Accessibility Guide for CAASPP Online Testing

2017-18 Administration

Smarter Balanced for English Language Arts/Literacy and Mathematics Summative Assessments
California Alternate Assessments for English Language Arts/Literacy and Mathematics
California Science Test

California Assessment of Student Performance and Progress

Updated February 26, 2018
Prepared by Educational Testing Service ©
# Table of Contents

**Introduction** ................................................................................................................................. 1
**Manual Content** ............................................................................................................................... 2
  - What’s New in 2017–18 ..................................................................................................................... 2
  - Sections ................................................................................................................................................ 3
  - Document Conventions ................................................................................................................... 4

## Chapter 1. Accessibility Features for CAASPP Assessments ............................................................ 5
### Types of Resources .......................................................................................................................... 6
  - Available Accessibility Resources ........................................................................................................ 6
  - Universal Tools ...................................................................................................................................... 8
  - Embedded ................................................................................................................................................ 8
  - Non-Embedded ..................................................................................................................................... 21
  - Designated Supports ............................................................................................................................ 23
    - Embedded .......................................................................................................................................... 23
    - Non-Embedded ................................................................................................................................. 32
  - Accommodations ............................................................................................................................... 42
    - Embedded .......................................................................................................................................... 42
    - Non-Embedded ................................................................................................................................. 47

## Chapter 2. Configuring Selected Accessibility Resources .............................................................. 55
### Text-to-Speech Requirements ......................................................................................................... 56
  - Overview of Text-to-Speech ................................................................................................................ 56
  - Configuring Windows Text-to-Speech Settings ............................................................................... 57
  - Configuring OS X Text-To-Speech Settings ...................................................................................... 59
  - Configuring Linux Text-to-Speech Settings ..................................................................................... 62
  - Configuring ZoomText to Recognize the Secure Browser ................................................................. 63
  - Using Permissive Mode ....................................................................................................................... 64
  - Using Audio Transcripts (Includes Braille) ....................................................................................... 66

## Chapter 3. Testing Students with Accessibility Resources ............................................................. 67
### Creating a Test Session for Practice and Summative Testing ......................................................... 68

## Chapter 4. Requirements for Testing Students with Visual Impairments ...................................... 81
### Introduction to Testing Students with Visual Impairments ............................................................ 82
### Technology Requirements ............................................................................................................... 83
  - Supported Operating Systems and Related Requirements .............................................................. 83
  - Software Resources .......................................................................................................................... 84
  - Test Operations Management System (TOMS) Test Settings for Consideration .......................... 84

### Overview of Testing Students Requiring Braille ......................................................................... 90
  - About Tests and Braille ...................................................................................................................... 90
  - Using Braille HAT ............................................................................................................................. 91
  - Using Streamline Mode .................................................................................................................... 92
  - Increasing Font Size .......................................................................................................................... 93
  - Configuring Printing Software on Test Administrator Computers .................................................. 94

### Configuring and Administrating Job Access with Speech (JAWS®) .............................................. 108
  - Configuring JAWS to Recognize the Secure Browser ................................................................. 108
  - Applying Settings for Contracted or Uncontracted Braille .......................................................... 109
  - Configuring JAWS to Speak "Dollars" ............................................................................................ 111
  - Optional JAWS Voice Adjustment Settings ..................................................................................... 112
  - Navigating a Test with JAWS .......................................................................................................... 114

## Appendixes ...................................................................................................................................... 125
### User Support .................................................................................................................................. 126
  - California Technical Assistance Center for LEA CAASPP Coordinators ..................................... 126
  - Change Log ........................................................................................................................................ 127
### Acronyms and Initialisms Used in the Accessibility Guide for CAASPP Online Testing

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR</td>
<td>American Institutes for Research</td>
</tr>
<tr>
<td>ASL</td>
<td>American Sign Language</td>
</tr>
<tr>
<td>BRF</td>
<td>braille-ready format</td>
</tr>
<tr>
<td>CAA</td>
<td>California Alternate Assessment</td>
</tr>
<tr>
<td>CAASPP</td>
<td>California Assessment of Student Performance and Progress</td>
</tr>
<tr>
<td>CALPADS</td>
<td>California Longitudinal Pupil Achievement Data System</td>
</tr>
<tr>
<td>CalTAC</td>
<td>California Technical Assistance Center</td>
</tr>
<tr>
<td>CAST</td>
<td>California Science Test</td>
</tr>
<tr>
<td>CAT</td>
<td>computer adaptive test</td>
</tr>
<tr>
<td>CDE</td>
<td>California Department of Education</td>
</tr>
<tr>
<td>CSA</td>
<td>California Spanish Assessment</td>
</tr>
<tr>
<td>DBT</td>
<td>Duxbury Braille Translator</td>
</tr>
<tr>
<td>EL</td>
<td>English learner</td>
</tr>
<tr>
<td>ELA</td>
<td>English language arts/literacy</td>
</tr>
<tr>
<td>HAT</td>
<td>hybrid adaptive test</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disabilities Education Act</td>
</tr>
<tr>
<td>IEP</td>
<td>individualized education program</td>
</tr>
<tr>
<td>JAWS</td>
<td>Job Access with Speech®</td>
</tr>
<tr>
<td>LEA</td>
<td>local educational agency</td>
</tr>
<tr>
<td>PRN</td>
<td>printer output file</td>
</tr>
<tr>
<td>PPT</td>
<td>paper-pencil test</td>
</tr>
<tr>
<td>PT</td>
<td>performance task</td>
</tr>
<tr>
<td>RBD</td>
<td>Refreshable Braille Display</td>
</tr>
<tr>
<td>SSID</td>
<td>Statewide Student Identifier</td>
</tr>
<tr>
<td>TDS</td>
<td>test delivery system</td>
</tr>
<tr>
<td>TOMS</td>
<td>Test Operations and Management System</td>
</tr>
<tr>
<td>UAAG</td>
<td>Smarter Balanced Usability, Accessibility, and Accommodations Guidelines</td>
</tr>
</tbody>
</table>
Introduction
Manual Content

This manual provides information for local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) coordinators, CAASPP test site coordinators, test administrators, and test examiners about universal tools, designated supports, accommodations, and test settings used in the following CAASPP assessments:

- Smarter Balanced for English Language Arts/Literacy (ELA)
- Smarter Balanced for Mathematics
- California Alternate Assessment (CAA) for ELA
- CAA for Mathematics
- California Science Test (CAST)
- California Spanish Assessment (CSA)

Information provided includes descriptions of accessibility resources and test settings, configuration information, how to create test sessions, and how to configure and administer tests to students with visual impairments.

What’s New in 2017–18

Key to program abbreviations:

| CE  | CAA for ELA |
| CM  | CAA for Mathematics |
| E   | Smarter Balanced for ELA |
| M   | Smarter Balanced for Mathematics |
| R   | CSA for Reading/Language Arts |
| S   | CAST |

<table>
<thead>
<tr>
<th>Feature</th>
<th>Change</th>
</tr>
</thead>
</table>
| Test Administrator Interface test settings Web form | The Web form on which test administrators see assigned designated supports and accommodations has been updated in the Test Administrator Interface. Resources are now sorted into the following groups:
  - Presentation
  - Literacy Assistance Tools
  - Integration with Assistive Technology
  - Visual Assistance Tools
  - Auditory Assistance Tools
  - Concentration Assistance Tools
  - General Testing Tools |

| Hybrid Adaptive Test (HAT) for braille readers | HAT is an online, multistage form for students using refreshable braille to access the Smarter Balanced for Mathematics assessments. The HAT features an adaptive section with items that do not require a supplemental graphics package, followed by a fixed-form section requiring a tactile graphics package for the student. |

<table>
<thead>
<tr>
<th>New Resources</th>
</tr>
</thead>
</table>
| New embedded universal tools | • Line Reader (E, M, S, CE, and CM)  
  - Thesaurus (ELA performance task full write) |
<p>| New embedded designated support | • Mouse Pointer (Size and Color) (E, M, S, CE, and CM) |
| New non-embedded designated support | • Amplification (E, M, S, CE, and CM) |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>New embedded accommodation</td>
<td>• Audio Transcript (includes Braille Transcript) (<strong>E – Listening and S</strong>) (Approved for use with CAST; however, there are currently no audio items for the CAST.)</td>
</tr>
<tr>
<td>New non-embedded accommodation</td>
<td>• Word Prediction (<strong>E, M, S, CE, and CM</strong>)</td>
</tr>
<tr>
<td><strong>Updated Resources</strong></td>
<td></td>
</tr>
<tr>
<td>Updated Smarter Balanced non-embedded designated support</td>
<td>• Scribe applies to all items except ELA performance task full write.</td>
</tr>
<tr>
<td>Updated non-embedded CAST designated supports</td>
<td>• 100s Number Table (<strong>S</strong>) has been reassigned from non-embedded accommodation to non-embedded designated support.&lt;br&gt;• Calculator (<strong>S</strong>) has been reassigned from non-embedded accommodation to non-embedded designated support.&lt;br&gt;• Multiplication Table (<strong>S</strong>) has been reassigned from non-embedded accommodation to non-embedded designated support.</td>
</tr>
<tr>
<td>Updated Smarter Balanced non-embedded designated support</td>
<td>• Read Aloud (<strong>M</strong>) has been clarified that it applies to mathematics stimuli and items.</td>
</tr>
<tr>
<td>Updated non-embedded Smarter Balanced accommodation</td>
<td>• Scribe (<strong>E</strong>) applies to ELA performance task full write.</td>
</tr>
<tr>
<td>Renamed CAA non-embedded accommodation</td>
<td>• Additional Instructional Supports for Alternate Assessments has been renamed to Additional Instructional Supports and Resources for Alternate Assessments (<strong>CE and CM</strong>).</td>
</tr>
<tr>
<td><strong>Additional Resources</strong></td>
<td></td>
</tr>
<tr>
<td>Additional CAST embedded designated supports</td>
<td>• Color Contrast&lt;br&gt;• Stacked Translations and Translated Test Directions (Spanish)&lt;br&gt;• Translation Glossaries&lt;br&gt;• Turn Off Any Universal Tools</td>
</tr>
<tr>
<td>Additional CAST non-embedded designated supports</td>
<td>• Read-Aloud in Spanish&lt;br&gt;• Science Charts (<strong>periodic tables of the elements, reference sheets</strong>)&lt;br&gt;• Simplified Test Directions</td>
</tr>
<tr>
<td>Additional CAST embedded accommodations</td>
<td>• Closed Captioning (<strong>Approved for use; however, there are currently no audio items for the CAST.</strong>)&lt;br&gt;• Streamline</td>
</tr>
<tr>
<td>Additional CAST non-embedded accommodation</td>
<td>• Alternate Response Options</td>
</tr>
<tr>
<td><strong>Deleted Resources</strong></td>
<td></td>
</tr>
<tr>
<td>Deleted CAST non-embedded accommodation</td>
<td>• Mathematics Tools</td>
</tr>
</tbody>
</table>

**Sections**

This manual contains the following sections:

- **Introduction** (this section), describes this guide.
• **Chapter 1, Accessibility Features for CAASPP Assessments**, provides information about the types of universal tools, designated supports, and accommodations available for CAASPP testing.

• **Chapter 2, Configuring Selected Accessibility Resources**, describes how to configure text-to-speech and ZoomText with the secure browser. *This chapter will be available in 2018.*

• **Chapter 3, Testing Students with Accessibility Resources**, describes how to verify students were assigned the correct designated supports and accommodations and how to approve students for testing with these resources, including braille. *This chapter will be available in 2018.*

• **Chapter 4, Requirements for Testing Students with Visual Impairments**, describes how to configure embossing software and how to configure and use Job Access with Speech ® for testing. *This chapter will be available in 2018.*

• **Appendix, User Support**, provides information about how LEA CAASPP coordinators can acquire Help Desk support.

**Document Conventions**

Table 1 lists key symbols and typographical conventions used in this manual.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Alert" /></td>
<td><strong>Alert</strong>: This symbol accompanies important information regarding a task that may cause minor errors.</td>
</tr>
<tr>
<td><img src="image" alt="Note" /></td>
<td><strong>Note</strong>: This symbol accompanies additional information that may be of interest.</td>
</tr>
<tr>
<td><img src="image" alt="Policy" /></td>
<td><strong>Policy</strong>: This symbol accompanies information that is based on policy set by the California Department of Education.</td>
</tr>
<tr>
<td><img src="image" alt="Tip" /></td>
<td><strong>Tip</strong>: This symbol accompanies suggestions that may be useful.</td>
</tr>
<tr>
<td><img src="image" alt="Warning" /></td>
<td><strong>Warning</strong>: This symbol accompanies important information regarding actions that may cause fatal errors.</td>
</tr>
<tr>
<td><img src="image" alt="Additional Resources" /></td>
<td><strong>Additional Resources</strong>: This symbol accompanies links to supporting documentation and instructions.</td>
</tr>
</tbody>
</table>

Table 1. Key Symbols and Elements
Chapter 1. Accessibility Features for CAASPP Assessments
Types of Resources

Additional Resources:


- Smarter Balanced Resources and Practices Comparison Crosswalk—linked on the CDE Student Accessibility Resources Web page at http://www.cde.ca.gov/ta/tg/ca/accesssupport.asp


- CAASPP Smarter Balanced Accessibility Resources documents—linked on the CDE Student Accessibility Resources Web page at http://www.cde.ca.gov/ta/tg/ca/accesssupport.asp


The California Assessment of Student Performance and Progress (CAASPP) provides English language arts/literacy (ELA), mathematics, and science assessments that permit students to demonstrate their mastery of the Common Core State Standards and the California Next Generation Science Standards. Assessments are made accessible through a variety of universal tools, designated supports, and accommodations. Students whose individualized education program (IEP) teams designate the use of an alternate assessment take the California Alternate Assessments (CAAs).

To help identify similarities between the assessment resources and classroom practices, Smarter Balanced has developed a Resources and Practices Comparison Crosswalk. The Crosswalk lists the resources that are currently included in the UAAG and assists educators and decision-makers by providing a description of both the resource and its classroom equivalent.

