

DISTRICT OF COLUMBIA COMPREHENSIVE ASSESSMENTS OF PROGRESS IN EDUCATION (DC CAPE) ACCESSIBILITY FEATURES AND ACCOMMODATIONS MANUAL

Guidance for Local Education Agencies (LEAs) and Decision-Making Teams to Ensure that the DC CAPE Assessments Produce Valid Results for All Students

SECOND EDITION







Table of Contents

Section 1: Overview of the DC CAPE Assessments1
Section 2: DC CAPE Accessibility System and Accessibility Features for All Students Taking the DC CAPE Assessments
Table 1: Accessibility Features for All Students
Table 2: Administrative Considerations for All Students
Section 3: Accommodations for Students with Disabilities and English Learners13
Table 3: Presentation Accommodations for Students with Disabilities
Table 4: Response Accommodations for Students with Disabilities
Table 5: Timing and Scheduling Accommodation for Students with Disabilities34
Table 6: Guidance on Selection of Accommodations for English Learners on DC CAPE Assessments
Table 7: Accommodations for English Learners on DC CAPE Assessments
Appendix A: Accessibility Features and Accommodations for Students Taking the Paper-Based DC CAPE Assessments41
Table A1: Accessibility Features for All Students Taking Paper-Based Assessments41
Table A2: Administrative Considerations for All Students Taking Paper-Based Assessments, at School's Discretion
Table A3: Presentation Accommodations for Students with Disabilities Taking Paper-Based Assessments
Table A4: Response Accommodations for Students with Disabilities Taking Paper-Based Assessments
Table A5: Timing & Scheduling Accommodation for Students with Disabilities Taking Paper-Based Assessment67
Table A7: Accommodations for English Learners Taking the Paper-Based Assessments 68
Appendix B: Test Administration Protocol for the Human Reader Accommodation for English Language Arts/Literacy (ELA/L) Assessments, and the Human Reader Accessibility Feature for Mathematics and Science Assessments
Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses
Appendix D: Text-to-Speech, or Human Reader/Human Signer Guidance for English Language Arts/Literacy (ELA/L) Assessments
Appendix E: Guidance for Selecting and Administering the Extended Time Accommodation
Appendix F: Unique Accommodation Request Form87



Appendix G: Use of an Emergency Accommodation on an Assessment	89
Appendix H: Student Accommodation Refusal Form	91
Appendix I: DC CAPE ELA Audio Guidelines	93
Appendix J: DC CAPE Mathematics Audio Guidelines	117
Appendix K: Legal Background	185
Appendix L: Human Signer Guidelines	191
Appendix M: DC CAPE Assessments for Students with Visual Impairment, Including Blindness	195



Section 1: Overview of the DC CAPE Assessments

Overview of the DC CAPE Assessments

The District of Columbia Comprehensive Assessments of Progress in Education (DC CAPE) include the DC English Language Arts assessment (DC ELA), the DC Math assessment (DC Math), and the DC Science assessment (DC Science). Together, these assessments create a comprehensive system that provides important information on students' progress and proficiency relative to DC's educational standards.

The DC ELA and DC Math assessments are the District of Columbia's annual assessments of ELA and mathematics, based on the <u>Common Core State Standards</u> (CCSS). These assessments measure the knowledge and skills that matter most for DC students — understanding complex texts, evidence-based writing, mathematical problem-solving — all skills that lead to confidence and success in key academic areas.

The DC Science assessment is the District of Columbia's statewide assessment of the <u>Next Generation Science Standards</u> (NGSS). DC Science presents students with tasks that are built around scientific phenomena as well as engineering design challenges. During the test, students use scientific principles, skills, and behaviors to observe phenomena, generate questions, conduct investigations, create models, predict outcomes, analyze results, and engage in argumentation and communication.

DC CAPE assessments are administered in these grades and courses:

- DC ELA: Grades 3-8, ELA I and ELA II
- DC Math: Grades 3-8, Algebra I, Geometry and Algebra II
- DC Science: Grades 5, 8, and high school Biology

For more information on the design of the DC CAPE assessments, visit https://osse.dc.gov/dccape.

General Testing Procedures

For information about coordinating or administering the DC CAPE assessments, including test security policies, administration procedures, and general administration tasks to complete before, during, and after testing, refer to the Test Coordinator Manual and the Test Administrator Manuals, as well as OSSE's test security webpage. Manuals are available at https://dc.mypearsonsupport.com/.



Section 2: DC CAPE Accessibility System and Accessibility Features for All Students Taking the DC CAPE Assessments

The DC CAPE Accessibility System

The Office of the State Superintendent of Education (OSSE) is committed to ensuring that statewide assessments are accessible to the largest possible number of students, including but not limited to students with disabilities, English learners (ELs), and ELs with disabilities. Through a combination of universal design principles and available accessibility features, the DC CAPE assessments are designed as an inclusive assessment system by considering accessibility from initial design through item development, field testing, and implementation of the assessments for all students. Although accommodations may still be needed for some students with disabilities and ELs to assist in demonstrating what they know and can do, both the computer-embedded and external accessibility features minimize the need for accommodations during testing and ensure the inclusive, accessible, and fair testing of the diverse students being assessed.

The DC CAPE Accessibility System includes three levels of supports:

- Accessibility features available to all students
 Students who take statewide assessments may use a wide array of accessibility features, which are tools or supports that increase access to test content and are available for use by all students who need them.
- Accessibility features and administrative considerations identified in advance
 While accessibility features and administrative considerations are available to any student
 who may need them, some are required to be identified in advance. Administrative
 considerations are decisions made about a student's testing environment (e.g., small group
 testing, special seating arrangements, or frequent breaks), and may be granted at the
 discretion of school leaders.
- Accommodations for students with disabilities and ELs
 Accommodations are adjustments to the test format or test administration intended
 to provide equitable access for students with disabilities, ELs, and ELs with disabilities.
 Some accommodations are built into the test, and others must be provided by the Test
 Administrator. All accommodations must be approved and documented in advance in an
 Individualized Education Program (IEP), 504 plan, or an English Learner Plan.

The assessment platforms include several **Accessibility Features** Available to all students accessibility features built into the system that all students can access at any time. (built into platform) Additional accessibility features are available to Accessibility Features & any student in need of the feature, but must **Administrative Considerations** be specifically selected in student registration (identified in advance) for planning purposes. **Accommodations** Certain accommodations are available only to students with disabilities (Individual Education Plans [IEP] or Section 504 plans) and others IEP/504 EL only to English Learners with EL plans. Plans Plans Accommodations must be documented in the IEP, 504 plan, and/or EL plan, and also in the student's registration profile.

The DC Cape Accessibility System



For a detailed overview of the decision-making process for selecting appropriate accessibility features and accommodations for students on the DC CAPE assessments, see the *DC CAPE Accessibility Decision-Making Process Supplement*, which is available at <u>dc.mypearsonsupport.com</u>. The *DC CAPE Accessibility Decision-Making Process Supplement* is a comprehensive document that provides guidance to LEAs and Individualized Education Program (IEP) teams to ensure that the DC CAPE assessments provide valid results for all participating students.

What are Accessibility Features?

On the DC CAPE computer-based assessments, accessibility features are tools or preferences that are either built into the assessment system or provided externally by Test Administrators. Accessibility features can be used by any student taking the DC CAPE assessments (i.e., students with and without disabilities, gifted students, ELs, and ELs with disabilities). Examples of accessibility features include: highlighter, answer masking, audio amplification, and blank scratch paper. Since the accessibility features are intended for all students, they are not classified as accommodations. Students should be exposed to these features prior to testing, and should have the opportunity to select and practice using them. Even though accessibility features are available to every student, that doesn't necessarily mean they are appropriate for every student. Consideration should be given to the supports a student consistently uses and finds helpful during instruction and when engaging in individual work. Practice tests that include accessibility features are available for teacher and student use throughout the year. To practice now, go to https://dc.mypearsonsupport.com/.

Accessibility Features Identified in Advance

A relatively small number of students will require additional accessibility features for their particular needs (e.g., changing the background or font color on-screen, listening to text-to-speech for the mathematics and science assessments). Research suggests that providing too many tools on-screen may lead to ineffective use of the tools provided and/or an impact on a student's test performance.1 Furthermore, the on-off controls for these features might distract some students if they were shown on-screen, or interfere with other features or accommodations. As an example, if a student does not regularly receive text-to-speech or other audio representations on their math textbooks during instruction, text-to-speech for mathematics on the DC CAPE assessments may distract a student or slow their pacing, possibly interfering with their performance. Based on the needs and preferences of the individual student, some accessibility features will be selected ahead of time by students in collaboration with educators. Students must practice using these features, either in a classroom or real world application or setting, and these features must also be generally consistent with those provided for classroom instruction and classroom assessments. Not only does the student need to practice using these features, but must also be using them during daily instruction to ensure it is not a feature just used for state testing. Students can decide whether or not to use a pre-selected support, without any consequence to the student, school, or LEA.

It is strongly recommended that decisions are made on an individual student basis based on the specific needs of each student as opposed to group decisions for a class or grade. Individualizing access needs on the assessment for each student provides increased opportunities to accurately demonstrate knowledge and skills, and will reduce the likelihood of giving students incorrect accessibility features or accommodations on the day of the test.

What is an Accommodations Registration File?

The accommodations registration file is a collection of student information regarding a student's

¹ Higgins, J., Fedorchak, G., & Katz, M. (2012). Assignment of Accessibility Tools for Digitally Delivered Assessments: Key Findings. White Paper for Enhanced Assessment Grant # S368A100008.



registration, testing condition, materials, and accessibility features and accommodations that are needed to take a DC CAPE assessment.

Collecting Student Accessibility Features and Accommodations Information Prior to the Assessment

Prior to the assessment, the following student information should be collected via the accommodations registration file so students receive the appropriate accessibility features and accommodations on testing day. It is the role of the school to ensure that the student's information is collected and included in this file:

- 1. Embedded accessibility features in the TestNav 8 online platform that need to be enabled for students during administration (e.g., color contrast [background/font color], text-to-speech for mathematics and science, etc.);
- 2. Embedded accommodations in the TestNav 8 online platform that need to be enabled for students during administration (e.g., closed captioning, text-to-speech for ELA/literacy, etc.);
- 3. Externally-provided accessibility features identified in advance, and accommodations for students with disabilities and ELs; and
- 4. Hard copy accommodated forms that require advance shipping (braille edition, paper-based edition, large print edition, etc.).

The accommodations registration file provides a record for School Test Coordinators and Test Administrators to ensure that students receive individualized accessibility features and accommodations during the assessments.

How is Information Collected for the Accommodations Registration File?

The accommodations registration file will be based on observations and stated preferences by the student or parent/guardian regarding a student's testing needs that have been determined to increase access during daily instruction and assessment. Observations based on a student's interaction with the online testing platform can be made during the practice tests. A student's testing needs should be reviewed at least annually, and revised as appropriate, to reflect current education-related needs or preferences.

Process for Collecting Accommodations Registration Information

- For students with disabilities, the IEP team or 504 Plan Coordinator will make decisions about which accessibility features and accommodations should be identified in the accommodations file.
- For ELs, the educators responsible for selecting accommodations (or an EL team, if available)
 will identify which accessibility features and accommodations should be identified in the
 student's accommodation file.
- For *ELs with disabilities*, the IEP team (which includes an adult familiar with the language needs of the student) or 504 Plan Coordinator will make decisions about which accessibility features and accommodations should be identified in the accommodations file.
- For students without disabilities and who are not ELs, decisions about which accessibility features identified in advance (if any) will be included in the student's accommodation file will be made based on the student's education-related needs and preferences by an informal team, which may include the:
 - Student (as appropriate);
 - Parent/guardian; and
 - Student's primary educator in the subject of the assessment.



How Do You Fill Out and Submit the Accommodations Registration File?

- <u>Step 1</u>: Local educators/teams collect individual student data to populate the Accommodations Registration File.
- <u>Step 2</u>: Local educators/teams capture individual student accommodation data in a central location.
- <u>Step 3</u>: The individual(s) responsible for student data upload at the school/LEA level receive the information from step 2 and input the information into the accommodations registration file for upload to the Assessment Delivery and Management (ADAM) platform.

There are certain accessibility features and accommodations which require materials to be shipped (e.g., large print, braille with tactile graphics, Human Reader or Human Signer kits, and paper tests). All paper and braille materials will need to be ordered through the ADAM platform by the school/LEA to be approved by OSSE.



Accessibility Features for All Students

Table 1: Accessibility Features for All Students lists the accessibility features that are available to all students taking DC CAPE assessments. These features are available through the online platform, or may be externally-delivered by a Test Administrator or other adult on the DC CAPE summative assessments. Students should determine whether they wish to use the feature on an item-by-item basis, based on the features they use during instruction and in daily life.

Where applicable, Table 1 will include the test administration activities for before, during, and after testing necessary for successful implementation of the DC CAPE accessibility features. There are a few accessibility features that must be identified in advance in the student accommodations file in order to activate the feature on the platform.



Table 1: Accessibility Features for All Students

Table includes Features for All Students & Accessibility Features Identified in Advance.

	Accessibility Feature Administration Guidelines		
1a	Answer Masking	Before Testing: Identification for Accommodations Registration File: Student's accommodations file must have answer masking selected to activate the feature on the platform. Including this in the student's accommodations file will mean answers are masked by default, but the feature can be enabled on each item at any time during the test. During Testing: When answer masking is enabled, multiple choice and multiple select answers will be masked. The student will uncover answer options when ready. The student may disable this feature by selecting, "Disable Answer Masking" in the user drop-down menu.	
1b	Audio Amplification	Before Testing: The student raises or lowers the volume control, as needed, using headphones. The student will now have access to volume control in the secure TestNav environment. Volume can be adjusted throughout the test. During Testing: Student must be tested in a separate setting if unable to wear headphones. Volume can be adjusted throughout the test.	
1c	Bookmark	During Testing: The student selects the "Bookmark" icon in the toolbar. The student electronically "bookmarks" items to review later. To remove the bookmark, select the "Bookmark" icon again.	
1d	Color Contrast (Background/Font Color)	Before Testing: Identification for Accommodations Registration File: Student's accommodations file must have the student's Color Contrast (Background/Font Color) selected to activate this feature on the platform. During Testing: Alternate on-screen background and/or font color is enabled via the Accommodations Registration File based on need or preference. The student may change the color contrast option or disable this feature by selecting, "Change the background and foreground color" in the user drop-down menu. Contrast Settings abc Black on White (Default) abc Black on Light Blue abc Black on Light Magenta abc White on Black abc Yellow on Blue abc Gray on Green	



	Accessibility Feature	Administration Guidelines	
1e	Blank Scratch Paper (provided by Test Administrator)	Before Testing: Test Administrators must supply at least one page of blank scratch paper (i.e., either unlined, lined, or graph) per student, per section.	
		If graph paper is used during mathematics instruction, it is recommended that schools provide graph paper as scratch paper for mathematics sections. Students with visual impairments may also use braille paper, raised line paper, bold line paper, raised line graph paper, bold line graph paper, abacus, or Math Window.	
		During Testing: The student uses blank scratch paper (i.e., lined, unlined, or graph) to take notes and/or work through items during testing. Additional pages may be provided as needed. Students are not required to write their names on scratch paper.	
		After Testing: Test Administrators are responsible for collecting ALL scratch paper after testing is completed to be securely destroyed. Scratch paper must be securely shredded if it has been used. Schools may reuse unused scratch paper only if paper is completely blank.	
1f	Eliminate Answer Choices	During Testing: The student selects the "Answer Eliminator" icon in the toolbar. On multiple choice options, a student selects an answer and a red X appears and "crosses out" the answer choice. The student may disable this feature by selecting "Answer Eliminator" in the toolbar again.	
1g	General Administration Directions Clarified (by Test Administrator)	During Testing: The Test Administrator clarifies general administration directions only. No passages or test items may be clarified.	
1h	General Administration Directions Read Aloud and Repeated as Needed (by Test Administrator)	During Testing: The Test Administrator reads aloud the general administration directions only. A student may raise their hand and request the directions be repeated.	
1i	Highlight Tool	During Testing: The student electronically highlights text as needed to recall and/or emphasize. The student has the option to remove highlighting over text. The highlighter color option will change depending on the color contrast option selected.	
1j	Headphones or Noise Buffers	Before Testing: Test Administrator prepares classroom with headphones for participating students.	
		During Testing: The student uses headphones or noise buffers to minimize distraction, access embedded text-to-speech, or filter external noise during testing (in addition to when headphones are required for the ELA/literacy assessment). If headphones are used only as noise buffers, do not plug them into the testing device.	



	Accessibility Feature	Administration Guidelines
1k	Line Reader Mask Tool	During Testing: The student selects "Show Line Reader Mask" in the user drop-down menu. The student uses an on-screen tool to assist in reading by raising and lowering the tool for each line of text on-screen. The Line Reader can be resized and the size of the reader window can be adjusted. The student may disable this feature by selecting, "Hide Line Reader Mask" in the user drop-down menu.
		The Line Reader includes additional functionality to close the Line Reader window and allow the feature to work as a general masking tool. The mask box can be resized by the student to cover content on the screen as necessary. In addition, the Line Reader window is moveable anywhere within the boundaries of the Line Reader tool.
		The Line Reader Mask box color will change depending on the color contrast option selected.
11	Magnification/ Enlargement Device	 Browser/Device Magnification: The student can use keyboard shortcuts (e.g., Ctrl+) for PCs or pinch/zoom for tablets to magnify content displayed on the screen (while preserving clarity, contrast, and color). Magnifier: The student can also select "Enable Magnifier" in the user drop-down menu. The student enlarges text and graphics onscreen via a magnification square (200%). The student may disable this feature by selecting, "Disable Magnifier" in the user drop-down
		Mote: Magnifying beyond 300% may affect heading formatting and may cause text-wrapping, and therefore it is not recommended.
1m	Notepad	During Testing: The student selects the "Notepad" icon in the toolbar. The student writes notes using embedded Notepad tool on the ELA/literacy assessments. The student may disable this feature by selecting "Notepad" in the toolbar again. Note: The notepad tool cannot be resized. In addition, the tool does not save across items and only saves student entered text on the item for which it was entered.
1n	Pop-up Glossary	During Testing: The student is able to view definitions of pre-selected, underlined words by hovering over them. The definition appears in a popup text box.
10	Redirect Student to the Test (by Test Administrator)	During Testing: The Test Administrator redirects the student's attention to the test without coaching or assisting the student in any way. There is no limit to the number of times a Test Administrator can redirect a student back to the test. Examples: Providing reminders to stay on task and focused during the assessments; Providing a visual cue to the student to remain on task.
1p	Spell Check or External Spell Check Device	During Testing: The student uses the embedded spell check icon in TestNav to review their written text for errors. If preferred, the student uses an external spell check device. Device may not have embedded grammar check, connect to the internet, or save information.



	Accessibility Feature	Administration Guidelines
1q	Student Reads Assessment Aloud to Self	Identification for Accommodations Registration File: The student's accommodations registration file must have this feature identified. During Testing: The student reads aloud the assessment to him or herself. Students may use an external device such as a whisper phone, read to themselves in a normal voice, or use other strategies from classroom instruction. The student must be tested in a separate setting.
1r	Text-to-Speech for the Mathematics and Science Assessments	 Identification for Accommodations Registration File: The student's accommodations registration file must have text-to-speech selected to activate the feature on the platform. Once a student is placed into a proctor group, the student will be assigned a form with embedded text-to-speech. Volume level must be determined prior to testing; once the test begins, the volume level cannot be changed. The student will not have access to volume control in the secure TestNav environment. Test Administrator Training: Refer to the Text-to-Speech tutorials on https://dc.mypearsonsupport.com/ for full training on tool functionality. Differences Between Text Only and Text Plus Graphics: Text Plus Graphics - Reads all printed text and the hidden alternate text descriptions for images. Text Only - Reads printed text but does not read any alternate text descriptions for images. During Testing: The student selects the "Text-to-Speech Player" icon on the toolbar on the right side of the screen. The test is read aloud to the student using embedded text-to-speech software. The student may pause and resume the audio. To choose a speed (slow, normal, fast), select the "Text-to-Speech Settings" icon. Once the test begins, the volume level cannot be changed. The student must be tested in a separate setting if unable to wear headphones.



	Accessibility Feature	Administration Guidelines
1s	Human Reader for Mathematics and Science Assessments, or Human Signer for Mathematics and Science	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have Human Reader/Human Signer selected to provide the Human Reader accessibility feature. This will assign all students in the proctor group the same form as the Test Administrator and will match the Human Reader Script. Students in these sessions cannot have other supported accommodations such as Text-to-Speech (TTS), Closed Captioning (CC). Important: Students must be identified as 'Human Reader' in the Accommodations File, failure to do so will result in the student receiving a form that differs from the form needed to provide the accessibility feature. The Test Administrator will be assigned a separate authorization login to access the same form as all students within the Human Reader session and also receive a secure Human Reader Script. Materials: Human Reader Script for Mathematics or Science Test Administrator Training: Human Readers and Human Signers providing this accessibility feature must review: The Human Reader Script, at least two school days prior to testing. Review of the Human Reader Script must occur in a SECURE ENVIRONMENT. Appendix B: Test Administration Protocol for the Human Reader Accommodation for English Language Arts/Literacy (ELA/L). Assessments, and the Human Reader Accessibility Feature for Mathematics and Science Assessments. Appendix L: Human Signer Guidelines (human signers only). During Testing: A Test Administrator (Human Reader or Human Signer) reads aloud to a student using the provided Human Reader Script. The student must be tested in an individual or small group setting. Small groups should only be used if all students are able to work at approximately the same pace. After Testing: Human Reader Scripts contain secure item content and should be handled as secure test materials. Test Administrators should return materials to Test Coordinators. Test Coordinators must return the
1t	Writing Tools	Human Reader Scripts to Pearson with the nonscorable materials. During Testing: The student uses embedded writing process tools for written responses, including copy/paste, bold, italicize, underline, insert bullets, numbered list, undo, redo, and spell check. Writing tools are available in the constructed response items on the ELA/literacy assessment. Note: The copy/paste functionality does not include the ability to copy test content. Only text contained within a student response can be copy/pasted.



Administrative Considerations for All Students

Detailed guidelines on the administration of the assessments will be included in the *Test Administrator Manuals* and the *Test Coordinator Manual*.

Although students are generally tested in their regular classroom and follow the standard test administration schedule for the grade and content area being assessed, the principal or test coordinator has the authority to schedule testing sessions in spaces other than regular classrooms, and at different scheduled times, as long as all requirements for testing conditions and test security are met as set forth in the *Test Administrator Manuals and Test Coordinator Manual* available at dc.mypearsonsupport.com. Decisions may be considered, for example, that benefit students who are easily distracted in large group settings by testing them in a small group or individual setting. In general, changes to the timing, setting, or conditions of testing are left to the discretion of the principal or Test Coordinator.

In accordance with principles of universal design for assessment, Table 2: Administrative Considerations for All Students, contains administrative guidance regarding the timing and scheduling of assessments, and setting/ locations for testing. These administrative considerations are available to all students . Administrative considerations must be identified for the student in advance in the accommodations registration file.

The principal or test coordinator may determine that ANY student can receive one or more of the following administrative considerations, regardless of the student's status as a student with a disability or EL.

Table 2: Administrative Considerations for All Students

Adm	inistrative Consideration	Description
2a	Individual or Small Group Testing	Student is tested in a separate location as an individual or with a small group of students with matching accessibility features, accommodations, or testing needs as appropriate.
2b	Time of Day	Student is tested during a specific time of day based on their individual needs (e.g., ELA/literacy in the morning; no testing after lunch).
2c	Separate or Alternate Location	Student is tested in a specifically assigned location.
2d	Specified Area or Setting	Student is tested in a specialized area or setting (e.g., front of the classroom, seat near the door, library, etc.).
2e	Adaptive and Specialized Equipment or Furniture	Student is provided specialized equipment or furniture needed for a successful testing environment (e.g., low lighting; adaptive seat).
2f	Frequent Breaks	Guidance on logistics for administrating the DC CAPE assessments with frequent breaks:
		 Medical Breaks: Student takes a break due to pre-existing or sudden onset of a temporary or long-term medical condition. Student's testing time stops.
		 Individual Bathroom Breaks: Student requests a bathroom break within their overall allotted testing time. Student's testing time does not stop.
		In-Chair Stretch Break: Student pauses and stretches. Student's testing time does not stop.



Section 3: Accommodations for Students with Disabilities and English Learners

Accommodations for Students with Disabilities and ELs

It is important to ensure that performance in the classroom and on assessments is influenced minimally, if at all, by a student's disability or linguistic/cultural characteristics that are unrelated to the content being assessed. For DC CAPE assessments, accommodations are considered to be adjustments to the testing conditions, test format, or test administration that provide equitable access during assessments for students with disabilities and students who are ELs. In general, the administration of the assessment should not be the first occasion in which an accommodation is introduced to the student. In addition, the Test Administrator administering the assessment or providing accommodations should be an education professional who is familiar with the student, and who is typically responsible for providing the accommodation in the classroom. To the extent possible, accommodations should:

- Provide equitable access during instruction and assessments;
- Mitigate the effects of a student's disability;
- Not reduce learning or performance expectations;
- Not change the construct being assessed; and
- Not compromise the integrity or validity of the assessment.

Accommodations are intended to reduce and/or eliminate the effects of a student's disability and/or English language proficiency level; however, accommodations should never reduce learning expectations by reducing the scope, complexity, or rigor of an assessment. Moreover, accommodations provided to a student on the DC CAPE assessments must be generally consistent with those provided for classroom instruction and classroom assessments. There are some accommodations that may be used for instruction or for formative assessments but are not allowed for the DC CAPE assessment because they impact the validity of the assessment results – for example, allowing a student to use a thesaurus or access the internet during a DC CAPE assessment. There may be consequences (e.g., voiding a student's test score) for the use of non-allowable accommodations during assessments. It is important for educators to become familiar with policies regarding accommodations used for the assessments.

The guidelines provided in this manual are intended to ensure that valid and reliable scores are produced on the assessments, and that an unfair advantage is not given to students who receive accommodations. Outside of the guidance provided in this manual, changes to an accommodation or the conditions in which it is provided may change what the assessment is measuring, and will likely call into question the reliability and validity of the results regarding what a student knows and is able to do as measured by the assessment.

To the extent possible, accommodations should adhere to the following principles:

- Accommodations enable students to participate more fully and fairly in instruction and assessments and to demonstrate their knowledge and skills.
- Accommodations should be based upon an individual student's needs rather than on the
 category of a student's disability, level of English language proficiency alone, level of or access
 to grade-level instruction, amount of time spent in a general classroom, current program
 setting, or availability of staff.
- Accommodations should be based on a documented need in the instruction/assessment setting and should not be provided for the purpose of giving the student an enhancement that could be viewed as an unfair advantage.
- · Accommodations for students with disabilities should be described and documented in the



- student's appropriate plan (i.e., either the IEP or 504 plan).
- Accommodations for ELs should be described and documented.
- Students who are ELs with disabilities qualify to receive accommodations for both students with disabilities and ELs.
- Accommodations should become part of the student's program of daily instruction as soon as possible after completion and approval of the appropriate plan.
- Accommodations should not be introduced for the first time during the testing of a student.
- Accommodations should be monitored for effectiveness.
- Accommodations used for instruction should also be used, if allowable, on local district assessments and state assessments.

In the event that a student was provided a test accommodation that was NOT LISTED in their IEP, 504 plan, or was not documented for an EL, or if a student was NOT PROVIDED a test accommodation listed in their IEP/504 plan/documentation for an EL, the school or LEA must contact OSSE for further guidance.

Scoring and Reporting

Summative assessment scores for students who receive any of the accommodations listed in this manual will be aggregated with the scores of other students and those of relevant groups, and can be included for accountability purposes.

Unique Accommodations

Pearson has developed a comprehensive list of accessibility features and accommodations that are designed to increase access to assessments and will result in valid, comparable assessment scores. However, students with disabilities or ELs may require additional accommodations that are not found in this manual. OSSE will review requests for unique accommodations on an individual basis and will provide approval after determining whether the accommodation would result in a valid score for the student. Refer to Appendix F: Unique Accommodation Request Form.

Emergency Accommodations

An emergency accommodation may be appropriate for a student who incurs a temporary disabling condition that interferes with test performance shortly before or during the DC CAPE assessment window. A student who does not have an IEP or 504 plan may require an accommodation as a result of a recently-occurring accident or illness. Cases include students who have a recently-fractured limb (e.g., arm, wrist, shoulder); whose only pair of eyeglasses has broken; or a student returning after a serious or prolonged illness or injury. An emergency accommodation should be given only if the accommodation will result in a valid score for the student (i.e., does not change the construct being measured by the test[s]). If the principal (or designee) determines that a student requires an emergency accommodation on the assessment, an Emergency Accommodation Form must be submitted to OSSE for approval and maintained in the student's assessment file. If approved, the parent or caregiver must be notified that an emergency accommodation was provided. Refer to Appendix G: Use of an Emergency Accommodation on an Assessment.

Student Accommodation Refusal Form

If a student refuses an accommodation listed in their IEP, 504 plan, or EL plan, the school should document in writing that the student refused the accommodation, and the accommodation must be offered and remain available to the student during testing. This form must be completed and placed in the student's file and a copy must be sent to the parent or caregiver on the day of refusal. Principals (or designee) should work with Test Administrators to determine who, if any others, should be



informed when a student refuses an accommodation documented in an IEP, 504 plan, or EL plan. Refer to Appendix H: Student Accommodation Refusal Form.

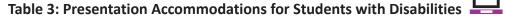
Ongoing Research and Data Collection on Use of Accommodations

OSSE will continue to research the use, effectiveness, validity, differential impact, relevance, and feasibility of available accommodations, and may make adjustments to available accommodations as appropriate.

Accommodations for Students with Disabilities

Table 3 provides a list of presentation accommodations for students with disabilities that describe changes in the assessment format and method in which the assessment is administered. The table also outlines the before, during, and after testing activities necessary to successfully administer these accommodations. Accommodations for students with disabilities must be pre-selected for the student in the accommodations registration file. This information is included in the "before testing" guidance. Unless otherwise noted, accommodations in this table are available on all DC CAPE assessments (DC ELA, DC Math, and DC Science).





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Accommodation		Administration Guidelines
3a	Assistive	Before Testing:
	Technology (Non-Screen	• <u>Identification for Accommodations Registration File</u> : Student's accommodations registration file must have assistive technology selected.
	Reader)	 <u>Testing</u>: Assistive technology should be tested during an Infrastructure Trial to determine whether the assistive technology will interact with TestNav and can be used successfully during computer-based testing. Note that DC ELA and DC Math assessments are designed to be Web Content Accessibility Guidelines (WCAG) compliant. For information on how to test assistive technology devices and software for use on the DC CAPE ELA and Math assessments with the TestNav 8 platform via an Infrastructure Trial, refer to the Assistive Technology Guidelines available at https://dc.mypearsonsupport.com/.
		During Testing: Students may use a range of assistive technologies on the DC CAPE assessments, including devices that are compatible with the Test Nav online testing platform, and those that are used externally on a separate computer. Refer to the list of allowable Assistive Technology available here: https://dc.mypearsonsupport.com/ .
		After Testing: Test Administrators are responsible for collecting all nonscorable student work created from assistive technology devices. Content must be cleared off all devices. Paper nonscorable student work must be securely shredded.
3b	Hard Copy Braille	Before Testing:
	Edition ²	• <u>Identification for Accommodations Registration File</u> : Student's accommodations registration file must have Hard Copy Braille Edition selected.
		 <u>Materials</u>: Braille Kits are required for administration. Braille Kits include Test Administrator Braille Scripts, one copy of the student's Hard Copy Braille Assessment, standard test booklet or answer document for transcription, and supplementary math materials (braille ruler, braille protractor) where appropriate. <u>Test Administrator Training</u>: Test Administrators of students with visual impairments must review:
		 Braille kits, which include the braille test administration scripts and information specific to administering paper-based braille. Braille notes are inserted behind the cover of the first volume of the Braille test. Important: Reading, viewing, copying, or reproducing passages or test items is prohibited. This review must take place in a SECURE ENVIRONMENT no more than two days prior to testing.
		 Appendix M: DC CAPE Assessments for Students with Visual Impairments, Including Blindness.
		 If needed by the student, braille test booklets or answer documents may be disassembled for testing (but must be reassembled for return). It is critical that Test Administrators count the number of pages in the test booklet or answer document prior to disassembling the test booklets or answer documents to help ensure that all pages are returned.