Available Accessibility Resources

The summative assessments and practice and training tests contain universal tools, designated supports, and accommodations. Embedded resources are those that are part of the online test administration system, whereas non-embedded resources are provided outside of that system.
The following accessibility resources and test settings for CAASPP testing are described in the next sections. Note that usage and description information is adapted from the *Smarter Balanced Usability, Accessibility, and Accommodations Guidelines*. Note also that samples provided are screen captures made using the Smarter Balanced practice tests.

### Universal Tools

**Embedded**
- Breaks ([Online Assessments](#)) (all)
- Calculator, Mathematics (M, CE)
- Calculator, Science (S)
- Digital Notepad (all)
- English Dictionary ([Writing](#)) (E)
- English Glossary (E, M, S)
- Expandable Items (all)
- Expandable Passages (E, M, S)
- Global Notes ([Writing](#)) (E)
- Highlighter (all)
- Keyboard Navigation (all)
- Line Reader (all)
- Mark for Review (all)
- Mathematics Tools (M, S)
- Science Charts (S)

**Science Tools** (S)
- Spell Check (E)
- Strikethrough (all)
- Thesaurus (E)
- Writing Tools (E, M, S)
- Zoom (all)

**Non-Embedded**
- Breaks ([Paper-pencil Tests](#)) (E, M)
- English Dictionary ([Writing](#)) (E)
- Scratch Paper (all)
- Thesaurus (E)
- Zoom (all)

### Designated Supports

**Embedded**
- Color Contrast (all)
- Masking (all)
- Mouse Pointer (Size and Color) (all)
- Permissive Mode ([Setting](#)) (all)
- Print Size ([Setting](#)) (all)
- Stacked Translations ([Spanish](#)) (M, S)
- Text-to-Speech (E, M, S)
- Translated Test Directions ([Spanish](#)) (M, S)
- Translation Glossaries (M, S)
- Turn Off Any Universal Tools (all)

**Non-Embedded**
- 100s Number Table, Science (S)
- Amplification (all)
- Bilingual Dictionary (E)
- Calculator, Science (S)
- Color Contrast (all)
- Color Overlays (all)
- Magnification (all)
- Multiplication Table, Science (S)
- Noise Buffers (all)
- Read-Aloud Items (all)
- Read-Aloud in ([Spanish](#)) (M, S)
- Science Charts (S)
- Scribe Items ([items only [non-performance task full-write]](#)) (E, M, S, CE, CM)
- Separate Setting (all)
- Simplified Test Directions (E, M, S)
- Translated Test Directions (E, M, S)
- Translation Glossary ([M PPTs](#))

### Accommodations

**Embedded**
- American Sign Language (E, M, S)
- Audio Transcript ([Includes](#)) ([Braille Transcript](#)) (E)
- Braille (E, M, S)
- Closed Captioning ([E—Listening](#))
- Streamline (all)
- Text-to-Speech Passages (E)

**Non-Embedded**
- 100s Number Table ([Mathematics, Grades Four and Above](#)) (M, CM)
- Additional Instructional Supports and Resources for Alternate Assessments (CE, CM)
- Abacus (M, CM, S)
- Alternate Response Options (all)
- Calculator, Mathematics (M)
- Multiplication Table, Mathematics (Grades Four and Above) (M, CM)
- Print-on-Demand (all)
- Read-Aloud Passages (E, CE)
- Scribe ([Writing](#)) ([E PT full write, CE](#))
- Speech-to-Text (E, M, S)
- Word Prediction (all)
Universal Tools

All students may access features of the assessments that are either provided as digitally delivered components of the test administration system (embedded) or separate from it (non-embedded) based on student preference and selection. For example, Global Notes is an embedded universal tool; scratch paper is a non-embedded universal tool.

All students may use universal tools based upon their preference and selection.

Embedded

Embedded universal tools are selected by students during testing. They also may be selected by test examiners who are entering student responses to California Alternate Assessment (CAA) test questions on behalf of students unable to provide responses on their own in the test delivery system.

Breaks (Online Assessments)

Approved Assessment(s):
✓ All (online assessments)

Description:
Smarter Balanced for English language arts/literacy (ELA) and mathematics, and California Science Test (CAST)—The number of items per session can be flexibly defined based on the student’s need. Students select the [Pause] button, circled in Figure 1, within the test to take a break from testing.

- Breaks of more than 20 minutes will prevent the student from returning to items already attempted by the student.
- There is no limit on the number of breaks that a student might be given.
- The use of this universal tool may result in the student needing additional overall time to complete the assessment.

CAAs for ELA and Mathematics—The test examiner can make the decision to pause and resume the test administration if the student is no longer engaged, is not actively participating, or is showing signs of behavioral or functional concerns related to the test. The test can be paused and resumed as many times as necessary to allow the student to show what he or she knows. If the choice is made to pause the test, the student can re-enter and complete testing on the same day or at a later time.
**Calculator, Mathematics**

**Additional Resources:**
- Tutorial—[Embedded Universal Tools: Calculator (Grades 6–8)]
- Tutorial—[Embedded Universal Tools: Calculator (Grade 11)]
- **Basic (four-function) calculator**
- **Scientific calculator**
- **Graphing calculator**

**Approved Assessment(s):**
- ✔ Smarter Balanced for Mathematics in grades six through eight and grade eleven
- ✔ CAA for Mathematics in all grades

**Description:**
An embedded on-screen digital calculator can be accessed for calculator-allowed items when students select the [Calculator] button. This button, circled in Figure 2, appears when such items are accessed.

- This resource is available only with the specific items for which the test’s specifications indicated that it would be appropriate.
- When the embedded calculator, as presented for all students, is not appropriate for a student (for example, for a student who is blind), the student may use the calculator offered with assistive technology devices (such as a talking calculator or a braille calculator).
- This universal tool is for use on calculator-allowed items only in grades six through eight and grade eleven.
- Students who require a non-embedded calculator should be assigned to use the [mathematics calculator non-embedded accommodation](#).
Calculator, Science

Additional Resources:
- Tutorial—Embedded Universal Tools: Calculator (Grades 6–8)
- Tutorial—Embedded Universal Tools: Calculator (Grade 11)
- Basic (four-function) calculator
- Scientific calculator

Approved Assessment(s):
✓ CAST for grades five, eight, ten, eleven, and twelve

Description:
An embedded on-screen digital calculator can be accessed for calculator-allowed items when students select the calculator button. This button, like the one circled in Figure 2, appears when such items are accessed.

- This resource is available for all items.
- When the embedded calculator, as presented for all students, is not appropriate for a student (for example, for a student who is blind), the student may use the calculator offered with assistive technology devices (such as a talking calculator or a braille calculator).
- This universal tool is for use by students in grade five with a basic (four-function) calculator; and grades eight, ten, eleven, and twelve with a scientific calculator.
- Students who require a non-embedded calculator should be assigned to use the science calculator non-embedded designated support.

Digital Notepad

Additional Resources:
- Tutorial—Embedded Universal Tools: Digital Notepad

Approved Assessment(s):
✓ All

Description:
This resource is used for making notes about an item. On mathematics assessments, a student accesses the digital notepad by using the context menu (which is circled in Figure 3). On ELA assessments, the student selects the [Notes] button (which is circled in Figure 9).

- The digital notepad is item-specific and is available through the end of the test segment.
- Notes are not saved when the student moves on to the next segment or after a break of more than 20 minutes.
English Dictionary (Writing)

Additional Resources:
- Tutorial—Embedded Universal Tools: English Dictionary

Approved Assessment(s):
✓ Smarter Balanced for ELA

Description:
An English dictionary is available for the full write portion of an ELA performance task. (A full write is the second part of a performance task.)

- A student accesses the English dictionary by selecting the [Dictionary] icon during specific test segments. This button is circled in Figure 4.
- Students must first type a word into the field next to the Merriam-Webster® logo and then select the [Dictionary] button, also circled, to see the result.
- The use of this universal tool may result in the student needing additional overall time to complete the assessment.

English Glossary

Additional Resources:
- Tutorial—Embedded Universal Tools: English Glossary

Approved Assessment(s):
✓ Smarter Balanced for ELA
✓ Smarter Balanced for Mathematics
✓ CAST

Figure 4. English dictionary

Figure 5. English glossary
Description:
Grade- and context-appropriate definitions of specific construct-irrelevant terms are shown in English on the screen via a pop-up window. An example is shown in Figure 5.

- The student can access the embedded glossary by selecting any of the preselected terms.
- This universal tool is for use in all ELA domains except Reading.
- The use of this designated support may result in the student needing additional overall time to complete the assessment.

Expandable Items

Additional Resources:

- Tutorial—Embedded Universal Tools: Expandable Items

Approved Assessment(s):

- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAA for ELA (default setting)
- CAA for Mathematics (default setting)
- CAST

Description:
Each stimulus in the left pane and question(s) in the right pane can be expanded so that it takes up a larger portion of the screen when the student selects one of the two horizontal arrows between the passage and the question(s). The arrows are circled in Figure 7.

- The right arrow expands the passage or stimulus; the left arrow contracts the expanded passage or stimulus and expands the item(s). However, if the test administrator has turned off the Expandable Passages universal tool, the student would see the left arrow—to expand the pane with the test item—only.
- The default setting for this universal tool is off and must be turned on by the test administrator on the Approvals and Student Test Settings screen for the student (select...
the [See/Edit Details] eye [ ] icon for a student before approving the test and then use the Expandable Items toggle to On). It is circled in Figure 6; its default setting is Off.

- Students should be advised that this universal tool is available.
- For the CAAs for ELA and mathematics, the default setting is for all items to be expandable.

**Expandable Passages**

**Additional Resources:**
- Tutorial—[Embedded Universal Tools: Expandable Passages](#)

**Approved Assessment(s):**
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAST

**Description:**
Each passage or stimulus can be expanded so that it takes up a larger portion of the screen when the student selects one of the two arrows in the passage pane. The arrows are circled in Figure 8.

- Select the [Expand] arrows icon to expand the passage.
- This universal tool expands the passage only.
Global Notes (Writing)

Additional Resources:
- Tutorial—Embedded Universal Tools: Global Notes

Approved Assessment(s):
- Smarter Balanced for ELA performance tasks

Description:
Global notes is a notepad that is available for ELA performance tasks in which students complete a full write (the second part of a performance task). The student selects the [Notes] icon, circled in Figure 9, for the notepad to appear.

During the ELA performance tasks, the notes are retained from segment to segment so that the student may go back to the notes even though the student is not able to go back to specific items in the previous segment.

Highlighter

Additional Resources:
- Tutorial—Embedded Universal Tools: Highlighter

Approved Assessment(s):
- All

Description:
Highlighter is a digital resource for marking desired text, item questions, item answers, or parts of these with a color. Highlighted text remains available throughout each test segment. To use this tool, a student selects text and then selects Highlight Selection from the content menu (circled in Figure 10).
**Keyboard Navigation**

Additional Resources:
- [Keyboard Commands for Students](#)

Approved Assessment(s):
- All

Description:
Navigation throughout text can be accomplished by using a keyboard.

**Line Reader**

Additional Resources:
- [Tutorial—Embedded Universal Tools: Line Reader](#)

Approved Assessment(s):
- All

Description:
A student moves an on-screen horizontal line that surrounds each line of text with shading after selecting the **Line Reader** line icon (indicated in Figure 11). To move the line reader, the student selects (clicks) anywhere on the next line to be shaded.
• This universal tool applies to both items and passages.

• Selecting an answer option with the line reader universal tool also will cause an option such as a radio button or check box to be selected.

  – If the student selects the “Option B” radio button in a vertical list of answer options, selecting (clicking) Option B’s text will both shade the line of text in the line reader and select that answer option as the student’s response to the test question (Figure 12). Students must select a line of text away from a radio button answer option—in a passage or the test question, for example—to unselect the selected line as the focus of the line reader universal tool. However, that answer option is still selected as the student’s response unless or until the student selects a different option.

  – If the student selects the “Option E” check box in a vertical list of answer options, selecting (clicking) Option E’s text will both shade the line of text in the line reader and select that answer option as one of the student’s responses to the test question (Figure 13). Students must select a line of text away from a check box answer option—in a passage or the test question, for example—to unselect the selected line as the focus of the line reader universal tool. However, that answer option is still selected as one of the student’s responses unless or until the student selects the check box to unselect it.

**Mark for Review**

**Additional Resources:**

- Tutorial—[Embedded Universal Tools: Mark for Review](#)

**Approved Assessment(s):**

- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAA for ELA
- CAA for Mathematics
- CAST

**Description:**

Mark for review allows a student to flag completed test items—that is, those to which he or she already has responded—for future review during the assessment by selecting *Mark for Review* from the content menu (circled in Figure 14). Markings are not saved when the student moves on to the next segment or after a break of more than 20 minutes. Figure 15 shows flagged items at the end of a segment. A student may select an item to return to it.
**Mathematics Tools**

**Approved Assessment(s):**
- Smarter Balanced for Mathematics
- CAST

**Description:**
These digital resources (i.e., graphing tools, embedded ruler, embedded protractor) are used for measurements related to mathematics or science items. They are available only with the specific items for which the test item specifications indicate that one or more of these resources would be appropriate. The mathematics tool shown in Figure 16 allows students to place points on a graph and connect a line between the points.

**Science Charts**

**Additional Resources:**
- Tutorial—Embedded Universal Tools: Science Charts

**Approved Assessment(s):**
- CAST

**Description:**
Students taking the grades eight and high school CAST assessments may refer to a periodic table of elements as a universal tool in grades eight, ten, eleven, and twelve. Students taking the grade eight and high school CAST assessments may refer to a reference sheet.
**Science Tools**

**Approved Assessment(s):**

✓ CAST

**Description:**
Students taking a CAST assessment may use a special embedded resource, if applicable, such as interactive laboratory equipment, videos, and/or a stopwatch tool to respond to a specific question.

**Spell Check**

**Additional Resources:**
- Tutorial—Embedded Universal Tools: Spell Check

**Approved Assessment(s):**

✓ Smarter Balanced for ELA

**Description:**
Spell check is a writing tool for checking the spelling of words in student-generated responses. The [Spell Check] button on the Writing toolbar is circled in Figure 17.

- Spell check only gives an indication that a word is misspelled; it does not provide the correct spelling.
- For ELA, spell check is bundled with other embedded writing tools for all performance task full writes (planning, drafting, revising, and editing). (A full write is the second part of a performance task.)
- This resource is available only with the specific items for which the test item specifications indicated that it would be appropriate.

**Strikethrough**

**Additional Resources:**
- Tutorial—Embedded Universal Tools: Strikethrough

**Approved Assessment(s):**

✓ All
Description:
Strikethrough allows users to cross out answer options. If an answer option is an image, a strikethrough line will not appear, but the image will be grayed out.

Thesaurus

Additional Resources:
• Tutorial—Embedded Universal Tools: Thesaurus

Approved Assessment(s):
✓ Smarter Balanced for ELA performance task

Description:
A thesaurus contains synonyms of terms while a student interacts with text included in the assessment.

• This universal tool is for use on ELA full-write performance tasks. (A full write is the second part of a performance task.)
• A student accesses the thesaurus by selecting the [Dictionary] icon during specific test segments. This button is circled in Figure 18.
• Students must first type a word into the field next to the Merriam-Webster® logo and then select the [Thesaurus] button, also circled, to see the result.
• The use of this universal tool may result in the student needing additional overall time to complete the assessment.

Writing Tools

Approved Assessment(s):
✓ Smarter Balanced for ELA
✓ Smarter Balanced for Mathematics
✓ CAST

Description:
Selected writing tools are available for all student-generated responses. (Also see spell check.) Writing tools are as follows:

• Bold
• Italic
• Underline
• Remove Format
• Numbered
• Bullet
• Outdent
• Indent
• Cut
• Copy
• Paste
• Undo
• Redo
• Spell check
• Language (English)
• Insert special character
Writing tools on the Writing toolbar are shown in Figure 19.

![Available writing tools](image)

**Figure 19. Writing tools**

### Zoom

#### Additional Resources:
- Tutorial—[Embedded Universal Tools: Zoom](#)

#### Approved Assessment(s):
- All

#### Description:
Zoom is a resource for making text or other graphics in a window or frame appear larger on the screen. The buttons controlling zoom are circled in Figure 20.

- The default font size for all tests is 14 point.
- The student can make text and graphics larger by selecting the Zoom In button. The student can select the Zoom Out button to return to the default or smaller print size. Zoom levels are as follows:

<table>
<thead>
<tr>
<th>Level #</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 0</td>
<td>No zoom, 14 point text</td>
</tr>
<tr>
<td>Level 1</td>
<td>1.50x zoom</td>
</tr>
<tr>
<td>Level 2</td>
<td>1.75x zoom</td>
</tr>
<tr>
<td>Level 3</td>
<td>2.00x zoom</td>
</tr>
<tr>
<td>Level 4</td>
<td>2.50x zoom</td>
</tr>
</tbody>
</table>

- When using the zoom feature, the student only changes the size of text and graphics on the current screen, including the size of the navigation buttons. To increase the default print size of the entire test (from 1.5X to 3.0X default size), the print size must be set for the student in TOMS or set by the test administrator prior to the start of the test. This is the only feature that test administrators can set.
- The use of this resource may result in the student needing additional overall time to complete the assessment.
- To set the zoom to a size larger than 3.X default, see the [Streamline](#) embedded accommodation.
Non-Embedded

Non-embedded universal tools are provided by the test administrator to students at the time of testing.

**Breaks (Paper-pencil Tests)**

**Approved Assessment(s):**
- Smarter Balanced for ELA (paper-pencil test)
- Smarter Balanced for Mathematics (paper-pencil test)

**Description:**
Breaks may be given at predetermined intervals or after completion of sections of the assessment for students taking a paper-based test. Sometimes students are allowed to take breaks when individually needed to reduce cognitive fatigue when they experience heavy assessment demands.

The use of this resource may result in the student needing additional overall time to complete the assessment.

**English Dictionary (Writing)**

**Approved Assessment(s):**
- Smarter Balanced for ELA

**Description:**
An English dictionary can be provided for the full write portion of an ELA performance task. (A full write is the second part of a performance task.)

The use of this resource may result in the student needing additional overall time to complete the assessment.

**Scratch Paper**

**Approved Assessment(s):**
- All

**Description:**
Scratch paper to make notes, write computations, or record responses may be made available.
- Only plain paper or lined paper is appropriate for ELA.
- Graph paper is required beginning in sixth grade and can be used on all mathematics assessments.
- A whiteboard with marker may be used as scratch paper.
• As long as the construct being measured is not impacted, assistive technology devices, including low-tech assistive technology (Math Window), are permitted to make notes. The assistive technology device needs to be consistent with the student’s IEP or Section 504 plan.

• Access to Internet must be disabled on assistive technology devices.

**Computer Adaptive Test (CAT) and CAST:**

• All scratch paper must be collected and securely destroyed at the end of each CAT assessment session to maintain test security.

• All notes on whiteboards or assistive technology devices must be erased at the end of each CAT session.

**Performance Tasks:**

• For mathematics and ELA performance tasks, if a student needs to take the performance task in more than one session, scratch paper, whiteboards, and/or assistive technology devices may be collected at the end of each session, securely stored, and made available to the student at the next performance task testing session.

• Once the student completes the performance task, the scratch paper must be collected and securely destroyed, whiteboards should be erased, and notes on assistive technology devices erased to maintain test security.

**Thesaurus**

**Approved Assessment(s):**

✓ Smarter Balanced for ELA performance task

**Description:**

A thesaurus contains synonyms of terms while a student interacts with text included in the assessment. The use of this universal tool may result in the student needing additional overall time to complete the assessment.

This resource is for use on ELA full-write performance tasks. (A full write is the second part of a performance task.)
Designated Supports

Access features of the assessments are available for use by any student for whom the need has been indicated by an educator (or team of educators working with the parent/guardian and student). They are either provided as digitally delivered components of the test administration system (embedded) or separate from it (non-embedded). For example, stacked translations in Spanish for mathematics is an embedded designated support; a scribe for English language arts/literacy (ELA) nonwriting items and mathematics items is a non-embedded designated support.

Designated supports are set in the Test Operations Management System (TOMS) by a local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) coordinator or CAASPP test site coordinator.

Embedded

Color Contrast

Additional Resources:
- Tutorial—Embedded Designated Supports: Color Contrast

Approved Assessment(s):
✓ All

Description:
The adjustment of screen background or font color is based on student needs or preferences and set in TOMS for the student. Color contrast may include reversing the colors for the entire interface or choosing the color of font and background. Choices are as follows:

- reverse contrast
- black on rose
- medium gray on light gray
- yellow on blue

The sample in Figure 21 shows reverse contrast.

![Figure 21. Color contrast (reverse contrast)](image)

Use:
Students with attention difficulties may need this resource for viewing test content.
- It also may be needed by some students with visual impairments or other print disabilities (including learning disabilities).
• Choice of colors should be informed by evidence that color selections meet the student’s needs.

**Masking**

**Additional Resources:**
• Tutorial—[Embedded Designated Supports: Masking](#)

**Approved Assessment(s):**
✓ All

**Description:**
Masking involves blocking off content that is not of immediate need or that may be distracting to the student. Students are able to focus their attention on a specific part of a test item by masking. In Figure 22, the [Masking] button is circled and an arrow indicates the masked portion of the answer options.

![Figure 22. Masking](image)

**Use:**
Students with attention difficulties may need to mask content not of immediate need or that may be distracting during the assessment.

• This resource also may be needed by students with print disabilities (including learning disabilities) or visual impairments.
• Masking allows students to hide and reveal individual answer options, as well as all navigational buttons and menus.
Mouse Pointer (Size and Color)

Additional Resources:
- Tutorial—Embedded Designated Supports: Mouse Pointer

Approved Assessment(s):
✓ All

Description:
Mouse pointer is a test setting for students who are visually impaired and need the mouse pointer to be larger or a different color to more readily find their mouse pointer on the screen. An enlarged mouse pointer is shown in Figure 23.

While the mouse pointer resource can be used with the zoom universal tool, the enlarged mouse pointer is built into the magnification universal tool.

What follows are the options for the mouse pointer designated support:
- Large, Black Mouse Pointer
- Extra Large, Black Mouse Pointer
- Large, Green Mouse Pointer
- Extra Large, Green Mouse Pointer
- Large, Red Mouse Pointer
- Extra Large, Red Mouse Pointer
- Large, White Mouse Pointer
- Extra Large, White Mouse Pointer
- Large, Yellow Mouse Pointer
- Extra Large, Yellow Mouse Pointer

Permissive Mode (Setting)

Approved Assessment(s):
✓ All

Description:
Permissive mode is a test setting that should be enabled for students who require access to approved accessibility software and/or devices in order to interact with the test (e.g., screen readers, magnifiers, speech-to-text, braille screen readers, and refreshable braille displays,
etc.). When permissive mode is disabled, the only application that can be open on the computer is the secure browser.

**Print Size (Setting)**

**Approved Assessment(s):**

- All

**Description:**

Print size is a test setting that sets the default font size the student should have when starting an online test. This setting applies to text items and stimuli only and not the buttons in the global menu bar.

- The selected font size becomes the default for all items in that student’s test.
- The default font size for all tests is 14 point.
- The default font for ELA tests is Times New Roman.
- The default font for mathematics tests is Verdana.

**Stacked Translations (Spanish)**

**Additional Resources:**

- Tutorial—[Embedded Designated Supports: Spanish Stacked Translations and Translated Test Directions](#)

**Approved Assessment(s):**

- Smarter Balanced for Mathematics
- CAST

**Description:**

Stacked translations are a language resource for some students. They provide the full translation of **each test item in Spanish** above the original item in English as well as **all on-screen directions in Spanish**.

A practice test item using the stacked translation designated support is shown in Figure 24.
Figure 24. Stacked translations, mathematics

Note that for the CAST only, some stacked Spanish translation items for inline choice item types will show the entire question in Spanish, including the response options in the drop-down menus, which appear with the Spanish translation of the questions. However, other items will show the Spanish translation of the drop-down response options in italics where the drop-down list would appear in the translation (indicated in Figure 25); in this case, to select a response, the students will select from the English options where the English drop-down list appears.

Figure 25. Stacked translations, science

Use:
This resource is for students whose primary language is not English and/or who use dual language supports in the classroom. For these students, use of the stacked (dual language) translation may be appropriate.

- Students participate in the assessment regardless of the language.
- This resource will increase reading load and cognitive load.
This resource should be used only for students who are proficient readers in Spanish and not proficient in English.

Because this resource will likely be confusing and may impede the performance of students who have not used it previously, students to whom stacked translations have been assigned should use it in a practice or training test to ensure its appropriateness.

Stacked translations in Spanish are available in conjunction with the embedded translated test directions in Spanish.

The use of this designated support may result in the student needing additional overall time to complete the assessment.

This designated support cannot be used with text-to-speech.

**Text-to-Speech**

Additional Resources:
- Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

(See also the embedded text-to-speech accommodation for ELA reading passages.)

**Approved Assessment(s):**
- Smarter Balanced for ELA (items only)
- Smarter Balanced for Mathematics (stimuli and items)
- CAST (stimuli and items)

**Description:**
Text for mathematics and science stimuli and items as well as ELA items is read aloud to the student via embedded text-to-speech technology that uses a simulated, not a human, voice. The student is able to control the speed as well as raise or lower the volume of the voice via a volume control.

**Use:**
Students who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud. To use this designated support, a student must select either **Speak Question** or **Speak Question and Options** from the content menu (circled in Figure 26).

This resource also may be needed by:
- students with reading-related disabilities,
- struggling readers, or
- students who are blind and do not yet have adequate braille skills.

This resource will likely be confusing and may impede the performance of students who do not regularly have the resource during instruction.
Simulated voices may not provide the same emphasis and other qualities of a natural, human voice when reading.

Students who use text-to-speech will need headphones unless tested individually in a separate setting.

The technical coordinator at the LEA or test site should ensure that the network bandwidth at the test site is sufficient to support the number of students who will be using this resource concurrently during testing.

This designated support cannot be used with stacked translations in Spanish for mathematics or science.

**Translated Test Directions (Spanish)**

**Additional Resources:**
- Tutorial—[Embedded Designated Supports: Spanish Stacked Translations and Translated Test Directions](#)

**Approved Assessment(s):**
- Smarter Balanced for Mathematics
- CAST

**Description:**
Translation of test directions is a language resource available prior to beginning the actual test items.

- Embedded test directions in Spanish are available in conjunction with the [stacked translations](#) in Spanish.
- Students can see test directions in Spanish.
- As an embedded designated support, translated test directions are automatically a part of the stacked translation designated support. Translated buttons are circled in Figure 27.

**Use:**
- Students who have limited English language skills can use the translated directions resource.

---

*Figure 27. Translated test directions*
• This resource should be used only for students who are proficient readers in Spanish and not proficient in English.

• Because this resource will likely be confusing and may impede the performance of students who have not used it previously, students to whom stacked translations have been assigned should use it in a practice or training test to ensure its appropriateness.

• The use of this designated support may result in the student needing additional overall time to complete the assessment.

**Translation Glossaries**

**Additional Resources:**
- Instructions for Using Embedded Glossaries
- Tutorial—Embedded Designated Supports: Translation Glossary

**Approved Assessment(s):**
- Smarter Balanced for Mathematics
- CAST

**Description:**
Translated glossaries are a language resource.

• The translated glossaries are provided for selected construct-irrelevant terms for mathematics.

• Translations for these terms appear on the computer screen when students select them.

• This designated support can be set as either the language of translation or the language of translation and English.

• Students can also select the audio icon next to the glossary term—circled in Figure 28—and listen to the audio recording of the glossary.