² Distribution quantities for any paper-based accommodations and accessibility features are derived from the orders placed by schools/LEAs in the ADAM platform.



Ac	commodation	Administration Guidelines
		During Testing: A student who is blind or has a visual impairment and is unable to take the computer-based test may take the DC CAPE assessments using the hard-copy contracted braille edition. Tactile graphics are already embedded in the hard copy braille edition. For students using braille forms, the Test Administrator directions for filling in a circle, making marks, and erasing do not apply. Students should number their responses to be sure that their answers can be transcribed accurately into a scorable test booklet or answer document.
		 After Testing: Responses must be transcribed verbatim by a Test Administrator in a standard student test booklet or answer document, which is included in the Braille Test Kit. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol.
		 Test Administrators are responsible for collecting all nonscorable student work created from assistive technology devices. Content must be deleted off all devices. Nonscorable student work must be securely shredded. If the braille test booklet or answer document was disassembled, it must be reassembled for return. To reassemble test booklets or answer documents, the Test Administrator may staple or binder clip all pages for return. Failure to return all pages will be considered a breach of security.
3c	Tactile Graphics	During Testing: Tactile graphics will be embedded in the hard copy braille edition assessments, when needed. For Mathematics assessments students will receive a full hard copy braille booklet rather than a tactile graphics supplement. After Testing: Braille test books contain secure item content and should be handled as secure test materials. Test Administrators should return tactile graphics to Test Coordinators. Test Coordinators must return braille books with the nonscorable materials.



Δ	ccommodation	Administration Guidelines
3d	Large Print	Before Testing:
34	Edition	 Identification for Accommodations Registration File: Student's accommodations registration file must have Large Print Edition selected. Materials: Large Print Test Kit includes a large print assessment booklet, standard test booklet or answer document for transcription, Test Administrator large print scripts, and supplementary large print
		 mathematics materials (large print ruler & protractor), when appropriate. <u>Test Administrator Training</u>: Test Administrators of students with visual impairments must review:
		 Appendix M: DC CAPE Assessments for Students with Visual Impairments, Including Blindness. Appendix A: Accessibility Features and Accommodations for Students Taking the Paper-Based DC CAPE Assessments.
		During Testing: A large print paper-based form of each assessment is available for a student with a visual impairment who is unable to take a computer-based assessment. The font size for the large print edition will be 18 point on paper sized 14" x 18". Students will not record their answers in standard print test booklets or answer documents. Instead, students will circle their answers in a large print test booklet. For constructed response items, students will write their answers on the lines provided in their large print test booklets. In mathematics, students will need to write their answers in boxes at the top of the answer grids, but they do not need to bubble in their answers. Test Administrators should refer to the TAM Scripts for instances where they should demonstrate an activity or display information. Demonstrations should be conducted where they are visible for each student (e.g., on the board, near the student).
		After Testing:
		 Responses must be transcribed verbatim by a Test Administrator in a standard student test booklet or answer document, which is included in the Large Print Test Kit. Only transcribed responses will be scored. At least two persons must be present during transcription of student responses (one transcriber and one observer confirming accuracy). It is recommended that one of the individuals be an LEA or School Test Coordinator. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses.



Accommodation		Administration Guidelines
3e	Paper-Based Edition (Alternate Representation – Paper Test)	 Identification for Accommodations Registration File: Student's accommodations registration file must have Paper-Based Edition selected. Materials: Paper-Based Edition of the assessment Test Administrator Training: Test Administrators must review the following appendix for accessibility features and accommodations in a paper-based environment: Appendix A: Accessibility Features and Accommodations for Students Taking the Paper-Based DC CAPE Assessments. During Testing: For schools administering the computer-based assessments, a paper-based assessment is available for students who (1) are unable to take a computer-based assessment due to a disability; (2) recently entered the school and has very little or no prior experience or familiarity with technology; (3) attend a school providing paper-based assessments as the primary mode; or (4) are unable to access an online assessment due to religion or beliefs.
3f	Closed Captioning of Multimedia on the ELA/Literacy Assessments³ Available on: DC CAPE ELA Assessments	• Identification for Accommodations Registration File: Student's accommodations registration file must have Closed Captioning selected. • During Testing: A student who is deaf or hearing-impaired views captioned text embedded in multimedia (i.e., video) segments of the ELA/literacy summative assessments. Captioning can be turned on/off within the video player as needed. Transcripts will also be available in an additional tab within the test form. See the Closed Captioning tutorial available here: https://dc.mypearsonsupport.com/tutorial/ .
3g	ELA/Literacy Assessments, including items, response options, and passages • Text-to- Speech Available on: DC CAPE ELA assessments	Purpose: The purpose of the embedded text-to-speech accommodation for the DC CAPE ELA assessment is to provide access to printed or written texts on the DC CAPE ELA assessments for a very small number of students with print-related disabilities who would otherwise be unable to participate in the assessment because their disability severely limits or prevents their ability to access printed text by decoding. This accommodation is not intended for students reading somewhat (i.e., only moderately) below grade level. Identification for Accommodations Registration File: The student's Accommodations Registration File must have text-to-speech selected to activate the features on the platform. Once a student is placed into a session, the student will be assigned a form with embedded text-to-speech.

³ The CCSS call for comparisons between different media. An example of this is RI9-10.7: Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account. Adding closed captioning to any students other than those who are deaf or hard of hearing affects the ability to effectively assess this type of standard, and therefore it is listed as an accommodation as opposed to a support for all.

⁴ **Note:** There may be unintended consequences related to the use of this accommodation for some students. Review the adjacent Administration Guidelines carefully. DC CAPE will conduct additional research to provide data to substantiate the need for providing this level of access to a small number of students.





Accommodation		Administration Guidelines
		In making decisions on whether to provide a student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
		 Blindness or a visual impairment and has not learned (or is unable to use) braille;
		OR
		 A disability that severely limits or prevents them from accessing printed text, even after varied and repeated attempts to teach the student to do so (e.g., student is unable to decode printed text);
		OR
		 Deafness or a hearing impairment and is severely limited or prevented from decoding text due to a documented history of early and prolonged language deprivation.
		Before listing the accommodation in the student's IEP or 504 plan, teams/coordinators should consider whether:
		 The student has access to printed text during routine instruction through a reader, other spoken-text audio format, or signer;
		 The student's inability to decode printed text or read braille is documented in evaluation summaries from locally-administered diagnostic assessments; and the student receives ongoing, intensive instruction and/or interventions in the foundational reading skills to continue to attain the important college and career-ready skill of independent reading.
		Decisions about who receives this accommodation will be made by IEP teams and 504 Plan Coordinators. For a student who receives one of these accommodations, no claims should be inferred regarding the student's ability to demonstrate foundational reading skills (i.e., decoding).
	uman Signer	Before Testing:
1 1	for Test Directions	• <u>Identification for Accommodations Registration File</u> : Student's accommodations registration file must have Human Signer for Test Directions selected.
		<u>Test Administrator Training</u> : Human Signers must review:
		Test Administrator Scripts included in the <i>Test Administrator Manuals</i> . Appendix to the second secon
		 Appendix L: Human Signer Guidelines (signers only).
		During Testing: A Human Signer will sign the test directions to a student. The student may either be tested in a small group or a separate setting based on the student's experiences during classroom assessments.



Table 4 provides a list of RESPONSE ACCOMMODATIONS for students with disabilities that allow a student to respond to test items using different formats. The table outlines the activities needed before, during, and after testing to administer the response accommodations appropriately. Accommodations for students with disabilities must be pre-selected for the student in the accommodations registration file. This information is included in the "before testing" guidance. Unless otherwise noted, accommodations in this table are available on all DC CAPE assessments (DC ELA, DC Math, and DC Science).

Table 4: Response Accommodations for Students with Disabilities



	Accommodation	Administration Guidelines	
4a	Assistive Technology (Non-Screen Reader)	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have assistive technology selected.	
		 <u>Testing</u>: Assistive technology should be tested during an Infrastructure Trial to determine whether the assistive technology will interact with TestNav and can be used successfully during computer-based testing. For information on how to test assistive technology devices and software for use on the DC CAPE assessments with the TestNav 8 platform via an Infrastructure Trial, refer to the Assistive Technology Guidelines available at https://dc.mypearsonsupport.com/. Note that the DC CAPE assessments are designed to be Web Content Accessibility Guidelines (WCAG) compliant. 	
		During Testing: Students may use a range of assistive technologies on the DC CAPE assessments, including devices that are compatible with the DC CAPE online testing platform, and those that are used externally on a separate computer. Refer to the list of allowable Assistive Technology available here: https://dc.mypearsonsupport.com/ .	
		After Testing: Test Administrators are responsible for collecting all nonscorable student work created from assistive technology devices. Content must be cleared off all devices. Nonscorable student work must be securely shredded.	



	Accommodation	Administration Guidelines
4b	Braille Note-taker	Before Testing:
		Identification for Accommodations Registration File: Student's accommodations registration file must have braille note-taker selected.
		During Testing: A student who is blind or has a visual impairment may use an electronic braille note-taker. The grammar checker, internet, and stored file functionalities must be turned off. For students using braille forms, the Test Administrator directions for filling in a circle, making marks, and erasing do not apply. Students should number their responses to be sure that their answers can be transcribed accurately into a scorable test booklet, answer document, or TestNav.
		After Testing:
		 Student responses generated using an electronic braille note-taker must be transcribed verbatim by a Test Administrator into the student's standard test booklet, answer document, or TestNav. Only transcribed responses will be scored. Responses must be transcribed by the teacher of the student with visual impairment, or a Test Administrator supervised by the teacher of the student with visual impairment. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Test Administrators are responsible for collecting all nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.
4c	Braille Writer	Before Testing:
		Identification for Accommodations Registration File: Student's accommodations registration file must have braille writer selected.
		During Testing: A student who is blind or has a visual impairment may use a braille writer. For DC CAPE assessments, grammar checker, internet, and stored file functionalities must be turned off. For students using braille forms, the Test Administrator directions for filling in a circle, making marks, and erasing do not apply. Students should number their responses to be sure that their answers can be transcribed accurately into a scorable test booklet, answer document, or TestNav.
		After Testing:
		 Student responses generated using a braille writer must be transcribed verbatim by a Test Administrator into the student's standard test booklet, answer document, or TestNav. Only transcribed responses will be scored. Responses must be transcribed either by the teacher of the student with visual impairment or a Test Administrator supervised by the teacher of the student with visual impairment. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Test Administrators are responsible for collecting all nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be



	Accommodation	Administration Guidelines
4d	Calculation Device (on Calculator Sections of Mathematics Assessments and all sections of science assessments) Available on: DC CAPE Math and Science assessments	Materials: Allowable calculators on calculator sections include: Grades 6-7 mathematics: Four-Function with square root and percentage functions. Grade 8 mathematics: Scientific calculators (Student may also bring a four-function with square root and percentage functions in addition to a grade-level calculator). High School mathematics: Graphing calculators with functionalities consistent with TI-84 or similar models (Student may also bring a scientific calculator or a four-function with square root and percentage functions). Science (all grades): Students may use a four-function calculator with square root and percentage functions for all Science assessments.
		During Testing: A student uses a specific calculation device (e.g., large key, talking, or other adapted calculator) other than the embedded grade-level calculator on the CALCULATOR SECTION of the mathematics assessments. If a talking calculator is used, the student must use headphones or be tested in a separate setting. Note: Grade-appropriate calculators are embedded in the online testing platform on all sections where a calculator is allowable. It is strongly recommended that students use the embedded calculator on all DC CAPE assessments. However, if they prefer, students may use hand-held calculators on computer-based Mathematics assessments on any section where a calculator is allowable (grades 6 through high school) or on all Science assessments. The use of hand-held calculators on calculator sections and on Science does not require an accommodation. All hand-held calculators must meet requirements as defined above and in the OSSE Calculator Policy.



	A commendation	Administration Cuidelines
	Accommodation	Administration Guidelines
4e	Calculation Device (on Non-Calculator Sections of Mathematics Assessments) Available on: DC CAPE Math Assessments	 Purpose: The purpose of the calculation device on the non-calculator sections accommodation is to provide access for students with a disability that severely limits or prevents their ability to perform basic calculations (i.e., student is unable to perform single digit addition, subtraction, multiplication, or division). For these students, a calculation device may be used on the non-calculator AND calculator sections of the mathematics assessments. The IEP or 504 plan must specify which device(s). Identification for Accommodations Registration File: Student's accommodation registration file must have Calculation Device on non-calculator sections selected. Materials: Hand-held calculator. Allowable calculators for the calculator accommodation on non-calculator sections: Grades 3-7: Four-Function with square root and percentage functions. Grade 8: Scientific calculators (Student may also bring a four-function with square root and percentage functions in addition to grade-level calculator). High School: Graphing calculators with functionalities consistent with TI-84 or similar models. (Student may also bring a scientific calculator or a four-function with square root and percentage functions).



Accommodation	Administration Guidelines
	During Testing: A student uses a calculation device (e.g., four-function calculator, large key, or other adapted calculator) on the NON-CALCULATOR SECTIONS of the mathematics assessments. If a talking calculator is used, the student must use headphones or be tested in a separate setting.
	Important Guidelines for identifying students to receive this accommodation: IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying students to receive this accommodation. If all guidelines are NOT met, and the student is given a Calculation Device without proper documentation, the student's assessment score may be invalidated and the score would not be counted in the overall assessment results (i.e., the student would be considered a "non-participant" for the mathematics assessment.)
	In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
	 A disability that severely limits or prevents the student's ability to perform basic calculations (i.e., single-digit addition, subtraction, multiplication, or division), even after varied and repeated attempts to teach the student to do so.
	Before listing the accommodation in the student's IEP/504 plan, teams should also consider whether:
	 The student is unable to perform calculations without the use of a calculation device during routine instruction.
	 The student's inability to perform mathematical calculations is documented in evaluation summaries from locally-administered diagnostic assessments.
	 The student receives ongoing, intensive instruction and/or interventions to learn to calculate without using a calculation device, in order to ensure that the student continues to learn basic calculation and fluency.
	For a student who receives this accommodation, no claims should be inferred regarding the student's ability to perform basic mathematical calculations without the use of a calculator.



	Accommodation	Administration Guidelines
4f	Mathematics Tools (on Non-Calculator Sections of Mathematics Assessments) Available on: DC CAPE Math Assessments	Before Testing: Purpose: The purpose of the mathematics tools on the non-calculator sections accommodation is to provide access for students with a disability that severely limits or prevents their ability to perform basic calculations (i.e., student is unable to perform single digit addition, subtraction, multiplication, or division). For these students, mathematics tools may be used on the non-calculator AND calculator sections of the mathematics assessments. The IEP or 504 plan must specify which device(s) or manipulatives. Identification for Accommodations Registration File: Student's accommodation registration file must have Mathematics Tools on non-calculator sections selected. Manipulatives and tools not named in the math tools policy must be submitted to OSSE for approval. Materials: Allowable mathematics tools include: Arithmetic tables (e.g., addition charts, subtraction charts, multiplication charts; division charts). Two-color chips (e.g., single-sided or double-sided). Counters and counting chips. Square tiles. Base 10 blocks. 100s chart. A student with a visual impairment may need other mathematics tools, such as a large print ruler (embedded DC CAPE ruler is designed in 18 point font), braille ruler, tactile compass, or braille



Accommodation	Administration Guidelines
	During Testing: A student uses an arithmetic table (including addition/subtraction and/or multiplication/division charts), and/or manipulatives (IEP or 504 plan must specify which device or manipulative) on the NON-CALCULATOR SECTIONS of the mathematics assessments.
	Important Guidelines for identifying students to receive this accommodation: IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying students to receive this accommodation. If all guidelines are NOT met, and the student is given Mathematics Tools without proper documentation, the student's assessment score may be invalidated and the score would not be counted in the overall assessment results (i.e., the student would be considered a "non-participant" for the mathematics assessment.)
	In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
	 A disability that severely limits or prevents the student's ability to perform basic calculations (i.e., single-digit addition, subtraction, multiplication, or division), even after varied and repeated attempts to teach the student to do so.
	Before listing the accommodation in the student's IEP/504 plan, teams should also consider whether:
	 The student is unable to perform calculations without the use of an arithmetic table, or manipulative during routine instruction. The student's inability to perform mathematical calculations is documented in evaluation summaries from locally-administered diagnostic assessments. The student receives ongoing, intensive instruction and/or interventions to learn to calculate without using an arithmetic table or manipulative, in order to ensure that the student continues to learn basic calculation and fluency.
	For a student who receives this accommodation, no claims should be inferred regarding the student's ability to perform basic mathematical calculations without the use of mathematics tools.



	Accommodation	Administration Guidelines
	ELA/Literacy Selected	Before Testing:
4g 4h 4i 4j	Response Options Speech-to-Text Human Scribe Human Signer Assistive Technology Device	 Identification for Accommodations Registration File: Student's accommodations registration file must have Speech-to-Text, Human Scribe, Human Signer, or Assistive Technology Device selected. Materials: External device provided by the student, if needed. If the student uses speech-to-text software, such as Dragon® Naturally Speaking, then a separate computer must be provided; one to run the assessment on TestNav and a second computer to run the software. TestNav 8 does not contain embedded speech-to-text software. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Appendix L: Human Signer Guidelines (signers only). Note: If a student is using an allowable 3rd party external Assistive Technology that provides speech-to-text functionality that will interact with TestNav, the student must also be registered for Assistive Technology Non Screen-
		 Assistive technology, including speech-to-text software, should be tested during an Infrastructure Trial. If during the Infrastructure Trial the specific device will not interact with TestNav, a secondary testing device to run the external device software will be needed. Some speech-to-text software will not interact with TestNav, and users should set up a separate, adjacent testing station; the student will use two testing stations, one device with the test and one device with the familiar software. Reference the Assistive Technology Guidelines available at the following link: https://dc.mypearsonsupport.com/. During Testing: Student dictates responses either verbally, using an external speech-to-text device, an augmentative/assistive communication device (e.g., picture/word board), or by dictating, signing, gesturing, pointing, or eye-gazing. The student must be tested in a separate setting. The student must be familiar with any assistive technology external device used for test administration. Note: TestNav does not have embedded Speech-to-Text functionality - students must use allowable Assistive Technology or an external third-party device (responses must be transcribed).
		 After Testing: Responses must be transcribed exactly as dictated/signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all paper nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.

⁵ This accommodation applies to Evidence Based Selected Response, and Technology Enhanced Constructed Response items (not Prose Constructed Response items) on the English language arts/literacy (ELA/L) assessments.



	Accommodation	Administration Guidelines
	Mathematics and	Before Testing:
4k 4l 4m 4n	Science Speech-to-Text Human Scribe Human Signer Assistive Technology Device	 Identification for Accommodations Registration File: Student's accommodations registration file must have Speech-to-Text, Human Scribe, Human Signer, or Assistive Technology Device selected. Materials: External device provided by the student, if needed. If the student uses speech-to-text software, such as Dragon® Naturally Speaking, then a separate computer must be provided; one to run the assessment on TestNav and a second computer to run the software. TestNav 8 does not contain embedded speech-to-text software. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Appendix L: Human Signer Guidelines (signers only). Note: If a student is using an allowable 3rd party external Assistive Technol-
		ogy that provides speech-to-text functionality that will interact with TestNav, the student must also be registered for Assistive Technology Non Screen-reader to allow the assistive technology to work.
		 Assistive technology, including speech-to-text software, should be tested during an Infrastructure Trial. If during the Infrastructure Trial the specific device will not interact with TestNav, a secondary testing device to run the external device software will be needed. Some speech-to-text software will not interact with TestNav, and users should set up a separate, adjacent testing station; the student will use two testing stations, one device with the test and one device with the familiar software. Reference the Assistive Technology Guidelines available at the following link: https://dc.mypearsonsupport.com/.
		During Testing: Student dictates responses either verbally, using an external speech-to-text device, an augmentative/assistive communication device (e.g., picture/word board), or by dictating, signing, gesturing, pointing, or eye-gazing. The student must be tested in a separate setting. The student must be familiar with any assistive technology external device used for test administration. Note: TestNav does not have embedded Speech-to-Text functionality - students must use allowable Assistive Technology or an external third-party device (responses must be transcribed).
		After Testing:
		 Responses must be transcribed exactly as dictated/signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all paper nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.



Accommodation	Administration Guidelines
ELA/Literacy Constructed Response Options ⁶ 40	 Identification for Accommodations Registration File: Student's accommodations registration file must have Speech-to-Text, Human Scribe, Human Signer, or Assistive Technology Device selected. If you plan to use a Chromebook or iPad as a third-party external assistive technology device, contact your state for additional guidance. Materials: External device provided by the student, if needed. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Appendix L: Human Signer Guidelines (signers only). Note: If a student is using an allowable 3rd party external Assistive Technology that provides speech-to-text functionality that will interact with TestNav, the student must also be registered for Assistive Technology Non Screenreader to allow the assistive technology to work.
	 Assistive technology, including speech-to-text software, should be tested during an Infrastructure Trial. If during the Infrastructure Trial the specific device will not interact with TestNav, a secondary testing device to run the external device software will be needed. Some speech-to-text software will not interact with TestNav, and users should set up a separate, adjacent testing station; the student will use two testing stations, one device with the test and one device with the familiar software. Reference the Assistive Technology Guidelines available at the following link https://dc.mypearsonsupport.com/. During Testing: Student dictates responses either verbally, using an external speech-to-text device, an augmentative/assistive communication device (e.g., picture/word board), or by dictating, signing, gesturing, pointing, or eye-gazing. The student must be tested in a separate setting. The student must be familiar with any assistive technology external device used for test administration. Note: TestNav does not have embedded Speech-to-Text functionality - students must use allowable Assistive Technology or an external third-party device (responses must be transcribed).

 $^{{\}small 6} \quad \text{This accommodation applies to Prose Constructed Responses on the ELA/Literacy assessments.} \\$



	Accommodation	Administration Guidelines
		After Testing:
		 Responses must be transcribed exactly as dictated/signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.
		Important Guidelines for identifying students to receive these accommodations:
		IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying a student to receive this accommodation. If all guidelines are NOT met, and the student is given the Human Scribe accommodation on a DC CAPE English language arts/literacy (ELA/L) assessment, the student's assessment score may be invalidated and the score would not be counted in the overall assessment results (i.e., the student would be considered a "non-participant" for the English language arts/literacy (ELA/L) assessment.)
		In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
		 A physical disability that severely limits or prevents the student's motor process of writing through keyboarding;
		OR
		 A disability that severely limits or prevents the student from expressing written language, even after varied and repeated attempts to teach the student to do so.
		Before listing the accommodation in the student's IEP or 504 plan, teams/coordinators should also consider whether:
		 The student's inability to express in writing is documented in evaluation summaries from locally-administered diagnostic assessments; The student routinely uses a scribe for written assignments; and The student receives ongoing, intensive instruction and/or interventions to learn written expression, as deemed appropriate by the IEP team or 504 Plan Coordinator.
4s	Monitor Test Response	During Testing: The Test Administrator monitors proper placement of student responses. This accommodation is to ensure that the student is marking the answer for the problem the student intends to answer. For example, a student may accidentally skip a question. The Test Administrator CANNOT assist the student in any way with respect to the content of the item.



	Accommodation	Administration Guidelines	
4t	Word Prediction	Before Testing:	
	External Device on the ELA/Literacy Assessment	 <u>Identification for Accommodations Registration File</u>: Student's accommodations registration file must have Word Prediction selected. <u>Materials</u>: External Word Prediction Device. 	
	Available on: DC CAPE ELA Assessments	Note: If a student is using an allowable 3rd party external Assistive Technology that provides Word Prediction functionality that will interact with TestNav, the student must also be registered for Assistive Technology Non Screen-reader to allow the assistive technology to work.	
		 Assistive technology should be tested during an Infrastructure Trial. If during the Infrastructure Trial the specific device will not interact with TestNav, a secondary testing device to run the external device software will be needed. Some external word prediction software will not interact with TestNav, and users should set up a separate, adjacent testing station; the student will use two testing stations, one device with the test and one device with the familiar software. 	
		 Reference the Assistive Technology Guidelines available at the following link: https://dc.mypearsonsupport.com/. 	
provides a bank of frequently- or recently-used words student enters the first few letters of a word. The student the use of the external device prior to assessme		During Testing: The student uses an external word prediction device that provides a bank of frequently- or recently-used words on-screen after the student enters the first few letters of a word. The student must be familiar with the use of the external device prior to assessment administration. The device may not connect to the internet or save information.	
		After Testing:	
		 Student responses generated using the External Word Prediction Device software must be transcribed verbatim by a Test Administrator into TestNav. Only transcribed responses submitted in TestNav will be scored. Note: If the student is writing their responses directly into TestNav through the external software for word prediction, then transcribing is not necessary. 	
		Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses.	
		Test Administrators are responsible for collecting all nonscorable student work created using external word prediction device software. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.	
		Important Guidelines for identifying students to receive this accommodation:	
		IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying a student to receive this accommodation.	
		In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators are instructed to consider whether the student has:	



Accommodation	Administration Guidelines	
	 A physical disability that severely limits or prevents the student from writing or keyboarding responses; 	
	OR	
	 A disability that severely limits or prevents the student from recalling, processing, and expressing written language, even after varied and repeated attempts to teach the student to do so. 	
	Before listing the accommodation in the student's IEP/504 plan, teams/coordinators are instructed to consider whether:	
	 The student's inability to express in writing is documented in evaluation summaries from locally administered diagnostic assessments; 	
	 The student routinely uses a word-prediction device or software during classroom writing assignments; and 	
	 The student receives ongoing, intensive instruction, and/or intervention in language processing and writing, as deemed appropriate by the IEP team/504 Plan Coordinator. 	

Table 5 describes the timing and scheduling accommodation for students with disabilities that is intended to increase the allowable time in which to complete an assessment. The table outlines the activities needed before, during, and after testing necessary to successfully administer the assessments with this accommodation. Accommodations for students with disabilities must be pre-selected for the student in the accommodations registration file. This information is included in the "before testing" guidance. Unless otherwise noted, accommodations in this table are available on all DC CAPE assessments (DC ELA, DC Math, and DC Science).

Table 5: Timing and Scheduling Accommodation for Students with Disabilities



	Accommodation	Administration Guidelines	
5a	Extended Time	Before Testing:	
		 <u>Identification for Accommodations Registration File</u>: Student's accommodations registration file must have extended time selected. The amount of time a student receives should be indicated in the student's IEP or 504 plan. The student does not need to take the full day if it is not needed. <u>Test Administrator Training</u>: Test Administrators providing this 	
		accommodation must review:	
		 Appendix E: Guidance for Selecting and Administering the Extended Time Accommodation. 	
		During Testing: Students have until the end of the school day to complete a single test section administered during the prescribed testing window. It is recommended to test students receiving the extended time accommodation separate setting to minimize distractions to other students, and to schedule students for testing in the morning to allow adequate time for completion of test section by the end of the school day.	



Accommodations for English Learners

Table 6 lists the accommodations on DC CAPE assessments that are available to ELs, cross-referenced with recommendations regarding the effectiveness of the accommodation based on the English Language Proficiency (ELP) level of the student. See DC CAPE Decision-Making Supplement for how ELP is determined. Please note that students identified as EL monitored and in their first two years of monitoring status are eligible only for the extended time and word-to-word dictionary accommodations. Active ELs are eligible for all listed accommodations.

Table 6: Guidance on Selection of Accommodations for English Learners on DC CAPE Assessments

KEY for Table 6:

- Highly recommended for use by ELs at this ELP level
- Recommended for use by ELs at this ELP level
- O May not be appropriate for students at this ELP level

DC CAPE Mathematics Accommodations	Most likely to benefit ELs at this ELP Level		
DC CAPE Mathematics Accommodations	Beginning	Intermediate	Advanced
Extended time*	•	•	•
Word-to-Word Dictionary* (English/Native Language)	•	•	•
Mathematics and Science Response Speech- to-Text			
Mathematics and Science Response Human Scribe	•	•	0
General Administration Directions Read Aloud and Repeated in Student's Native Language (by Test Administrator)	•	•	0
General Administration Directions Clarified as Needed in Student's Native Language (by Test Administrator)	•	•	0
Online Transadaptation of the Mathematics and Science Assessments in Spanish	•	•	0
PapersBased Edition of the Mathematics and Science Assessments in Spanish	•	•	0
Text-to-Speech for the Mathematics Assessments in Spanish	•	•	0

^{*}Students identified as EL monitored and in their first two years of monitoring status are eligible only for the extended time and word-to-word dictionary accommodations. Active ELs are eligible for all listed accommodations.



Table 7 provides a list of accommodations for ELs. Students who are classified as EL monitored and are in their first two years of monitoring status are only eligible to receive accommodations 7a and 7b, Extended Time and Word-to-Word Dictionary.

The table describes the activities needed before, during, and after testing necessary to administer these accommodations appropriately. Accommodations for ELs must be pre-selected for the student in the Accommodations Registration File. This information is included in the "before testing" guidance and the corresponding column in the accommodations registration file is also provided.

Table 7: Accommodations for English Learners on DC CAPE Assessments

Tabl	Table 7: Accommodations for English Learners on DC CAPE Assessments		
Accommodation		Administration Guidelines	
7a	Extended time	Before Testing:	
		 Identification for Accommodations Registration File: Student's accommodations registration file must have extended time selected. Test Administrator Training: Test Administrators providing this accommodation must review: 	
		 Appendix E: Guidance for Selecting and Administering the Extended Time Accommodation. 	
		During Testing: Students have until the end of the school day to complete a single test section administered during the prescribed testing window. The amount of time a student receives must be indicated in advance. It is recommended to test students receiving the extended time accommodation in a separate setting to minimize distractions to other students, and to schedule these students for testing in the morning to allow adequate time for completion of a test section by the end of the school day.	
7b	Word-to-Word	Before Testing:	
	Dictionary (English/ Native Language)	 <u>Identification for Accommodations Registration File</u>: Student's accommodations registration file must have word-to-word dictionary selected. <u>Materials</u>: Word-to-word dictionaries are provided to students by their selections. 	
school, based on those used by the student for rou instruction. Contact OSSE for guidance on allowable dictionaries for DC CAPE assessments.		instruction. Contact OSSE for guidance on allowable word-to-word	
		During Testing: The student uses a published bilingual, word-to-word dictionary that does not include definitions, pronunciation, phrases, sentences, or pictures. The student should be familiar with the dictionary they will use during testing. Students should be given ample time to complete the test using the accommodation. If no printed word-to-word dictionary can be found for a specific language, an electronic translator may be used. The device may not connect to the internet or store information, and therefore, webbased translators are not allowed.	



	Accommodation	Administration Guidelines		
7c 7d	Mathematics and Science Response Speech-to-Text Human Scribe/ Human Signer Available on: DC CAPE Math and Science Assessments	 Identification for Accommodations Registration File: Student's accommodations registration file must have Speech-to-Text or Human Scribe selected. Materials: External device provided by the student, if needed. If the student uses speech-to-text software, such as Dragon® Naturally Speaking, then a separate computer must be provided; one to run the assessment on TestNav and a second computer to run the software. TestNav 8 does not contain embedded speech-to-text software. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. 		
Appendix C: Protoco for Transcribing Stud Note: If a student is using an a Technology that provides spee TestNav, the student must also Screen-reader to allow the ass Assistive technology, inclutested during an Infrastruthe specific device will not device to run the external to-text software will not in a separate, adjacent testing stations, one device with software. Reference the Assistive Technology and the student of the stations of the student of the separate setting. The student of the separate setting. The student of the separate setting of this accommon to the separate setting. The student of the separate setting of this accommon to the separate setting of the separate setting. Assistive Technology or an extension of the separate setting: Responses must be transcommon to the separate setting the settin		 Reference the Assistive Technology Guidelines available at: https://dc.mypearsonsupport.com/. During Testing: A student dictates responses verbally, using an external speech-to-text device or by dictating. The student must be tested in a separate setting. The student must already be familiar with any external device used for this accommodation. Note: TestNav does not have embedded Speech-to-Text functionality - students must use allowable Assistive Technology or an external third-party device (responses must be transcribed). After Testing: Responses must be transcribed exactly as dictated/signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. 		