• Current languages of translations for mathematics are as follows:
  - Arabic
  - Cantonese
  - Ilokano
  - Korean
  - Mandarin
  - Punjab
  - Russian
  - Spanish
  - Tagalog
  - Ukrainian
  - Vietnamese

• Current languages of translations for science are as follows:
  - Arabic
  - Cantonese
  - Korean
  - Mandarin
  - Punjab
  - Russian
  - Tagalog
  - Spanish
  - Vietnamese
Use:
Students who have limited English language skills (whether or not designated as English learners [ELs] or ELs with disabilities) can use the translation glossary for specific items. The use of this designated support may result in the student needing additional overall time to complete the assessment.

**Turn Off Any Universal Tools**

Approved Assessment(s):  
✓ All

Description:
Any universal tools that might be distracting or that students do not need to use or are unable to use may be disabled by the test administrator in the Test Administrator Interface before a test is approved. *Highlighter* is an example of a universal tool that can be toggled off and is circled in Figure 29.

Use:
Students who are easily distracted (whether or not designated as having attention difficulties or disabilities) may be overwhelmed by some of the universal tools. Knowing which specific resources may be distracting is important for determining which universal tool(s) to turn off.
Non-Embedded

100s Number Table, Science

Additional Resources:
- 100s Number Table

Approved Assessment(s):
✓ CAST

Description:
The 100s number table is a paper-based table listing numbers from 1–100 available for reference.

Use:
Students with visual processing or spatial perception needs may find this designated support beneficial.

Amplification

Approved Assessment(s):
✓ All

Description:
Students may adjust the volume control beyond the testing device’s built-in settings using headphones or another non-embedded device.

Use:
A student with a hearing impairment may use headphones, assistive technology, noise buffers, or white noise machines to increase the volume provided in the test delivery system.

- Use of this resource may require a separate setting.
- If the amplification device has additional features that may compromise test security (such as Internet access), the functionality should be disabled before testing.

Bilingual Dictionary

Approved Assessment(s):
✓ Smarter Balanced for ELA performance task full writes

Description:
A bilingual/dual language word-to-word dictionary is a language resource.

- A bilingual/dual language word-to-word dictionary can be provided for the full write portion of an ELA performance task.
• A full write is the second part of a performance task.
• This designated support is for use with ELA full-write performance tasks only.

Use:
For students whose primary language is not English and who use dual language supports in the classroom, use of a standard published bilingual/dual language word-to-word dictionary may be appropriate.

• Students participate in the assessment regardless of the language.
• The use of this designated support may result in the student needing additional overall time to complete the assessment.

**Calculator, Science**

Approved Assessment(s):
✓ CAST

Description:
A non-embedded calculator may be used by students needing a special calculator, such as a braille calculator or a talking calculator, which is currently unavailable within the assessment platform. This designated support is for use by students in grade five with a four-function calculator; and grades eight, ten, eleven, and twelve with a scientific calculator.

Use:
Students with visual impairments who are unable to use the embedded calculator for calculator-allowed items will be able to use the calculator that they typically use, such as a braille calculator or a talking calculator. Test administrators should ensure that the calculator is available only for designated calculator items.

**Color Contrast**

Additional Resources:
- Tutorial—[Embedded Designated Supports: Color Contrast](#)

Approved Assessment(s):
✓ All

Description:
Test content of online items may be printed with different colors using a color printer. This non-embedded designated support must be used in conjunction with print-on-demand.

Use:
Students with attention difficulties may need this resource for viewing the test when digitally provided color contrasts do not meet their needs.
• Some students with visual impairments or other print disabilities (including learning disabilities) also may need this resource.

• Choice of colors should be informed by evidence of those colors that meet the student’s needs.

**Color Overlays**

**Approved Assessment(s):**
✓ All

**Description:**
Color transparencies are placed over a paper-based assessment.

**Use:**
Students with attention difficulties may need this resource to view test content.

• This resource also may be needed by some students with visual impairments or other print disabilities (including learning disabilities).

• Choice of color should be informed by evidence of those colors that meet the student’s needs.

**Magnification**

**Approved Assessment(s):**
✓ All

**Description:**
The size of specific areas of the screen (e.g., text, formulas, tables, graphics, and navigation buttons) may be adjusted by the student with an assistive technology device. Magnification increases the size and color contrast of the student’s on-screen presentation, to levels not provided by the zoom universal tool, color contrast designated support, and/or mouse pointer designated support.

**Use:**
Students used to viewing enlarged text or graphics, or navigation buttons may need magnification to comfortably view content.

• This resource also may meet the needs of students with visual impairments and other print disabilities.

• Because magnification increases the size and color contrast of the student’s on-screen presentation, students may not need also to use the zoom universal tool, color contrast designated support, and/or mouse pointer designated support.

• The use of this designated support may result in the student needing additional overall time to complete the assessment.
Multiplication Table, Science

Additional Resources:
- Multiplication Table

Approved Assessment(s):
✓ CAST

Description:
A paper-based single-digit (1–9) multiplication table is a resource.

Use:
The multiplication table is for students with a documented and persistent calculation disability (i.e., dyscalculia).

Noise Buffers

Approved Assessment(s):
✓ All

Description:
Noise buffers are equipment such as ear mufflers, white noise, and/or other devices used to block external sounds.

Use:
Student (not groups of students) wears equipment to reduce environmental noises.
- Students may have these testing variations if regularly used in the classroom.
- Students who use noise buffers will need headphones unless tested individually in a separate setting.
Read-Aloud Items

Additional Resources:
- Guidelines for Read Aloud, Test Reader
- Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

(See also the non-embedded read-aloud accommodation for ELA reading passages.)

Approved Assessment(s):
✓ All

Description:
Text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided by Smarter Balanced. All or portions of the content may be read aloud.

Qualifications for test readers are as follows:¹
- The test reader should be an adult who is familiar with the student and who is typically responsible for providing this support during educational instruction and assessments.
- Test readers must be trained on the administration of the assessment in accordance with member policy, and familiar with the terminology and symbols specific to the test content and related conventions for standard oral communication.
- Test readers must be trained in accordance with Smarter Balanced and member administration and security policies and procedures as articulated in Consortium and member test administration manuals, guidelines, and related documentation.

Use:
Students who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud.
- This resource also may be needed by students with reading-related disabilities or by students who are blind and do not yet have adequate braille skills.
- For mathematics, this resource applies to stimuli and items.
- If not used regularly during instruction, this resource is likely to be confusing and may impede the performance on assessments.
- Readers should be provided to students on an individual basis, not to a group of students.
- A student should have the option of asking a reader to slow down or repeat text.
- The use of this designated support may result in the student needing additional overall time to complete the assessment and/or the use of a separate setting.

Read-Aloud in Spanish

Additional Resources:
- Guidelines for Read Aloud in Spanish, Test Reader
- Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

Approved Assessment(s):
- Smarter Balanced for Mathematics
- CAST

Description:
Spanish text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided by Smarter Balanced. All or portions of the content as presented in the Spanish stacked translation may be read aloud.

Use:
Spanish-speaking students receiving the Translations (stacked) designated support and who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud.

- This resource also may be needed by students with reading-related disabilities.
- If not used regularly during instruction, this resource is likely to be confusing and may impede the performance on assessments.
- A student should have the option of asking a reader to slow down or repeat text.
- The use of this designated support may result in the student needing additional overall time to complete the assessment and/or the use of a separate setting.

Science Charts

Additional Resources:
- CAST Periodic Table of the Elements, Grades Eight and High School (This resource will be available in the training tests on March 5, 2018.)
- CAST Reference Sheet, Grade Eight
- CAST Reference Sheet, High School

Approved Assessment(s):
- CAST

Description:
Students taking the grades eight and high school CAST assessments may refer to a state-approved, paper-based, periodic table of elements as a designated support in grades eight, ten, eleven, and twelve. Students taking the grade eight and high school CAST assessments may refer to a state-approved reference sheet. These resources are available for download as PDFs.
Students may alternatively use a different periodic table they have been using in class and is listed in an IEP or Section 504 plan after a request for this use as an unlisted resource has been approved.

**Scribe Items**

Additional Resources:
- Scribing Protocol

(See also the non-embedded scribing accommodation for writing.)

**Approved Assessment(s):**

✔ All, except for ELA full-write performance task (PT)

**Description:**

Students dictate their responses to a human who records verbatim what they dictate.

- The scribe must be trained and qualified, and must follow the administration guidelines provided by Smarter Balanced.
- This designated support is for use with mathematics, science, and reading and listening (i.e., nonwriting) ELA items only; it does not apply to the ELA full-write PT.

**Use:**

Students who have documented significant motor or processing difficulties, or who have had a recent injury (such as a broken hand or arm) that makes it difficult to produce responses may need to dictate their responses to a human, who then records the students’ responses verbatim. The use of this resource may result in the student needing additional overall time to complete the assessment.

**Separate Setting**

**Approved Assessment(s):**

✔ All

**Description:**

Test location is altered so that the student is tested in a setting different from that made available for most students.

**Use:**

Students who are easily distracted (or may distract others) in the presence of other students, for example, may need an alternate location to be able to take the assessment.

- The separate setting may be in a different room that allows them to work individually or among a smaller group or to use a device requiring voicing (e.g., a whisper phone).
- The separate setting may be in the same room but in a specific location (for example, away from windows, doors, or pencil sharpeners; in a study carrel; near the teacher’s desk; or in the front of a classroom).
• Students also may need specific adjustment to their testing environment to remove obstacles to a comfortable test experience.

• Some students may benefit from being in an environment that allows for movement, such as being able to walk around.

• Some students also may benefit from testing at a particular time of day.

• Students using the amplification non-embedded designated support may need a separate setting to avoid disturbing other students who are testing.

• Other adjustments to the testing environment include special lighting, acoustics, and adaptive furniture.

• In some instances, students may need to interact with instructional or test content outside of school, such as in a hospital or their home.

**Simplified Test Directions**

**Additional Resources:**
- Guidelines for Simplified Test Directions

**Approved Assessment(s):**
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAST

**Description:**
The test administrator simplifies or paraphrases the test directions found in the test administration manual according to the Guidelines for Simplified Test Directions.

**Use:**
Students who need additional support understanding the test directions may benefit from this resource. This designated support may require testing in a separate setting to avoid distracting other test takers.

**Translated Test Directions**

**Additional Resources:**
- CAST Translated Test Directions Web page—link forthcoming

**Approved Assessment(s):**
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAST
Description:
A student uses a PDF of directions translated in each of the languages currently supported.

- A bilingual adult can read to student.
- Translated test directions PDFs are available in the following languages:
  - Arabic (Saudi and Egypt)
  - Cantonese (Traditional and Simplified)
  - Dakota
  - Filipino (Tagalog and Ilokano)
  - French
  - Haitian Creole
  - Hmong
  - Japanese
  - Korean
  - Lakota
  - Mandarin (Traditional and Simplified)
  - Punjabi (Indian [East] and Pakistani [West])
  - Russian
  - Somali
  - Spanish (ELA only)
  - Ukrainian
  - Vietnamese (North and South)
  - Yup'ik

Use:
Students who have limited English language skills (whether or not designated as ELs or ELs with disabilities) can use the translated test directions.

- In addition, a biliterate adult trained in the test administration manual can read the test directions to the student.
- The use of this designated support may result in the student needing additional overall time to complete the assessment.

**Translation Glossary**

**Approved Assessment(s):**
- Smarter Balanced for Mathematics paper-pencil tests

Glossaries for paper-pencil tests are available to LEA CAASPP coordinators by contacting the California Technical Assistance Center. This designated support is set in TOMS by selecting the “Translation Glossaries” embedded designated support.

Description:
Translated glossaries (in printable PDFs) are a language resource.

- Translated glossaries are provided for selected construct-irrelevant terms for mathematics.
- Translation glossaries are available, by request only, in the following languages:
  - Arabic
  - Cantonese
  - English
  - Filipino (Tagalog and Ilokano)
  - Korean
  - Mandarin
  - Punjabi (East [Indian] or West [Pakistani])
  - Russian
  - Spanish
  - Ukrainian
  - Vietnamese
• Glossary terms are listed by item and include the English term and its translated equivalent.

**Use:**
Students who have limited English language skills can use the translation glossary for specific items. The use of this designated support may result in the student needing additional overall time to complete the assessment.
Accommodations

Accommodations are changes in procedures or materials that increase equitable access during the California Assessment of Student Performance and Progress (CAASPP) assessments. Assessment accommodations generate valid assessment results for students who need them; they allow these students to show what they know and can do. Accommodations are available for assignment to students with documented individualized education programs (IEPs) or Section 504 plans. Accommodations do not compromise the learning expectations, construct, grade-level standard, or intended outcome of the assessments. They are either provided as embedded components of the test administration system or are non-embedded. For example, braille is an embedded accommodation; print-on-demand is a non-embedded accommodation.

Accommodations are assigned in the Test Operations Management System (TOMS) by a local educational agency (LEA) CAASPP coordinator or CAASPP test site coordinator.

Note: To ensure a student remains eligible to receive accommodations and/or unlisted resources, the California Longitudinal Pupil Achievement Data System (CALPADS) education program code field must be set for “special education” (value 144) and provide a primary disability category or “504 Plan” (value 101).

Embedded

American Sign Language (ASL)

Additional Resources:
- Tutorial—Embedded Accommodations: American Sign Language

Approved Assessment(s):
- Smarter Balanced for English Language Arts/Literacy (ELA)—Listening
- Smarter Balanced for Mathematics
- California Science Test (CAST)

Description:
Test content is translated into ASL video.
- ASL human signer and the signed test content are viewed on the same screen.
- Students may view portions of the ASL video as often as needed by selecting American Sign Language from the content menu, as seen in Figure 30.
Use:
Some students who are deaf or hard of hearing and who typically use ASL may need this accommodation when accessing text-based content in the assessment.

- The use of this accommodation may result in the student needing additional overall time to complete the assessment.

- For many students who are deaf or hard of hearing, viewing signs is the only way to access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the audio presentation in a listening test.

Audio Transcript (Includes Braille Transcript)

Additiona Resources:
- Tutorial—[Embedded Accommodations: Audio Transcript]

Approved Assessment(s):
- Smarter Balanced for ELA Listening passages
- CAST (Approved for use; however, there are currently no audio items for the CAST.)

Description:
Content that is accessed through listening during the course of the assessment with the option of closed captioning is made available in braille or on-screen as a single text presentation (rather than one line at a time as provided by closed captioning). The [Transcript] icon the student selects to request a transcript is circled in Figure 31; while the sample transcript is the on-screen, audio transcript that appears in a pop-up box, this accommodation also is available in refreshable braille.
Use:
Some students who are deaf or hard of hearing and/or visually impaired may have difficulty with portions of the assessment acquired by listening, and the closed captioning does not provide adequate support to assist the student’s testing.

- Students who require the closed captions to be presented in braille also must have the braille embedded accommodation set.
- Students who require the closed captioned material to be presented as a transcript will see the test in the closed captioning in a single text presentation on screen.

Braille

Additional Resources:
- [Overview of Testing Students Requiring Braille](#)—subsection in this manual

Approved Assessment(s):
- ✔️ Smarter Balanced for ELA
- ✔️ Smarter Balanced for Mathematics
- ✔️ CAST

Description:
Students with visual impairments may use a raised-dot code that individuals read with the fingertips.

- Graphic material (e.g., maps, charts, graphs, diagrams, and illustrations) is presented in a raised format (paper or thermoform).
- Contracted and noncontracted braille is available; Nemeth code is available for mathematics.
Use:
Students with visual impairments may read text via braille.

- Tactile overlays and graphics also may be used to assist the student in accessing content through touch.
- Refreshable braille is available only for ELA and the CAST, because Nemeth Code is not available via refreshable braille.
- For mathematics and the CAST, braille will be presented via embosser; embosser-created braille can be used for ELA also.
- It is not necessary to request the print-on-demand accommodation when assigning the braille accommodation.
- The use of this accommodation may result in the student needing additional overall time to complete the assessment.

Closed Captioning

Additional Resources:
- Tutorial—Embedded Accommodations: Closed Captioning

Approved Assessment(s):
- Smarter Balanced for ELA—Listening
- CAST (Approved for use; however, there are currently no audio items for the CAST.)

Description:
Printed text that appears on the computer screen as audio materials are presented. This accommodation starts when the student accesses the test item and does not require manual intervention by the student. This feature is shown in Figure 32.

Figure 32. Closed captioning
Use:
Students who are deaf or hard of hearing and who typically access information presented via audio by reading words that appear in synchrony with the audio presentation may need this resource to access audio content.

For many students who are deaf or hard of hearing, viewing words (sometimes in combination with reading lips and ASL) is how they access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the audio presentation in a listening test.

Streamline

Additional Resources:
- Tutorial—Embedded Accommodations: Streamline
- About Streamline Mode—subsection in this manual

Approved Assessment(s):
✓ All

Description:
This accommodation provides a streamlined interface of the test in an alternate, simplified format in which the items are displayed below the stimuli vertically; it is designed to interact with Job Access with Speech (JAWS®) navigation.

This accommodation includes zoom levels greater than 3X in the student interface. The sample in Figure 33 shows a full-screen zoom that includes navigation buttons and item passage.

Use:
This accommodation may benefit a small number of students who have specific learning and/or reading disabilities in which the text is presented in a more sequential format.
Text-to-Speech Passages

Additional Resources:
- Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

Approved Assessment(s):
✓ Smarter Balanced for ELA

Description:
Text is read aloud to the student via embedded text-to-speech technology (Figure 34). The student is able to control the speed as well as raise or lower the volume of the voice via a volume control.

Use:
This accommodation is appropriate for a very small number of students with a documented need in an IEP or Section 504 plan. Students who use text-to-speech will need headphones unless tested individually in a separate setting.

Non-Embedded

100s Number Table (Mathematics, Grades Four and Above)

Additional Resources:
- 100s Number Table

Approved Assessment(s):
✓ Smarter Balanced for Mathematics
✓ CAA for Mathematics

Description:
The 100s number table is a paper-based table listing numbers from 1–100 available for reference. This accommodation is for use by students in grades four through eight and grade eleven.

Use:
Students with visual processing or spatial perception needs may find this beneficial, as documented in their IEP or Section 504 plan.
Additional Instructional Supports and Resources for Alternate Assessments

Additional Resources:

Approved Assessment(s):
✓ CAA for ELA  
✓ CAA for Mathematics

Description:
Eligible pupils shall have any instructional supports and/or accommodations, including the language of instruction, used in the student’s daily instruction in accordance with the student’s IEP.

Use:
Administration of the CAAs to eligible pupils shall be one-on-one (test examiner to student). Depending upon the student’s disability or needs, the CAAs may or may not include the student’s independent use of the testing interface.

Abacus

Approved Assessment(s):
✓ Smarter Balanced for Mathematics  
✓ CAA for Mathematics  
✓ CAST

Description:
This resource may be used in place of scratch paper for students who typically use an abacus.

Use:
Some students with visual impairments who typically use an abacus may use an abacus in place of using scratch paper.

Alternate Response Options

Approved Assessment(s):
✓ All

Description:
Devices that can be used as an alternate response option include but are not limited to adapted keyboards, large keyboards, StickyKeys, MouseKeys, FilterKeys, adapted mouse, touch screen, head wand, and switches.
Use:
Students with some physical disabilities (including both fine motor and gross motor skills) may need to use the alternate response options accommodation. Some alternate response options are external devices that must be plugged in and be compatible with the assessment delivery platform. An alternate response option that requires a third-party software to run also requires the permissive mode test setting.

**Calculator, Mathematics**

**Approved Assessment(s):**
- ✔ Smarter Balanced for Mathematics

**Description:**
A non-embedded calculator may be used by students needing a special calculator, such as a braille calculator or a talking calculator, which is currently unavailable within the assessment platform. This accommodation is for use on calculator-allowed items only in grades six through eight and grade eleven.

**Use:**
Students with visual impairments who are unable to use the embedded calculator for calculator-allowed items will be able to use the calculator that they typically use, such as a braille calculator or a talking calculator. Test administrators should ensure that the calculator is available only for designated calculator items.

**Multiplication Table, Mathematics (Grades Four and Above)**

**Additional Resources:**
- Multiplication Table

**Approved Assessment(s):**
- ✔ Smarter Balanced for Mathematics
- ✔ CAA for Mathematics

**Description:**
A paper-based single-digit (1–9) multiplication table is an accommodation for use by students in grades four through eight and grade eleven.

**Use:**
This accommodation is for students with a documented and persistent calculation disability (i.e., dyscalculia).
Print-on-Demand

Approved Assessment(s):
✓ All

The ability to print on demand is available only if the LEA CAASPP coordinator has received permission by contacting the California Technical Assistance Center.

Description:
Paper copies of either passages/stimuli and/or items are printed for students.

Use:
Some students with disabilities may need paper copies of either passages/stimuli and/or items.
• A very small percentage of students should need this accommodation.
• The use of this accommodation may result in the student needing additional time to complete the assessment.
• It is not necessary to request the print-on-demand accommodation when assigning the braille accommodation.

Read-Aloud Passages

Additional Resources:
• Guidelines for Read Aloud, Test Reader
• Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

(See also the non-embedded read-aloud designated support for ELA and mathematics items.)

Approved Assessment(s):
✓ Smarter Balanced for ELA
✓ CAA for ELA

Description:
Text is read aloud to the student by a human reader or by a trained and qualified human reader who follows the administration guidelines provided in the Guidelines for Read Aloud.
• All or portions of the content may be read aloud.
• Refer to the guidelines for choosing the read-aloud accommodation when deciding if this accommodation is appropriate for a student.
Use:
This accommodation is appropriate for a very small number of students.

- A student should have the option of asking a reader to slow down or repeat text.
- The use of this accommodation may result in the student needing additional time to complete the assessment and/or the use of a separate setting.

Scribe (Writing)

Additional Resources:
- Scribing Protocol

(See also the non-embedded scribe designated support for mathematics and nonwriting ELA.)

Approved Assessment(s):
✓ Smarter Balanced for ELA performance task full write
✓ CAA for ELA

Description:
Students dictate their responses to a human who records verbatim what they dictate. The scribe must be trained and qualified, and must follow the administration guidelines provided in the Scribing Protocol.

Use:
Students who have documented significant motor or processing difficulties, or who have had a recent injury (such as a broken hand or arm) that makes it difficult to produce responses may need to dictate their responses to a human, who then records the students' responses verbatim.

- The use of this accommodation may result in the student needing overall additional time to complete the assessment.
- For many of these students, dictating to a human scribe is the only way to demonstrate their composition skills.
- It is important that these students be able to develop planning notes via the human scribe, and to view what they produce while composing via dictation to the scribe.

Speech-to-Text

Approved Assessment(s):
✓ Smarter Balanced for ELA
✓ Smarter Balanced for Mathematics
✓ CAST
Description:
Voice recognition allows students to use their voices as input devices to the computer, to dictate responses or give commands (e.g., opening application programs, pulling down menus, and saving work).

- Voice recognition software generally can recognize speech up to 160 words per minute.
- Students may use their own assistive technology devices.

Use:
Students who have motor or processing disabilities (such as dyslexia) or who have had a recent injury (such as a broken hand or arm) that makes it difficult to produce text or commands using computer keys may need alternative ways to work with computers. Students will need to be familiar with the software, and should have had many opportunities to use it prior to testing.

Speech-to-text software requires that the student go back through all generated text to correct errors in transcription, including use of writing conventions; thus, prior experience with this accommodation is essential. If students use their own assistive technology devices, all assessment content should be deleted from these devices after the test for security purposes.

For many of these students, using voice recognition software is the only way to demonstrate their composition skills. Still, use of speech-to-text does require that students know writing conventions and that they have the review and editing skills required of students who enter text via the computer keyboard. It is important that students who use speech-to-text also be able to develop planning notes via speech-to-text, and to view what they produce while composing via speech-to-text.

Word Prediction

Approved Assessment(s):
✓ All

Description:
Students use non-embedded software that will offer an option for the next word based on word frequency and syntax rules. Students who use word prediction in conjunction with speech output will need headphones unless they are testing individually in a separate setting. Students may need additional time to test.

Use:
The following students may use word prediction:

- Students with documented motor or orthopedic impairments that impair their ability to provide written or typed responses without the use of assistive technology
- Students with moderate to severe learning disabilities that prevent them from recalling, processing, or expressing written language

Students will need to be familiar with the software, and should have had many opportunities to use it prior to testing.
Using word prediction software does require that students know writing conventions and that they have the review and editing skills required of students who enter text via the computer keyboard. It is important that students who use word prediction also be able to develop planning notes with or without text-to-speech.

The student’s word prediction solution used must adhere to the following guidelines:

- The software must predict a single word only.
- Phonetic spelling and speech output may be used.
- Functionality that provides phrase prediction, predict ahead, or next word must be disabled prior to testing.
- Expanded dictionaries must be disabled.
- Students may use their own assistive technology devices. Note the following about student-provided assistive technology devices:
  - If the device has additional features that may compromise test security (such as Internet access), the functionality should be disabled before testing.
  - All assessment content must be removed after testing to protect the security and integrity of the assessments.
This page is left blank intentionally.
Chapter 2. Configuring Selected Accessibility Resources
Text-to-Speech Requirements

This section contains information about text-to-speech (TTS) requirements.

Overview of Text-to-Speech

Using text-to-speech requires at least one voice pack to be installed on testing devices. A number of voice packs are available for testing devices, and all voice packs are researched and tested for compatibility with the secure browsers. Additionally, not all voice packs that come pre-installed with operating systems are approved for use with online testing. The voice packs listed in the operating system subsections have been tested and are whitelisted by the secure browser.

Using Text-to-Speech

Students using text-to-speech for the practice tests must log on using a supported secure browser. Students can also verify that text-to-speech works on their devices by logging on to a practice test session and selecting a test for which text-to-speech is available.

Notes:

- Test sites are strongly encouraged to test the text-to-speech settings before students take operational tests. You can check these settings through the diagnostic page. From the practice test logon screen, select the [Run Diagnostics] link, then select the [TTS Check] button, and then follow the instructions on the page.
- TTS tracking does not function correctly on the Linux operating system. If students require the use of this accommodation (TTS with tracking), they must use a different operating system.

How the Secure Browser Selects Voice Packs

This subsection describes how the secure browsers select which voice pack to use.

Voice Pack Selection on Desktop Versions of Secure Browsers

When a student who is using text-to-speech starts a test, the secure browser looks for voice packs on the student’s device. Upon recognizing an approved voice pack, the secure browser uses the one with the highest priority. If any of the approved voice packs has also been set as the default voice on the device, then that voice pack will always get the highest priority.

Voice Pack Selection on Mobile Versions of Secure Browsers

The mobile secure browser uses either the device’s native voice pack or a voice pack embedded in the secure browser. Additional voice packs downloaded to a mobile device are
not recognized by the mobile secure browser. Table 2 lists the voice packs used by mobile versions of the secure browser.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Voice Pack Used by Secure Browser</th>
</tr>
</thead>
<tbody>
<tr>
<td>iOS 9.2–11</td>
<td>Native iOS voice pack</td>
</tr>
<tr>
<td>Android</td>
<td>Native Android voice pack</td>
</tr>
<tr>
<td>Chrome OS</td>
<td>Native Chromebook voice pack</td>
</tr>
</tbody>
</table>

**About NeoSpeech Voice Packs for Windows**

Pursuant to an agreement between NeoSpeech and the American Institutes for Research (the subcontractor providing the online testing systems), authorized users may download and install specific licensed NeoSpeech voice packs for use on supported Windows devices (Windows Vista, 7, 8.0, 8.1, and 10).

These voice packs can be used instead of the default Windows voice packs for English and the commercial Spanish voice packs from Cepstral. (The default Windows voice packs as well as the Cepstral voice packs for Windows may still be used for text-to-speech, if desired.)

- The Julie voice pack is for English text-to-speech users.
- The Violeta voice pack is for Spanish text-to-speech users.