	Accommodation	Administration Guidelines		
7e	General Administration Directions Read Aloud and Repeated in Student's Native Language (by Test Administrator)	Before Testing: Identification for Accommodations Registration File: Student's accommodation registration file must have General Administration Directions Read Aloud and Repeated in Student's Native Language selected. Materials: Written general test administration directions are available in the following languages: Spanish If written general test administration directions are not available in the student's native language, a local translator fluent both in English and the student's native language may translate and read		
		 Test Administrator Training: Test Administrators, or other qualified interpreters, providing the general administration directions in languages other than English must review the directions in advance in order to provide consistent transadaptations. Test Administrators providing this accommodation will ideally be literate and fluent in English, as well as in the student's native language; or may collaborate with a local translator, if available. During Testing: The Test Administrator, or other qualified interpreter, reads aloud the general administration instructions in the student's native language. The student may request that directions be repeated. The student must be 		
		tested in a separate setting.		
7f	General Administration Directions Clarified in Student's Native Language (by Test Administrator)	 Identification for Accommodations Registration File: Student's accommodations registration file must have General Administration Directions Clarified in Student's Native Language selected. Test Administrator Training: Test Administrators providing this accommodation should be literate and fluent in English, as well as in the student's native language. 		
		During Testing: The Test Administrator clarifies general administration directions only in the student's native language. Test Administrators, or other qualified interpreters, providing this accommodation should ideally be literate and fluent in English, as well as in the student's native language; or Test Administrator may be assisted by a translator who speaks the language of the student, if available.		



	Accommodation	Administration Guidelines	
science Assessments in Spanish Test Administrator Training: Taccommodation should ideal Spanish, or may be assisted by administration directions will During Testing: A student takes the		Identification for Accommodations Registration File: Student's accommodations registration file must have Online Transadaptation in Spanish selected. Once a student is placed into a proctor group, the student will be assigned an online form in Spanish. Test Administrator Training: Test Administrators providing this accommodation should ideally be literate and fluent in English and Spanish, or may be assisted by a translator, if available, since test administration directions will be read to the student in Spanish. During Testing: A student takes the online mathematics or science assessment with content presented in Spanish.	
7h Paper-Based Edition of the Assessment in Spanish Available on: DC CAPE Math and Science Assessments		 Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have Paper-Based Edition in Spanish selected. Materials: Paper-Based Edition of the Assessment in Spanish. Test Administrator Training: For ELs, and ELs with disabilities, administrators must review the following:	



	Accommodation	Administration Guidelines		
7i	Text-to-Speech for the Mathematics and Science Assessments in Spanish Available on: DC CAPE Math and Science Assessments	 Identification for Accommodations Registration File: Student's accommodations registration file must have Text-to-Speech in Spanish selected. Once a student is placed into a proctor group, the student will be assigned a form with embedded text-to-speech on the online Spanish form. The volume level must be determined prior to testing. Once testing begins, the volume cannot be changed. Student must be tested in a separate setting if unable to wear headphones. Test Administrator Training: 		
		 Refer to the Text-to-Speech Tutorial on https://dc.mypearsonsupport.com/ for training on functionality. Test Administrators providing this accommodation should ideally be literate and fluent in English and Spanish, or may be assisted by a translator, if available, since test administration directions will be read to the student in Spanish. 		
		Differences Between Text Only and Text Plus Graphics:		
		 Text Plus Graphics - Reads all printed text and the hidden alternate text descriptions for images. Text Only - Reads printed text but does not read any alternate text descriptions for images. 		
		During Testing: The student selects the "Text-to-Speech Player" icon on the toolbar on the right side of the screen. The test is read aloud to the student in Spanish using embedded text-to-speech software. The student may pause and resume the audio as needed. To choose a speed (slow, normal, fast), select the "Text-to-Speech Settings" icon. Once the test begins, the volume level cannot be changed. Student must be tested in a separate setting if unable to wear headphones.		



Appendix A: Accessibility Features and Accommodations for Students Taking the Paper-Based DC CAPE Assessments

Students who may participate in a Paper-Based Assessment

Although DC CAPE assessments are computer-based using an online testing platform, there may be specific instances which require a student to take a paper-based assessment instead. The following conditions may result in a school choosing to administer a paper-based assessment:

- Condition #1: A student is unable to use a computer due to the impact of their disability. The student's inability to participate in computer-based assessments should be documented in an Individualized Education Program (IEP) or 504 plan.
 - Examples may include:
 - A student with a disability who cannot participate in the online assessment due to a health-related disability, neurological disorder, or other complex disability, and/or cannot meet the demands of a computer-based test administration;
 - A student with an emotional, behavioral, or other disability who is unable to maintain sufficient concentration to participate in a computer-based test administration, even with test accommodations;
 - A student with a disability who requires assistive technology that is not compatible with the testing platform.
- Condition #2: A student who recently entered the school and has had very little or no prior experience or familiarity with technology.
- Condition #3: A student who is unable to access an online assessment due to religious beliefs.

There are a few accessibility features that must be pre-selected for the student in the accommodations registration file. Accommodations for students with disabilities and/or ELs must be pre-selected for the student in the accommodations registration file. When needed for the paper-based accessibility feature or accommodation, this information is included in the "before testing" guidance.

Refer to the *DC CAPE Accessibility Features and Accommodations Manual* for additional information concerning test administration considerations, accessibility features, and accommodations.

Table A1: Accessibility Features for All Students Taking Paper-Based Assessments

Table A1 includes Features for All Students & Accessibility Features Identified in Advance.

CBT Comparable Accessibility Feature		PBT Accessibility Feature	PBT Administration Guidelines
A1a	Answer Masking	External Masking Cards (Visual Aids/ Organizers)	Identification for Accommodations Registration File: Student's accommodations registration file must have Answer Masking selected. Materials: Test Administrator provides student with blank masking cards. During Testing: The student may cover or uncover answer options with external blank masking cards as needed.



	BT Comparable essibility Feature	PBT Accessibility Feature	PBT Administration Guidelines
A1b	Audio Amplification	Auditory Aids	Before Testing: The student brings familiar auditory aid to the test administration.
			During Testing: The student uses amplification device assistive technology (e.g. FM System), noise buffers, or white noise machines (provided by the school or student).
A1c	Bookmark	Place Markers (Visual Aids/ Organizers)	Materials: Test Administrator provides student with place markers. During Testing: The student uses non-sticky place markers to "bookmark" items to review later. All place markers must be removed before test booklet or answer document is submitted for scoring.
A1d	Color Contrast (Background/Font Color)	Colored Overlays	Identification for Accommodations Registration File: Test Administrator provides student with colored overlays. During Testing: The student uses colored overlays when taking the assessment. The color is pre-selected and should match what is currently used during instruction.
A1e	Blank Scratch Paper (provided by Test Administrator)	Same as CBT	Before Testing: Test Administrators must supply at least one page of blank scratch paper (i.e., either unlined, lined, or graph) per student, per section. If graph paper is used during mathematics instruction, it is recommended that schools provide graph paper as scratch paper for mathematics sections. Students with visual impairments may also use braille paper, raised line paper, bold line paper, raised line graph paper, bold line graph paper, abacus, or Math Window. During Testing: The student uses blank scratch paper (lined, un-lined, or graph) to take notes and/or work through items during testing. Additional pages may be provided as needed. Students are not required to write their names on scratch
			After Testing: Test Administrators are responsible for collecting ALL scratch paper after testing is completed to be securely destroyed. Scratch paper must be securely shredded if it has been used. Schools may reuse unused scratch paper only if paper is completely blank.
A1f	Eliminate Answer Choices	Writing Instrument	During Testing: The student may use removable markers (e.g. small strips of paper) to indicate that they are eliminating an answer. Placing any stray marks in the answer area may conflict with accurate scoring. After Testing: The Test Administrator ensures no small strips of paper are still in the booklets.



CBT Comparable Accessibility Feature		PBT Accessibility Feature	PBT Administration Guidelines
A1g	General Administration Directions Read Aloud and Repeated as Needed (by Test Administrator)	Same as CBT	During Testing: The Test Administrator reads aloud the general administration directions only. A student may raise their hand and request the directions be repeated.
A1h	General Administration Directions Clarified (by Test Administrator)	Same as CBT	During Testing: The Test Administrator clarifies general administration directions only. No passages or test items may be clarified.
A1i	Highlight Tool	Highlighter	Before Testing:
			 <u>Materials</u>: Test Administrator provides student with highlighter(s). Multiple colors may be provided.
			During Testing: The student highlights text as needed to recall and/or emphasize. Multiple colors may be provided.
A1j	Headphones or Noise Buffers	Same as CBT	Before Testing:
			 <u>Materials</u>: Test Administrator provides student with headphones.
			During Testing: The student uses headphones or noise buffers to minimize distraction or filter external noise during testing. If headphones are used only as noise buffers, they should not be plugged into the student's device.
A1k	Line Reader Mask	Straight Edge	Before Testing:
	Tool	(Visual Aids/ Organizers)	 <u>Materials</u>: Test Administrator provides student with blank straight edge.
			During Testing: The student uses a blank straight edge as they read and follows along with the text.
A1I	Magnification/	Magnification/	Before Testing:
	_	Enlargement Device	 <u>Materials</u>: Test Administrator provides student with magnification/enlargement device.
			During Testing:
			The student uses external magnification or enlargement devices to increase the font or graphic size (e.g., projector, CCTV, eye-glass mounted or hand-held magnifiers, electronic magnification systems, etc.).
A1m	Note Pad	Blank Scratch Paper	See Blank Scratch Paper in Table 1 of the DC CAPE Accessibility Features and Accommodations Manual



	BT Comparable essibility Feature	PBT Accessibility Feature	PBT Administration Guidelines
A1n	Pop-up Glossary	Glossary in Footnotes	During Testing: The student refers to a glossary of preselected, construct-irrelevant words in the footnotes of the paper-based test.
A1o	Redirect Student to the Test (by Test Administrator)	Same as CBT	During Testing: The Test Administrator redirects the student's attention to the test without coaching or assisting the student in any way. There is no limit to the number of times a Test Administrator can redirect a student back to the test. Examples: Providing reminders to stay on task and focused during the assessments; Providing a visual cue to the student to remain on task.
A1p	Spell Check or External Spell Check Device	External Spell Check Device	Materials: Test Administrator provides student with external spell check device. During Testing: The student uses an external spell check device. Device may not have embedded grammar check, connect to the internet, or save information.
A1q	Student Reads Assessment Aloud to Self	Same as CBT	During Testing: The student reads aloud the assessment to themselves. Students may use an external device such as a whisper phone. The student must be tested in a separate setting.
A1r	Text-to-Speech for the Mathematics Assessments	Human Reader	See Human Reader guidance below (A1s).



CBT Comparable Accessibility Feature	PBT Accessibility Feature	PBT Administration Guidelines
A1s Human Reader/ Human Signer for DC CAPE Assessments	Same as CBT	 ldentification for Accommodations Registration File: Student's accommodations registration file must have Human Reader/Human Signer selected. Materials: Read Aloud Kits, which include one copy of the student test booklet and answer document and a Human Reader Script. Test Administrator Training: Test Administrators providing this accessibility feature must review: Read Aloud Kits, including the Human Reader Script, at least two school days prior to testing, with kits provided to schools for this purpose. Review of Read Aloud Kits must occur in a SECURE ENVIRONMENT. Appendix B: Test Administration Protocol for the Human Reader Accommodation for English Language Arts/Literacy (ELA/L) Assessments, and the Human Reader Accessibility Feature for Mathematics and Science Assessments. Appendix L: Human Signer Guidelines (signers only). Appendix M: DC CAPE Assessments for Students with Visual Impairments, Including Blindness. During Testing: A Test Administrator (Human Reader or Human Signer) reads aloud to a student using the provided Human Reader script and test booklet. The student must be tested in an individual or small group setting. Small groups should only be used if all students are able to work at approximately the same pace. After Testing: Human Reader Scripts are secure, and Test Coordinators are responsible for returning the Human Reader Scripts with the non-scorable materials.
A1t Writing Tools	Writing Instrument	During Testing: The student uses a writing instrument on written responses to underline, bold, or add bullets for formatting.



Administrative Considerations for All Students

Detailed guidance on the administration of the DC CAPE assessments is included in the *Test Administrator Manuals* and the *Test Coordinator Manual* available at dc.mypearsonsupport.com.

Although students are generally tested in their regular classroom and follow the standard test administration schedule for the grade and content area being assessed, school leadership has the authority to schedule students in testing spaces other than regular classrooms, and at different scheduled times, as long as all requirements for testing conditions and test security are met as set forth in the *Test Administrator Manuals* and *Test Coordinator Manuals*. Decisions may be considered, for example, that benefit students who are easily distracted in large group settings by testing them in a small group or individual setting. In general, changes to the timing, setting, or conditions of testing are left to the discretion of the principal or test coordinator.

In accordance with principles of universal design for assessment, OSSE is providing the following administrative guidance regarding the timing and scheduling of assessments, and setting/locations for testing. These administrative considerations are available to all students. School leaders may determine that any student can receive one or more of the following test administration considerations, regardless of the student's status as a student with a disability or EL.

Table A2: Administrative Considerations for All Students Taking Paper-Based Assessments, at School's Discretion

PBT	Administrative Consideration	Description	
A2a	Small Group Testing	Student is tested in a separate location with a small group of students with matching accessibility features, accommodations, or testing needs as appropriate.	
A2b	Time of Day	Student is tested during a specific time of day based on their individual needs (e.g., ELA/literacy in the morning; no testing after lunch).	
A2c	Separate or Alternate Location	Student is tested in a specifically assigned location.	
A2d	Specified Area or Setting	Student is tested in a specialized area or setting (e.g., front of the classroom, seat near the door, library, etc.).	
A2e	Adaptive and specialized equipment or furniture	Student is provided specialized equipment or furniture needed for a successful testing environment (e.g., low lighting; adaptive seat).	
A2f	Frequent breaks	Guidance on logistics for administrating assessments with frequent breaks: • Medical Breaks: Student takes a break due to pre-existing or sudden onset of a temporary or long-term medical condition. Student's testing time stops. • Individual Bathroom Breaks: Student requests a bathroom break within their overall allotted testing time. Student's testing time does not stop.	
		 In-Chair Stretch Break: Student pauses and stretches. Student's testing time does not stop. 	



Table A3: Presentation Accommodations for Students with Disabilities Taking Paper-Based **Assessments**

	CBT Comparable PBT Accommodation Accommodation		PBT Administration Guidelines
A3a	Assistive Technology (Non-Screen Reader)	Assistive Technology (external)	• Identification for Accommodations Registration File: Student's accommodations registration file must have Assistive Technology - Non-Screen Reader selected. During Testing: Students may use a range of assistive technologies on the DC CAPE assessments, including those that are used externally on a separate computer. After Testing: Test Administrators are responsible for collecting all nonscorable student work created from assistive technology devices. Content must be cleared off all devices. Paper nonscorable student work must be securely shredded. Responses must be transcribed verbatim by a test administrator in a standard student test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol.



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A3b	Hard Copy Braille Edition	Hard Copy Braille Edition	 Test Administrators may have access to and review secure materials no more than two days prior to test administration. Identification for Accommodations Registration File: Student's accommodations registration file must have Hard Copy Braille Edition selected. Materials: Braille Kits are required for administration. Braille Kits include Test Administrator Braille Scripts, one copy of the student's Hard Copy Braille Assessment, standard test booklet or answer document for transcription, and supplementary math materials (braille ruler, braille protractor) where appropriate. Test Administrator Training: Test Administrators of students with visual impairments must review: Braille Kits, which will be provided to schools at least two full school days prior to testing in a SECURE ENVIRONMENT for the Test Administrator to verify that the braille code (e.g., English Braille American Edition (EBAE) and Unified English Braille (UEB)) is accurate on the test booklet cover and review the braille test administration scripts, including information specific to administering paper-based braille. Braille notes are inserted behind the cover of the first volume of the Braille test. Important: Reading, viewing, copying, or reproducing passages or test items is prohibited. Appendix M: DC CAPE Assessments for Students with Visual Impairments, Including Blindness. If needed by the student, braille test booklets or answer documents may be disassembled for testing (but must be reassembled for return). It is critical that Test Administrators count the number of pages in the test booklet or answer document prior to disassembling the test booklets or answer document prior to disassembling the test booklets or answer documents to help ensure that all pages are returned.



	CBT Comparable PBT Accommodation Accommodation		PBT Administration Guidelines
			 During Testing: A student who is blind or has a visual impairment and is unable to take the computer-based test may take the DC CAPE assessments using the hard copy contracted braille edition. Tactile graphics are already embedded in the hard copy braille edition. For students using braille forms, the Test Administrator directions for filling in a circle, making marks, and erasing do not apply. Students should number their responses to be sure that their answers can be transcribed accurately into a scorable test booklet or answer document. After Testing: Responses must be transcribed verbatim by a Test Administrator in a standard student test booklet or answer document, which is included in the Braille Test Kit. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all nonscorable student work created from assistive technology devices. Content must be cleared off all devices. Nonscorable student work must be securely shredded. If the braille test booklet or answer document was disassembled, it must be reassembled for return. To reassemble test booklets or answer documents, the Test Administrator may staple or binder clip all pages for return. Failure to return all pages will be considered a
A3c	Tactile Graphics	Tactile Graphics	During Testing: Tactile graphics will be embedded in the hard copy braille edition assessments, when needed.
			After Testing: Tactile graphics booklets contain secure item content and should be handled as secure test materials. Test Administrators should return tactile graphics to Test Coordinators. Test Coordinators must return tactile graphics with the nonscorable materials.



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A3d	Large Print Edition	Large Print Edition	Before Testing: • Identification for Accommodations Registration File:
			Student's accommodations registration file must have Large Print Edition selected.
			 Materials: Large Print Test Kit includes a large print assessment booklet, standard test booklet or answer document for transcription, Test Administrator large print scripts and supplementary large print mathematics materials (large print ruler & protractor), when appropriate.
			<u>Test Administrator Training</u> : Test Administrators of students with visual impairments must review:
			 Appendix M: DC CAPE Assessments for Students with Visual Impairments, Including Blindness.
			 Appendix A: Accessibility Features and Accommodations for Students Taking the Paper- Based DC CAPE Assessments.
			During Testing: A large print paper-based form of each assessment is available for a student with a visual impairment who is unable to take a computer-based assessment. The font size for the large print edition will be 18 point on paper sized 14" x 18". Students will not record their answers in standard print test booklets or answer documents. Instead, students will circle their answers in a large print test booklet. For constructed response items, students will write their answers on the lines provided in their large print test booklets. In mathematics, students will need to write their answers in boxes at the top of the answer grids, but they do not need to bubble in their answers. Test Administrators should refer to the Test Administrator Manual (TAM) Scripts for instances where they should demonstrate an activity or display information. Demonstrations should be conducted where they are visible for each student (e.g., on the board, near the student).
			After Testing:Responses must be transcribed verbatim by a Test
			Administrator in a standard student test booklet or answer document, which is included in the Large Print Test Kit. Only transcribed responses will be scored. At least two persons must be present during transcription of student responses (one transcriber and one observer confirming accuracy). It is recommended that one of the individuals be an LEA or School Test Coordinator. • Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses.



	CBT Comparable PBT Accommodation Accommodation		PBT Administration Guidelines
A3e	Paper-Based Edition	Paper-Based Edition	 Identification for Accommodations Registration File: Student's accommodations registration file must have Paper-Based Edition selected. Materials: Paper-Based Edition of the assessment Test Administrator Training: Test Administrators must review the following appendix for accessibility features and accommodations in a paper-based environment: Appendix A: Accessibility Features and Accommodations for Students Taking the Paper-Based DC CAPE Assessments During Testing: For schools administering the computer-based assessments, a paper-based assessment is available for students who are unable to take a computer-based assessment due to a disability.
A3f	Closed Captioning of Multimedia on the ELA/Literacy Assessments Available on: DC CAPE ELA Assessments	N/A	N/A



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A3g A3h	ELA/Literacy Assessments, including items, response options, and passages Text-to- Speech Human Reader/ Human Signer Available on: DC CAPE ELA Assessments	ELA/Literacy Assessments, including items, response options, and passages • Human Reader/ Human Signer	 Purpose: The purpose of the Human Reader/ Human Signer accommodation for the DC CAPE ELA/literacy assessment is to provide access to printed or written texts on the DC CAPE ELA/ literacy assessments for a very small number of students with print-related disabilities who would otherwise be unable to participate in the assessment because their disability severely limits or prevents their ability to access printed text by decoding. This accommodation is not intended for students reading somewhat (i.e., only moderately) below grade level. Identification for Accommodations Registration File: Student's accommodations registration file must have Human Reader/Human Signer selected. Tools for Identification: IEP teams/504 Plan Coordinators should use the decision-making tool available in Appendix D: Text-to-Speech, or Human Reader/Human Signer Guidance for English Language Arts/Literacy (ELA/L) Assessments to inform their decision-making. Materials: Read Aloud Kits, which include one copy of the student test booklet for Test Administrators (Human Reader/ Human Signer). Test Administrator Training: Test Administrators providing this accommodation must review: Read Aloud Kits at least two school days prior to testing, with kits provided to schools for this purpose. Review of Read Aloud Kits must occur in a SECURE ENVIRONMENT. Appendix B: Test Administration Protocol for the Human Reader Accommodation for English Language Arts/Literacy (ELA/L) Assessments, and the Human Reader Accessibility Feature for Mathematics and Science Assessments Appendix L: Human Signer Guidelines (signers only). Appendix M: DC CAPE Assessments for Students with Visual Impairments, Including Blindness.



CBT Comparable	РВТ	
Accommodation	Accommodation	PBT Administration Guidelines
		During Testing: A student receives an audio representation of the ELA/literacy assessment either through a Human Reader/ Human Signer. For Human Reader, the Test Administrator will need to reference Appendix I: DC CAPE ELA Audio Guidelines. Note: If a student has a Human Reader or Human Signer, the student must be tested in a separate setting.
		Important Guidelines on identifying students for these accommodations: IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying students to receive these accommodations on the ELA/ literacy assessments.
		In making decisions on whether to provide a student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
		 Blindness or a visual impairment and has not learned (or is unable to use) braille;
		OR
		 A disability that severely limits or prevents them from accessing printed text, even after varied and repeated attempts to teach the student to do so (e.g., student is unable to decode printed text);
		OR
		 Deafness or a hearing impairment and is severely limited or prevented from decoding text due to a documented history of early and prolonged language deprivation.
		Before listing the accommodation in the student's IEP or 504 plan, teams/coordinators should consider whether:
		 The student has access to printed text during routine instruction through a reader, other spoken-text audio format, or signer;
		 The student's inability to decode printed text or read braille is documented in evaluation summaries from locally-administered diagnostic assessments; and
		 The student receives ongoing, intensive instruction and/or interventions in the foundational reading skills to continue to attain the important college and career- ready skill of independent reading.
		Decisions about who receives this accommodation will be made by IEP teams and 504 Plan Coordinators. For a student who receives one of these accommodations, no claims should be inferred regarding the student's ability to demonstrate foundational reading skills (i.e., decoding and fluency).



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A3i	Human Signer for Test Directions	Same as CBT	Identification for Accommodations Registration File: Student's accommodations registration file must have Human Signer for Test Directions selected. Test Administrator Training: Human Signers must review: Test Administrator Scripts included in the Test Administrator Manuals. Appendix L: Human Signer Guidelines (signer only). During Testing: A Human Signer will sign the test directions to a student. The student may either be tested in a small group or a separate setting based on the student's experiences during classroom assessments.



Table A4: Response Accommodations for Students with Disabilities Taking Paper-Based **Assessments**

	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A4a	Assistive	Assistive Technology	Before Testing:
	Technology (Non- Screen Reader)	File mu	Identification for Accommodations Registration File: Student's accommodations registration file must have External Assistive Technology Device selected.
			During Testing: Students may use a range of assistive technologies on the DC CAPE assessments, including those that are used externally on a separate computer.
			After Testing: Test Administrators are responsible for collecting all nonscorable student work created from assistive technology devices. Content must be cleared off all devices. Paper nonscorable student work must be securely shredded. Responses must be transcribed verbatim by a test administrator in a standard student test booklet or answer document. Only transcribed responses will be scored.
			Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol.



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A4b	Braille Note-taker	Braille Note-taker	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have braille note-taker selected.
			During Testing: A student who is blind or has a visual impairment may use an electronic braille note-taker. The grammar checker, internet, and stored file functionalities must be turned off. For students using braille forms, Test Administrator directions for filling in a circle, making marks, and erasing do not apply. Students should number their responses to be sure that their answers can be transcribed accurately into a scorable test booklet or answer document.
			After Testing:
			 Student responses generated using an electronic braille note-taker must be transcribed verbatim by a Test Administrator into the student's standard student booklet. Only transcribed responses will be scored. Responses must be transcribed by a teacher of the visually impaired or a Test Administrator supervised by a teacher of the visually impaired. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Test Administrators are responsible for collecting all nonscorable student work created using
			assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.
A4c	Braille Writer	Braille Writer	Before Testing:
			 <u>Identification for Accommodations Registration</u> <u>File</u>: Student's accommodations registration file must have braille writer selected.
			During Testing: A student who is blind or has a visual impairment may use a braille writer. For DC CAPE assessments, grammar checker, internet, and stored file functionalities must be turned off. For students using braille forms, Test Administrator directions for filling in a circle, making marks, and erasing do not apply. Students should number their responses to be sure that their answers can be transcribed accurately into a scorable test booklet or answer document.



CBT Comparable Accommodation PBT Accomm		PBT Administration Guidelines
•	Calculation Device (on Calculator Sections of Mathematics Assessments)	After Testing: Student responses generated using an electronic braille notetaker must be transcribed verbatim by a Test Administrator into the student's standard test booklet or answer document. Only transcribed responses will be scored. Responses must be transcribed either by a teacher of the visually impaired or a Test Administrator supervised by a teacher of the visually impaired. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Test Administrators are responsible for collecting all nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded. Before Testing: Materials: Allowable calculators on calculator sections: Grade 8: Scientific calculators (Student may also bring a four-function with square root and percentage functions in addition to a grade-level calculator). High School: Graphing calculators with functionalities consistent with TI-84 or similar models (Student may also bring a scientific calculator or a four-function
		functionalities consistent with TI-84 or similar models (Student may also bring
		During Testing: A student uses a specific calculation device (e.g., large key, talking, or other adapted calculator) on the calculator section of the mathematics assessments. If a talking calculator is used, the student must use headphones or be tested in a separate setting.



CBT Comparable Accommodation		PBT Accommodation	PBT Administration Guidelines
A4e	Calculation Device (on Non-Calculator Sections of Mathematics Assessments) Available on: DC CAPE Math Assessments	Calculation Device (on Non-Calculator Sections of Mathematics Assessments)	 Purpose: The purpose of the calculation device on the non-calculator sections accommodation is to provide access for students with a disability that severely limits or prevents their ability to perform basic calculations (i.e., student is unable to perform single-digit addition, subtraction, multiplication, or division). Specific guidelines for determining if this accommodation would be appropriate for a specific student, see the next page. For these students, a calculation device may be used on the non-calculator AND calculator sections of the mathematics assessments. The IEP or 504 plan must specify which device(s). Identification for Accommodations Registration File: Student's accommodations registration file must have Calculation Device on Non-Calculator Sections selected. Check with your district/state contact if you have questions. Materials: Allowable calculators for the calculator accommodation on non-calculator sections: Grade 8: Scientific calculators (Student may also bring a four-function with square root and percentage functions in addition to a grade-level calculator). High School: Graphing calculators with functionalities consistent with TI-84 or similar models (Student may also bring a scientific calculator or a four-function with square root and percentage functions



CBT Comparable Accommodation	PBT Accommodation	PBT Administration Guidelines
		During Testing: A student uses a calculation device (e.g., four-function calculator, large key, or other adapted calculator) on the non-calculator sections of the mathematics assessments. If a talking calculator is used, the student must use headphones or be tested in a separate setting.
		Important Guidelines for identifying students to receive this accommodation: IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying students to receive this accommodation.
		In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
		 A disability that severely limits or prevents the student's ability to perform basic calculations (i.e., single-digit addition, subtraction, multiplication, or division), even after varied and repeated attempts to teach the student to do so.
		Before listing the accommodation in the student's IEP/504 plan, teams should also consider whether:
		 The student is unable to perform calculations without the use of a calculation device during routine instruction.
		 The student's inability to perform mathematical calculations is documented in evaluation summaries from locally-administered diagnostic assessments.
		 The student receives ongoing, intensive instruction and/or interventions to learn to calculate without using a calculation device, in order to ensure that the student continues to learn basic calculation and fluency.
		For a student who receives this accommodation, no claims should be inferred regarding the student's ability to perform basic mathematical calculations without the use of a calculator.



CBT Comparable Accommodation	PBT Accommodation	PBT Administration Guidelines
A4f Mathematics Tools (on Non-Calculator Sections of Mathematics Assessments) Available on: DC CAPE Math Assessments	Mathematics Tools (on Non-Calculator Sections of Mathematics Assessments)	Purpose: The purpose of the mathematics tools on the non-calculator sections accommodation is to provide access for students with a disability that severely limits or prevents their ability to perform basic calculations (i.e., student is unable to perform single-digit addition, subtraction, multiplication, or division). Specific guidelines for determining if this accommodation would be appropriate for a specific student, see the next page. For these students, mathematics tools may be used on the non-calculator AND calculator sections of the mathematics assessments. The IEP or 504 plan must specify which manipulatives. Identification for Accommodations Registration File: Student's accommodations registration file must have Mathematics Tools on Non-Calculator Sections selected. Any mathematical tools not included on the list may require state assessment office approval, depending on state policies. Check with your district/state contact if you have questions. Materials: Allowable mathematics tools include: Arithmetic tables (e.g., addition charts, subtraction charts, multiplication charts; division charts). Two-color chips (e.g., single-sided or double-sided). Counters and counting chips. Abacus. Square tiles. Base 10 blocks. 100s chart. A student with a visual impairment may need other mathematics tools, such as a large print ruler, braille ruler, tactile compass, or braille protractor. Note that braille mathematics kits will include the appropriate grade-level braille ruler and braille protractors.



CBT Comparable Accommodation	PBT Accommodation	PBT Administration Guidelines
		During Testing: A student uses an arithmetic table (including addition/ subtraction and/or multiplication/ division charts), and/or manipulatives (IEP or 504 plan must specify which device or manipulative) on the non-calculator sections of the mathematics assessments.
		Important Guidelines for identifying students to receive this accommodation: IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying students to receive this accommodation.
		In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
		 A disability that severely limits or prevents the student's ability to perform basic calculations (i.e., single-digit addition, subtraction, multiplication, or division), even after varied and repeated attempts to teach the student to do so.
		Before listing the accommodation in the student's IEP/504 plan, teams should also consider whether:
		 The student is unable to perform calculations without the use of an arithmetic table, or manipulative during routine instruction. The student's inability to perform mathematical
		calculations is documented in evaluation summaries from locally-administered diagnostic assessments.
		 The student receives ongoing, intensive instruction and/or interventions to learn to calculate without using an arithmetic table or manipulative, in order to ensure that the student continues to learn basic calculation and fluency.
		For a student who receives this accommodation, no claims should be inferred regarding the student's ability to perform basic mathematical calculations without the use of mathematics tools.



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
A4g A4h A4i A4j	ELA/Literacy Selected Response Options7	ELA/ Literacy Selected Response Options Speech-to-Text Human Scribe Human Signer Assistive Technology Device	Identification for Accommodations Registration File: Student's accommodations registration file must have Speech-to-Text, Human Scribe, Human Signer, or External Assistive Technology Device selected. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Appendix L: Human Signer Guidelines
A4k A4l A4m A4n	Mathematics and Science Response Options Speech-to- Text Human Scribe Human Signer Assistive	Mathematics and Science Response Options Speech-to-Text Human Scribe Human Signer Assistive Technology Device	(signers only). During Testing: Student dictates responses either verbally, using an external speech-to-text device, an augmentative/assistive communication device (e.g., picture/word board), or by dictating, signing, gesturing, pointing, or eye-gazing. The student must be tested in a separate setting. The student must be familiar with any assistive technology external device used for test administration.
A411	Technology Device	recimology Device	 After Testing: Braille and Large Print responses must be transcribed exactly as dictated/signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all paper nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.

This accommodation applies to Evidence Based Selected Response, and Technology Enhanced Constructed Response items (not Prose Constructed Response items) on the English/language arts (ELA/L) assessments.



BT Comparable accommodation	PBT Accommodation	PBT Administration Guidelines
•	PBT Accommodation ELA/Literacy Constructed Response Options Speech-to-Text Human Scribe Human Signer Assistive Technology Device	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have Speech-to-Text, Human Scribe, Human Signer, or External Assistive Technology Device selected. Materials: External device provided by the student, if needed. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Appendix L: Human Signer Guidelines (signers only). During Testing: Student dictates responses either verbally, using an external speech-to-text device, an augmentative/assistive communication device (e.g., picture/word board), or by dictating, signing, gesturing,
		pointing, or eye-gazing. The student must be tested in a separate setting. The student must be familiar with any assistive technology external device used for test administration. After Testing: Braille and Large Print responses must be transcribed exactly as dictated/signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded.