The NeoSpeech voice pack is to be used only in conjunction with, and not separate from, the online assessments provided by the test delivery system. The NeoSpeech voice packs and the [NeoSpeech Voice Packs Installation Guide](#) can be downloaded from the Test Operations Management System (TOMS).

**Note:** You must have a user role assignment that grants you access to TOMS to download this software.

**Configuring Windows Text-to-Speech Settings**

This section explains how to configure Windows for using text-to-speech with the secure browser. The text-to-speech feature is available on Windows versions as listed in the *System Requirements* document. Using Table 3 as a reference, install voice packs from the indicated packages—these are the supported voice packs.

Windows devices are typically shipped with at least one default voice pack. Many of these default voice packs are recognized by the secure browser.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Voice Pack</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows (pre-installed)</td>
<td>Julie</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>Kate</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>Michael</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>Michelle</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MSAnna</td>
<td>English</td>
</tr>
<tr>
<td>Windows (pre-installed)</td>
<td>MS_EN-GB_HAZEL</td>
<td>English</td>
</tr>
</tbody>
</table>
The instructions in this section are for Windows 7. The process is similar for other versions of Windows.

1. Open the speech recognition tool in the Control Panel
   - Start menu → Control Panel → Speech Recognition
   - or
   - Select the [Start] menu, right-click on [Control Panel], select Open from the shortcut menu, and then select [Speech Recognition] (Figure 35).

2. In the Configure your Speech Recognition experience window, select [Text to Speech] (Figure 36).

3. Select the [Text to Speech] tab to configure default text-to-speech preferences (Figure 37).
   - Voice selection: If multiple voice packs are available, select the default voice.
b. Select [Preview Voice] to hear a sample of the voice and determine whether the selected voice requires a rate adjustment.

c. **Voice speed:** If necessary, adjust the voice speed. Drag the slider to make the voice speak slower or faster. To listen to the rate, select [Audio Output].

![Default text-to-speech preferences in Windows](image)

Figure 37. Default text-to-speech preferences in Windows

4. When you are finished selecting options, select [OK] to save your settings and close the Speech Properties window.

### Configuring OS X Text-to-Speech Settings

This section explains how to configure Mac OS X for using text-to-speech with the secure browser. The text-to-speech feature is available on OS X versions as listed in the System Requirements document. Using Table 4 as a reference, install voice packs from the indicated packages—these are the supported voice packs.

Mac OS X devices are typically shipped with at least one default voice pack. Many of these default voice packs are recognized by the secure browser.
### Table 4. Voice Packs Recognized by Secure Browsers—OS X

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Voice Pack</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac (pre-installed)</td>
<td>Agnes</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Alex</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Bruce</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Callie</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>David</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Fred</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Jill</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Junior</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Kathy</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Princess</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Ralph</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Samantha</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Tom</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Vicki</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Victoria</td>
<td>English</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Diego</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Javier</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Marta</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Monica</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (pre-installed)</td>
<td>Paulina</td>
<td>Spanish</td>
</tr>
<tr>
<td>Infovox (commercial)</td>
<td>Heather Infovox iVox HQ</td>
<td>English</td>
</tr>
<tr>
<td>Infovox (commercial)</td>
<td>Rosa Infovox iVox HQ</td>
<td>Spanish</td>
</tr>
</tbody>
</table>

The instructions in this section are for OS X 10.9. The process is similar for other versions of OS X.

1. Choose the **Apple** menu → **System Preferences** (Figure 38).

![Figure 38. Select OS X System Preferences](image)

2. Select the **[Dictation & Speech]** icon (circled in Figure 39).
3. In the Text to Speech section of the Dictation & Speech configuration window (Figure 40), set your default text-to-speech preferences.
   a. System Voice: If multiple voice packs are available, select the default voice.
   b. Select [Play] to hear a sample of the voice and determine whether the selected voice requires a rate adjustment.
   c. Speaking Rate: If necessary, adjust the voice speed. Drag the slider to make the voice speak slower (left) or faster (right). To listen to the rate, select [Play].
   d. When you are done, select the red X or bubble in the upper-left corner to save your settings and close the Dictation & Speech window.
Configuring Linux Text-to-Speech Settings

This section explains how to install voice packs on the supported Linux distributions. Using Table 5 as a reference, install voice packs from the indicated packages—these are the supported voice packs.

Table 5. Packages That Include Supported Voice Packs on Linux Distributions

<table>
<thead>
<tr>
<th>Distribution/Voice Pack</th>
<th>Available in Package</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ubuntu</strong></td>
<td></td>
</tr>
<tr>
<td>kal_diphone (Kevin American English male)</td>
<td>festvox-kallpc16k, festvox-kallpc8k</td>
</tr>
<tr>
<td>ked_diphone (Kurt American English male)</td>
<td>festvox-kdlpc16k, festvox-kdlpc8k</td>
</tr>
<tr>
<td>el_diphone (Castilian Spanish male)</td>
<td>festvox-ellpc11k</td>
</tr>
<tr>
<td><strong>Fedora</strong></td>
<td></td>
</tr>
<tr>
<td>cmu_us_awb_arctic_hpts (Scottish English male)</td>
<td>festvox-awb-arctic-hpts</td>
</tr>
<tr>
<td>cmu_us_bdl_arctic_hpts (American English male)</td>
<td>festvox-bdl-arctic-hpts</td>
</tr>
<tr>
<td>cmu_us_jmk_arctic_hpts (Canadian English male)</td>
<td>festvox-jmk-arctic-hpts</td>
</tr>
<tr>
<td>kal_diphone (Kevin American English male)</td>
<td>festvox-kal-diphone</td>
</tr>
<tr>
<td>ked_diphone (Kurt American English male)</td>
<td>festvox-ked-diphone</td>
</tr>
</tbody>
</table>

1. Install Festival for text-to-speech:
   - **Ubuntu**: `sudo apt-get install festival`
   - **Fedora**: `yum install festival`

2. Install Sound eXchange (SoX) for text-to-speech:
   - **Ubuntu**: `sudo apt-get install sox`
   - **Fedora**: `yum install sox`
Configuring ZoomText to Recognize the Secure Browser

ZoomText is a magnification and screen reading software that you can use with the secure browser. Use the following procedure to ensure ZoomText recognizes the secure browser.

1. If ZoomText is running, close it.
2. In the Windows Explorer, go to the installation directory for your version of ZoomText. For example, if you have ZoomText version 10.1:
   - Go to C:\Program Files (x86)\ZoomText 10.1\ (Windows 64-bit)
   - Go to C:\Program Files\ZoomText 10.1\ (Windows 32-bit).
3. In a text editor, open the file ZoomTextConfig.xml.
4. Search for line containing the D2DPatch property, similar to the following:
   <Property name="D2DPatch" value="*,~dwm,~firefox,~thunderbird"/>
5. In the value attribute, add “casecurebrowser” for California’s secure browser:
   <Property name="D2DPatch" value="*,~dwm,~firefox,~casecurebrowser,~thunderbird"/>
6. Save the file, and then restart ZoomText.
Using Permissive Mode

Additional Resources:

Permissive mode is a setting that allows students to use accessibility software in addition to the secure browser.

Permissive mode activates when the student is approved for testing. Students who have the Permissive mode setting enabled should not continue with the sign-in process until the accessibility software is configured correctly.

To use accessibility software with the secure browser:

1. Open the required accessibility software.
2. Open the secure browser. Begin the normal sign-in process up to the test administrator/test examiner approval step.
3. When a student is approved for testing, the secure browser allows the operating system’s menu and task bar to appear.
4. The student must immediately switch to the accessibility software that is already open on the device so that it appears over the secure browser. The student cannot select (click) within the secure browser until the accessibility software is configured.
   - **Windows**: To switch to the accessibility software application, select the application in the task bar.
   
   **Note**: When using Windows 8 and above, the task bar remains on-screen throughout the test after enabling accessibility software. However, forbidden applications are still prohibited.

   - **Mac**: To switch to the accessibility software application, select the application in the dock.
5. The student configures the accessibility software settings as needed.
6. After configuring the accessibility software settings, the student returns to the secure browser. At this point, the student can no longer switch back to the accessibility software. If changes need to be made, the student must sign out, make the changes, and then sign in again.
7. The student continues with the sign-in process.
Notes:

- Permissive Mode is available only for devices running supported desktop Windows and Mac operating systems. For information about supported operating systems, see the *Technical Configuration and Specifications Guide for CAASPP Online Testing*.
- Accessibility software must be certified for use with the test delivery application.
- Forbidden applications will still not be allowed to run.
Using Audio Transcripts (Includes Braille)

Content that is accessed through listening while accessing the English language arts/literacy listening passages with the option of closed captioning is made available in refreshable braille or on-screen as a single text presentation called Audio Transcript.

Students who see this accommodation on-screen select the [Transcript] icon to open a pop-up box that contains a transcript of what is otherwise presented via closed captioning.

Students who required a braille transcript select the [Print Passage] icon; the test administrator approves the request and prints the braille transcript. Note that students also must have the braille embedded accommodation set to print transcripts in braille.
Creating a Test Session for Practice and Summative Testing

This section provides a brief overview of the processes for verifying students’ test settings for summative testing, creating a test session, approving students to enter the session, and viewing embossing and enlarged-text requests.

Step 1. Test Administrator: Review the student’s test settings in the Test Operations Management System (TOMS).

1. Open an Internet browser.
2. Go to http://www.caaspp.org/ and select the [Test Operations Management System (TOMS)] button.
3. Log on using your Single Sign-On account.
4. When logged on, select the [Students] button.
5. Using the Search for Students Web form shown in Figure 41, either enter the student's name or other identifying information and then select [SEARCH] to find a student.

![Figure 41. Searching for a student in TOMS](image)

6. Select the magnifying glass [View] icon for the student in the Actions column, shown in Figure 42, to access the Student Profile screen in Figure 43.
7. Select the [Test Settings] tab (Figure 43).

8. Review the student’s test settings before approving him or her for testing in the Student Profile, shown in Figure 43 and Figure 44. The following instructions, which can be undertaken by your CAASPP test site coordinator or your local educational agency (LEA) CAASPP coordinator, ensure that the student has the appropriate Individuals with Disabilities Education Act (IDEA) indicators (special education and a primary disability) or Section 504 plan for the applicable settings.

   a. Under the “Embedded Accommodations” heading, the Braille (E and M) and the Streamline (Includes zoom levels greater than 3X). . . . (E, M, CE, and CM) checkboxes (Figure 44) should be selected if a screen reader or a magnifier will be used. Braille (E and M) should be selected if Audio Transcript (Listening) will be used in conjunction with braille. Note that the selection of braille includes the ability to emboss on demand; the print-on-demand accommodation does not have to be set specifically.

   b. Under the “Embedded Designated Supports” heading, the Permissive Mode (use with assistive software and devices) (E, M, S, CE, and CM) checkbox (Figure 44) should be selected if a screen reader or magnification will be used.

   c. Under the “Embedded Designated Supports” heading, the appropriate option on the Print Size (E, M, S, CE, and CM) drop-down (Figure 44) should be selected if an enlarged font will be used or if the default zoom levels for on-screen test presentation need to be set.

   d. Under the “Non-Embedded Designated Supports” heading, the Magnification (E, M, S, CE, CM, and R) checkbox (Figure 44) should be selected if a magnifier will be used. Magnification also may be used in association with print-on-demand.
Figure 43. Test Settings in TOMS, top

Figure 44. Test Settings in TOMS, bottom

Note: Other settings for which the student has the proper IDEA/Section 504 indicator should be selected as well.

Alert: Permissive Mode and Magnification should be selected if a magnifier or screen reader will be used.

Reminder: Your LEA CAASPP coordinator should contact the California Technical Assistance Center by phone at least one to two business days before testing to have print-on-demand enabled.
9. Select [UPDATE] to save changes, then log off using the [Logout] button when you have finished reviewing the test settings in TOMS.

Step 2. Test Administrator: Log on to the Test Administrator Interface.

10. Open an Internet browser.

11. Go to http://www.caaspp.org/ and select the [Test Administrator Interface for All Online Tests] button (summative testing) or [Practice & Training Tests] button (practice or training tests).

12. Log on with your Single Sign-On username and password in the Web form that is shown in Figure 45.

![Logon Web form](image)

Figure 45. Test Administrator Logon Web form

Step 3. Test Administrator: Create a test session.

13. In the test selection box shown in Figure 46 (operational assessments) or Figure 47 (practice and training tests), select the test(s) to include in the test session.
14. Select the [Start Operational Session] button. The Session ID, such as the one in Figure 48, will be generated automatically. Please make a note of this session ID. The session ID for the training tests starts with “TRAIN.”

Step 4. Student: Log on to a test session in the secure browser.

15. Open Job Access with Speech (JAWS®) on the student device.
16. To access an operational or training test, open the secure browser on the student device. The student Please Sign In Web form, shown in Figure 49, will display.

![Image of Please Sign In Web form]

**Figure 49. Student Please Sign In Web form**

17. If the student needs to take a practice test, select [Go to the Practice and Training Test Site].

18. On the Please Sign In Web form, students must enter their first name, Statewide Student Identifier (SSID), and the Session ID, and then select [Sign In].
   a. Press the [Tab] key to navigate to the First Name field. The student should enter his or her first name.
   b. Press the [Tab] key to navigate to the SSID field. Enter the SSID.
   c. Press the [Tab] key to navigate to the first text box for the Session ID. Enter the first portion of the hyphenated text given by the test administrator.
   d. Press the [Tab] key to navigate to the second text box for the Session ID. Enter the next set of hyphenated text given by the test administrator.
   e. Press the [Tab] key to navigate to the third text box for the Session ID. Enter the remaining text given by the test administrator.
   f. Press the [Tab] key to navigate to the [Sign In] button. Press the [Enter] key to log on.

**Note:** Session IDs will have three parts. As a result, the Session ID field is split into three text boxes. The hyphens are automatically provided.


20. On the Practice and Training Test Sign In screen (shown in Figure 50), have students uncheck Guest User and Guest Session using the [Space Bar] key. Students should enter their SSID, first name/confirmation code, and the Session ID, and then select [Sign In].