⁸ This accommodation applies to Prose Constructed Responses on the ELA/literacy assessments.



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
			Important Guidelines for identifying students to receive these accommodations: IEP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying a student to receive this accommodation. In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators should consider whether the student has:
			 A physical disability that severely limits or prevents the student's motor process of writing through keyboarding;
			OR
			 A disability that severely limits or prevents the student from expressing written language, even after varied and repeated attempts to teach the student to do so.
			Before listing the accommodation in the student's IEP or 504 plan, teams/coordinators should also consider whether:
			 The student's inability to express in writing is documented in evaluation summaries from locally-administered diagnostic assessments; The student routinely uses a scribe for written assignments; and
			 The student receives ongoing, intensive instruction and/or interventions to learn written expression, as deemed appropriate by the IEP team or 504 Plan Coordinator.
A4s	Monitor Test Response	Monitor Test Response	During Testing: The Test Administrator monitors proper placement of student responses. This accommodation is to ensure that the student is marking the answer for the problem the student intends to answer. For example, a student may accidentally skip a question. The Test Administrator CANNOT assist the student in any way with respect to the content of the item.



A4t Word Prediction Word Prediction B External Device on External Device on	Before Testing:
Assessments p o o e b tt	 Identification for Accommodations Registration File: Student's accommodations registration file must have Word Prediction selected. Materials: External Word Prediction Device. During Testing: The student uses an external word prediction device that provides a bank of frequently-for recently-used words on-screen after the student must be familiar with the use of the external device prior to assessment administration. The device may not connect to the internet or save information. After Testing: Student responses generated using the External Word Prediction Device software must be transcribed verbatim by a Test Administrator into a scorable test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses. Test Administrators are responsible for collecting all nonscorable student work created using external word prediction device software. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded. Important Guidelines for identifying students to receive this accommodation: EP teams and 504 Plan Coordinators should carefully review the following guidelines before identifying a student to receive this accommodation. In making decisions whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators are instructed to consider whether the student has:



	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines
			Before listing the accommodation in the student's IEP/504 plan, teams/coordinators are instructed to consider whether:
			The student's inability to express in writing is documented in evaluation summaries from locally administered diagnostic assessments;
			 The student routinely uses a word-prediction device or software during classroom writing assignments; and
			The student receives ongoing, intensive instruction, and/or intervention in language processing and writing, as deemed appropriate by the IEP team/504 Plan Coordinator.
A4u	Not Applicable	Answers Recorded in Test Book	During Testing: For students using test booklets and answer documents, the student records answers directly in the test booklet.
			After Testing:
			 Responses must be transcribed exactly as written in the student's standard test booklet into the answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol.



Table A5: Timing & Scheduling Accommodation for Students with Disabilities Taking Paper-**Based Assessment**

	BT Comparable ccommodation	PBT Accommodation	PBT Administration Guidelines		
A5a	Extended Time	Extended Time	Before Testing:		
			 Identification for Accommodations Registration File: Student's accommodations registration file must have extended time selected. The amount of time a student receives must be indicated in the student's IEP or 504 plan. Test Administrator Training: Test Administrators providing this accommodation must review: 		
			 Appendix E: Guidance for Selecting and Administering the Extended Time Accommodation. 		
			During Testing: Students have until the end of		
			the school day to complete a single test section		
			administered during the prescribed testing window. It is		
			recommended to test students receiving the extended		
			time accommodation in a separate setting to minimize		
			distractions to other students, and to schedule these students for testing in the morning to allow adequate		
			time for completion of a test section by the end of the school day.		



Table A7 provides a list of ACCOMMODATIONS for active ELs. Students who are classified as EL monitored and are in their first two years of monitoring status are only eligible to receive accommodations A7a and A7b, Extended Time and Word-to-Word Dictionary. The table describes the activities needed before, during, and after testing necessary to administer these accommodations appropriately.

Table A7: Accommodations for English Learners Taking the Paper-Based Assessments

CBT Comparable Accommodation		PBT Accommodation	PBT Administration Guidelines
A7a	Extended Time	Extended Time	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have extended time selected. The amount of time a student receives must be indicated in the student's IEP or 504 plan. Test Administrator Training: Test Administrators providing this accommodation must review: Appendix E: Guidance for Selecting and Administering the Extended Time Accommodation. During Testing: Students have until the end of the school day to complete a single test section administered during the prescribed testing window. It is recommended to test students receiving the extended time accommodation in a separate setting to minimize distractions to other students, and to schedule these students for testing in the morning to
A7b	Word-to-Word Dictionary (English/ Native Language)	Word-to-Word Dictionary (English/ Native Language)	allow adequate time for completion of a test section by the end of the school day. Before Testing: • Identification for Accommodations Registration File: Student's accommodations registration file must have word-to-word dictionary selected. • Materials: Word-to-word dictionaries are provided to students by their school, based on those used by the student for routine classroom instruction. During Testing: The student uses a published bilingual, word-to-word dictionary that does not definitions, phrases, pronunciations, sentences, or pictures. The student should be familiar with the dictionary they will use during testing. Students should be given ample time to complete the test using the accommodation. If no printed word-to-word dictionary can be found for a specific language, an electronic translator may be used. The device may not connect to the internet or store information, and therefore, web-based translators are not allowed.



CBT Comparable Accommodation		PBT Accommodation	PBT Administration Guidelines			
A7c	Mathematics and Science Response • Speech-to-	Mathematics and Science Response • Speech-to-	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have			
A7d	Text • Human Scribe/ Human Signer Available on: DC CAPE Math and Science	Text • Human Scribe/Human Signer	 Speech-to-Text or Human Scribe selected. Materials: If student uses software, a separate computer will be needed in addition to the computer used to administer the test. An external device may also be brought to the assessment. Test Administrator Training: Test Administrators providing the scribe accommodation must review: Appendix C: Protocol for the Use of the Scribe 			
	Assessments		Accommodation and for Transcribing Student Responses. During Testing: A student dictates responses verbally, using an external speech-to-text device or by dictating. The student must be tested in a separate setting. The student must already be familiar with any external device used for this accommodation. After Testing:			
			 Responses must be transcribed exactly as dictated/ signed (e.g., the Human Scribe/Human Signer may not change, embellish, or interpret a student's responses when transcribing) into the student's standard test booklet or answer document. Only transcribed responses will be scored. Refer to Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses for protocol. Test Administrators are responsible for collecting all nonscorable student work created using assistive technology devices. Test-related content must be deleted from all devices. Nonscorable student work must be securely shredded. 			



CBT Comparable Accommodation		PBT Accommodation	PBT Administration Guidelines
A7e	General Administration Directions Read Aloud and Repeated in Student's Native Language (by Test Administrator)	General Administration Directions Read Aloud and Repeated in Student's Native Language (by Test Administrator)	Identification for Accommodations Registration File: Student's accommodations registration file must have General Administration Directions Read Aloud and Repeated in Student's Native Language selected. Materials:
A7f	General Administration Directions Clarified in Student's Native Language (by Test Administrator)	General Administration Directions Clarified in Student's Native Language (by Test Administrator)	 Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have General Administration Directions Clarified in Student's Native Language selected. Test Administrator Training: Test Administrators providing this accommodation should be literate and fluent in English, as well as in the student's native language. During Testing: The Test Administrator clarifies general administration directions only in the student's native language. Test Administrators, or other qualified interpreters, providing this accommodation should ideally be literate and fluent in English, as well as in the student's native language; or Test Administrator may be assisted by a translator who speaks the language of the student, if available.



CBT Comparable Accommodation		PBT Accommodation	PBT Administration Guidelines	
A7g	Online Transadaptation of the DC CAPE Mathematics and Science Assessment in Spanish	Paper-Based Edition of the Mathematics and Science Assessment in Spanish	Paper-Based Edition of the Mathematics and Science Assessment in Spanish	
A7h	Paper-Based Edition of the DC CAPE Mathematics and Science Assessment in Spanish	Paper-Based Edition of the DC CAPE Mathematics and Science Assessment in Spanish	Before Testing: Identification for Accommodations Registration File: Student's accommodations registration file must have Paper-Based Edition in Spanish selected. Materials: Paper-Based Edition of the Mathematics Assessment. Test Administrator Training: For ELs with disabilities, administrators must review the following: Appendix A: Accessibility Features and Accommodations for Students Taking the Paper-Based DC CAPE Assessments. Test Administrators providing this accommodation should ideally be literate and fluent in English and Spanish, or may be assisted by a translator, if available, since test administration directions will be read to the student in Spanish. During Testing: The student takes a paper-based mathematical assessment in Spanish (or other native language as requested). Spanish kits for paper based assessment include an English version of the test booklet and math tools so the test can be administered in a bilingual format. Responses must be entered on the Spanish answer document for responses provided in Spanish to be scored.	





Appendix B: Test Administration Protocol for the Human Reader Accommodation for English Language Arts/Literacy (ELA/L) Assessments, and the Human Reader Accessibility Feature for Mathematics and Science Assessments

In cases where a student requires a text-to-speech accommodation on the DC ELA assessment and/or a text-to-speech accessibility feature on the DC Math or DC Science assessments, but cannot participate in the computer-based assessment and takes the paper-based assessment instead, a Human Reader must provide the accommodation to the student. Human Readers who provide the accommodation to a student on the DC ELA assessment or the accessibility feature on the DC Math or DC Science assessments must follow these procedures during testing to ensure the standardization of the oral presentation of the assessments.

Procedures for Human Readers Providing the Human Reader Accommodation for DC ELA Assessments or the Human Reader Accessibility Feature for the DC Math and DC Science Assessments

- 1. Readers must be trained locally to administer each assessment, as indicated in the *DC CAPE Test Administrator Manual (TAM)*. Readers must sign the Security Agreement in **Appendix B** of the TAM.
- 2. Readers must read verbatim (word for word) only what is printed in the provided paper Human Reader script for mathematics and science, or on the computer screen for ELA, without changing, emphasizing, or adding words. Readers may not clarify (except for test directions), provide additional information, assist, or influence the student's selection of a response in any way.
- 3. Readers must speak in a clear and consistent voice throughout the test administration, using correct pronunciation, and without vocal inflections that may provide clues to, or mislead, a student. Readers should be provided a copy of the test and the Test Administrator's directions two schools days prior to the start of testing, in order to become familiar with the words, terms, symbols, signs, and/or graphics that will be read aloud to the student.
- 4. Readers should emphasize only the words printed in boldface, italics, or capital letters and inform the student that the words are printed that way. No other emphasis or vocal inflection is permitted.
- 5. Readers may repeat passages, test items, and response options, as requested, according to the needs of the student. Readers should not rush through the test and should ask the student if they are ready to move to the next item.
- 6. Readers may not attempt to solve mathematics problems, or determine the correct answer to a test item while reading, as this may result in pauses or changes in inflection which may mislead the student.
- 7. Readers must attempt to maintain a neutral facial expression, neither smiling nor frowning during the test, which may be interpreted by the student as approval or disapproval of the student's answers.
- 8. Readers must be familiar with the student's IEP or 504 plan, and should know in advance which accommodations are required by the student, and for which test (ELA/Literacy, Mathematics, and/or Science) the student is designated to receive a Human Reader.
- 9. Readers must be aware of whether a student requires additional tools, devices, or adaptive equipment that has been approved for use during the test, such as a magnifier, closed circuit television (CCTV), abacus, brailler, slate and stylus, etc.



- 10. If a reader is unsure how to pronounce an unfamiliar word, advise the student of the uncertainty and spell the word.
- 11. When reading a word that is pronounced like another word with a different spelling, the reader may spell the word after pronouncing it, if there is any doubt about which word is intended.
- 12. Readers must spell any words requested by the student.
- 13. When reading passages, readers must be aware of punctuation marks. Readers may read the passage, or selected lines a second time, with all punctuation marks indicated.
- 14. When test items refer to a particular line, or lines, of a passage, reread the lines before reading the question and answer choices. For example, the reader should say, "Question X refers to the following lines...," then read the lines to the student, followed by question X and the response options.
- 15. When reading selected response items, readers must be careful to give equal stress to each response option and to read all of them before waiting for a response.
- 16. If a reader is also scribing the student's responses, or if another adult will scribe, and the student designates a response choice by letter only ("D," for example), the reader must ask the student if they would like the response to be reread before the answer is recorded in the answer booklet.
- 17. If the student chooses an answer before the reader has read all the answer choices, the Human Reader must ask if the student wants the other response options to be read.
- 18. After the reader finishes reading a test item and all response options, the reader must allow the student to pause before responding. If the pause has been lengthy, say: "Do you want me to read the question or any part of it again?" When rereading questions, readers must avoid emphasis on words not bolded, italicized, or capitalized.
- 19. Readers must refer to <u>Appendix I: DC CAPE ELA Audio Guidelines</u> and/or <u>Appendix J: DC CAPE Mathematics Audio Guidelines</u> to ensure consistency in how items are read.

Procedures for Providing the Human Reader Accommodation for DC ELA Assessments or the Human Reader Accessibility Feature for the DC Math and DC Science Assessments to a Small Group of Students

Human Readers may read the test aloud to a small group of students, rather than individually, provided that each student has the Human Reader accommodation/accessibility feature listed in an IEP, 504 plan, or Accommodations Registration File (in the case of mathematics and science only).

The following procedures must be followed:

- Students with the Human Reader accessibility feature for mathematics or science or Human Reader accommodation for ELA/literacy that need to be grouped together must be taking the same test form, since test questions will differ on each form of the test.
- Students not receiving the Human Reader accessibility feature for mathematics or science or the Human Reader accommodation for ELA/literacy may not be tested in the same location as students who are receiving the Human Reader accessibility feature for mathematics or science or Human Reader accommodation for ELA/literacy.



Appendix C: Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses

Scribing a student's responses by an adult Test Administrator is a response accommodation that allows students to provide test responses to an adult Test Administrator who writes or types the responses directly onto the assessment for the student. Students receiving the scribe accommodation may respond to assessment items either:

- verbally,
- using a speech-to-text device or other augmentative/assistive communication device (e.g., picture/ word board),
- signing (e.g., American Sign Language, signed English, Cued Speech),
- gesturing,
- pointing, or
- eye-gazing

Note: Scribing may include manipulating technology-enhanced items, such as "dragging and dropping" selected response items, as appropriate.

The scribe accommodation is appropriate for students with a physical disability that *severely limits or prevents* the student's motor process of writing, typing, or recording responses during testing. This includes students with reduced ability to record responses due to pain, fracture, paralysis, loss of function, or loss of endurance, as well as students whose handwriting is indecipherable or illegible. Scribes are also an appropriate accommodation for students who have a documented disability in the area of written expression which results in significant interference in their ability to express their knowledge in writing/keyboarding, even after varied and repeated attempts to teach the student to do so.

If a student requires a scribe due to a recently occurring, though temporary, illness or injury, an Emergency Accommodations Request Form must be completed, submitted to OSSE, and kept on file at the school. This form can be accessed in Appendix G: Use of an Emergency Accommodation on an Assessment or on OSSE's website at https://osse.dc.gov/service/testing-accommodations.

If a student requires a scribe due to an ongoing inability to express their responses through writing/keyboarding, this should be documented in evaluation summaries from locally-administered diagnostic assessments, and must be listed in the student's IEP or 504 plan. The student should be receiving ongoing, intensive instruction and/or interventions to learn written expression, as deemed appropriate by the IEP team or 504 Plan Coordinator.

The use of a scribe is permitted in the following assessments:

- DC Math assessments
- DC Science assessments
- DC ELA assessments for Evidence Based Selected Response, and Technology Enhanced Constructed Response items
- DC ELA assessments for Prose Constructed Responses. Note: For this accommodation, refer to selection and administration guidelines in the DC CAPE Accessibility Features and Accommodations Manual



Qualifications of the Scribe

Individuals who provide the scribe accommodation to a student must:

- be trained by the school or district, as indicated in the Test Administrator Manuals, and OSSE Test Security Guidelines and
- be fluent in receptive and expressive American Sign Language (ASL), signed English, or other sign system, for students who are deaf or hard of hearing.

Preferably, the scribe will already be familiar with and have experience scribing for the student. If the scribe is unfamiliar with the student, then scribe and student should have the opportunity to practice the scribing process together prior to taking the assessment.

Administering the Scribe Accommodation

- A scribe may administer the scribe accommodation only to one student at a time during a test. The student must be tested in a separate setting.
- The scribe must write legibly, if transcribing a student's response into a test book.
- The scribe must transcribe responses verbatim from the student, and may not prompt or question the student, or correct a student's responses. The scribe may ask the student to restate (or sign) words or parts, as needed.
- A student using a scribe must be given the same opportunity as other students to plan and draft a constructed response. The scribe may write an outline, plan, or draft exactly as directed by the student without any cueing and guidance to the student.
- The scribe should be informed of the preferred method or format for recording the student's response before the date of the assessment. During testing, the student may dictate constructed responses either:
 - 1. Directly to a human scribe who records the responses at the time they are given (computer- and paper-based testing)
 - 2. Into a speech-to-text converter (e.g., voice recognition software), augmentative communication device, or assistive technology device to be transcribed by the scribe at a later time into the online testing platform or unto a paper-based book/answer document). A student must be given the opportunity to review and edit their responses before they are finalized into the online testing platform or paper-based test book/answer document.
- When using a speech-to-text converter, augmentative communication device, or other
 assistive technology device, hard copies of the student's response must be printed out for
 transcription purposes unless the device being used does not have the capability to print.
 In cases where printing a response is not possible, scribing must take place as the student
 dictates or otherwise produces the response. All electronic files must be deleted immediately
 after the testing session.
- The scribe must allow the student to review the scribed response in order to make edits. If
 requested by the student, the scribe may read the scribed response back to the student. The
 student may dictate changes or edits to the scribe, and the scribe must make those changes
 exactly as dictated by student, even if a change is incorrect. All changes must be made during
 testing.

Additional Guidelines for the DC ELA Assessment–Prose Constructed Responses

Capitalization and Punctuation

For the DC ELA Assessment—Prose Constructed Responses only, the student is responsible for all capitalization and punctuation. This can be accomplished either after testing or during testing using



one or more of the following Rules for Punctuation:

- After dictation: The student can dictate the entire response at one time. The scribe will write/ type the response without capitalization and punctuation. When the student is finished dictating, the scribe will show the response to the student. The student will tell the scribe which letters are to be capitalized and where punctuation should be added.
- 2. During dictation: The student may add capitalization and punctuate as they dictate.
 - a. For example, when stating the sentence "The fox ran." The student will say, "Capital T, the fox ran, period"
 - b. If a sentence includes other punctuation, for example a comma, the student must indicate the comma. For example, when stating, "The boy bought apples, oranges, and bananas." The student will say, "Capital T, the boy bought apples, comma, oranges, comma, and bananas, period"

Students must be given the opportunity to proofread their responses, even if they provide capitalization and punctuation during dictation.

Rules for Capitalization

The scribe can automatically capitalize in these cases:

- 1. The scribe should capitalize the first letter of a sentence if the student has indicated the punctuation in the previous sentence. For example, if the student said, "Capital T, the fox ran, period. The fox jumped, period."
- 2. The first word in a new paragraph when students have indicated for the scribe to begin a new paragraph.

The student must specify capitalization in the following cases:

- 1. The first letter of a sentence, if the student has not indicated punctuation in the previous sentence. For example, if the student said, "Capital T, the fox ran, the fox jumped, period." The scribe would write "The fox ran the fox jumped."
- 2. Other capitalization (e.g., capitalization of proper nouns, acronyms, etc.)

Scribe Parameters during the Assessment

The following scribing practices are acceptable:

- The scribe may ask "Are you finished?" Or "Is there anything you want to add or delete?"
- The scribe may respond to procedural questions asked by the student such as, "Do I have to use the entire space to answer the question?" The scribe may indicate "no."
- If the student requests that the scribe read a response that was already dictated, the scribe must read what the student dictated previously in an even voice, being careful not to cue the student to errors.

The following scribing practices are unacceptable:

- The scribe cannot influence the student's response in any way.
- The scribe cannot give the student specific directions, clues, or prompts; e.g., "First, set the equations equal to one another;" or "Make sure that the equation is set equal to zero."
- The scribe cannot tell the student if their answer is correct or incorrect.
- The scribe cannot answer a student's questions related to the content; e.g., "Is this the right



- way to set up the problem?" Or "Can you tell me what this word means?"
- The scribe cannot alert the student to mistakes they made during testing.

Special Considerations When Scribing for a Student Who Uses Sign Language or Cued Speech

- The scribe for a student who signs their responses must be fluent in ASL, signed English, or other sign systems the student uses.
- When responses are dictated by a student using American Sign Language (or other signed system), the scribe may ask clarifying questions regarding the use of classifiers. Classifiers give descriptive information about a noun or verb such as location and kind.
- The scribe will write the student's responses in English. The transcription of ASL will not be done in a word-to-word format, but instead will be written in English without changing or enhancing the meaning of the content, adding information, or explaining concepts unknown to the student (e.g., student signs "HOUSE WHITE LIVE THERE ME." Scribe writes "I live in the white house.")
- Scribe must follow all other acceptable scribing practices.

Use of Speech-to-Text/Voice-Recognition Software/Devices

Speech-to-text conversion, or voice recognition, software allows students to dictate responses into their computer microphone and have the responses converted to printed text. For this accommodation, students will use their own assistive technology devices at a separate computer station equipped with speech-to-text/voice recognition software in order to respond to multiple-choice, open-ended items, and extended responses on assessments. Students who use voice recognition software routinely, and for whom this accommodation is listed in their IEP, may use speech-to-text/voice recognition software as an accommodation on assessments. Students must become familiar with the software and must have opportunities to practice using it prior to testing. It is also important that students who use speech-to-text devices be given the opportunity to develop planning notes using speech-to-text, and to view what they produce via speech-to-text.

Upon completion of a test, the student's responses should be printed out and the guidelines for transcribing student responses followed.

Guidelines for Transcribing Student Responses (Paper-based testing only)

Certain situations involving scribing of responses during administration of assessments may require a Test Administrator to transcribe a student's response in a standard, scorable test booklet or answer document. These situations may include:

- Answers were recorded in the wrong section of a Test Booklet or Answer Document, or in an incorrect Test Booklet or Answer Document.
- A student takes the test using a special test format that requires answers to be transcribed (e.g., large print).
- A student uses a speech-to-text converter, augmentative communication device, or assistive technology device to be transcribed by the scribe at a later time.
- As an accommodation, a student records answers in a test booklet, answer document, or on blank paper, instead of in the required Test Booklet or Answer Document.
- A Test Booklet or Answer Document becomes unusable (e.g., torn, wrinkled).

If a student's responses must be transcribed after test administration is completed, the following steps must be followed:

At least two persons must be present during any transcription of student responses. One



of these persons will be the transcriber, and the other will be an observer confirming the accuracy of the transcription. It is highly recommended that one of the individuals be an authorized LEA Test Coordinator or School Test Coordinator.

The student's response must be transcribed verbatim into the Answer Document or Test Booklet. The student's original response in an Answer Document/Test Booklet should be returned with secure test materials. The LEA Test Coordinator or School Test Coordinator should write "DO NOT SCORE" or draw an "X" in large font on the front of the original Answer Document/Test Booklet. Do not cover the barcode. Return them with nonscorable test materials.

- Braille transcription: Only an eligible Test Administrator who is a certified Teacher of Students with Visual Impairment, including Blindness, or someone working under the direct supervision of an eligible Test Administrator who is a certified Teacher of Students with Visual Impairment, including Blindness may transcribe the student's responses onto the paper form of the DC CAPE assessments.
- Any original student responses that were printed from an assistive technology device or recorded separately on blank paper (or on other external devices) must be securely shredded.

Procedures for Transcribing Student Responses for Computer-Based Testing

Selected Response and Technology Enhanced Items

For selected response and technology enhanced items, student responses must be entered into TestNav during testing by the Test Administrator. Once the student reaches the end of the test with all Selected Response and Technology Enhanced Items completed, the Test Administrator should have the student EXIT the test but not submit the test.

Constructed Response Items

During administration of computer-based assessments, students who require use of a speech-to-text converter, augmentative communication device, or assistive technology device will need constructed responses transcribed into TestNav by a Test Administrator before the online testing window closes. In these situations, the following steps must be followed.

- As the student encounters constructed responses, they should use their device to respond
 to the questions. The student will then continue testing in TestNav, leaving these items
 unanswered in TestNav.
- Once the student reaches the end of the test, the Test Administrator should have the student EXIT the test but NOT submit the test.
- The Test Administrator must set the test to Resumed status within Assessment Delivery and Management Platform (ADAM).
 - If a student submits the test in error, the test submission must be undone to complete the transcription. Contact OSSE to have test submission undone.
- Once the test has been resumed, the Test Administrator must log in to TestNav as the student and navigate to the items for transcription.
- At least two persons must be present during any transcription of student responses. One of the individuals must be an authorized Test Administrator.
- The student's responses must be transcribed verbatim into TestNav. (See note above about scribing signed responses in English).
- Once all items have been transcribed, the Test Administrator will submit the test.
- After transcription is complete, all original student responses that were printed from an assistive technology device must be securely shredded.





Appendix D: Text-to-Speech, or Human Reader/Human Signer Guidance for English Language Arts/Literacy (ELA/L) Assessments

Individualized Education Program (IEP) or 504 Plan Decision-Making Tool

Directions: This tool has been developed to assist IEP teams and 504 Plan Coordinators in identifying students who may be appropriate candidates to receive the accommodation for text-to-speech (computer-based), or Human Reader/Human Signer (paper-based) for the DC ELA assessment.

/Local ID#:
Date
(Parent/Guardian Initials) ext-to-speech or Human Reader/Human

If all guidelines listed are met, and the student is given the text-to-speech, or Human Reader/ Human Signer accommodation for the DC ELA assessment, they will receive a valid score on the assessment. If all guidelines are not met, and the student is given the text-to-speech, or Human Reader/Human Signer accommodation on a DC ELA assessment, the student's assessment score may be invalidated and the score would not be counted in the overall assessment results; i.e., the student would be considered a "non-participant" for the DC ELA assessment.

Guidelines for IEP Team or 504 Plan Consideration	Additional Guidance	Agree/ Disagree
The student has an Individualized Education Program (IEP) or 504 plan.	Student has an approved IEP or current 504 plan.	☐ Agree☐ Disagree☐

date of notification to this form regarding the decision to provide the text-to-speech, ASL video, or Human Reader/Human Signer accommodation to the student, and keep this form with the student's records.



Guidelines for IEP Team or 504 Plan Consideration	Additional Guidance	Agree/ Disagree
In making decisions on whether to provide the student with this accommodation, IEP teams and 504 Plan Coordinators are instructed to consider whether the student has:	For the screen reader accommodation, the IEP team or 504 Plan Coordinator must determine whether the student is blind or has a visual impairment and has not yet learned (or is unable to use) braille.	☐ Agree☐ Disagree
 Blindness or a visual impairment and has not yet learned (or is unable to use) braille; OR 	For the text-to-speech, or Human Reader/Human Signer accommodation, the IEP team or 504 Plan Coordinator must determine whether the student has a disability that severely limits or prevents them from decoding text.	
 A disability that severely limits or prevents them from accessing printed text, even after varied and repeated attempts to teach the student to do so (e.g., student is unable to decode printed text); OR Deafness or a hearing impairment and is severely limited or prevented from decoding text due to a documented history of early and prolonged language deprivation. 	This accommodation is not intended for a student reading somewhat (i.e., moderately) below grade level. The IEP or 504 plan must document objective evidence from a variety of sources (including state assessments, district assessments, AND one or more locally-administered diagnostic assessments or other evaluation) that indicate that the student's ability to decode text is severely limited or prevented or that the student is blind or visually impaired and has not yet learned (or is unable to use) braille.	
Before listing the accommodation in the student's IEP or 504 plan, teams and plan coordinators should also consider whether: • The student has access to		☐ Agree☐ Disagree
printed text during routine instruction through a reader or other spoken-text audio format, or interpreter; The student's inability to decode printed text or read braille is documented in evaluation summaries from locally-administered diagnostic assessments; or The student receives ongoing, intensive instruction and/ or interventions in the foundational reading skills to continue to attain the important college and career- ready skill of independent reading.		



List the data and/or evaluation sources that were used to document the decision to give the text-to-speech, ASL video, or Human Reader/Human Signer accommodation to the student on the DC ELA assessment:

Name of Diagnostic Evaluation or Educational Assessment:
Name and Title of Test Administrator:
Most Recent Testing Date:
Score(s):
Provide a Summary of the Results:
2) Name of Diagnostic Evaluation or Educational Assessment:
Name and Title of Test Administrator:
Most Recent Testing Date:
Score(s):
Provide a Summary of the Results:
3) List any additional assessment data, scores, and/or evaluation results that were used to guide the decision-making process for IEP teams or 504 Plan Coordinators regarding the text-to-speech, ASL video, Human Reader/Human Signer accommodation for the DC ELA assessment:
List the instructional interventions and supports specifically related to reading that are currently provided throug daily instruction to the student:
Intensive reading interventions have been provided to the student for year
List the specific school years and frequency
Describe and list the specific reading intervention(s) provided to the student:
List any additional relevant information regarding the student:





Appendix E: Guidance for Selecting and Administering the Extended Time Accommodation

What is the Extended Time Accommodation?

Extended time is a provision which expands the allowable length of time to complete assignments, tests, and activities, and may also change the way the time is organized. For DC CAPE, this accommodation provides additional time for a student to complete the summative assessments beyond the time allotted for the test or test section. Students with disabilities, students who are ELs, and students who are ELs with disabilities are eligible to receive the Extended Time Accommodation. The Extended Time Accommodation allows a student to have up to a single day to complete a single test section. Single test sections may not extend beyond one school day. (For exceptions, refer to Appendix F: Unique Accommodation Request Form).

Who can benefit from the Extended Time Accommodation?

The Extended Time Accommodation is most beneficial for students who routinely need more time than is generally allowed to complete activities, assignments, and tests. Extra time may be needed:

- To process written text (e.g., for a student who processes information slowly or has a Human Reader).
- To write (e.g., for a student with limited dexterity).
- To use other accommodations or augmentative devices (e.g., assistive technology, audio materials, or a scribe).
- For a student who needs frequent breaks that may extend the time needed to complete testing.

Documenting the Extended Time Accommodation in a Student's Individualized Education Plan (IEP), 504 Plan, or EL Plan

Extended time must be documented in a student's IEP, 504 plan, or EL plan based on data or observations of the student's performance in past assessments. Where possible, each student's IEP, 504, or EL plan should document the amount of extended time anticipated for assessments. These decisions must be made on a case-by-case basis based on the student's needs and any other accommodations being provided for the assessment for which the extended time will be needed. Teams should consider whether the section time provided will meet the student's needs prior to including a provision for extended time in student plans.

Planning and Logistics for Administering the Extended Time Accommodation

Students who require this accommodation should take the test in a separate setting to minimize disruptions, especially if classrooms or the computer lab are scheduled for successive testing sessions. The planning process includes consideration of additional accommodations, available technology, physical space, and personnel coverage, all of which will need to be determined well in advance of testing.

Procedure for Ending the Extended Time Accommodation with Students

Students with the Extended Time Accommodation must be given a section in a continuous block of time and may not be brought back to that section at a later time. If the accommodation extends into the student's scheduled lunch, then the Test Administrator must either accompany the student to lunch and remain with them, or bring the student's lunch to the testing room. If the Test Administrator observes that the student is no longer productively engaged, an inquiry may be made regarding testing status. Once the extended time provision is exhausted, the Test Administrator should proceed to the next test section or end the testing process.





Appendix F: Unique Accommodation Request Form



OFFICE OF THE STATE SUPERINTENDENT OF EDUCATION

DC Statewide Assessments Unique Accommodations Request Form

The Office of the State Superintendent of Education (OSSE) has an established process for approving student use of unique accommodations on statewide assessments. In the rare event that a student with a disability or an English Learner requires an accommodation on a statewide assessment that is not included on the standard accommodation list; the item is deemed a unique accommodation. As with the standard accommodation, a unique accommodation may not change the construct being measured by the assessment. When applicable, individual schools must use this Unique Accommodations Request Form to request approval for individual student use of a unique accommodation for an assessment.