**Optional:** While students may log on as a guest user, logging on with their own SSID/First Name is recommended to aid tracking print requests on the Test Administrator Interface.

**Required:** In order to enable print requests, students must not utilize Guest Session. Please make sure that the [Guest Session] checkbox is unchecked.
Step 5. Student: Verify student information in the secure browser.

This screen requires students to verify personal information.

21. On the *Is This You?* screen (shown in Figure 51), the student must verify his or her personal information. If the information is correct, the student should select [Yes].
   a. To listen to each line of text, press the [Down] arrow. The listed demographic information will be read aloud.
   b. To move to the [No] and [Yes] buttons, press the [Tab] key.
   c. To select the [No] or [Yes] button, press [Enter].
Step 6. **Student: Select a test in the secure browser.**

This screen lists the available tests for the student's grade level (Figure 52). Tests are listed in a two-column table. Students will first hear the test name, then the opportunity number, and then the link to choose that test.

![Figure 52. Selecting a student’s test](image)

22. To move to the first test listed on this screen, press the [Tab] key.

23. To navigate between the test names, press the [Tab] key. The order of navigation is from left to right and top to bottom, in a zigzag pattern.

24. To start or resume a test, press the [Enter] key.

**Step 7. Test Administrator: Approve student for operational or training testing.**

25. On the Test Administrator Interface, the student's name and selected test will appear in the **Approvals** preview box, shown in Figure 53.

![Figure 53. Approving a student’s test](image)

26. Select the [Approvals (#)] button. The **Approvals and Student Test Settings** screen will display.

27. On the **Approvals and Student Test Settings** screen, select the [Details] eye [ ] icon, shown in Figure 54, for a student.

The student's test settings will appear on the screen.
28. If you have not done so already, verify that all other test settings are correct (see Step 1). Contact your CAASPP test site coordinator or LEA CAASPP coordinator to have them set if they are not.

- Confirm that streamline mode, permissive mode, zoom, and items and stimuli test settings are correct.

- **If the field for student’s test language is not set to Braille, the test administrator should not approve the test.** The student’s information must be updated in TOMS before the student can test. If the test was approved before the test settings were corrected, the LEA CAASPP coordinator or CAASPP test site coordinator must complete a Security and Test Administration Incident Reporting System form to file a report and then, when directed, an appeal to have the test reset.

- The options for Braille Type may be in the Approvals and Student Test Settings screen. The Braille Type options for each subject matter is as follows:
  - Mathematics: Nemeth
  - English language arts/literacy (ELA): Contracted or Uncontracted

- Emboss Request Type is a test setting that determines if embossing requests are generated automatically, without student input, or manually, with student input. The default options for each test subject are as follows:
  - Mathematics: Auto-Request
    (As students move through the test, embossing requests will automatically appear on the Test Administrator Interface.)
  - ELA: On-Request
    (Students must manually request printing of passages and items as they move through the test.)

29. After you have verified the student’s test settings are correct, you may approve the student. Select [Approve]. The student will appear in the “Students in Your Test Session” table.
Step 8. **Student: Verify test settings.**

This screen lists student test information. The student needs to verify that all test information and settings are correct. Settings may look different for different assessments.

30. After you approve the student, he or she will see the **Is This Your Test?** screen (shown in Figure 55). The student should verify that all test information is correct and select **[Yes]**.
   a. To listen to each line of text, press the **[Down]** arrow.
   b. To move to the **[No]** and **[Yes]** buttons, press the **[Tab]** key. (You can also press the **[B]** key.)
   c. To select the **[No]** or **[Yes]** button, press **[Enter]**.

![Figure 55. Is This Your Test? student verification screen](image)

31. If the information is not correct, the student should select **[No]** and communicate the incorrect information to the test administrator.

Step 9. **Student: Review test instructions and help.**

This screen provides a basic overview of test rules and available tools. See the **Navigating Within the Test** section for instructions on how to use JAWS to navigate online assessments.

32. Review the information on the **Instructions and Help** screen, shown in Figure 56.

![Figure 56. Test Instructions and Help screen](image)
33. To proceed and start the test, select [Begin Test Now].

**Step 10. Student: Submit print requests.**

34. For tests that require manual embossing requests or enlarged printing, students must open the context menu for a passage or item and select the print option. The request will be sent to the test administrator. The [Context Menu] icon is circled in the sample item in Figure 57.

- For **passages**, the student must select the print option in the passage menu. To print a passage, select the [Print Passage] printer icon.

- For **items**, the student must select the printer option in the item's menu. To open the menu, select the [Context Menu] icon at the top right of the item. The menu will include a print option. Select [Print Item].

- For **passages and items**, the student must select the [Print Page] button on the upper right-hand side of the student interface.

![Figure 57. Submitting an embossing request](image)

**Reminder:** For tests that have **auto-request** enabled for the Emboss Request Type test setting, the embossing requests will automatically appear on the Test Administrator Interface as the student moves through the test. Mathematics tests will default to **auto-request** and ELA tests will default to **on-request** unless otherwise indicated by the test administrator in **Step 7**.

**Step 11. Test Administrator: Approve printing requests.**

35. The Students in Your Test Session table, sampled in Figure 58, includes a **Requests** column. When a student submits an embossing request, the **Requests** column header changes color and a [Print] button with an icon of a printer appears for the student who submitted the request.

![Figure 58. Students in Your Test Session table](image)
36. Select the [Print] button for the student who submitted the print request. The Student Print Request(s) window, like the one in Figure 59, will open.

![Figure 59. Student’s embossing requests]

37. Review the print requests. Multiple requests may appear.

38. Select [Approve] for each print request that is allowed. Select [Deny] for incorrect (or duplicate) print requests.

39. Process the print requests. (For more information, refer to the “Sending Requested BRF and PRN Files to the Embosser” subsection.)

**Note:** Embossed tests are not labeled. The test administrator must keep track of student print requests as shown in the “Student Print Request” screen.

**Policy: Deleting Files and Discarding Test Material**

- When the student’s test session is completed, all digital and printed test materials must be permanently deleted and securely destroyed.
- For instructions on deleting downloaded files, refer to the “Removing Files from the Web Browser Download Archive” subsection.
- Printed test materials must be securely destroyed.
Chapter 4. Requirements for Testing Students with Visual Impairments
Introduction to Testing Students with Visual Impairments

This portion of the guide provides information about supported hardware, software, and supported version requirements and how to configure Job Access with Speech (JAWS®). General information about administering a test to a student with a braille accommodation and printing test material is also included.

Content

Additional Resources:
- Creating a Test Session for Practice and Summative Testing—subsection in this manual

The following bulleted list contains brief descriptions of each section in this portion of the guide.

- Technology Requirements outlines the supported operating systems and hardware and software requirements for students and test administrators, including test settings in the Test Operations Management System for consideration.

- Overview of Testing Students Requiring Braille provides an introduction to testing with braille, including a screenshot of the sample interface that students will use and how test administrators configure embossing software, and details about braille-ready format and printer output file types and how to configure them. Information on how to delete temporary downloaded files is also provided.

- Configuring and Administrating Job Access with Speech (JAWS®) includes a table of configurable student test settings on the Test Operations Management System that may be relevant to visually impaired students, instructions for configuring JAWS to work with the secure browser.
Technology Requirements

Additional Resources:
- Freedom Scientific Blindness Solutions: JAWS® Web page—http://www.freedomscientific.com/Products/Blindness/JAWS

The technology requirements in this section are specific to online testing with braille. The hardware and software that are used for braille testing require the use of a supported Windows operating system.

For information about complete requirements for online testing, refer to the Technical Specifications and Configuration Guide for CAASPP Online Testing.

Supported Operating Systems and Related Requirements

For the 2017–18 test administration, the following must be installed on computers used for braille test administration (see Table 6).

Table 6. Supported Operating Systems and Related Requirements

<table>
<thead>
<tr>
<th>Operating Systems</th>
<th>Requirements for Student Computers</th>
<th>Requirements for Test Administrator Computers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Windows 7, 8.0–8.1, 10</td>
<td>Windows 7, 8.0–8.1, 10 Note: Test administrators must use a computer running an operating system that is supported by Duxbury and ViewPlus software. These systems are supported by both the American Institutes for Research (AIR) and these third-party companies.</td>
</tr>
</tbody>
</table>

Hardware
- Refreshable Braille Display (RBD) Note: AIR recommends an RBD that has a minimum of 40 cells, such as the ALVA USB 640 40-cell Braille Display. However, if students prefer using a display with fewer cells (such as the APEX HumanWare Braille Display 18), they may do so.
- ViewPlus Tiger Max Embosser
Requirements for Testing Students with Visual Impairments

Technology Requirements

<table>
<thead>
<tr>
<th>Requirements for Student Computers</th>
<th>Requirements for Test Administrator Computers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Software</strong></td>
<td><strong>Software</strong></td>
</tr>
<tr>
<td>Windows Secure Browser 10.0</td>
<td>Supported Web browser</td>
</tr>
<tr>
<td>Job Access with Speech (JAWS®)</td>
<td>Duxbury Braille Translator 11.1, 11.2, 11.3,</td>
</tr>
<tr>
<td>Screen Reader 16–18</td>
<td>or 12.1</td>
</tr>
<tr>
<td></td>
<td>ViewPlus Desktop Embosser driver</td>
</tr>
<tr>
<td></td>
<td><em>(for ViewPlus Tiger Max Embosser)</em></td>
</tr>
</tbody>
</table>

**Note:** For security purposes, tablets are not supported for braille testing and should not be used. Only desktop and laptop computers should be used when testing with the braille accommodation.

Software Resources

This subsection provides resources for downloading software required for testing with braille.

Software for Students

Windows Secure Browser

Students will use the same Windows secure browser that is used for all online testing. To download the Windows secure browser, select the [Secure Browsers] button on the CAASPP Portal. For secure browser installation instructions, refer to the Technical Specifications and Configuration Guide for CAASPP Online Testing.

JAWS Screen Reader

Students can use the same JAWS screen reader with the Windows secure browser as with other computer applications. For more information about JAWS, or to download the product, please go to the Freedom Scientific Blindness Solutions Web page.

Software for Test Administrators

Duxbury Braille Translator (DBT)

This software allows printing of items and stimuli that do not contain images. The DBT software may be downloaded on the Duxbury DBT Win Main Menu Web page.

ViewPlus Desktop Embosser Driver

The driver includes the Tiger Viewer software, which allows printing of items and stimuli that contain tactile or spatial components (e.g., images). The driver may be downloaded from the ViewPlus Tiger Desktop Series Drivers Web page.

Test Operations Management System (TOMS) Test Settings for Consideration

Table 7 is a list of all test settings in TOMS that should be considered for students with visual impairments prior to the start of summative testing. For a comprehensive explanation of every test setting available in TOMS, please refer to the file specifications in the Online Student Test Settings template posted on the California Assessment of Student Performance and Progress (CAASPP) TOMS Web page.
<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Accommodation</td>
<td>Audio Transcript (Includes Braille Transcript)</td>
<td>- Blank (default)</td>
<td>Smarter English Language Arts/Literacy (ELA) Listening</td>
<td>Content that is accessed through listening during the course of the assessment with the option of closed captioning is made available in braille or on-screen as a single text presentation (rather than one line at a time as provided by closed captioning).</td>
</tr>
<tr>
<td>Embedded Accommodation</td>
<td>Braille</td>
<td>- Blank (default)</td>
<td>Smarter ELA</td>
<td>Braille is a language support.</td>
</tr>
<tr>
<td>Embedded Accommodation</td>
<td>Streamlined Interface</td>
<td>- Blank (default)</td>
<td>Smarter ELA</td>
<td>Not available for the California Alternate Assessment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Selected</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Smarter ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
</tbody>
</table>
### Requirements for Testing Students with Visual Impairments

#### Technology Requirements

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Accommodation</td>
<td>Text-to-Speech Passages (ELA)</td>
<td>• Blank (default)</td>
<td>Smarter ELA PT</td>
<td>• Text-to-speech is read aloud to the student via embedded text-to-speech technology. The student is able to control the speed as well as raise or lower the volume of the voice via volume control.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selected</td>
<td></td>
<td>• This accommodation is available for all grades.</td>
</tr>
<tr>
<td>Non-Embedded Accommodation</td>
<td>Print on Demand (Note: This accommodation is not required when the braille accommodation has been selected,)</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>• Print-on-demand for test stimuli and items, stimuli only, or items only is set by having the local educational agency CAASPP coordinator contact the California Technical Assistance Center (CalTAC) only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Stimuli</td>
<td>Smarter Mathematics</td>
<td>• Configuring this accommodation in the upload file or on the TOMS user interface will not automatically activate it for the assigned student.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Items</td>
<td>CAA ELA</td>
<td>• All requests must be approved by CalTAC and the California Department of Education.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Items and Stimuli</td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
</tbody>
</table>
### Technology Requirements

**Type** | **Display Name** | **Possible Values** | **Test** | **Description**
--- | --- | --- | --- | ---
Non-Embedded Accommodation | Read-Aloud Passages | • Passages | • Smarter ELA  
• CAA ELA | Text is read aloud to the student by a trained and qualified human reader. All or portions of the content may be read aloud.

**Embedded Designated Support** | Color Contrast | • Default (Black on White)  
• Reverse Contrast  
• Black on Rose  
• Medium Gray on Light Gray  
• Yellow on Blue | • Smarter ELA  
• Smarter Mathematics  
• CAA ELA  
• CAA Mathematics  
• CAST | By default, tests are presented with black text on a white background. Students who require a different combination of text and background should be assigned the appropriate setting.