A minimum of **four weeks** prior to test administration, the school principal, principal's designee, or assessment coordinator must complete and upload the Unique Accommodations Request Form into the <u>OSSE Support Tool</u>. School personnel are responsible for the mandatory filing of a copy of this completed request form into the student's file.

Student Information			
Name:			State ID (USI) :
Grade:			DOB:
Indicate Type of plan: IEP	☐ Section 504 Plan ☐ I	EL Plan	
School Information			
School Name:			Tel. Number:
District/LEA Name:			
Name of Principal or Assessment C	oordinator:		Signature:
Email:			Date:
Test Administration			
DC Statewide assessment(s) for	which you are seeking app	roval to u	se unique accommodation(s):
☐ DC CAPE ELA/Literacy	☐ MSAA ELA		APE Science
☐ DC CAPE Mathematics	☐ MSAA Mathematics	☐ Dyna	amic Learning Maps (DLM) Science
☐ ACCESS for ELLs	☐ Alternate ACCESS		
Provide a brief description of th	e accommodation for whic	h you are	requesting approval:

1050 First Street NE, Washington, DC 20002 • (202) 727-6436 TTY: 711 • osse.dc.gov



Describe the evidence that supports the need for this accommodation, including how it is used by the			
student in the classroom or on other assessments:			
Did OSSE approve the use of this unique accommodation on a statewide assessment in the previous school			
year for this student? \square Yes, approved \square No, denied \square Did not submit request last year			
year for this student:			
In submitting this form to OSSE for approval, the principal or assessment coordinator assures that:			
If approved, this accommodation will be documented in the student's IEP, Section 504 plan, or EL plan.			
In the case of an IEP, the unique accommodation will be listed as "Unique/Non-standard" on the IEP.			
In the case of an IEP, the parent/guardian of the student will sign the finalized IEP (or IEP amendment form)			
prior to testing.			
The school team has met and considered all listed accommodations before proposing this unique			
accommodation.			
The proposed accommodation is used, as appropriate, for routine class instruction.			
If approved, the accommodation must be listed in the Individualized Education Program (IEP) or 504 plan for			
a student with a disability or in an English Learner (EL) plan for an English learner.			
a student with a disability of in an English Learner (EL) plantor an English learner.			
For OSSE Use Only: (Approval/Denial of Request)			
(This completed section will be returned to your school prior to testing.)			
☐ This request has been approved. ☐ This request has been denied.			
OSSE Staff Name and Position:			
OSE Stail Name and 1 OstaOn.			
Signature: Date:			

1050 First Street NE, Washington, DC 20002 \cdot (202) 727-6436 TTY: 711 \cdot osse.dc.gov



Appendix G: Use of an Emergency Accommodation on an Assessment



OFFICE OF THE STATE SUPERINTENDENT OF EDUCATION

DC Statewide Assessments Emergency Accommodations Request Form

Directions: This form is appropriate in cases where a student needs a new accommodation immediately prior to the assessment due to unforeseen circumstances. Cases could include students who have a recently-fractured limb (e.g., fingers, hand, arm, wrist, or shoulder); whose only pair of eyeglasses has broken; or a student returning from a serious or prolonged illness or injury. If the principal (or designee) determines that a student requires an emergency accommodation on the day of the statewide test, this form must be completed and maintained in the student's assessment file. **The parent must be notified that an emergency accommodation was provided.**

To request approval for an emergency accommodation, this form must be completed and submitted to the OSSE Assessment Team for rapid approval as soon as the need arises. A copy of this form must be kept in the student's file and, if appropriate, retained at the LEA office. Forms must be submitted via the OSSE Support Tool to ensure the secure transfer of sensitive student data.

Student Information			
Name:			State ID (USI) #:
Grade:		DOB:	
Indicate Type of plan: IEP	☐ Section 504 Plan ☐ EL	Plan [☐ No plan
School Information			
School Name:			Tel. Number:
District/LEA Name:			l
Name of Principal or Assessment C	oordinator:		Signature:
Email:			Date:
Test Administration			
DC Statewide assessment(s) for	which you are seeking appro	val to us	se an emergency accommodation(s):
☐ DC CAPE ELA/Literacy	☐ MSAA ELA	□ D	C CAPE Science
☐ DC CAPE Mathematics	☐ MSAA Mathematics		ynamic Learning Maps (DLM) Science
☐ ACCESS for ELLs	☐ Alternate ACCESS		
Provide a brief description of th	e accommodation for which	vou are	requesting approval:
		,	and a shift a same



Describe the reason for needing an emergency test accommodation (attach documentation if needed):			
In submitting this form to OSSE for approval, the principal or assessment coordinator assures that if			
approved and applicable, this accommodation will be documented in the student's IEP, Section 504 plan,			
or EL plan, as applicable.			
If approved, the accommodation must be listed in the Individualized Education Program (IEP) or 504 plan for a student with a disability or in an English Learner (EL) plan for an English learner.			
For OSSE Use Only: (Approval/Denial of Request)			
(This completed section will be returned to your school prior to testing.)			
\Box This request has been approved. \Box This request has been denied.			
OSSE Staff Name and Position:			
Signature: Date:			



Appendix H: Student Accommodation Refusal Form

Directions: If a student refuses an accommodation listed in their Individualized Education Program (IEP), 504 plan, or EL plan, the school should document in writing that the student refused the accommodation, and the accommodation must be offered and remain available to the student during testing. This form must be completed and placed in the student's file and a copy sent to the parent on the day of refusal. Principals (or designee) should work with Test Administrators to determine who, if any others, should be informed when a student refuses an accommodation documented in an IEP, 504 plan or EL plan.

Student Name:	Date:		
Grade:	Student ID#:		
School Name:			
Reason for refusal:			
Comments:			
Student's Signature (optional):			
Signature of Test Administrator:			
	form on file at the school		

Keep this form on file at the school.

A copy must be sent home to the parent.





Appendix I: DC CAPE ELA Audio Guidelines

Version 3.0

Table of Contents

Change History Log	3
Visuals	
Guidelines for Text-to-Speech Descriptions	
Classifications for Embed Coding Scheme for Text Descriptions	
Ellipses	
Quotations and Quotation Marks	
Emphasis for Underline, Bold, Italics, Capitalization	7
Word Webs	
Pronunciation	
Graphic Organizers	16
Different Types of Text	
Play, Example 1	
Play, Example 2	
Poem, Example 1	19
Poem, Example 2	
Political Cartoons	24
Maps	25
Timelines	27
Fill in the Blank	28
Pictures	
Boxed Sentences or Paragraphs	
Acknowledgements	



Visuals

Guidelines for Text-to-Speech Descriptions

Use these guidelines to describe visuals for text-to-speech scripts:

- Read the title.
- Provide a general overview of the image (i.e., A map of South America, a graphic organizer with a center circle and four circles radiating outward).
- Begin with the main section of the image.
- Describe the details in a succinct manner using grade-level appropriate vocabulary.
- Omit minor details that are irrelevant (a box to the left of the person).
- If facial expressions or body language are important, do not assume a blind student can interpret them. For example, it is better to describe a person as worried than to state that the person has furrowed brows.
- When describing several people in an image, label each one clearly so they are not mixed up (i.e., tall man, elderly man, little boy).
- Describe only what is seen in the image. Do not provide interpretation or additional information.

Classifications for Embed Coding Scheme for Text Descriptions

An embed code within the alt text will be included for all test items with visual elements. The embed code will be classified as a 1, 2 or 3. The description of each level is listed below:

- [1] is not construct-relevant and can be eliminated (e.g., it is only there for engagement purposes). For example, a picture of an elephant added purely for engagement would has alt text that reads "elephant [1]" or "picture of elephant [1]."
- [2] is construct-relevant and can be represented using accompanying textual description. Example of text where reading the graph is construct-relevant: The graph title is Roller Rink costs. Key, dashed line represents Roller Rink A, solid line represents Roller Rink B. The x-axis is labeled number of people. The y-axis is labeled cost in dollars. The dashed arrow starts at zero people, sixty dollars and points to a little less than sixteen people, midway between one hundred and one hundred ten dollars. The solid arrow starts at zero people, a little less than ten dollars and points to a little more than fourteen people, a little less than one hundred ten dollars. [2]
- [3] is construct-relevant and can be represented using accompanying textual description together with a tactile representation or physical manipulative. Example of text where reading the graph is construct-relevant: The graph title is Roller Rink costs. Key, dashed line represents Roller Rink A, solid line represents Roller Rink B. The x-axis is labeled number of people. The y-axis is labeled cost in dollars. [3]

Accessibility experts will be trained on this embedded coding scheme during the item tagging phase of item development.



Ellipses

Example

- 22. Which statement best represents a turning point in the story?
 - Suddenly he seemed to know that if he were to survive, he must learn how to fly . . . "
 - "Albert jumped up and down and screeched for them to rescue him, but they could do nothing."
 - C. "When he tried to climb the rocks to the ridge top, he slid backward on his rear."
 - "Albert watched as his brother pumped his wings wildly and zigzagged far above the ground."

Audio Guideline

Text Only/Text and Graphics

When an ellipsis is used to signify missing text in a sentence, read as "pause 'dot, dot, dot' pause."

Note: Pauses in each application of the audio guidelines in this document are represented by an En Dash with a space on either side of the En Dash.

Application of Audio Guideline

Example

Which statement best represents a turning point in the story?

A. Suddenly he seemed to know that if he were to survive, he must learn how to fly – dot – dot – dot –



Quotations and Quotation Marks

Example 1

- In this poem, "the smell of the damp" reminds the speaker of the
 - O A. dark shade.
 - O B. strips of sunlight.
 - O C. moss that is growing.
 - O D. wooden porch boards.

Example 2

- Inside the bottle, the "white-tipped waves" are made out of
 - A. water.
 - B. paper.
 - C. clay.
 - D. wood.

Example 3

Mill argues against using St. Paul's epistles as a means for discrimination against women because "The powers that be are ordained of God' gives his sanction to military despotism to that alone, as the Christian form of political government, or commands passive obedience to it."

Audio Guideline

Text Only/Text and Graphics

- a. Quotation marks should be read as "quote" before the text and "end quote" after the text.
- b. If the quotes surround the title of a work, do not say, "quote."
- c. If both single and double quotes occur in a single passage, item, or paragraph, specify with "single quote," "end single quote," "double quote," and "end double quote."

Application of Audio Guideline

Example 1

In this poem – quote - the smell of the damp - end quote - reminds the speaker of

- A. dark shade.
- B. strips of sunlight.
- C. moss that is growing.
- D. wooden porch boards.

Example 2

Inside the bottle, the - quote - white-tipped waves - end quote - are made out of

- A. water.
- B. paper.
- C. clay.
- D. wood.



Example 3

Mill argues against using St. Paul's epistles as a means for discrimination against women because - double quote - single quote - the powers that be are ordained of God – end single quote - gives his sanction to military despotism to that alone, as the Christian form of political government, or commands passive obedience to it - end double quotes -

Emphasis for Underline, Bold, Italics, Capitalization

Example 1

- 3 Based on the first paragraph, a <u>cradle</u> is a kind of
 - O A. bed.
 - O B. house.
 - O C. craft.
 - O D. weapon.

Example 2

- In paragraph 11, what do the words to its fullest most likely mean?
 - O A. with each other
 - O B. some of the time
 - O C. with other tribes
 - O D. as much as they could

Example 3

- The suffix -less in the words helpless and careless means
 - A. most.
 - B. tiny.
 - C. some.
 - D. without.

Audio Guideline

Text Only/Text and Graphics

Emphasize words that are underlined, bolded, italicized, or capitalized.

Pause before and after the emphasized word(s) to differentiate between emphasis and normal formatting.



Do not read differently or pause for italics, underline, or bold if they are being used for the directions before a passage or item and are not part of the prompt, question, or answers.

Application of Audio Guideline

Example 1

Based on the first paragraph, a - cradle - is a kind of

- A. bed.
- B. house.
- C. craft.
- D. weapon.

Example 2

In paragraph eleven, what do the words – to its fullest - most likely - mean?

- A. with each other
- B. some of the time
- C. with other tribes
- D. as much as they could

Example 3

The suffix - less - in the words - helpless - and - careless - means

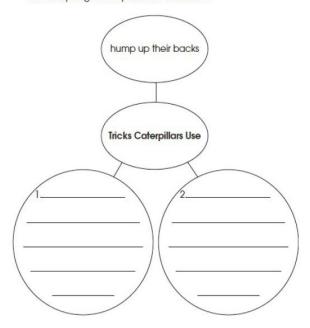
- A. most.
- B. tiny.
- C. some.
- D. without.



Word Webs

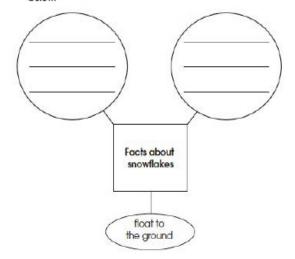
Example 1

 Using the reading selection, write two other tricks caterpillars use to try to get away from their enemies.



Example 2

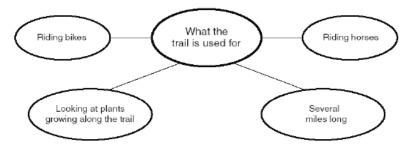
 Use details from the reading selection to complete the web below.





Example 3

Jimmy made this web. Use it to answer questions 14 and 15.



Audio Guideline

Text Only

Read the title of the word web, if available, before reading the rest of the text in the word web.

Text and Graphics

Begin by giving a very brief orientation that includes

- that it is a word web
- the attributes of the word web (number of cells, rows, etc.)

Read the word web in a logical manner that helps the student easily navigate the information. While many word webs can be read left to right, top to bottom, some word webs are better read bottom to top or from the middle.

Use common language throughout the item and the test when referring to word webs and their attributes (labels, blank cells, stems, etc.).

Application of Audio Guideline

Example 1

A word web containing four cells. The center cell is labeled "Tricks Caterpillars Use." A cell connecting to the center cell is labeled "hump up their backs." The two other cells connecting to the center cell contain space to write two other tricks caterpillars use.

Example 2

A word web containing four cells. The center cell is labeled "Facts about snowflakes." A cell connecting to the center cell is labeled "float to the ground." The two other cells connecting to the center contain space to write.

Example 3

A web containing five cells. The center cell is labeled "What the trail is used for." The four cells connecting to the center cell are labeled "Riding bikes," "Riding horses," "Looking at plants growing along the trail," and "Several miles long."



Pronunciation

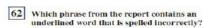
Example 1

- 2 Which word rhymes with cone?
 - O A. both
 - O B. done
 - O C. corn
 - O D. own

Example 2

- 11 Which word has the same vowel sound as soak?
 - O A. stir
 - O B. look
 - O C. kick
 - O D. rope

Example 3



- A ancient mazes
- B friends and nieghbors
- C previous ones
- D several surprises

Audio Guideline

Text Only

If the question or stem has the word that rhymes or has a specific sound, read that word, but do not read the answers.

Do not try and read aloud misspelled words as pronunciation is somewhat subjective.

Text and Graphics

When an item is measuring rhyming of words or sounds of words, speak the individual letters in the word instead of speaking the word. If the question or stem has the word that rhymes or has a specific sound, read that word and spell out the answer options.

For questions containing intentionally misspelled words, spell out any word for which the student needs to consider spelling correctness/incorrectness.

Do not try and read aloud misspelled words as pronunciation is somewhat subjective.



Application of Audio Guideline

Example 1

Text Only

Which word rhymes with cone?

- A. A
- B. B
- C. C
- D. D

Text and Graphics

Which word rhymes with - cone?

- A. B O T H
- B. D O N E
- C. C O R N
- D. O-W-N

Example 2

Text Only

Which word has the same vowel sound as soak?

- A. A
- B. B
- C. C
- D. D

Text and Graphics

Which word has the same vowel sounds as - soak?

- A. S-T-I-R
- B. L O O K
- C. K-I-C-K
- D. R-O-P-E

Example 3

Text Only

Which phrase from the report contains an underlined word that is spelled incorrectly?

- Α. Α
- B. B
- C. C
- D. D

Text and Graphics

Which phrase from the report contains an underlined word that is spelled incorrectly?

- A. A N C I E N T mazes
- B. friends and N-I-E-G-H-B-O-R-S
- C. P R E V I O U S ones
- D. several S U R P R I S E S

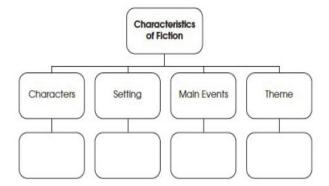


Graphic Organizers

Example 1

"We put the crushed cocoa beans into a chocolate pot."

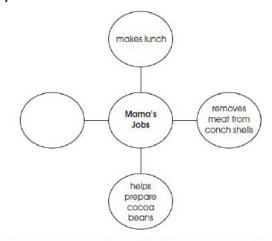
Which column in the graphic organizer below would include this detail?



- A. Characters
- B. Setting
- C. Main Events
- D. Theme

Example 2

41.



According to information in the selection, which phrase should be added to the graphic organizer above?

- A. makes chowder from conchs
- B. hollows a log to make a canoe
- C. plants cacao trees in the shade
- D. crushes cocoa beans in a mortar



Audio Guideline

Text Only

Read the title of the graphic organizer, if available, before reading the rest of the text in the graphic organizer.

Text and Graphics

If the organizer is structured like a table or has a structure similar to a table, refer to the DC CAPE Math Audio Guidelines document.

If the organizer is structured like a word web, follow the rules in this document for word webs.

Application of Audio Guideline

Example 1

Graphic organizer with a cell labeled "Characteristics of Fiction" at the top. Below the top cell there are four columns and two rows. The first row has columns labeled "Characters," "Setting," "Main Events," and "Theme." Below each labeled cell is a blank cell.

Example 2

Center cell, Mama's Jobs; connecting cells, read clockwise from the top, makes lunch, removes meat from conch shells, helps prepare cocoa beans, blank.



Different Types of Text

Play, Example 1

Setting: Deep in the forest. Tall stool is center, shorter stool is left.

At Rise: Leopard is seated on tall stool, beating drum. Turtle enters left and slowly moves to center and sits on smaller stool.

Leopard (pounding drum and chanting): The forest is mine all night and all day. . .

Turtle (shouting over drum): Good morning, Leopard. I've been listening to your music. You have a fine sounding drum and a fine voice as well.

(Leopard stops pounding drum and looks up.)

Play, Example 2

Jay: Who's that? (Turning the flashlight on the man)

Louie: Get that light outta my face and go back to sleep, Kid.

Jay: There's nothing here to steal, Mister. I swear.

Louie: Is that you, Jay? Jay: Yeah, who are you? Louie: It's Uncle Louie.

Jay: Uncle Louie? No kidding? . . . Arty! It's Uncle Louie.

Application of Audio Guideline

Example 1

Setting: - (Voice 1) - Deep in the forest. Tall stool is center, shorter stool is left.

At Rise: - (Voice 1) - Leopard is seated on tall stool, beating drum. Turtle enters left and slowly moves to center and sits on smaller stool.

Leopard - (Voice 1) - pounding drum and chanting: - (Voice 2) - The forest is mine all night and all day- dot - dot - dot -

Turtle - (Voice 1) - shouting over drum: - (Voice 2) - Good morning, Leopard. I've been listening to your music. You have a fine sounding drum and a fine voice as well. - (Voice 1) - Leopard stops pounding drum and looks up.

Example 2

Jay - (Voice 1) - Who's that? - (Voice 2) - Turning the flashlight on the man.

Louie - (Voice 1) - Get that light outta my face and go back to sleep, Kid.

Jay - (Voice 1) - There's nothing here to steal, Mister. I swear.

Louie - (Voice 1) - Is that you, Jay?

Jay - (Voice 1) - Yeah, who are you?

Louie - (Voice 1) - It's Uncle Louie.

Jay - (Voice 1) - Uncle Louie? No kidding? - dot - dot - dot - Arty! It's Uncle Louie.



Poem, Example 1

Carrying the Snake to the Garden

In the cellar

was the smallest snake

I have ever seen.

It coiled itself

in a corner

and watched me

with eyes

like two little stars

set into coal,

and a tail

that quivered.

One step

of my foot

and it fled

like a running shoelace,

but a scoop of the wrist

and I had it

in my hand.

I was sorry

for the fear,

so I hurried

upstairs and out the kitchen door

to the warm grass

and the sunlight

and the garden.

It turned and turned

in my hand

but when I put it down

it didn't move.

I thought

it was going to flow

up my leg

and into my pocket.

I thought, for a moment,

as it lifted its face,

it was going to sing.

And then it was gone.

-Mary Oliver



Sheepdog

In the green field stand the scattered sheep, pretending innocence, and the Shepherd standing just beyond the fieldand at the Shepherd's feet, poised, the rough-coat collie dog, with one thought only. It is the woolies.

Her eyes, one blue, one brown never leave them.

- 10 When the Shepherd's whistle releases her, she's off, like an arrow, running east, her bared teeth showing the wolf that still lives in her.
- 15 She circles wide, closing in, a black and white blur at the edge of a sheep's bad dream. But the Shepherd whistles, twice for right and once for left,
- and the dog holds back, bringing order out of her own wildness, serving the man's need.

By sundown, the circle is complete.

- 25 The sheep are penned. The tired Shepherd, the panting dog head for home, each more than they would be alone, the ring the dog marked, running,
- 30 symbol of their union.



Audio Guideline

Text Only

Read the poem paying attention to the layout of the stanzas. Do not reference given line numbers. Use extended pauses for the start of a new stanza.

Text and Graphics

Read the poem paying attention to the layout of the stanzas. Reference the line numbers associated with the first and last line of a stanza. For example, say, "Start of stanza line 12... End of stanza line 18." Use extended pauses for the start of a new stanza or reference the new stanza if deemed necessary. Use the above rules for emphasis.

Application of Audio Guideline

Example 1

Read the poem as is line by line.

Example 2

In the green field stand the scattered sheep, pretending innocence, and the Shepherd standing just beyond the field and at the Shepherd's feet, poised, the rough-coat collie dog, with one thought only. - It is the woolies. -Her eyes, one blue, one brown never leave them. - End of stanza - line 9 Start of stanza – line 10 - When the Shepherd's whistle releases her. she's off, like an arrow, running east, her bared teeth showing the wolf that still lives in her. She circles wide, closing in, a black and white blur at the edge of a sheep's bad dream. But the Shepherd whistles, twice for - right and once for - left, and the dog holds back, bringing order out of her own wildness, serving the man's need. - end of stanza - line 22 start of stanza - line 23 - By sundown, the circle is complete. The sheep are penned. The tired Shepherd, the panting dog head for home, each more than they would be alone, the ring the dog marked, running,

symbol of their union. – end of stanza – line 30 –



Political Cartoons

Example

Look at the cartoon below. Then answer the following.



"I'M SORRY, KID, BUT IT REALLY HURTS ME MORE THAN IT HURTS YOU

According to the cartoon, what is a criticism of the juvenile justice system?

- A. The system gives judges little choice in punishment.
- B. The juvenile justice system wastes too much money.
- C. The government has too much control over the lives of juveniles.
- D. The courts make the community responsible for juveniles' actions.

Audio Guideline

Text Only

Read the title of the political cartoon, if available, before reading the rest of the text in the political cartoon.

Text and Graphics

Start by stating that it is a political cartoon.

Pay special attention to any writing in the cartoon (labels, titles, signs, etc.). Read the caption of the cartoon.

Application of Audio Guideline

Example

A political cartoon showing an officer standing behind a boy who is standing before a judge. The judge has an open book that is titled "Comprehensive guidelines for sentencing juvenile offenders." The caption of the cartoon is I'm sorry, kid, but it really hurts me more than it hurts you.



Maps

Example

(Part of a passage and section on Machu Picchu that references many of the countries, cities, and geographical features labeled)



Audio Guideline

Text Only

Read the title of the map if available, then read the key, compass rose, and map from top to bottom, left to right as much as possible.

Text and Graphics

Read the title of the map if available, then read the key, compass rose, and map from top to bottom, left to right as much as possible.

For maps, a few words can be used to describe the map unless the item requires the student to use the map to answer the question.

Application of Audio Guideline

Example

A map showing a portion of South America: Ecuador; Amazon River; Urbamba River; Peru; Vilcabamba, Brazil; Machu Picchu; Andes Mountains; Cuzco, Bolivia; Atacama Desert; Chile; Argentina.



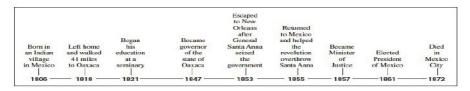
Timelines

Example 1

Timeline

Edmund Halley is born	Halley observes the comet for the first time	Halley visits Isaac Newton to discuss the laws of gravity	Halley focuses on the study of comets	Halley dies	The comet returns to view as Halley predicted
1656	1682	1684	1704	1742	1759

Example 2



Audio Guideline

Text Only

Read the title of the timeline and text from top to bottom, column to column.

Text and Graphics

State that it is a timeline and read the title first or any brief note of what the timeline represents.

State the direction of the timeline and direction of reading.

Read the timeline in chronological order, keeping text with the corresponding date.

Read the date first, followed by the corresponding text that accompanies it.

Application of Audio Guideline

Example 1

A timeline of Edmund Halley's life. From left to right, the timeline reads, sixteen fifty-six, Edmund Halley is born; sixteen eighty-two, Halley observes the comet for the first time; sixteen eighty-four, Halley visits Isaac Newton to discuss the laws of gravity; seventeen oh-four, Halley focuses on the study of comets; seventeen forty-two, Halley dies; seventeen fifty-nine, The comet returns to view as Halley predicted.

Example 2

A timeline of Benito Juarez's life. From left to right the timeline reads, eighteen oh-six, Born in an Indian village in Mexico; eighteen eighteen, Left home and walked forty-one miles to Oaxaca; eighteen twenty-one, Began his education at a seminary; eighteen forty-seven, Became governor of the state of Oaxaca; eighteen fifty-three, Escaped to New Orleans after General Santa Anna seized the government; eighteen fifty-five, Returned to Mexico and helped the revolution overthrow Santa Anna; eighteen fifty-seven, Became Minister of Justice; eighteen sixty-one, Elected President of Mexico; eighteen seventy-two, Died in Mexico City.



Fill in the Blank

Example

0		e word <u>clothes</u> ntence?	belongs in which	
	0	A. My old	no longer fit me	
	0	B. Please	the door on your	
		way out.		

O C. The lights will come on at the of the show.

O D. She had to _____ the store because of the storm.

Audio Guideline

Text Only

Read the blank element with a pause, then "blank" followed by a pause.

Text and Graphics

Read the blank element with a pause, then "blank" followed by a pause.

If the space to be filled in has a question mark, read it as "unknown x" where x is the line, box, bubble, cell, etc.

For technology enhanced items where the blank is in the shape of a box, read the blank box with a pause, then "blank box" followed by a pause.

Application of Audio Guideline

Example

Text Only; Text and Graphics

- A. My old blank no longer fit me.
- B. Please blank the door on your way out.
- C. The lights will come on at the blank of the show.
- D. She had to blank the store because of the storm.



Pictures

Example 1



An Air Force I.C-130, equipped with skis for landing, transports scientists and workers

American scientists and their helpers who are traveling to the interior of Antarctica fly from Christchurch, New Zealand, on U.S. Air Force planes, operated by the 109th Airlift Wing of the New York Air National Guard. These LC-130s are outfitted with skis instead of wheels for landing on the ice runways.

The flight from Christchurch to McMurdo Station, the biggest American base in Antarctica, takes eight hours. Boomerang flights—ones that turn around midway—are common. The planes can't carry enough fuel to fly to Antarctica and back again to New Zealand. They must refuel in Antarctica. But when there's a blizzard on the ice, the pilots can't land to refuel. So at the midway point, the pilot always radios ahead. If there's a chance of a storm, the plane turns around and flies back to New Zealand. One third of all flights headed for Antarctica are forced to turn around midway. This midway point is called the point of no return.



Read the following two selections. Think about how they are alike and how they are different.

Reminiscing

by Ralph Cortez

- Watermelons were so much sweeter then,
- 2 When boys were the stuff of super men,
- 3 And summers seemed so much longer too,
- 4 With nothing pending and nothing due.
- 5 We were swordsmen—swashbuckling heroes,
- 6 Eternal victors—never zeroes;
- 7 Second basemen and clean-up hitters;
- 8 Forever winners, never quitters.
- 9 Play was a ritual in those days,
- 10 To go on magical mind forays,
- 11 To play the game with aplomb and ease,
- 12 To venture forth when and where we'd please.
- 13 We would feign death, and then rise up again.
- 14 Watermelons were so much sweeter then.



Piano

by D. H. Lawrence

- Softly, in the dusk, a woman is singing to me:
- 2 Taking me back down the vista of years, till I see
- 3 A child sitting under the piano, in the boom of the tingling strings
- 4 And pressing the small, poised feet of a mother who smiles as she sings.
- In spite of myself, the insidious mastery of song
- 6 Betrays me back, till the heart of me weeps to belong
- 7 To the old Sunday evenings at home, winter outside
- 8 And hymns in the cozy parlor, the tinkling piano our guide.
- 9 So now it is vain for the singer to burst into clamor
- 10 With the great black piano appassionato. The glamour
- 11 Of childish days is upon me, my manhood is cast
- 12 Down in the flood of remembrance, I weep like a child for the past. [Public Domain]



CSR170%

Example 3



Whites and African Americans participated and sometimes worked together. Many of the African Americans were escaped slaves themselves, but they continued to risk their lives to help others. There were ordinary farmers, ministers, and housewives. Many well-known political and religious leaders from the black and white communities were also active supporters. In 1859, a congressman named Owen Lovejoy gave a speech in which he announced that he worked with the Underground Railroad. In the speech, he boldly said: "Owen Lovejoy . . . aids every fugitive that comes to his door and asks it. Proclaim it then from the housetops. Write it on every leaf that trembles in the forest, make it blaze from the sun at high noon."



Audio Guideline

Text Only

After the paragraph that refers to the picture, read the title, if available. Read embedded text and/ or caption, and then read text.

Text and Graphics

Before describing the picture, it should be determined whether the details of the picture are necessary to understanding and responding to the item(s). In many cases, the picture will be used to accompany a passage or reading excerpt as a piece of visual interest that is not essential in responding to the item. In this case, a very brief description may suffice.

In other cases, the caption or embedded text will describe the picture and only limited additional information is necessary.

In general, read the title of the picture or caption (if it is meant to serve as a title) if there is one.

Application of Audio Guideline

Example 1

A picture showing an airplane.

American scientists and their helpers who are traveling to the interior of Antarctica fly from Christchurch, New Zealand, on U.S. Air Force planes, operated by the 109th Airlift Wing of the New York Air National Guard. These LC-130s are outfitted with skis instead of wheels for landing on the ice runways.

The flight from Christchurch to McMurdo Station, the biggest American base in Antarctica, takes eight hours. Boomerang flights—ones that turn around midway—are common. The planes can't carry enough fuel to fly to Antarctica and back again to New Zealand. They must refuel in Antarctica. But when there's a blizzard on the ice, the pilots can't land to refuel. So at the midway point, the pilot always radios ahead. If there's a chance of a storm, the plane turns around and flies back to New Zealand. One third of all flights headed for Antarctica are forced to turn around midway. This midway point is called the point of no return.

Example 2

A picture of a sliced watermelon.

A picture of a piano with musical notes coming from it.

Example 3

A picture of a slave with chains on his hands and feet. The caption reads "Am I Not a Man and a Brother?"



Boxed Sentences or Paragraphs

Example 1

"This is your last chance to change your mind" said the operator.

What does the sentence suggest about a ride on the Space Shot?

Example 2

Nothing was different except the warm glow that was in my belly and my arms and my legs and my head and wouldn't go away.

Which of the following words is an adjective as it is used in the sentence?

Audio Guideline

Text Only

Read the boxed sentence/word as is with a pause before and after to reflect a return to normal formatting.

Text and Graphics

Preface the boxed sentence/word by saying "boxed x" (x being sentence, word, etc.).

Pause after reading the information in the box to indicate a return to normal formatting.

Application of Audio Guideline

Example 1

What does the sentence suggest about a ride on the Space Shot?

Boxed sentence, - This is your last chance to change your mind, - said the operator. - (Answer options are read.)

Example 2

Which of the following words is an adjective as it is used in the sentence?

Boxed sentence, - Nothing was different except the warm glow that was in my belly and my arms and my legs and my head and wouldn't go away. -

(Answer options are read.)

Acknowledgements

DC CAPE's Audio Guidelines were adapted from: Georgia Department of Education (GADOE), Guidelines for Accessible Assessment Project (GAAP), Maryland Department of Education (MSDE), Smarter Balance Assessment Consortium, and Virginia Department of Education (VDOE).



Appendix J: DC CAPE Mathematics Audio Guidelines

Version 3.3

Table of Contents

Cha	nge History Log	5
Visu	als	6
	Guidelines for Text-to-Speech Descriptions	6
	Classifications for Embed Coding Scheme for Text Descriptions	6
Sym	bols	7
	Money (\$)	7
	Angles/Triangles (∠ and Δ)	8
	Ratios (:)	9
	Equal Signs (=)	9
	Ρi (π)	9
	Approximately equal to (≈)	10
	Less than (<)	10
	Less than or equal to (≤)	11
	Greater than (>)	
	Greater than or equal to (≥)	
	Dashes (–)	
	Temperatures (°F and °C)	
	Parallels (RS XY)	
	Perpendiculars (⊥)	
	Abbreviations (ft., km)	
	Measurement (" ' cm²)	
	Number Signs (#)	
	Empty/Unknown Boxes (, ?)	
	Not equal to (≠)	
	Arc ()	
	Infinity (∞)	
	Percent (%) Lines: Line Segment, Line, and Ray (\overrightarrow{FG} , \overrightarrow{JK} , \overrightarrow{LM})	18
	Similar to (~)	
	Therefore (.:.)	
	Congruent (≅)	
	Factorial (!)	
	Plus or Minus (±)	
	Subscript (Ai)	
Nun	nbers	
	Negative/Positive Numbers	
	Large Whole Numbers	
	Fractions/Improper Fractions	
	Mixed Numbers	
	Decimal Points	
	Roman Numerals	
	Time	
	Date	



Ordered Pairs	29
Probability	30
Expressions/Equations/Operations	31
Multiplication	31
Subtraction	32
Division	32
Parentheses	33
Mathematical Exponents (x², x³, 45)	34
Variables/Letters	35
Logs	37
Radicals	39
Absolute Values	40
Functions (f(x))	40
System of Equations/Inequalities	42
Trigonometry	42
Tables	43
Tally Charts	45
Bar Graphs	46
Histograms	48
Line Graphs	51
Box Plots	54
Scatter Plots	56
Coordinate Planes	58
Exponential/Linear Function Graphs	61
Diagrams/Figures/Keys	64
Tree Diagram	64
Keys	65
Line Plots	66
Shaded Figures (Grids, Bars, and Shapes)	68
Pictographs	
Figures/Illustrations	71
Number Lines	73
Spinners	75
Coins and Dollars	78
Numbered/Step Diagrams	79
Geometric Figures	81
References	9/



Visuals

Guidelines for Text-to-Speech Descriptions

Use these guidelines to describe visuals for text-to-speech scripts:

Read the title.

Provide a general overview of the image. (i.e., A map of South America, a graphic organizer with a center circle and four circles radiating outward)

Begin with the main section of the image.

Describe the details in a succinct manner using grade-level appropriate vocabulary. Omit minor details that are irrelevant (a box to the left of the person).

If facial expressions or body language are important, do not assume a blind student can interpret them. For example, it is better to describe a person as worried than to state they have furrowed brows.

When describing several people in an image, label each one clearly so they are not mixed up. (i.e., tall man, elderly man, little boy)

Describe only what is seen in the image, do not provide interpretation or additional information.

Reading Inline Choice Items

Test Nav 8.4 does not yet have the capability to read the options in an inline choice item, therefore, follow these directions for providing phonetic markup.

Use the drop-down menus to complete the sentence.

Example Stem:

A twenty-three point six K-G grocery cart is pushed away from and then rolls back toward a cart rack. Use the graph to complete the sentence describing the motion of the grocery cart.

Example of Inline Choice

The graph shows that the cart travels (Inline Choice dropdown menu) meters between zero and five seconds.

When accessing the dropdown menu, the following answer options are available.

Two point zero Three point zero Four point zero Five point zero Six point zero



Example of Phonetic Markup

The graph shows that the cart travels - blank - meters between zero and five seconds. The answer choices are: two point zero, three point zero, four point zero, five point zero, six point zero.

Classifications for Embed Coding Scheme for Text Descriptions

An embed code within the alt text will be included for all test items with visual elements. The embed code will be classified as a 1, 2 or 3. The description of each level is listed below:

- [1] is not construct-relevant and can be eliminated (e.g., it is only there for engagement purposes). For example, a picture of an elephant added purely for engagement would has alt text that reads "elephant [1]" or "picture of elephant [1]."
- [2] is construct-relevant and can be represented using accompanying textual description. Example of text where reading the graph is construct-relevant: The graph title is Roller Rink costs. Key, dashed line represents Roller Rink A, solid line represents Roller Rink B. The x-axis is labeled number of people. The y-axis is labeled cost in dollars. The dashed arrow starts at zero people, sixty dollars and points to a little less than sixteen people, midway between one hundred and one hundred ten dollars. The solid arrow starts at zero people, a little less than ten dollars and points to a little more than fourteen people, a little less than one hundred ten dollars. [2]
- [3] is construct-relevant and can be represented using accompanying textual description together with a tactile representation or physical manipulative. Example of text where reading the graph is construct-relevant: The graph title is Roller Rink costs. Key, dashed line represents Roller Rink A, solid line represents Roller Rink B. The x-axis is labeled number of people. The y-axis is labeled cost in dollars. [3]

Accessibility experts will be trained on this embedded coding scheme during the item tagging phase of item development.

Symbols

Money (\$)

Example 1

\$4.35

Example 2

\$2.50

Example 3

\$5,390

Audio Guideline

Read dollars and cents if there is a decimal point.



Do not read shortcuts for numbers. For instance \$.25 and \$1.50 should be read as twentyfive cents instead of a quarter. This will allow a more standardized presentation of monetary quantities.

If the amount is less than one dollar, read "X cents" and do not read the zero (\$0.35 is "thirty-five cents" not "zero dollars and thirty-five cents"). Likewise, do not read "and zero cents" (\$4.00 is read "four dollars" and not "four dollars and zero cents").

Read the number place value unless the question is measuring place value (refer to the large number section for details).

Application of Audio Guideline

Example 1

Four dollars and thirty-five cents

Example 2

Two dollars and fifty cents

Example 3

Five thousand three hundred ninety dollars

Angles/Triangles (\angle and Δ)

Example 1

∠RST

Example 2

 $\triangle RST$

Example 3

 $\Delta R'S'T'$

Audio Guideline

Read angles and shapes by leading with "angle," "shape," etc. and then reading letters individually. When reading a transformed or reflected angle or shape that uses "'", describe as "prime."

Do not reference the case of the letter unless an item includes uppercase and lowercase letters. In this instance, make reference to the uppercase letters guideline.

Application of Audio Guideline

Example 1

Angle RST

Example 2

Triangle RST

Example 3

Triangle R prime S prime T prime



Ratios (:)

Example

3:2

Audio Guideline

Read as "the ratio x to y."

Sometimes the ratio symbol is used for fractions. This can usually be determined by context. If this is the case, refer to the fraction guideline.

If the "the ratio of" is used in the item, read as "x to y" to avoid being redundant.

Application of Audio Guideline

Example

The ratio three to two

Equal Signs (=)

Example

2 + 3 = 5

Audio Guideline

Read as "equals."

Application of Audio Guideline

Example

Two plus three equals five.

Pi (π)

Audio Guideline

Read as "pi."

Other Greek letters

Audio Guideline

Read as the Greek letter in most cases, unless using the closest English letter is clearer.



Application of Audio Guideline

Example

 $\sin \alpha = 0.5$ is read "sine alpha equals zero point five" but the density formula,

$$\rho = \frac{m}{V}$$

where "p" is the Greek letter rho, should be read "P equals fraction with ..." since (a) there is no "P" in the formula, (b) the Greek letter closely resembles the English letter, and (c) use of the word "rho" is likely to be more distracting than helpful for text-to-speech users, since English readers may not know what a "rho" is. It is advisable to avoid formulas like this in item development (a "D" replaces the rho is some US textbooks), but given an item with uncommon Greek letters (other than alpha, beta, delta, theta, and perhaps a few others as may be determined on a case-by-case basis), math content specialists have found it most helpful in the past to use the closest English equivalent.

Approximately equal to (≈)

Example

 $\pi \approx 3.14$

Audio Guideline

Read as "is approximately equal to."

Application of Audio Guideline

Example

Pi is approximately equal to three point one four.

Less than (<)

Example 1

3<5

Example 2

x<y<z

Audio Guideline

Read as "is less than."

If there is more than one "less than" sign in a string, then read the whole relationship together. Read the last part as "is less than."



Application of Audio Guideline

Example 1

Three is less than five.

Example 2

X is less than y is less than z.

Less than or equal to (≤)

Example

2x ≤ 6

Audio Guideline

Read as "is less than or equal to."

Application of Audio Guideline

Two x is less than or equal to six.

Greater than (>)

Example 1

7>5

Example 2

x>y>z

Audio Guideline

Read as "is greater than."

If there is more than one "greater than" sign read the whole relationship together. Start the last part as "is greater than."

Application of Audio Guideline

Example 1

Seven is greater than five.

Example 2

X is greater than y is greater than z.

Greater than or equal to (≥)

Example

3x ≥ 6



Audio Guideline

Read as "is greater than or equal to."

Application of Audio Guideline

Three x is greater than or equal to six.

Dashes (-)

Example 1

Pages 3-7

Audio Guideline

When the dash is used to reference material or as a group of conditions, use "through" for consecutive and non-consecutive numbers.

Application of Audio Guideline

Example 1

Pages three through seven

Temperatures (°F and °C)

Example 1

35°F

Example 2

25°C

Audio Guideline

Read as "degrees Fahrenheit" and "degrees Celsius."

Application of Audio Guideline

Example 1

Thirty-five degrees Fahrenheit

Example 2

Twenty-five degrees Celsius

Parallels ($\overline{RS} \mid | \overline{XY}$)

Audio Guideline

Read as "is parallel to."

Application of Audio Guideline

Line segment RS is parallel to line segment XY.



Perpendiculars (⊥)

Example

 $RS \perp XY$

Audio Guideline

Read as "is perpendicular to."

Application of Audio Guideline

Line segment RS is perpendicular to line segment XY.

Abbreviations (ft., km)

Example 1

3ft.

Example 2

What is the correct abbreviation for kilometer?

- A. kl
- B. K
- C. km
- D. klm

Audio Guideline

Present abbreviations by speaking the whole word the abbreviation represents.

If the item measures the ability to identify the meaning of the abbreviation, then read the abbreviation letter by letter.

If speaking the abbreviation violates the construct being measured, then read letter by letter.

If the item has measurements that are all uppercase or lowercase, then it is not necessary to reference the cases.

Application of Audio Guideline

Example 1

Three feet

Example 2

What is the correct abbreviation for kilometer?

- A. kl
- B. K
- C. km
- D. klm



Measurement (" ' cm²)

Example 1

6"

Example 2

12'

Example 3

4 cm²

Example 4

 5 cm^3

Audio Guideline

Present measurements by speaking the whole word the symbol represents.

Application of Audio Guideline

Example 1

Six inches

Example 2

Twelve feet

Example 3

Four square centimeters

Example 4

Five cubic centimeters

Number Signs (#)

Example

Refer to step #5.

Audio Guideline

Read as "number."

Rule refers only to when symbol is being used to signify "number" as opposed to other nonmathematical uses of the symbol (for example, the pound key and the hash key).

Application of Audio Guideline

Example

Refer to step number five.



Empty/Unknown Boxes (☐, ?)

Example 1

$$4 + 2x = \Box$$

Example 2

$$3 + y = ?$$

Audio Guideline

Refer to an empty box in a formula or equation as "blank." Refer to a box with a question mark in it as "question mark."

Application of Audio Guideline

Example 1

Four plus two x equals blank.

Example 2

Three plus y equals question mark.

Not equal to (≠)

Example

 $2x \neq 7$

Audio Guideline

Read as "is not equal to."

Application of Audio Guideline

Two *x* is not equal to seven.

Arc (^)

Example

RT

Audio Guideline

Read as "arc."

Application of Audio Guideline

Example

Arc RT



Infinity (∞)

Example

As
$$x \to \infty$$
, $f(x) \to -\infty$

Audio Guideline

Read as "infinity."

Application of Audio Guideline

Example

As x approaches infinity, f of x approaches negative infinity.

Percent (%)

Example

35%

Audio Guideline

Read as "percent."

Application of Audio Guideline

Thirty-five percent

Lines: Line Segment, Line, and Ray Lines: Line Segment, Line, and Ray (\overrightarrow{FG} , \overrightarrow{JK} , \overrightarrow{LM})

Example 1

Line Segment \overline{FG}

Example 2

Line \overrightarrow{JK}

Example 3

Ray \overrightarrow{LM}

Audio Guideline

Read as "line segment," "line," or "ray" when they appear above letters or numbers.

Application of Audio Guideline

Example 1

Line segment FG

Example 2

line JK

Example 3

ray LM



Similar to (~)

Example

 $\triangle EFG \sim \triangle JKL$

Audio Guideline

Read as "is similar to."

Application of Audio Guideline

Example

Triangle *EFG* is similar to triangle *JKL*.

Therefore (.:.)

Example

A=B and B=C: A=C

Audio Guideline

Read as "therefore."

Application of Audio Guideline

Example

A equals B and B equals C, therefore A equals C.

Congruent (\cong)

Example

 $\angle FGH \cong \angle JKL$

Audio Guideline

Read as "is congruent to."

Application of Audio Guideline

Example

Angle FGH is congruent to angle JKL.



Factorial (!)

Example 5

! = x

Audio Guideline

Read as "factorial."

Application of Audio Guideline

Example

Five factorial equals x.

Plus or Minus (±)

Example

The margin of error is $4.5 \pm .8$

Audio Guideline

Read as "plus or minus."

Application of Audio Guideline

Example

The margin of error is four point five plus or minus point eight.

Subscript (A,)

Example

A_i represents the maximum amount of interest.

Audio Guideline

Read as "x subscript y."

Application of Audio Guideline

A subscript *i* represents the maximum amount of interest.



Numbers

Negative/Positive Numbers

Example 1

-4

Example 2

4 - -5

Example 3

What is the distance between +4 and -3 on the number line?

Audio Guideline

Read as "negative." Do not read the negative sign as a minus sign.

In most cases, consecutive negatives that are intended to show the negative of a negative will be represented with a set of parentheses. If this is the case, then refer to the parentheses section.

If the negative of a negative does not include parentheses, read as "negative (pause) negative."

Two consecutive negatives should not be read as "negative negative X" if the operation is focused on subtraction. In this case, read as "minus negative X." Note that this rule refers to numbers only. If, instead of a number, X is actually a variable or expression that includes variables, refer to the section entitled "Variables/Letters" below for the correct reading of expressions like –y.

If a positive sign precedes a number and is not part of an operation, then read as "positive."

Application of Audio Guideline

Example 1

Negative four

Example 2

Four minus negative five

Example 3

What is the distance between positive four and negative three on the number line?

Large Whole Numbers

Example 1

103,457



Item 2:

Virginia covers one hundred two thousand, five hundred fifty-eight square kilometers of land. Which shows this number?

- A 1,258
- B 12,558
- c 102,558
- D 1,200,558

Audio Guidelines

For items not measuring place value, read large numbers by referencing all of the number place values.

If the item measures place value knowledge, read the number digit by digit using commas.

If reading the number as a whole number violates the construct being measured, read the number digit by digit.

Application of Audio Guideline

Example 1

One hundred three thousand, four hundred fifty-seven

Note: Use this application unless cueing occurs; then use the application in Example 2.

Example 2

- A. one comma two five eight
- B. one two comma five five eight
- C. one zero two comma five five eight
- D. one comma two zero zero comma five five eight

Fractions/Improper Fractions

Example 1

$$\frac{1}{2} + \frac{3}{8}$$

Example 2

$$\frac{1}{14} + \frac{15}{100} - \frac{x}{2y}$$

Example 3

$$\frac{3x+y}{z}$$

Example 4



$$\frac{3x}{5} + x^2$$

Audio Guidelines

Read common fractions by presenting the numerator as the number it represents and the denominator as the ordinal number using two words for the whole presentation.

Read any fraction with numerator of _____ (pause) and denominator of _____.

If the denominator is between 2 and 10 then read it is as one third, one fourth, one sixth, one sixth, one seventh, one eighth, one ninth, or one tenth.

An exception to the first guideline is $\frac{1}{2}$, which should always be read as one-half.

An exception to the first guideline is 1 in the denominator. For example, $\frac{3}{1}$ should be read as numerator of 3 (pause) and denominator of 1.

When a fraction is complex (e.g., has more than one number in the numerator/denominator, includes an arithmetic operation, or involves parentheses/exponents) denote the numerator and denominator using the language "fraction with numerator of ..."

When an operation follows a fraction, pause between the fraction and the next operation.

Application of Audio Guidelines

Example 1

One-half plus three-eighths

Example 2

Fraction with numerator of 3 (pause) and denominator of 14 (pause) plus fraction with numerator of fifteen (pause) and denominator of one hundred (pause) minus fraction with numerator of x (pause) and denominator of two y

Example 3

Fraction with numerator of three X plus Y (pause) and denominator of Z

Example 4

Six-thirds

Example 5

Fraction with numerator of three x (pause) and denominator of 5 (pause) plus x squared

Mixed Numbers

Example 1

 $4\frac{3}{4}$



 $5\frac{13}{28}$

Audio Guidelines

Read with "and" between the whole number and the fraction.

Use fraction audio guidelines for reading fraction portion of mixed numbers.

Application of Audio Guidelines

Example 1

Four and three fourths

Example 2

Five and (pause) fraction with numerator of thirteen (pause) and denominator of 28

Decimal Points

Example 1

40.6500

Example 2

0.100000

Example 3

0.0000000002

Example 4

0.333...

Example 5

3,450.0844397

Audio Guidelines

If there are up to six repeating zeroes or numbers before or after the decimal point, read them as "zero and three repeating."

If there are more than six repeating zeroes or numbers after the decimal point (beyond millionths), say "point" and read the digits in order from left to right.

Read "repeating" where "..." represents the number of group of numbers that repeats.

Application of Audio Guidelines

Example 1

Forty point six five zero zero



Zero point one zero zero zero zero zero

Example 3

Zero point zero zero zero (pause) zero zero zero zero zero zero zero two

Example 4

Zero point three repeating

Example 5

Three thousand four hundred fifty point zero eight four (pause) four three nine seven

Roman Numerals

Example 1

Find the point in quadrant II that is furthest from the origin.

Example 2

V. Three students walked to school taking different routes.

Example 3

What is the numeric value of Roman numeral VII?

Audio Guidelines

If an item uses Roman numerals but is not measuring knowledge of Roman numerals, read the Roman numeral reference and then the number.

If the item measures knowledge of Roman numeral value, read "Roman numeral" followed by the letters one at a time.

Application of Audio Guidelines

Example 1

Find the point in quadrant two that is furthest from the origin.

Example 2

Question five. Three students walked to school taking different routes.

Example 3

What is the numeric value of Roman numeral VII?



Time

Example 1

6:30

Example 2

9 a.m.

Example 3

5:45

Example 4

5:00 p.m.

Audio Guidelines

Read the time literally without using shortcuts or reading the time in reference to a different version of time (e.g., noon, quarter of six, ten after five).

Read a.m. and p.m. without adding language about the time of day (e.g., "in the morning" or "at night.")

Application of Audio Guidelines

Example 1

Six thirty

Example 2

Nine a m

Example 3

Five forty five

Example 4

Five o'clock p m

Date

Example 1

1976

Example 2

Feb. 5, 2003



Population of Two Cities from 1975 to 2025

City	1975	2000	2010	2025
Tokyo	26.6 million	34.4 million	36.9 million	37.1 million
Delhi	4.4 million	15.7 million	21.9 million	28.6 million

Audio Guidelines

Read years as they would be read in plain language usage. For years after 1999, read "two thousand six" (for example) before 2010 and "twenty twelve" for years after 2009. However, when years comprise the axis of a graph or a sequence of table cells, maintain consistency in going from 2009 ... 2010 ... 2011 and use either convention (both are acceptable usage), except do not use the "twothousand" style for years after 2019. For years after 2099, use the same style as for years between 1900 and 1999.

Read months as the full name even if abbreviations are presented in text.

Read days as you would when reading a date instead of reading the day as number (e.g., "second" instead of "two," "third" instead of "three," or "fourth" instead of "four").

Application of Audio Guidelines

Example 1

Nineteen seventy six

Example 2

February sixth, two thousand three

Example 3

... city ... nineteen seventy five ... two thousand ... two thousand ten ... twenty twenty five ... (Refer to the section entitled "Tables" for more information.)

Ordered Pairs

Example

Point X is (-2, 4)

Audio Guideline

Read coordinate pairs as "ordered pair X, Y."

Application of Audio Guideline

Point X is ordered pair negative two, four.



Probability

Example

P(orange) = $\frac{1}{6}$

Audio Guideline

"P(text)" is the notation for probability. When reading a probability, do not read parentheses as "open parenthesis/close parenthesis." Read as "P of" word in parentheses "is" remaining text.

Application of Audio Guideline

Example

P of orange is one-sixth

Expressions/Equations/Operations

Multiplication

Example 1

 $3 \times 5 = X$

Example 2

$$xy + 4x = 10$$

Example 3

$$(3 + x)(y - 2)$$

Audio Guidelines

Read the multiplication symbol as "times" when it appears in a math item.

When a number, symbol, or another set of parentheses appears before a set of parentheses, read the number or symbol as is and "open parenthesis" before what is within the parentheses. When multiple sets of parentheses appear consecutively, read as "open parenthesis" and "close parenthesis."

If there are two variables or a variable and a number consecutively, do not read "times" to represent implied multiplication.

Application of Audio Guidelines

Example 1

Three times five equals X.

Example 2

Xy plus four x equals ten.

Example 3

Open parenthesis three plus x, close parenthesis, (pause) open parenthesis y minus two, close parenthesis.



Addition

Example

4 + 2 + 3

Audio Guideline

Read as "plus."

Application of Audio Guideline

Four plus two plus three

Subtraction

Example

5 - 3

Audio Guideline

Read as "minus."

Application of Audio Guideline

Five minus three

Division

Example 1

 $12 \div 4$

Example 2

What is $57 \div 5$

A. 10 R7

B. 11 R2

C. 12

Audio Guideline

Read as "divided by."

If the item presents the remainder as "R" read as "remainder" unless the item is measuring the meaning of "R." In this case, read it as "R."

Application of Audio Guideline

Example 1

Twelve divided by four



What is fifty-seven divided by five?

- A. ten, remainder seven
- B. eleven, remainder two
- C. twelve

Parentheses

Example 1

$$3(x + y) = 6$$

Example 2

$$2(x+3) + \left(\frac{-y-2}{3}\right) = 9$$

Example 3

$$(x + 4)[(x + 4) - (x - 2)]$$

Audio Guideline

Read the parentheses by referring to the opening of the parentheses using the language "open parenthesis" and the closing of the parentheses using the language "close parenthesis."

It is important to reference the close of the parentheses to be clear on when the parenthetical expression ends.

When reading an equation or expression with multiple parts and sets of parentheses, pause to help differentiate between sections.

Read brackets using the same language as parentheses in the first guideline.

Application of Audio Guideline

Example 1

Three (pause) open parenthesis x plus y close parenthesis (pause) equals six.

Example 2

Two (pause) open parenthesis x plus three close parenthesis (pause) plus (pause) fraction with numerator of open parenthesis y minus two close parenthesis (pause) and denominator of three (pause) equals nine.

Example 3

Open parenthesis x plus four close parenthesis, open bracket, open parenthesis, x plus four close parenthesis minus open parenthesis x minus two close parenthesis, close bracket.



Mathematical Exponents $(x^2, x^3, 4^5)$

Example 1

$$y = x^2$$

Example 2

$$y = 4^5 + 2$$

Example 3

$$y = 2^{x+5} + 3$$

Example 4

$$16^{3/2} = 8^2$$

Example 5

$$3^{5.5} = (z+8)^{x/z}$$

Audio Guidelines

Read the base first—the base can be either a numeral or the variable.

If the exponent has a value of 2, then read "squared." If the exponent has a value of 3, read "cubed;" otherwise, read "raised to the _power" where _denotes either the ordinal of the number (fourth, sixth, negative seventy-sixth, etc.) if the exponent is an integer or the expression, as specified elsewhere in these guidelines, if the exponent is anything other than an integer.

To indicate a return to the base, use a pause.

Read fraction exponents following the fractions rule.

Application of Audio Guidelines

Example 1

Y equals x squared.

Example 2

Y equals four raised to the sixth power (pause) plus two.

Example 3

Y equals two raised to the x plus five power (pause) plus three.

Example 4

Sixteen raised to the three halves power equals eight squared.

Example 5

Three raised to the five point five power equals open parenthesis Z plus 8 close parenthesis, raised to the fraction with numerator of x and denominator of 2 power.



Variables/Letters

Example 1

x + y = 3

Example 2

In the triangle, what is the measurement of angle A that is opposite side α ?

Example 3

N + 4

Example 4

 $-x^{3}$

Audio Guideline

Read lowercase variables in a math item without referring to case.

If uppercase variables are used in a math item along with lowercase variables, then specify both cases using the language "lowercase" and "uppercase."

If an uppercase variable appears in a math item without a lowercase variable, then do not specify uppercase.

If a variable is preceded by a negative sign, read as "opposite of" the variable, rather than the "negative of" the variable.

Application of Audio Guideline

Example 1

X plus y equals three.

Example 2

In the triangle below, what is the measurement of angle uppercase A that is opposite side lowercase *a*?

Example 3

N plus four

Example 4

Opposite of x cubed

Logs

Example 1

 $Log_{10}100 = 2$





If $\log 2 \approx 0.301$ and $\log 3 \approx 0.477$, what is the approximate value of log 72?

- 0.051
- 0.778
- 0.861
- 1.857 D

Example 3

In x

Audio Guidelines

Read "log" followed by the base, the word "of," and then the number or variable.

If the log is shown without an explicit base, then read as "log" and the number or variable shown. Do not interpret the implied base of 10 if it is not written.

Read "In x" as "natural log of x."

Application of Audio Guidelines

Example 1

Log base ten of one hundred equals two.

Example 2

If log two is approximately equal to zero point three zero one and log three is approximately equal to zero point four seven seven, what is the approximate value of log seventy-two?

Example 3

Natural log of x

Radicals

Example 1

 $\sqrt{2}$

Example 2

$$\sqrt[4]{144} = \sqrt[8]{288}$$

Example 3

$$\sqrt[m+n]{x+y}$$



$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Audio Guidelines

For radicals with an implied radical index of two, read as "the square root of x."

For radicals with a radical index of three, read as "the cube root of x."

For radicals with a number for a radical index other than two or three, start by reading the index as "the Xth root of."

If the radical index is a variable, read as "the x root of y."

When multiplying numbers by radicals (e.g.,), say "x times the square root of y."

Application of Audio Guidelines

Example 1

The square root of two

Example 2

The fourth root of one hundred forty-four equals the x root of two hundred eighty-eight.

Example 3

The m plus n root of quantity x plus y

Example 4

X equals, fraction with numerator of, opposite of B, plus or minus the square root of quantity, B squared minus four A C, and denominator of two A.

Absolute Values

Example 1

Example 2

$$|2 + 7|$$

Example 3

$$|x| + 1$$

Audio Guidelines

Read as "the absolute value of."

Pause if an absolute value is part of a larger expression or equation.



Application of Audio Guidelines

Example 1

The absolute value of negative sixteen

Example 2

The absolute value of quantity two plus seven

Example 3

The absolute value of x (pause) plus one.

Functions (f(x))

Example 1

$$f(x) = 5$$

Example 2

$$f(x+1)$$

Example 3

f(g(x))

Example 4

$$f^{-1}(x) = -x - 2$$

Audio Guidelines

For function notation in general, read the first letter shown then the word "of," followed by the variable and/or number in parentheses.

When the expression inside the parentheses is more complex or includes another function, use the same rule of reading the letter first, then the word "of," followed by the variable or expression in parentheses.

When the inverse of a function is presented, read it as "f inverse of x."

Application of Audio Guidelines

Example 1

F of x equals five

Example 2

F of open parenthesis x plus one close parenthesis

Example 3

F of g of x

Example 4

The inverse of f of x equals negative two-thirds x minus two.



For function tables where one column/row is paired with one row/column

The table should be read as it is organized, as (x, y) pairs, according to p. 44 (If the orientation of the table lends itself to reading the table information column by column and this is a more logical manner to present the table, then do so.)

Example

This table shows a relationship between x and y:

Х	у
3	14
7	30
9	38

"The table has two columns and three rows. The first column heading is, x; the second column heading is, y. First row, 3, 14; second row, 7, 30; third row, 9, 38."

Example

This table shows a relationship between x and y:

X	3	7	9
У	14	30	38

"The table has two rows and three columns. The first row heading is, x; the second row heading is, y. First column, 3, 14; second column, 7, 30; third column, 9, 38."

System of Equations/Inequalities

Example 1

$$\begin{cases} x + y = 4 \\ x - y = 2 \end{cases}$$

What is the solution to the system of equations?

Example 2

7 Which point lies in the solution set for the

$$system \begin{cases}
2y - x \ge -6 \\
2y - 3x < -6
\end{cases}$$

- A (-4,-1)
- B (3,1)
- C (0,-3)
- D (4,3)



Audio Guidelines

Start by reading "system of equations" or "system of inequalities." Then read the information in the system starting from the top to the bottom; reference the row position and insert a pause between rows.

Read equations and inequalities according to equation and inequality guidelines above.

Application of Audio Guidelines

Example 1

System of equations. Top row, x plus y equals four (pause) bottom row, x minus y equals two. What is the solution to the system of equations?

Example 2

Which point lies in the solution set for the system, top row, two y minus x is greater than or equal to negative six (pause) bottom row, two y minus three x is less than negative six.

Trigonometry

Example 1

sin15°=cos75°

Example 2

 $tan\theta = -1$

Audio Guidelines

Read the abbreviated versions of trigonometry functions in full words if doing so does not violate the construct being measured.

If the item is measuring knowledge of these abbreviations read letter by letter.

Use the Greek alphabet in reading trigonometric functions and items. The most used letter is theta (θ)

Application of Audio Guidelines

Example 1

Sine fifteen degrees equals cosine seventy five degrees

Example 2

Tangent theta equals negative 1



Tables

Example 1

Seashell Collection

Size	Number of Seashells
Small	3
Medium	6
Large	4

Example 2

Rock Types

	Shiny	Air Holes	Flat Layers	Fossils
Metamorphic	X		×	X
Igneous	×	×		
Sedimentary			×	X

Audio Guideline

Text Only

Read the table title only. Allow for all content elements in the table to be read on demand.

Text and Graphics

Read the table title, and then state the number of rows and columns. Then read the column headings from left to right followed by reading the information in each row from left to right.

If the orientation of the table lends itself to reading table information column by column and this is a more logical manner to present the table, then do so.

Read the units of measure for each cell unless they are not specified in the table.

When reading a data table that has blank cells, skip over them if they are unnecessary to answer the question. Blank cells should be read if this information is essential to answer the item.

Remain consistent with the style of reading from table to table. Using a standardized version will help students better understand the patterns of the descriptions.

Many charts that are set up in a table format can be read in the manner described. Determine the layout of such charts before deciding the best way to read the information being presented.



Application of Audio guidelines

Example 1

The table title is Seashell Collection. The table has two columns and three rows. The first column heading is Size, the second column heading is Number of Seashells; first row, Small, three seashells; second row, Medium, six seashells; third row, Large, four seashells.

Example 2

The table title is Rock Types. The table has four columns and three rows. The first column heading is Shiny, the second column heading is Air Holes, the third column heading is Flat Layers, and the fourth column heading is Fossils; first row, Metamorphic, Shiny, Flat Layers, Fossils; second row, igneous, Shiny, Air Holes; third row, Sedimentary, Flat Layers, Fossils.

Tally Charts

Example

Name	Number of Votes
Tigers	HH I
Rockets	111
Sharks	HH 11
Bobcats	1111

Audio Guideline

Text Only

Read the tally chart title only. Allow for all content elements in the chart except for the tally marks to be read on demand.

Text and Graphics

Read the tally chart title, column headings, and row headings.

Read the number of tally marks only if it does not violate the construct being measured. If reading tally marks does violate the construct being measured, tactile representation is required to make this item accessible to blind students and some low-vision students.

Application of Text and Graphics Guidelines

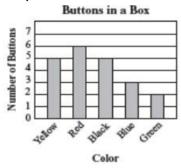
Example

The tally chart has two columns and four rows. The first column heading is Name, and the second column heading is Number of Votes; first row, Tigers, six votes; second row, Rockets, three votes; third row, Sharks, seven votes; fourth row, Bobcats, four votes.

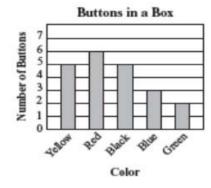


Bar Graphs

Example 1



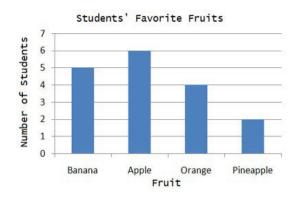
Example 2



How many red buttons are in the box?

Example 3

Kate asked the students in her class what their favorite fruit was. The results of her survey are shown in the graph below.





Audio Guideline

Text Only

Read the bar graph title. Allow for all words and numbers on the bar graph to be available to be read on demand.

Text and Graphics

Read the bar graph title first, followed by the x-axis label and the y-axis label. Do not read values on either axes until describing the bars.

Describe each bar, being careful to take into account the question, so as not to violate the construct being measured. In each description, use the units of measure for the values on the x- and y- axes if applicable.

If a bar is between two horizontal lines, then do not estimate or approximate numbers. Instead, use more general language such as "a little less than," "a little more than," and "midway between."

If the item measures the student's ability to identify the number associated with the bar, then describe the graph without noting the heights of the bars. In this case, tactile representation is required to make this item accessible to blind students and some low-vision students.

Application of Text and Graphics Guidelines

Example 1

The bar graph title is Buttons in a Box. The x-axis label is Color and the y-axis label is Number of Buttons; Yellow bar, five buttons; Red bar, six buttons; Black bar, five buttons; Blue bar, three buttons; Green bar, two buttons.

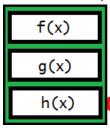
Example 2 (item specifically asks students to identify the value associated with a bar)

The bar graph title is Buttons in a Box. The x-axis label is Color and shows five colors: Yellow, Red, Black, Blue, and Green. The y-axis label is Number of Buttons.

Example 3

The bar graph title is Students' favorite fruits. The x-axis label is Fruit, and the y-axis label is Number of students. Four bars are shown, from left to right, banana, apple, orange, pineapple.

Three functions plotted on a graph





If this graph is described with a tool like that above used to select different graphs on the same coordinate plane, it should be read as follows:

First row, F of X; second row, G of X; third row, H of X.

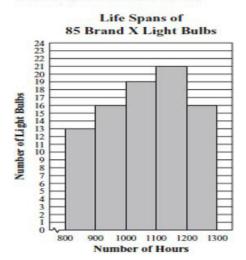
Note: If only two types of graph can be selected with the tool, it may be appropriate to read according to instructions beginning on page 43 for systems of equations (top row ... bottom row ...).

Histograms

Example 1



Abe tested 85 Brand X light bulbs to determine their life spans. The histogram below shows the results of his test.



What was the total number of Brand X light bulbs that had life spans greater than or equal to 1000 hours?

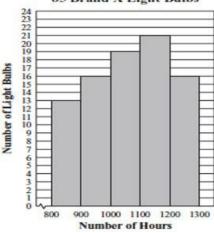
- A. 72
- B. 56
- C. 51
- D. 21





Abe tested 85 Brand X light bulbs to determine their life spans. The histogram below shows the results of his test.

Life Spans of 85 Brand X Light Bulbs



What was the total number of Brand X light bulbs that had life spans greater than or equal to 1000 hours?

- A. 72
- B. 56
- C. 51
- D. 21

Audio Guideline

Text Only

Read the histogram title. Allow for all words and numbers on the histogram to be available to be read on demand.

Text and Graphics

Read the histogram title first, followed by the x-axis label and the y-axis label.

Describe each bar range on the x-axis, being careful to take into account the question, so as not to violate the construct being measured. In each description use the units of measure on the x- and y-axis labels if applicable.

If a bar is between two horizontal lines, then do not estimate or approximate numbers. Instead, use more general language such as "a little less than," "a little more than," and "midway between."

If the item measures the student's ability to identify the number associated with the bar, then describe the graph without noting the heights of the bars. In this case, this item is not accessible to blind and some low-vision students without tactile representation.

If there are a large number of bars (more than 10) consider associating bars together or focusing on trends or more general frequency in your description.



Application of Text and Graphics Guidelines

Example 1

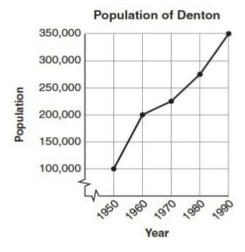
The histogram title is Life Spans of Eighty-Five Brand X Light Bulbs. The x-axis label is Number of Hours and the y-axis label is Number of Light Bulbs; bar one, eight hundred through eight hundred ninety nine hours, thirteen light bulbs; bar two, nine hundred through nine hundred ninety nine hours, sixteen light bulbs; bar three, one thousand through one thousand ninety nine hours, nineteen light bulbs; bar four, one thousand one hundred through one thousand one hundred ninety nine hours, twenty one light bulbs; bar five, one thousand two hundred through one thousand two hundred ninety nine hours, sixteen light bulbs.

Example 2 (item specifically asks student to read information from one of the bars)

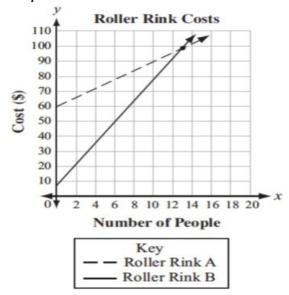
The histogram title is Life Spans of Eighty-Five Brand X Light Bulbs. The x-axis label is Number of Hours and the y-axis label is Number of Light Bulbs. Five bars show the number of light bulbs with a life span of eight hundred through eight hundred ninety nine hours, nine hundred through nine hundred ninety nine hours, one thousand through one thousand ninety nine hours, one thousand one hundred through one thousand two hundred through one thousand two hundred ninety nine hours.

Line Graphs

Example 1







Audio Guidelines

Text Only

Read the graph title only. Allow for all words and numbers in the graph area to be available to be read on demand.

Text and Graphics

For all graphs, read the title first.

Read the Key title and then key section (refer to Key rule specifically).

Read the axis labels.

When describing the graph, be as concise as possible while providing the necessary information to understand and answer the question.

If a line or point being described falls between two marked x- or y-axis values, then do not estimate or approximate numbers Instead, use more general language such as "a little less than," "a little more than," and "midway between."

It is not necessary to describe the visual attributes of the graph unless there is an explicit need, such as a key that references line types or an item referencing the attributes or if doing so would help the student is reading a tactile or a magnified version of the test.

If the description violates the construct being measured, then consider amending it to give less specific information. In this case, tactile representation is required to make this item accessible to blind students and some low-vision students.

When possible, reference the starting and ending point of the line segments or starting points of rays to provide context to the student.



Application of Text and Graphics Guidelines

Example 1

The graph title is Population of Denton. The *x*-axis label is Year and the *y*-axis label is Population. The line starts at nineteen fifty, one hundred thousand, rises to nineteen sixty, two hundred thousand, then nineteen seventy, midway between two hundred and two hundred fifteen thousand, then nineteen eighty, midway between two hundred fifty and three hundred thousand, and ends at nineteen ninety, three hundred fifty thousand.

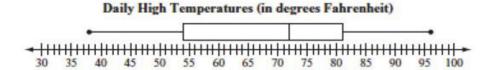
Example 2

The graph title is Roller Rink Costs. Key, dashed line represents Roller Rink A, solid line represents Roller Rink B. The *x*-axis is labeled Number of People. The *y*-axis is labeled Cost (in dollars). The dashed line starts at zero people, sixty dollars and moves up through midway between twelve and fourteen people, one hundred dollars and fourteen people, a little more than one hundred dollars. The solid line starts at zero people, a little less than ten dollars and moves up through between twelve and fourteen people, one hundred dollars and fourteen people, a little less than one hundred ten dollars.

Box Plots

Example 1

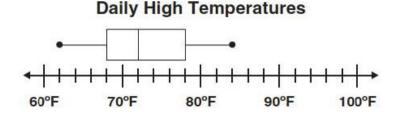
The box plot shows the distribution of the daily high temperatures, in degrees Fahrenheit, in the town of Clifton during the year 2004.



Based on the box plot, in which of the intervals of temperatures is it most likely that exactly 50% of the daily high temperatures are located?

Example 2

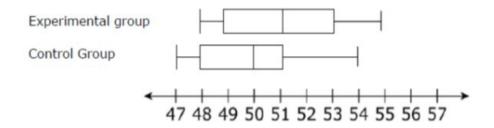
The box plot represents the daily high temperatures at a beach in April



What was the median daily high temperature?



Heights of Plants (cm)



Audio Guidelines

Read the box plot title. Allow for all words and numbers on the box plot to be available to be read on demand.

Text and Graphics

Start by reading the title of the plot and reference that it is a box plot. Read the box titles or any other words on the plot if applicable.

Read the information along the bottom of the graph from left to right.

If the item measures knowledge of the box plot or if the description violates the construct being measured, then describe the box plot without using specific terminology (e.g., whiskers, quartiles, or median). In this case, tactile representation is required to make this item accessible to blind students and some low-vision students.

If a line or point being described falls between two marked values, then do not estimate or approximate number. Instead use more general language such as "a little less than," "a little more than," and "midway between."

Describe the graph elements using specific box plot terminology—including whiskers, quartiles, box, and median—unless doing so violates the construct being measured.



Application of Text and Graphics Guidelines

Example 1

The title of the box plot is Daily High Temperatures (in degrees Fahrenheit). The number line ranges from thirty degrees Fahrenheit to one hundred degrees Fahrenheit. The whiskers range from thirty-eight degrees to ninety-six degrees and the box ranges from fifty-four to eighty-one degrees with a median of seventy-two degrees.

Example 2

The title of the box plot is Daily High Temperatures. The number line ranges from sixty degrees Fahrenheit to one hundred degrees Fahrenheit with markers every ten degrees. The whiskers range from sixty-two degrees to eighty-four degrees and the box ranges from sixty-eight degrees to seventy-eight degrees with an **interior vertical line segment** at seventy-two degrees.

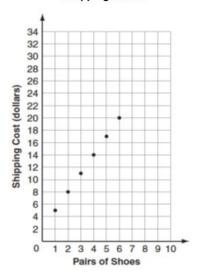
Example 3

The title of the box plot is Heights of Plants (centimeters). The number line ranges from 47 to 57 with markers every whole number. For the experimental group, the whiskers range from 48 centimeters to 55 centimeters and the box ranges from 49 centimeters to 53 centimeters with a median of 51 centimeters. For the control group, the whiskers range from 47 centimeters to 54 centimeters and the box ranges from 48 centimeters to 51 centimeters with a median of 50 centimeters.

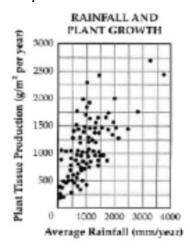
Scatter Plots

Example 1

Shipping Shoes







Audio Guidelines

Text Only

Read the title of the scatter plot. Allow for all words and numbers on the scatter plot to be available to be read on demand.

Text and Graphics

For scatter plots, start by reading the title and x-axis and y-axis labels. Include the x- and y-axes ranges if necessary to access the item. In some cases, the rightmost extension of the x-axis and/ or topmost extension of the y-axis has no value specified. When specifying the ranges, use either the greatest number listed or the actual value at the rightmost or topmost extension of the axes, whichever is more appropriate.

For a scatter plot with fewer than ten data points, reference each data point. Include units of measure while describing data points only if deemed relevant.

If a line or point being described falls between two marked x- or y-axes values do not estimate or approximate numbers. Instead use more general language such as "a little less than," "a little more than," and "midway between."

If a scatter plot has more than ten data points, then focus on the change of concentration. When possible, read at least a couple of data points (first and last preferably) to put the plot into context.

For some items with scatter plots, tactile representation is required to make the item accessible to blind students and some low-vision students.

Application of Text and Graphics Guidelines

Example 1

The graph is a scatter plot titled "Shipping Shoes." The x-axis is labeled Pairs of Shoes and ranges from zero to ten in increments of one. The y-axis is labeled Shipping Cost (dollars) and ranges from zero to thirty-four in increments of two. The scatter plot has points at one, midway between four and six; two, eight; three, midway between ten and eleven, four, fourteen; five, midway between sixteen and eighteen; and six, twenty.

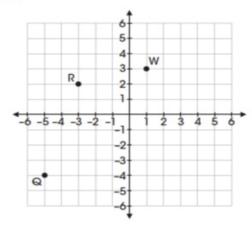


The graph is a scatter plot titled Rainfall and Plant Growth. The x-axis is labeled Average Rainfall and ranges from zero to four thousand, in units of millimeters per year, in increments of one thousand. The y-axis is labeled Plan Tissue Production in units of grams per meter squared per year, ranging from zero to three thousand, in increments of five hundred. The graph has approximately eightyfive points scattered in a pattern beginning in the lower-left corner where Plant Tissue Production and Average Rainfall are the lowest. The pattern extends toward the upper-right corner where Plant Tissue Production and Average Rainfall are the highest. The majority of points is concentrated in the lower-left corner and diminishes in concentration as the pattern extends toward the upper-right corner.

Coordinate Planes

Example 1

23. Points Q, R, and W are plotted on the coordinate

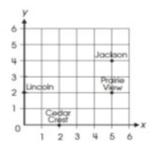


Where should point Z be plotted so that parallelogram QRWZ is formed?

- A. (-2, -6)
- B. (-1, -3)
- C. (3, -2)
- D. (2, -1)



18. Mr. Yang is driving to the school located at (2, 0) on the coordinate grid.

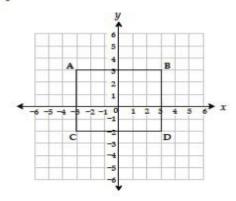


Which school is located at (2, 0)?

- O A. Cedar Crest
- O B. Jackson
- O C. Lincoln
- O D. Prairie View

Example 3

Use the diagram below to answer question 7.



7. Which ordered pair identifies the location of vertex C?

A (-3, -2) *

B (~3, 3)

C (3, -2)

D (-2, -3)

vertex D vertex C reversed

vertex A

Audio Guidelines

Text Only

Start by reading the title of the coordinate plane. Allow for all words and numbers on the coordinate plane to be available to be read on demand.



Text and Graphics

Read the title of the coordinate plane first.

Read the range of each axis. In some cases, the extensions of the x- and/or y-axis have no value specified. When specifying the ranges, use either the greatest (or least for bottom and left extensions) number listed or the actual value at the furthest extension of the axes, whichever is more appropriate.

Read the points or words on the grid in a logical manner (clockwise, following the listing of a shape, etc.) referencing their location on the grid.

If a line or point being described falls between two marked x- or y-axis values, then do not estimate or approximate numbers. Instead, use more general language such as "a little less than," "a little more than," and "midway between."

If reading the location of the points violates the construct being measured, do not read the point, but reference that they are on the grid. In this case, tactile representation is required to make the item accessible to blind students and some low-vision students.

If there is a shape on the grid, then read the type of shape or name of it first, and then reference the axis points of all sides, if relevant. If referencing the axis points violates the construct being measured, then provide a description of the shape without these points.

If an empty grid is presented in an item as part of the prompt, question, or answer, then read the title and the x- and y- axes scale.

Application of Text and Graphic Guidelines

Example 1

A coordinate plane with x- and y-axes ranging from negative six to six; point Q, negative five, negative four; point R, negative three, two; and point W, one, three.

Example 2

A coordinate plane with x- and y-axes ranging from zero to six. The grid shows the location of the four schools: Jackson, Prairie View, Cedar Crest, and Lincoln.

Example 3

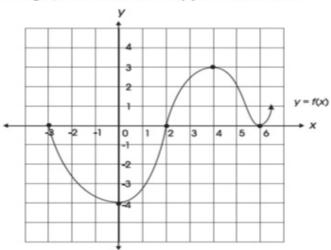
A coordinate plane with x- and y-axes ranging from negative six to six. Rectangle ABCD is shown on the grid.



Exponential/Linear Function Graphs

Example 1

31. The graph of the function f(x) is shown below.

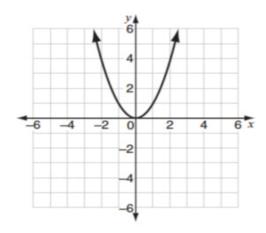


Which of the following is NOT a zero of f(x)?

- -3 B.
- 2
- D. 6

Example 2

10 Look at this graph of $y = x^2$.



If y = x - 2 is graphed on the same coordinate plane, at how many points would the two graphs intersect?

- A. 0
- B. 1
- C. 2
- D. 3



Audio Guidelines

Text Only

Start by reading the title of the graph. Allow for all words and numbers on the graph to be available to be read on demand.

Text and Graphics

Read the title of the graph first.

Read the range of each axes and any words or symbols that are on the graph. In some cases, the extensions of the x- and/or y-axis have no value specified. When specifying the ranges, use either the greatest (or least for bottom and left extensions) number listed or the actual value at the furthest extension of the axes, whichever is more appropriate.

Describe the shape of the graph. Use relevant points including starting and ending points or x or y intersection points to aid the description.

If a line or point being described falls between two marked x- or y-axes values, then do not estimate or approximate numbers. Instead use more general language such as "a little less than," "a little more than," and "midway between."

If reading the location of any points violates the construct being measured, then do not read these points. If describing the shape or direction of the graph violates the construct, then do not read the details of the shape of the graph. In this case, tactile representation is required to make the item accessible to blind students and some low-vision students.

Application of Text and Graphics Guidelines

Example 1

A graph showing the function y equals f of x. The x-axis ranges from negative four (or three) to seven (or six), and the y-axis ranges from negative six (or negative four) to five (or four). The graph is in the shape of a wave. The graph starts at negative three zero, goes through zero negative four, then two zero, then four three, then six zero, and ends with an arrow pointing up at a midway between six and seven, one.

Example 2

A graph showing y equals x squared. The x- and y-axes ranges from negative six to six. The graph is a parabola that starts with an arrow at midway between negative two and negative three, six, and then the line moves down through zero zero, and ends with an arrow at midway between two and three, six.



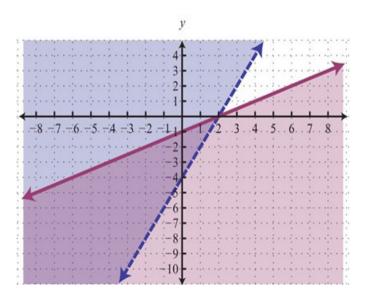
System of inequalities

Example

Which graph represents the solution to this system of inequalities?

$$y > 2x - 4$$

$$3x - 6y \ge 6$$



Application of Audio Guidelines

Text and Graphics

Which graph represents the solution to this system of inequalities, top row, Y is greater than 2 X minus 4; bottom row, 3 X minus 6 Y is greater than or equal to 6. A. A graph showing two lines and shaded regions. The X axis ranges from negative 9 to 9. The y axis ranges from negative 11 to 5. The purple line is solid and starts at negative 9, a little less than negative 5; rises to zero, negative 1; then 2, zero; and ends at 9, a little more than 3. The area below the solid line is shaded purple. The blue line is dashed and starts at a little less than negative 3, negative 11; rises to zero, negative 4; then 2, zero; and ends at a little more than 4, 5. The area to the left of the dashed line is shaded blue. The area in between the solid purple line and the dashed blue line is shaded light gray.



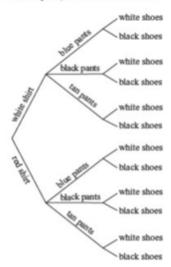
Diagrams/Figures/Keys

Tree Diagram

Example 1



The tree diagram below shows all of the outfits Jay can choose to wear today. An outfit has one color of shirt, one color of pants, and one color of shoes.



What is the total number of possible outfits with a white shirt?

- B. 6
- C. 3
- D. 1

Audio Guidelines

Text Only

Read the tree diagram title. Allow for all words and numbers on the tree diagram to be available to be read on demand.

Text and Graphics

Read the tree diagram title and brief description along with stating the direction of the tree diagram.

Start with the innermost parts of the tree and describe the different limbs in an order that is easy to follow.

Describe all of the elements of the tree diagram with standardized language.

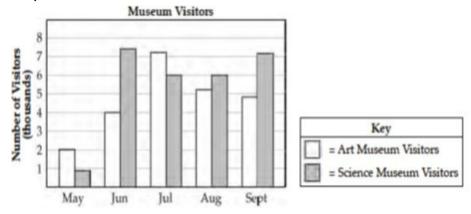
Application of Text and Graphics Guidelines

A tree diagram showing outfit combinations of shirts, pants, and shoes. The diagram displays information from left to right starting with shirts on the leftmost branches. On the top half of the tree, white shirt branches to blue pants, black pants, and tan pants. Each of these pants branches stems to the outermost branches of white shoes and black shoes. On the bottom half of the tree, red shirt branches to blue pants, black pants, and tan pants. Each of these pants branches stems to the outermost branches of white shoes and black shoes.



Keys

Example



Audio Guidelines

Text Only

Read the word Key after reading the graph/diagram title. Allow for all words and numbers in the key to be available to be read on demand.

Text and Graphics Guidelines

Read the graph/diagram title and then the key.

Describe the key in detail, including shapes, shades, and so on. Use "represents" to associate icon with text. (e.g., -10 miles. Dashed line represents ten miles.)

Read the graph/diagram using the key symbols. (e.g., May, white bar, two; May, gray bar, a little less than one)

Application of Text and Graphics Guidelines

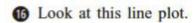
Example

The bar graph title is Museum Visitors. In the Key, the white bar represents Art Museum Visitors, while the gray bar represents Science Museum Visitors. The x-axis shows five months; the y-axis is labeled Number of Visitors (thousands); May, white bar, two; May, gray bar, a little less than one; June, white bar, four; June, gray bar, midway between seven and eight; July, white bar, a little more than seven; July, gray bar, six; August, white bar, a little more than five; August, gray bar, six; September, white bar, a little less than five; September, gray bar, a little more than seven.

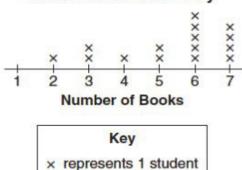


Line Plots

Example



Books We Read in May



Audio Guideline

Text Only

Read the line plot title. Allow for all words and numbers on the line plot and on the key to be available to be read on demand.

Text and Graphics

Read the title of the line plot, the key, and then the x-axis title (refer to this as the number line plot title if the term "axes" has not been taught in the grade being assessed).

Use the key symbol to describe the line plot instead of interpreting the symbol.

If there are no x's or symbols above a number, then read this as zero instead of skipping it.

Be careful not to violate the construct being measured. Read the range of numbers on the x-axis without reading the data, if necessary. In this case, tactile representation is required to make the item accessible to blind students and some low-vision students.

Application of Text and Graphics Guidelines

Example

The title of the line plot is Books We Read in May. The key shows that an x represents one student. The number line title is Number of Books and ranges from one to seven in increments of one; at line plot one, zero x's are shown; at line plot two, one x is shown; at line plot three, two x's are shown; at line plot four, one x is shown; at line plot five, two x's are shown; at line plot six, five x's are shown; and at line plot seven, four x's are shown.



Shaded Figures (Grids, Bars, and Shapes)

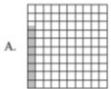
Example

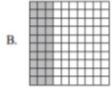


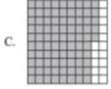
 A fraction of the fish shown below are shaded gray.

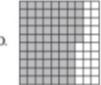


Which grid is shaded gray to represent a fraction with the same value?









Audio Guidelines

Text Only

Read the title of the shaded figure. Allow for all words and numbers in the figure to be available to be read on demand.

Text and Graphics

Read the title if there is one, and then describe the dimensions of the figure first. If possible, read the dimensions of the figure (ten by ten) instead of just the number of boxes.

Explain how many boxes are shaded, but do not use the terminology "x of y" boxes are shaded. This creates the fraction for the student and will often violate the construct being measured.



Do not state the total number of boxes shaded when information can be provided that students should use to determine the number of boxes shaded. (e.g., seven columns of ten boxes shaded, instead of seventy boxes)

Application of Text and Graphics Guidelines

Example

A fraction of the fish shown below is shaded gray. The graphic shows four fish. Three of them are shaded gray.

Which grid below is shaded gray to represent a fraction with the same value?

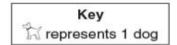
- A. ten by ten box grid with seven boxes shaded
- B. ten by ten box grid with three columns of ten boxes shaded
- C. ten by ten box grid with eight columns of ten boxes shaded and five additional boxes shaded
- D. ten by ten box grid with seven columns of ten boxes shaded and five additional boxes shaded

Pictographs

Example

Dogs at the Park

Type of Dog	Number of Dogs
Beagle	Titi
Collie	तितित
Poodle	Ti
Dalmatian	रिति सिति सि



Audio Guidelines

Text Only

Read the title of the pictograph. Allow for all words and numbers in the pictograph or key to be available to be read on demand.

Text and Graphics

Start by reading the title of the pictograph and then the key.

If the pictograph is in a table format, then refer to the table guidelines.

If the pictograph is in a graph format, then refer to the graph guidelines.

Reference the picture being used in general terms without describing it in detail. Use the key to read the pictograph without interpreting it. When the pictograph, reference "picture of x," since the scale may not be one to one.



In some cases, tactile representation is required to make the item accessible to blind students and some low-vision students.

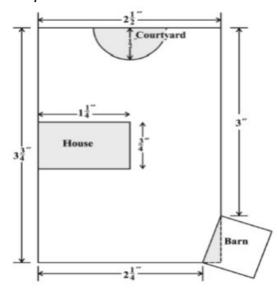
Application of Text and Graphics Guidelines

Example

The pictograph title is Dogs at the Park. The Key shows a picture of a dog represents one dog. The table has two columns and four rows; column heading one is Type of Dog; column heading two is Number of Dogs; row one, Beagle, picture of two dogs; row two, Collie, picture of three dogs; row three, Poodle, picture of one dog; row four, Dalmatian, picture of four dogs.

Figures/Illustrations

Example 1



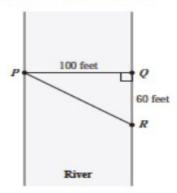
Scale: 1 inch = 20 feet

Use the scale to find the actual dimensions, in feet, of the house. Show or explain how you found your answer.





Triangle PQR in the diagram below represents Pam's trip across a river.



In the diagram, PQ represents her planned trip across the river, and \overline{PR} represents her actual trip across the

Based on the dimensions in the diagram, which of the following is closest to the length of PR?

- A. 104 feet
- B. 117 feet
- C. 120 feet
- D. 160 feet

Audio Guidelines

Text Only

Read the title of the figure/illustration or any caption that is being used in the title format. Allow for all words and numbers in the pictograph or key to be available to be read on demand.

Text and Graphics

Read the title of the figure or illustration. Include the caption in the description if it is not included in the surrounding text.

Read any scale before describing parts of the figure.

Separate the information into pieces using sentences, bullet points, or lists.

Use similar language to describe all parts of the diagram or illustration. Standardized language will help ensure comprehension.

Remember that the goal is to help the student understand the pertinent information in the diagram. Try to include descriptions of all shapes and figures, but try not to overload the student with descriptions that are overly wordy or not needed to answer the question.

In some cases, tactile representation is required to make the item accessible to blind students and some low-vision students.



Application of Text and Graphics Guideline

Example 1

A drawing showing a rectangular plot of land is illustrated. The scale shows that one inch equals twenty feet. The left and right sides of the plot are three and three-fourths inches, and the top and bottom sides of the plot are two and a half inches. The rectangular house has side lengths of one and one-fourth inches and three-fourths of an inch. The barn is a square, mostly outside the plot, with a shaded right triangle inside the plot. The hypotenuse of the right triangle and the side of the square inside the plot are the same line segment. One corner of the triangle is at the two and onefourth inch line at the bottom of the plot and another corner is at the three inch line on the side of the plot. The courtyard is a semicircle with a radius of one-half inch.

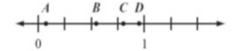
Example 2

A diagram showing a rectangular section of a river is illustrated. Triangle PQR shows Pam's trip across the river with all three points of the triangle touching a side of the river. Point P is on the left side of the river, and points Q and R are on the right side of the river. Point Q is the vertex of a right angle. The distance from P to Q is one hundred feet. The distance from Q to R is sixty feet.

Number Lines

Example 1

Which point on the number line below best represents 0.8?



- A. point A
- B. point B
- C. point C
- D. point D

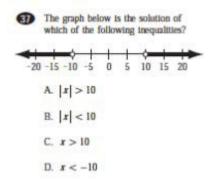
Example 2

Look at this number line.



Point A is halfway between $\frac{1}{2}$ and $\frac{3}{4}$. What fraction does point A represent? Show your work or explain how you know.





Audio Guidelines

Text Only

Read the title of the number line only or any caption that is being used in the title format. Allow all letters, words, and number on the number line to be available on demand.

Text and Graphics

Start by reading the title of the number line.

Read the range on the bottom along with the increments displayed.

Read the letters or words on the number line along with their location. Be careful not to violate the construct being measured in doing so. In some cases, tactile representation is required to make the item accessible to blind students and some low-vision students.

If a line or point being described falls between two marked values, then do not estimate or approximate numbers. Instead, use more general language such as "is located a little after," "is located a little before," "is closer to," and "is midway between."

For bolded number lines, describe which parts are bolded.

Application of Text and Graphics Guidelines

Example 1

A number line is shown with points A, B, C, and D and three equally spaced tick marks between the values of zero and one. Point A is located between zero and the first tick mark, and is closer to zero; point B is located between the second and third tick marks, and is much closer to the second tick mark; while point C and point D are closer to the value one.

Example 2

A number line shows zero and one with three tick marks in between: one-fourth, one-half, and three-fourths. Point A is marked midway between one-half and three-fourths.

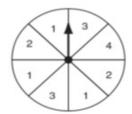


A number line shows from negative twenty to positive twenty in increments of five. The areas from negative twenty to negative ten and positive ten to positive twenty are bolded with open circles at negative ten and positive ten. There are bolded arrows to the left of negative twenty and to the right of positive twenty.

Spinners

Example 1

Description Look at this spinner.



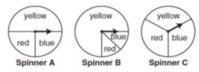
On what number is the arrow least likely to land?

- O A. 1
- O B. 2
- O C. 3
- O D. 4



Example 2

1 Look at these spinners.



Julie, Greg, and Lori each used a different spinner to record the results of 40 spins.

a. This table shows Julie's results.

Julie's Spinner Results

Color	Frequency
yellow	12
blue	14
red	14

Which spinner did Julie most likely use? Show your work or explain how you know.

b. This table shows Greg's results.

Greg's Spinner Results

Color	Frequency
yellow	30
blue	5
red	5

Which spinner did Greg most likely use? Show your work or explain how you know.

c. Lori used the remaining spinner. Make a table to show the most likely results of Lori's 40 spins. Explain your reasoning.

Audio Guidelines

Text Only

Read the title of the spinner only. Allow for all letters, words, and numbers on the spinner to be available on demand.

Text and Graphics

Read the title of the spinner and reference it as a spinner.

Read any words, symbols, or numbers in the spinner, starting at the top and moving clockwise.

If necessary, describe the sizes of each section. Be sure not to violate the construct being measured in doing so. In some cases, tactile representation is required to make the item accessible to blind students and some low-vision students.

When describing the size of sections, do not estimate or approximate a specific size if it is not labeled. Instead, use more general language such as "less than," "more than," and "half of." Exceptions are for one-fourth, one-third, one-half, two-thirds, and three-fourths that are immediately apparent.



Application of Text and Graphics Guidelines

Example 1

Grades 7 and lower: A spinner is divided into eight sections of the same size. One number in each section is shown. From the top moving clockwise, the sections read three, four, two, one, three, one, two, one.

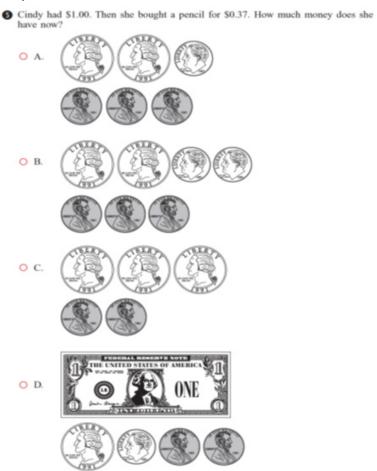
Grades 8 and higher: A spinner divided into eight congruent sections. One number in each section is shown. From the top moving clockwise, the sections read three, four, two, one, three, one, two, one.

Example 2

There are three spinners shown labeled Spinner A, Spinner B, and Spinner C. Each spinner is divided into three sections. In Spinner A, one-half of the spinner is labeled yellow, one-fourth of the spinner is labeled blue, and one-fourth of the spinner is labeled red. In Spinner B, three-fourths of the spinner is labeled yellow, and the other part is divided evenly and labeled blue and red. In Spinner C, about one-third of the spinner is labeled yellow, about one-third of the spinner is labeled red, and about one-third of the spinner is labeled blue.

Coins and Dollars

Example





Audio Guidelines

Text and Graphics

Describe the money using standard language (penny, dime, quarter, or dollar).

Be sure to read each currency symbol as a symbol and not to interpret the value. (e.g., two quarters instead of fifty cents, or three dimes instead of thirty cents)

If reading the currency symbols violates the construct being measured, tactile representation is required to make the item accessible to blind students and some low-vision students.

Application of Audio Guidelines

Example

A shows two quarters, one dime, and three pennies.

B shows two quarters, two dimes, and three pennies.

C shows three quarters and two pennies.

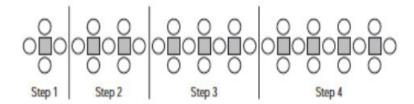
D shows one one-dollar bill, one quarter, one dime, and two pennies.

Numbered/Step Diagrams

Example



On made a pattern using circles and squares. The first four steps of his pattern are shown below



If Don continues his pattern, what is the total number of circles he will need to make Step 10?

- A. 30
- B. 31
- C. 38
- D. 40

Audio Guideline

Text Only

Read the title of the diagram only. Allow for all letters, words, and numbers on the diagram to be available to be read on demand.



Text and Graphics

Read the title of the diagram and a brief orientation of what the diagram shows.

In logical order (left to right or top to bottom), read the steps or diagram numbers along with a description of the figures in each step.

Describe the figures with enough detail to understand the item. Unless necessary, do not detail the specific characteristics of the figures being used. (e.g., color, size, location, shape, etc.)

If the description violates the construct being measured (e.g., if the question asked "How many circles are in step 1?"), then adjust the description to be vague. In this case, tactile representation is required to make the item accessible to blind students and some low-vision students.

Application of Audio Guidelines

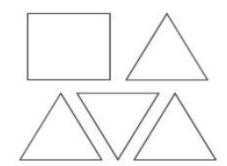
Example

A diagram shows four steps of a pattern using circles and squares. Step one shows a square and four circles, step two shows two squares and seven circles, step three shows three squares and ten circles, and step four shows four squares and thirteen circles.

Geometric Figures

Example 1

These shapes are the 5 faces of a threedimensional figure.



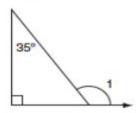
What is the three-dimensional figure?

- A. cube
- B. cone
- C. prism
- D. pyramid



Example 2

Look at this diagram.

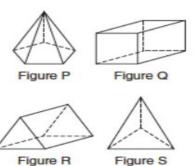


What is the measure of $\angle 1$?

- 55°
- B. 115°
- C. 125°
- D. 135°

Example 3

Look at these figures.



Which two figures have the same number of

- A. Figure P and Figure Q
- B. Figure S and Figure R
- C. Figure P and Figure R
- D. Figure S and Figure Q

Audio Guidelines

Text Only

Read the title of the shape(s) only. Allow for all labels of sides or angles to be available on demand.

Text and Graphics

Simple shapes (any 2D shape with eight sides or fewer): Reference simple shapes as is, unless the item is measuring identification of a shape. If the item contains a simple shape, reference it without description. If there are unique attributes to the shape, describe what type of shape it is in as few words as possible. Be sure to reference labels of sides, angles, and so on.



3D shapes/figures: Reference the type of figure. If relevant and does not violate the construct being measured, describe the figure including the number of sides. In some cases, if a certain description would violate the construct, tactile representation is required to make the item accessible to blind students and some low-vision students.

Be sure to reference labels of sides, angles, and so on.

Refer to the coordinate plane section for reading shapes on coordinate planes.

Application of Text and Graphics Guidelines

Example 1

A square and four equally sized triangles are shown.

Example 2

A diagram shows a right triangle. The triangle shows a right angle in the left corner, a thirty-five degree angle at the top, with no angle reference in the bottom-right corner. Outside the bottomright corner of the triangle there is a symbol for angle one, which arcs from the unknown angle in the triangle to touch the ray.

Example 3

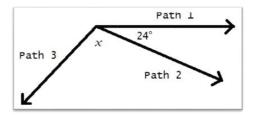
Four figures are shown. Figure P is a pentagonal pyramid, Figure Q is a rectangular prism, Figure R is a triangular prism, and Figure S is a triangular pyramid.

For geometric figures with multiple lines

Diagrams with internal angles should generally be described clockwise, beginning at the 12:00 position or a logical point of origin in the diagram.

Example

Bicyclists at National Park can choose one of three bike paths from the visitors' center, as shown in this diagram.



A diagram shows three rays, each originating at the same point. The first ray, drawn horizontally to the right, is labeled Path 1. The second ray, labeled Path 2, is drawn downward and toward the right. The angle that includes Path 1 and Path 2 is labeled 24 degrees. The third ray, labeled Path 3, is drawn downward and to the left. The angle that includes Path 2 and Path 3 is labeled x.



References

Smarter Balanced Assessment Consortium: Mathematics Audio Guidelines.

 $\underline{https://portal.smarterbalanced.org/library/en/mathematics-audio-guidelines.pdf}.$





Appendix K: Legal Background

Federal Legislation

The Every Student Succeeds Act

The Elementary and Secondary Education Act of 1965 (ESEA) was reauthorized in 2015 as The Every Student Succeeds Act (ESSA). ESSA explicitly calls for the participation in high-quality, yearly student academic assessments of all students [20 USC § 6311(b)(3)(C)(i)]. It also requires that these assessments provide for the reasonable adaptations and accommodations for students with disabilities – as defined in IDEA [20 USC § 1401(3)] – necessary to measure the academic achievement of such students relative to state academic content and state student academic achievement standards [20 USC § 6311(b)(3)(C)(ii)].

Federal provisions for inclusion and accommodation of ELs in state assessment and accountability systems are included in ESSA, which requires the participation of all students, including ELs and ELs with disabilities, in standards-based instruction and assessment initiatives.

Through the ESSA federal legislation, in addition to other state and local district initiatives, assessments aimed at increasing accountability provide important information with regard to:

- How successful schools are including all students in standards-based education;
- How well students are achieving standards; and
- What needs to be improved upon for specific groups of students.

There are several elements in ESSA that hold schools accountable for educational results:

- Academic content standards (what students should learn) and academic achievement standards (how well students should learn the content) form the basis of state accountability systems. State assessments are the primary (though not necessarily exclusive) tool for determining whether schools have been successful in having students attain the knowledge and skills defined by the content standards. States must include at least 95 percent of students in these assessments, with the following two exceptions:
 - ELs in their first year in a U.S. school are not required to participate in the state's English language arts Title I assessment, and are not counted in the state's accountability system for ELA and mathematics; and
 - Up to one percent of the total number of students participating in statewide assessments, and who take alternate assessments based on alternate achievement standards, are not required to take the state's standard Title I assessments and may be counted as proficient on the alternate assessments in the state's accountability system.
- States must provide assessments in reading/language arts and mathematics for all students, including in grades 3-8 and once in high school; science at least once in elementary, middle, and high school; and English language proficiency for students designated as ELs.
 - o DC CAPE assessments include annual ELA/Literacy and mathematics assessments in grades 3-high school, and annual science assessments in grades 5, 8, and high school.
 - WIDA ACCESS for ELLs and WIDA Alternate ACCESS are the annual English language proficiency assessments used in the District of Columbia.
- The accountability system is intended to measure the improvement of schools, districts, and states in achieving standards for all students and designated subgroups each year.
- Schools, districts, and states are held accountable for improvements on an annual basis through public reporting and ultimately through consequences if accountability goals are not achieved.



Students with Disabilities

Individuals with Disabilities Education Improvement Act of 2004

IDEA requires the participation of students with disabilities in state and district-wide assessments. Specific IDEA requirements include that:

Children with disabilities are included in general state and district-wide assessment programs, with appropriate accommodations, where necessary [14 USC § 1412(a)(16)(A)]. The term 'individualized education program' or 'IEP' means a written statement for each child with a disability that is developed, reviewed, and revised in accordance with this section and that includes ... a statement of any individual modifications in the administration of state or district-wide assessments of student achievement that are needed in order for the child to participate in such assessment; and if the IEP team determines that the child will not participate in a particular state or district-wide assessment of student achievement (or part of such an assessment), a statement of why that assessment is not appropriate for the child; and how the child will be assessed [14 USC § 1412(d)(1)(A)(v) and (vi)].

For more information, see https://www.ed.gov/laws-and-policy/individuals-disabilities/idea.

Section 504 of the Rehabilitation Act of 1973

Section 504 prohibits discrimination against individuals with disabilities who seek access to programs and activities provided by entities that receive financial assistance from the federal government, including organizations that receive U.S. Department of Education funding. In the public school setting, students with disabilities protected by Section 504 have the right to the aids and services required to meet their educational needs to the same extent as other students. The Act states that:

No otherwise qualified individual with a disability in the United States, as defined in 20 USC § 794(a) of this title, shall, solely by reason of their disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under and program or activity conducted by any Executive agency.

In school settings, Section 504 legislation guarantees and protects the rights of students with disabilities who may not have an IEP, but are still considered individuals with disabilities. The definition of a student with a disability is much broader under Section 504 than it is under the IDEA. Under Section 504, in order for a student to have a qualifying disability, a student must have a physical, sensory, or mental impairment that substantially limits one or more major life activities. The determination of a substantial limitation is made on a case-by-case basis by a group of knowledgeable persons who draw upon a variety of information in making the determination [34 C.F.R. § 104.35 (c)].

For more information on Section 504, see: https://www.ed.gov/laws-and-policy/ individuals-disabilities/section-504 and https://www.ed.gov/laws-and-policy/individuals-disabilities/ protecting-students-with-disabilities.

Students Who Are ELs

The *Every Student Succeeds Act (ESSA)* provides an explicit definition of what constitutes an English learner student, as follows:

The term "English learner," when used with respect to an individual, means an individual — (A) who is aged 3 through 21; (B) who is enrolled or preparing to enroll in an elementary school or secondary school; (C)(i) who was not born in the United States or whose



native language is a language other than English; (ii)(I) who is a Native American or Alaska Native, or a native resident of the outlying areas; and (II) who comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency; or (iii) who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant; and (D) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual — (i) the ability to meet the challenging State academic standards; (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or (iii) the opportunity to participate fully in society. (ESEA Section 8101(20))

Federal Legislation, Policies and Court Cases Ensuring Equal Access for ELs

Title VI of the Civil Rights Act of 1964

42 U.S.C. Section 2000d9 states that:

No person in the United States shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Equal Educational Opportunities Act of 1974 (EEOA)¹⁰

EEOA of 1974 requires states and school districts to provide an equal educational opportunity to students learning English. States and districts must take "appropriate action" to "overcome language barriers," which usually means teaching academic content in the language students understand, while also teaching them English. It prohibits discrimination against faculty, staff, and students, including racial segregation of students, and requires school districts to take action to overcome barriers to students' equal participation.

Office of Civil Rights 1970 Memorandum¹¹

This memorandum:

- Requires school districts to take affirmative steps to rectify language deficiencies in order to open its instructional program to national origin minority group students, where inability to speak and understand English excludes the students from effective participation in the district's educational program.
- Prohibits school districts from assigning EL students to special education classes on the basis of criteria which essentially measure or evaluate English language skills.
- Forbids specialized programs for EL students to operate as an educational dead-end or permanent track.
- Requires school districts to adequately notify language-minority parents of school activities that are called to the attention of other parents. Such notice in order to be adequate may have to be provided in a language other than English.

Retrieved from the internet at http://www2.ed.gov/about/offices/list/ocr/eeolep/index.html.

¹⁰ Retrieved from the internet at https://www.gpo.gov/fdsys/pkg/USCODE-2010-title20/pdf/USCODE-2010-title20chap39- subchapI-part2-sec1703.pdf.

¹¹ Retrieved from the internet at https://outreach.ou.edu/educational-services/education/edutas/comp-center-landingpage/knowledgebases/english-language-learners/ell-admin-teachers/1-1-2-become-familiar-ocr-guidelines/office-civilrights-memorandum/#:~:text=The%20May%2025%2C%201970%2C%20memo,the%20basis%20of%20national%20 origin.



Lau v. Nichols (1974)

The Office of Civil Rights established a policy for the provision of equal educational opportunities for ELs based on Title VI of the Civil Rights Act of 1964. This policy was described in a memorandum in 1970:

Where the inability to speak and understand the English language excludes national origin minority group children from effective participation in the educational program offered by a school district, the district must take affirmative steps to rectify the language deficiency in order to open its instructional program to these students.

This memorandum does not inform districts of the steps they must take to ensure equal opportunities for ELs. However, it does state that Title VI of the Civil Rights Act of 1964 is violated if:

- students are excluded from effective participation in school because of their inability to speak and understand the language of instruction;
- students are inappropriately assigned to special education classes because of their lack of English skills;
- programs for students whose English is less than proficient are not designed to teach them English as soon as possible, or if these programs operate as a dead end track; or
- parents whose English is limited do not receive school notices or other information in a language they can understand.

This policy was tested in the Supreme Court Case, Lau v. Nichols. In 1974, the Supreme Court upheld this law, supporting the premise that if students cannot understand the language of instruction, they do not have access to an equal opportunity education. The Supreme Court said the following:

There is no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education.

Therefore, equal education is only possible when students are able to understand the language of instruction.

Castañeda v. Pickard (1981)

This case established the Castañeda standards, a three-prong set of evaluation criteria for the adequacy of a district's program for EL students:

- 1. Is the program based on an educational theory recognized as sound by some experts in the field or considered by experts as a legitimate experimental strategy?
- 2. Are the programs and practices, including resources and personnel, sufficient to implement the district's chosen program effectively?
- 3. Does the school district evaluate its programs and make adjustments where needed to ensure language barriers are actually being overcome?

Recently-Arrived Students Who Are ELs

Federal 2007 non-regulatory guidance on the Assessment and Accountability of Recently Arrived and Former Limited English Proficient (LEP) Students clarifies the definition of a recently-arrived EL student:

The regulations define a recently arrived LEP student as a LEP student who has attended schools in the United States for less than 12 months ... During the period within which an



LEP student may be a recent arrival to the United States (during their first 12 months attending schools in the U.S.) a State may exempt such a student from one administration of the State's reading/language arts assessment. (p. 4)

Recently arrived ELs are required to participate in mathematics assessments, but states may exclude their results from accountability determinations for their first year in a U.S. school. Therefore, LEAs should make reasonable efforts to determine the date of enrollment of an EL in a U.S. school (both inside and outside of their state) and whether the student has been given this exemption previously. The policy allowing first-year EL exemption from the DC ELA assessment does not apply to WIDA ACESS for ELLs, the state-required English language proficiency (ELP) assessment; all ELs in grades K-12 must take the state-required ELP assessment, regardless of time in a U.S. school. Recently arrived ELs must also participate in the DC Math and DC Science assessments as applicable to their enrolled grade or course(s). Recently arrived ELs are not included in performance results reporting for ELA, math, and science, but are included in participation reporting for math and science.





Appendix L: Human Signer Guidelines

Test Administration Protocol for the Human Signer Accommodation for DC ELA Assessments, and the Human Signer Accessibility Feature for the DC Math or DC **Science Assessments**

In cases where a student requires a sign language accommodation on the DC ELA assessments and/or a sign language accessibility feature on the DC Math or DC Science assessments, a human signer must be provided. Human signers for assessments must follow these procedures during testing to ensure the standardization of the signed presentation to the students.

Procedures for Human Signers Providing the Human Signer Accommodation for the DC ELA Assessments or the Human Signer Accessibility Feature for the DC Math and DC Science **Assessments**

- 1. Signers must be trained on test administration policies by local Test Coordinators, as indicated in the Test Administrator Manuals (TAM). Signers must sign the Security Agreement in the TAM.
- 2. Signers should use signs that are conceptually accurate (except for SEE2 users), with or without simultaneous voicing, translating only the content that is printed in the test book or on the computer screen without changing, emphasizing, or adding information. Signers may not clarify (except for test directions), provide additional information, assist, or influence the student's selection of a response in any way. Signers must do their best to use the same signs if the student requests a portion repeated.
- 3. Signers must sign (or sign and speak when using Sim-Com [Simultaneous Communication]) in a clear and consistent manner throughout test administration, using correct production, and without inflections that may provide clues to, or mislead, a student. Signers should be provided a copy of the test and the administrative directions prior to the start of testing, in order to become familiar with the words, terms, symbols, signs, and/or graphics that will be read aloud to the student.
- 4. Signers should emphasize only the words printed in boldface, italics, or capital letters and inform the student that the words are printed that way. No other emphasis or inflection is permitted.
- 5. Signers may repeat passages, test items, and response options, as requested, according to the needs of the student. Signers should not rush through the test and should ask the student if they are ready to move to the next item.
- 6. Signers may not attempt to solve mathematics problems, or determine the correct answer to a test item while signing, as this may result in pauses or changes in inflection which may mislead the student.
- 7. Signers must use facial expressions consistent with sign language delivery and must not use expressions which may be interpreted by the student as approval or disapproval of the student's answers.
- 8. Test Administrators must be familiar with the student's Individualized Education Plan (IEP) or 504 plan, and should know in advance which accommodations are required by the student, and for which test (ELA/Literacy, Mathematics, and/or Science) the student is designated to receive a human signer. Test Administrators must be aware of whether a student requires additional tools, devices, or adaptive equipment that has been approved for use during the test, such as a magnifier, closed circuit television (CCTV), abacus, brailler, slate, stylus, etc., and if use of these tools impacts the translation of the test, the signer should be made aware of this.



- 9. Upon review of the test, if a human signer is unsure how to sign and/or pronounce an unfamiliar word, the signer should collaborate with an ASL-fluent content expert (if available) which sign is most appropriate to use. If the signer is unable to obtain this information before the test, the signer should advise the student of the uncertainty and spell the word.
- 10. When using an ASL sign that can represent more than one concept or English word, the signer must adequately contextualize the word, in order to reduce ambiguity. The signer may also spell the word after signing it, if there is any doubt about which word is intended.
- 11. Signers must spell any words requested by the student during the test administration.
- 12. When test items refer to a particular line, or lines, of a passage, resign the lines before signing the question and answer choices. For example, the signer should sign, "Question X refers to the following lines...," then sign the lines to the student, followed by question X and the response options.
- 13. When signing selected response items, signers must be careful to give equal emphasis to each response option and to sign options before waiting for the student's response.
- 14. When response choices will be scribed, the signer should inform the student at the beginning of the test that if the student designates a response choice by letter only ("D," for example), the signer will ask the student if they would like the response to be signed again before the answer is recorded in the answer booklet or the computer-based test.
- 15. If the student chooses an answer before the signer has signed all the answer choices, the human signer must ask if the student wants the other response options to be signed.
- 16. After the signer finishes signing a test item and all response options, the signer must allow the student to pause before responding. If the pause has been lengthy, ask: "Do you want me to sign the question or any part of it again?" When signing questions again, signers must avoid emphasis on words not bolded, italicized, or capitalized.
- 17. Signers should refer to the ASL Glossary for technical vocabulary (signs used on the ASL video accommodation) for consistency in providing the accommodation.

Procedures for Providing the Human Signer Accommodation for ELA/Literacy Assessments or the Human Signer Accessibility Feature for the Mathematics and Science Assessments to a Small Group of Students

Human signers may sign the test to a small group of students, rather than individually, provided that each student has the human signer accommodation/accessibility feature listed in an IEP, 504 plan, or Student Registration/Personal Needs Profile (in the case of mathematics only). See individual state policy for clarification.

The following procedures must be followed:

- Students with the human signer accessibility feature for mathematics or science or human signer accommodation for ELA/literacy that will be grouped together must be administered the SAME TEST FORM, since test questions will differ on each form of the test.
- Students not receiving the human accessibility feature for mathematics or science or human signer accommodation for ELA/literacy may not be tested in the same location as students who are receiving the human signer accessibility feature for mathematics or science or human signer accommodation for ELA/literacy.



Sign-System-Specific Procedures

Human signers must deliver the accommodation in the language or communication mode used by the student according to the student's IEP or 504 plan.

American Sign Language (ASL)

Human signers delivering the accommodation via ASL must use appropriate ASL features (including signs, sentence structure, non-manual markers, classifiers, etc.) while protecting the construct being measured by the assessment. Although it is necessary for a human signer to use appropriate non-manual markers to ensure proper delivery of test content in ASL, the human signer must be careful not to cue students while doing so.

English-Based Sign Systems (SEE2, CASE, Sim-Com, etc.)

Human signers delivering the accommodation via an English-based signing system must use the features of the communication mode used by the student. Human signers delivering the test in Signing Exact English (SEE2) should use the rules of that signing system (e.g. specific signed vocabulary, prefixes, suffixes, etc.). Human Signers delivering the test in other English-based signing systems (CASE, Sim-Com, etc.) should use the rules of those signing systems (conceptually accurate signs, English word order, etc.), with or without simultaneous voicing.





Appendix M: DC CAPE Assessments for Students with Visual Impairment, **Including Blindness**

DC CAPE Assessments and Students with Visual Impairment, Including Blindness

I. Purpose of this Guidance

The District of Columbia Comprehensive Assessments of Progress in Education (DC CAPE) Assessments are provided online, in regular print, large print and braille. This document is for Test Coordinators, Test Administrators, test transcribers and teachers to clarify issues and potential questions for students with visual impairments, including blindness. Given the innovative approach to the assessments, students with visual impairments who receive instructional and assessment accommodations, and those professionals that work with them, will need to plan ahead for testing to ensure that students have all necessary tools and materials available to complete assessment tasks. All accommodations must be documented in the student's Individualized Education Program (IEP) or 504 plan.

II. Frequently Asked Questions (FAQ)

1. Who is an Eligible Test Administrator?

In general, the following individuals may serve as a Test Administrator:

- Individuals employed by the Local Education Agency (LEA) as teachers
- LEA and school-level administrators
- Other certified educational professionals

Eligible Test Administrators and proctors must attend training and follow test procedures and protocol. See the OSSE Test Security Guidelines for further details on Test Administrator requirements.

2. What is included in the braille/large print versions of the tests? What additional materials do I need?

Large print and braille versions of the tests are used by students who have this presentation format identified in their IEPs or 504 plans for instruction and assessment. Charts in Section III of the Test Administrator Manual identify the materials packaged with each large print and braille test and additional needed materials. Additional materials needed must be documented in the student's IEP or 504 plan, except for the following items:

- Test Administrator Manual
- No. 2 pencils with erasers
- Blank scratch paper
 - Blank scratch paper may include: abacus, slate, stylus, Braille Math Window or Brannan Cubarithm.
- Highlighter
- Graph paper
- Calculator
 - Use of a grade-level appropriate calculator is available to all students during designated portions of the mathematics assessment.
 - Students who have calculators identified as a needed accommodation in an IEP or 504 plan may use the calculator on all portions of the mathematics assessment.



- The calculator currently available in TestNav is not accessible with screen readers. Students who use a screen reader should use calculators they use during instructional activities as long as it meets the calculator policy.
- Refer to https://dc.mypearsonsupport.com/ for specific information on grade-level appropriate calculators.
- 3. What if a student requires a combination of Human Reader, braille, and large print (i.e., dual or multi-media)?

Pearson will distribute materials in the following hierarchy:

- Read Aloud Kits
- Large Print Kits
- o Braille Kits

Considering the above, if a student requires both large print and braille versions of the assessment, Pearson will process the orders as made in the ADAM platform by the school/LEA and approved by OSSE.

4. What special issues exist regarding the use of optical or electronic magnification of the test?

Electronic magnification systems enlarge print materials in black/white or color combinations. Magnification for viewing text and graphics can be increased up to 800% with option for changing font colors, background colors, using a line marker, etc. They come in a variety of models – desktop or handheld, near or distance, stand alone or connected to a computer. Electronic magnification systems provide students with access to all printed materials, and the size of the print can be customized for the task. Students who require magnification by using an electronic magnification system can use a regular paper-based test book.

- If the electronic magnification system used by the student has the ability to capture images, these images must be deleted at the end of the test.
- Graphics enlarged on an electronic magnification system may be problematic for some students with low vision. When an image is magnified, the student may not be able to see the whole graphic at once. If the student has difficulty with graphics, a large print test should be ordered. Large print is the regular print book enlarged to 150% which is equivalent to 18 point font size.
- 5. What special issues should be considered regarding students with a visual impairment, including blindness who may take the online test?

For any student taking the online test, it will be delivered using TestNav 8.



Screen enlargement

The online assessments come with a built-in magnifier that can be used by all students at any time during the assessment period. This magnifier is intended to enlarge small areas of the screen so that a student can get a closer look at a visual image such as a picture or graphic. The built-in magnifier cannot be increased or decreased and students will not be able to select answers or interact with the text that is magnified with the built-in tool. For students with a visual impairment that require screen enlargement for access, it is recommended that they use third-party access technology, such as ZoomText or MAGic or other third-party access technology that conforms with UAAG (User Agent Accessibility Guidelines), and supports content that is coded to comply with the Web Content Accessibility Guidelines (WCAG) and the Accessible Rich Internet Applications (ARIA) recommendations from the World Wide Web Consortium (W3C). Again, any third-party access technology used during the assessment should be familiar to the student and used during instruction.

Students may also use screen enlargement capabilities that are built into web browsers. Note, that some graphical information may become "pixelated" at very high magnification. Students and teachers should explore the Practice Items with enlargement in order to determine the efficacy of using the browser-based enlargement in a testing environment.

For students who will use screen enlargement software with a Human Reader, refer to the DC CAPE Accessibility Features and Accommodations Manual, Appendix B: Test Administration Protocol for the Human Reader Accommodation for English Language Arts/Literacy (ELA/L) Assessments, and the Human Reader Accessibility Feature for Mathematics and Science Assessments.

For more information about prerequisite skills, refer to the Technology Skills Checklist below.

Color contrast

The TestNav system provides a built-in method for changing the color contrast settings and is available to all students. Currently, the available choices are Black on Cream, Black on Light Blue, Black on Light Magenta, White on Black, Light Blue on Dark Blue or Gray on Green. Color contrast settings can also be adjusted through a screen enlargement program, such as ZoomText or MAGic.

Braillers and Braille Note-takers

Students who are accustomed to using a brailler, slate and stylus or a braille note-taker to produce work during instructional activities will be able to do so with the online test. In these cases, the student will produce their answers and transcribe them into TestNav or have them transcribed into the TestNav.

6. Who can transcribe the tests?

Only an Eligible Test Administrator who is a certified Teacher of Students with Visual Impairment, including Blindness or someone working under the direct supervision of an Eligible Test Administrator who is a certified Teacher of Students with Visual Impairment, including Blindness may transcribe the student's responses into the test booklet, answer document or online form of the DC CAPE assessments.

Answers written on braille paper must be transcribed onto the standard-size paper form of the DC CAPE assessments or into TestNav. If responses are written on an electronic braille



note-taker, they should be printed and transcribed into a standard-size paper test booklet, answer document or into TestNav. The file in the electronic braille note-taker must be deleted following successful transcription of the student's responses. Note: A student response can be embossed for their reviews, after which copies must be securely shred after transcription.

III. Testing Materials

DC CAPE English Language Arts/Literacy			
Materials	Large Print	Braille	Online
Included with the Test	 Instructions for Large Print Administration, including Test Administrator scripts Large Print Test Booklet Standard Print Test Booklet or Answer Document for transcription 	 Instructions for Braille Administration, including Test Administrator scripts Braille test booklet or answer document with embedded tactile graphics (certain forms) Picture descriptions Standard Print Test Booklet or Answer Document for transcription 	Braille test booklet
Additional Materials Needed	 Test Administrator Manual No. 2 pencils with erasers Blank scratch paper Highlighter Other materials included in the student's IEP or 504 plan 	 Test Administrator Manual No. 2 pencils with erasers Other materials included in student's IEP or 504 plan, such as braille writing devices 	 Test Administrator Manual No. 2 pencils with erasers Student's preferred access technology Other materials included in the student's IEP or 504 plan, such as braille writing devices



DC CAPE Mathematics			
Materials	Large Print English	Braille	Online
Included with the Test	 Instructions for Large Print Administration, including Test Administrator Scripts Large Print Test Booklet Standard Print Test Booklet or Answer Document for transcription Large Print Mathematics Reference Sheet 	 Instructions for Braille Administration, including Test Administrator Scripts Braille test booklet or answer document with embedded tactile graphics Standard Print Test Booklet or answer document for transcription Braille Mathematics Reference Sheet 	Braille test booklet with embedded tactile graphics



DC CAPE Mathematics			
Materials	Large Print English	Braille	Online
Additional Materials Needed	 Test Administrator Manual No. 2 pencils with erasers Blank scratch paper Highlighter Regular classroom compass¹² Grade-level appropriate large print ruler – measures in US customary and metric Grade-level appropriate large print protractor Grade-level appropriate calculator – fourfunction, scientific or graphing Other materials included in the student's IEP or 504 plan 	 Test Administrator Manual No. 2 pencils with erasers Braille writing devices, such as a Perkins Brailler or an electronic braille note-taker Grade-level appropriate braille ruler – measures in US customary and metric Grade-level appropriate braille protractor Grade-level appropriate tactile compass Grade-level appropriate tactile compass Grade-level appropriate calculator – fourfunction, scientific or graphing Braille materials that can be used as scratch paper Cranmer Abacus Braille Math Window Brannan Cubarithm 	 Test Administrator Manual No. 2 pencils with erasers Blank scratch paper or braille materials that can be used as scratch paper Cranmer Abacus Braille Math Window Brannan Cubarithm Grade-level appropriate tactile compass Grade-level appropriate braille ruler – measures in US customary and metric Grade-level appropriate braille protractor Grade-level appropriate braille protractor Grade-level appropriate braille protractor Grade-level appropriate braille protractor Grade-level appropriate calculator – fourfunction, scientific or graphing Other materials included in the student's IEP or 504 plan, such as braille writing devices. Student's preferred access technology

¹² A compass is an allowable material for the grade 8 Mathematics and Geometry assessments. The compass is not a required tool but can be made available to students if they use the tools regularly during instruction. Geometry tools are not allowed for grades 3–7, Algebra I, and Algebra II.



DC CAPE Science			
Materials	Large Print English	Braille	
Included with the Test	 Instructions for Large Print Administration, including Test Administrator Scripts Large Print Test Booklet Standard Print Test Booklet or Answer Document for transcription 	 Instructions for Braille Administration, including Test Administrator Scripts Braille test booklet or answer document Standard Print Test Booklet or answer document for transcription 	
Additional Materials Needed	 Test Administrator Manual No. 2 pencils with erasers Blank scratch paper Highlighter Four-function calculator with square root and percentage functions Other materials included in the student's IEP or 504 plan 	 Test Administrator Manual No. 2 pencils with erasers Other materials included in student's IEP or 504 plan, such as braille writing devices Four-function calculator with square root and percentage functions Braille materials that can be used as scratch paper 	

Accommodations Registration File and Ordering Braille and Large Print

The Accommodations Registration File is used to gather information regarding a student's testing condition, materials, or accessibility features and accommodations that are needed to take a DC CAPE assessment. Any paper based accessibility feature or accommodation which requires materials to be shipped will need to be requested in the accommodations registration file import. (e.g., Large Print, braille, Human Reader or Human Signer for ELA/L Kits, Paper Test for Online Students, and Spanish Paper Mathematics, or Science Assessments). All students who require braille and large print test must ordered through the accommodations registration file import process.

IV. Technology Skills Checklist

Accessibility of testing materials for all students is an important part of the DC CAPE assessments. For a student with visual impairment, including blindness to take the online test, they will need to have a minimum level of skills with computer technology and the assistive technology they use to access instructional materials. The following is a list of skills a student should be using regularly during instructional activities and be proficient with on the day of testing in order to independently access the DC CAPE assessments online. Students should, at a minimum, be able to complete these tasks independently and should be given multiple opportunities to practice using the DC CAPE Practice Tests available here: https://dc.mypearsonsupport.com/ and the ELA and math Sample Items here: https://dc.mypearsonsupport.com/.