**Embedded Designated Support** | Permissive Mode | • Blank (default)  
• Selected | • Smarter ELA  
• Smarter Mathematics  
• CAA ELA  
• CAA Mathematics  
• CAST | Permissive mode should be enabled for students who require access to approved accessibility software and/or devices in order to interact with the test (e.g., screen readers, magnifiers, speech-to-text, braille screen readers, and refreshable braille displays, etc.). When permissive mode is disabled, the only application that can be open on the computer is the secure browser.
<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Designated Support</td>
<td>Print Size</td>
<td>• No zoom applied (default)</td>
<td>Smarter ELA</td>
<td>• Sets student’s font size accommodation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1.5X</td>
<td>Smarter Mathematics</td>
<td>• This is the font size the student should have when starting a test.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1.75X</td>
<td>CAA ELA</td>
<td>• The selected font size becomes the default for all items in that student’s test.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 2.5X</td>
<td>CAA Mathematics</td>
<td>• The default font size for all tests is 14 point.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 3X</td>
<td>CAST</td>
<td>• The default font for mathematics tests is Verdana.</td>
</tr>
<tr>
<td>Embedded Designated Support</td>
<td>Text-to-Speech</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>Text is read aloud to the student via embedded text-to-speech technology. The student is able to control the speed as well as raise or lower the volume of the voice via a volume control.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Items (ELA)</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Stimuli and Items (Mathematics)</td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Items (ELA) and Stimuli and Items (Mathematics, Science)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Embedded Designated</td>
<td>Color Contrast</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>Test content of online items may be printed with different colors.</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td>• Selected</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td>Non-Embedded Designated</td>
<td>Magnification</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>The size of specific areas of the screen (e.g., text, formulas, tables, graphics, and navigation buttons) may be adjusted by the student with an assistive technology device.</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td>• Selected</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
</tbody>
</table>
**Type** | **Display Name** | **Possible Values** | **Test** | **Description**
--- | --- | --- | --- | ---
Non-Embedded Designated Support | Read-Aloud Items | • Blank (default)  
• Selected | • Smarter ELA  
• Smarter Mathematics  
• CAA ELA  
• CAA Mathematics  
• CAST | Text is read aloud to the student by a trained and qualified human reader. All or portions of the items may be read aloud.
Overview of Testing Students Requiring Braille

Additional Resources:


About Tests and Braille

About Using Braille in Training Tests:

- Students who need to take a training test using the braille accommodation must log on to a training test session with a test administrator.
- Students cannot emboss test content directly from their computers.
- Students should use the secure browser for training tests so that their experience with testing is more similar to the operational testing environment.

The online test delivery system (TDS) is available to students who use braille, allowing them to access the adaptive algorithm and use the online systems in a similar fashion to general education students.

Students who have a braille accommodation will receive the online assessments in an accessible format via the TDS’s Streamline Mode (see Figure 61). The Streamline feature is optimized to allow supported screen-reading software and printing of passages and test items to braille embossers.

All test content may be delivered to a braille embosser.

Alert: All mathematics content requiring Nemeth translation cannot be delivered to a Refreshable Braille Display (RBD).

English Language Arts/Literacy (ELA)

The English language arts/literacy (ELA) tests will present students with items in either contracted or uncontracted literary braille:

- Items that contain only text will be sent to an RBD.
- Items that contain text and images that cannot be read by an RBD will be sent to a braille embosser.

Mathematics

Students will take the braille hybrid adaptive test (HAT) option for the Smarter Balanced Summative Assessments for Mathematics. All test content will be delivered in English Braille American Edition contracted with Nemeth mathematics code via a braille embosser.

The braille HAT includes the following:

- Adaptive segment, which will include only items that have no graphics
- Fixed form segment, which will include items with graphics
• Pre-embossed graphic supplement

See the subsection, “Using Braille Hat” for additional details about the new braille HAT option.

**Science**

Students who have been assigned the braille accommodation for the California Science Test field test have the option of receiving items printed via embosser or refreshable braille.

**Using Braille HAT**

Serving as an alternative to the online adaptive and paper fixed form options, the braille HAT allows LEAs to order a set of preprinted, embossed graphics for students’ mathematics tests when the students do not otherwise have access to an embossing printer that works with the Smarter Balanced assessment items.

This option provides students with access to an efficient online adaptive test that simplifies logistical burdens for educators and students. With the braille HAT option, students can use the online test administration platform, including embedded accessibility resources, while also accessing the pre-embossed graphics.

These graphics packages must be ordered by the local educational agency (LEA) CAASPP coordinator for a mathematics summative assessment by contacting the California Technical Assistance Center (CalTAC) by phone at 800-955-2954 or by e-mail at caltac@ets.org at least 14 business days prior to the start of testing at the school. Materials are available only for students in your LEA who have the braille accommodation assigned.

**Order of Testing**

The Braille HAT consists of a fixed-form segment, a computer adaptive segment, and a performance task. The segments are presented to students in this order.

1. **Fixed-Form Segment**: The fixed-form segment includes items with tactile graphics. These items can be embossed at the testing location or received as a package of pre-embossed materials ordered from CalTAC.

2. **Computer Adaptive Segment**: The computer adaptive segment does not include items with tactile graphics. All items in this segment can be presented to students using an RBD.

3. **Performance Task**: The performance task does not include items with tactile graphics. All items in this segment can be presented to students using an RBD.
Note: If there are multiple students in the school who would benefit from the same package of pre-embossed materials, the pre-embossed materials may be stored securely and used by each student individually as he or she takes the assessment. Students sharing the same package of pre-embossed materials must be scheduled to take the assessment at separate times. In such cases, a test administrator must review the materials to ensure that each student left no markings or information on the sheets that would compromise the validity of results. After the school finishes testing every student who needs these materials, the materials must be securely recycled.

Selecting Braille HAT

The mathematics section of the Smarter Balanced Summative Assessments listing on the Operational Test Selection screen in the Test Administrator Interface includes an option for selecting the Mathematics Braille Hybrid Adaptive Test (indicated in Figure 60).

![Operational Test Selection screen showing the option for Braille HAT](image)

Figure 60. Operational Test Selection screen showing the option for Braille HAT

When starting test sessions, be sure to select the appropriate option for your students. The Your Tests page in the student test delivery system also lists the HAT option. Verify that your students selected the appropriate option when you approve them for testing.

Using Streamline Mode

The braille reading format is selectable within the student’s test language field within the TDS. When braille is selected, the test layout will default to Streamline Mode. The Streamline Mode layout, shown in Figure 61, is different from the standard test interface and is designed to interact with Job Access with Speech (JAWS®) navigation. When Streamline Mode is
enabled, the test content is laid out vertically. Passages and stimuli are located at the top of the screen, with questions appearing below.

**Figure 61. Sample Streamline Mode Layout**

**Increasing Font Size**

Students who have a braille accommodation but also have usable vision may use the embedded Zoom tool available in the test to adjust the size of text and graphics as necessary, up to four levels of increased magnification. Note that Level 0 is the default. Zoom levels are as follows:

<table>
<thead>
<tr>
<th>Level #</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 0</td>
<td>No zoom, 14 point text</td>
</tr>
<tr>
<td>Level 1</td>
<td>1.50x zoom</td>
</tr>
<tr>
<td>Level 2</td>
<td>1.75x zoom</td>
</tr>
<tr>
<td>Level 3</td>
<td>2.00x zoom</td>
</tr>
<tr>
<td>Level 4</td>
<td>2.50x zoom</td>
</tr>
</tbody>
</table>

With the permissive mode setting, students may increase the font size of items and stimuli to sizes in excess of the 2.50x permitted by the Zoom tool.
Configuring Printing Software on Test Administrator Computers

The test delivery system is designed to allow students to print secure test material with test administrator approval. This means that the software used for sending print requests to the braille embosser must be installed on the computers that test administrators will use for test sessions.

The embossed output for student print requests varies depending on the file type associated with a test item. There are two types of files:

**Braille Ready Format (BRF):** The BRF file type handles print requests for items containing only text, including formatted tables and poems. This file type is handled by the Duxbury Braille Translator (DBT) software.

**Printer Output File (PRN):** The PRN file type handles print requests containing tactile or spatial components such as images, diagrams, etc. This file type is handled by the ViewPlus Tiger Viewer software.

Upon approving a print request, the test administrator must send the file to the embosser using either the DBT software (for BRF files) or ViewPlus (for PRN files) software. The following section provides steps for configuring BRF and PRN files using sample files that are available under the Help menu on the Test Administrator Practice site, which is linked on the CAASPP Online Practice and Training Tests Portal.

Instructions for printing files are located in the “Sending Requested BRF and Printer Output Files (PRNs) to the Embosser” subsection.

**Alert:** Test administrators will need to ensure that the Braille Type setting for the student is correct prior to approving the student for testing. The Braille Type setting (Nemeth, Contracted, or Uncontracted) determines what file type will be used for student print requests.

Opening Sample BRF and PRN Files on Test Administrator Computers

This section contains instructions for opening sample BRF and PRN files with the correct software program and setting default printing preferences. The DBT and ViewPlus Tiger Viewer software must already be installed.

Configuring BRF Files with the DBT Software

2. Select the [Practice & Training Tests] button and select [Test Administrator and Test Examiner Practice and Training Site] button.
3. Log on using your Single Sign-On account.
4. When logged on, select the [Help Guide] menu button in the top right-hand corner of the screen (shown in Figure 62).
5. Select the **Show/Hide** icon [ ].

6. Select the **[Appendices]** link in the left navigation column.

7. Select the **[Sample Braille Files]** link.

8. Select **[Sample BRF File]**. The file dialog window, shown in Figure 63, will open.

9. From the drop-down list next to **Open with**, select **Duxbury Braille Translator (default)** and then select **[OK]**.

10. This will open the sample file in the DBT program. Continue to Step 15.

11. If the **Duxbury Braille Translator** is not available as a selectable program, follow Steps 12–14.

12. To add DBT as the default program for opening BRF files:
   a. Select **[Browse]**. The **Choose Helper Application** window, shown in Figure 64, will open.
b. Scroll down or navigate to the “Duxbury” folder and open it.

c. Open the DBT folder and select **dbtw.exe**, circled in Figure 65.

13. In the **Open with** program selection window (shown in Figure 66):

a. Make sure the **[Duxbury Braille Translator]** icon is selected.

b. Check the box for **Do this automatically for files like this from now on**.

14. Select **[OK]**. The **Duxbury Braille Translator** program will open and preview the file.

**Note:** If the **Import File** window appears, set the template to either **English (American) – Standard Literary Format** (for DBT 11.2 or earlier) or **English**
15. In the Duxbury Braille Translator window shown in Figure 67, open the Document menu and then select [Embossing Setup]. The Document: Embosser Setup window will open.

![Figure 67. The Duxbury Braille Translator window](image)

16. In the Document: Embosser Setup window (shown in Figure 68), the following must be selected:
   
   - **Brailler Device**: ViewPlus Max (or other ViewPlus embosser)
   - The following Desired Braille Document Formatting options must be set:
     - [Emboss in Interpoint] check box is **not** selected
     - Top margin in lines: 2
     - Binding margin in characters: 5

![Figure 68. Document Embosser Setup window](image)

17. When you are done, select [OK].

18. In the Duxbury Braille Translator window (Figure 69), open the Global menu and then select [Formatted Braille Importer]. The Global Formatted Braille Importer window will open.
19. In the Global: Formatted Braille Importer window, select the box for Read formatted Braille without interpretation and select [OK].

20. In the Duxbury Braille Translator window (shown in Figure 70), select the File menu and then select [Emboss]. The File: Emboss… window will open.

21. In the File: Emboss… window (shown in Figure 71), ensure that only one copy is being printed and that the page range is set to All.

22. Select [OK].
Configuring PRN Files with the Tiger Viewer Software

2. Select the [Practice & Training Tests] button, and select [Test Administrator and Test Examiner Practice and Training Site].
3. Log on using your Single Sign-On account.
4. When logged on, select the [Help Guide] menu button in the top right-hand corner of the screen (shown in Figure 72).

![Figure 72. Selecting the Help Guide menu]

5. Select the [Show/Hide] icon [ ].
6. Select the [Appendices] link in the left navigation column.
7. Select the [Sample Braille Files] link.
8. Select [Sample PRN File]. The file dialog window, shown in Figure 73, will open.

![Figure 73. Opening prnsample.prn dialog box]

9. From the drop-down list next to Open with, select Tiger Viewer and then select [OK]. This will open the sample file in Tiger Viewer. Skip to Step 19.
10. If Tiger Viewer is not available as a selectable program, follow Steps 11–18 below.
11. To add Tiger Viewer as the default program for opening PRN files, select [Browse]. The Choose Helper Application window will open.
12. Scroll down or navigate to the “ViewPlus” folder shown in Figure 74 and open it.
13. Open the “Tiger” folder, circled in Figure 75.

14. The “Tiger” folder may contain several “ViewPlus . . .” embosser folders. Open the “ViewPlus Max” folder, circled in Figure 76.

15. In the “ViewPlus Max” folder, select **TigerViewer.exe** (circled in Figure 77), and then select [Open]. The **Tiger Viewer** program will now appear in the **Open with . . .** program selection window.
16. In the Open with program selection window (shown in Figure 78), make sure Tiger Viewer is selected.

17. Check the box for Do this automatically for files like this from now on.

18. Select [OK]. The Tiger Viewer program will open and preview the file.

19. In the Tiger Viewer window shown in Figure 79, open the File menu and then select [Print].

20. The Print current PRN file window will open.
21. In the *Print current PRN file* dialog box (shown in Figure 80), the following must be selected:

- **Printer**: Select *ViewPlus Max* or other supported ViewPlus embosser.
- **Copies**: Ensure that only one copy is being printed.

![Figure 80. Print current PRN file dialog box](image)

22. When you are done, select [Print].

**Policy: Deleting Files and Discarding Test Material**

- When the student’s test session is completed, all digital and printed test materials must be permanently deleted and securely destroyed.
- For instructions on deleting downloaded files, refer to the “Removing Files from the Web Browser Download Archive” subsection.
- Printed test materials must be securely destroyed.

**Sending Requested BRF and Printer Output Files (PRNs) to the Embosser**

The instructions in this subsection assume the test administrator has begun a test session and approved a print request from a student.

**Alert**: When administering tests, be sure to plug the embosser into the same USB port that was used when it was first set up for testing. Otherwise, the computer may identify the embosser as a new device and require you to set it up again.

**Printing BRF Files**

1. Upon approving a print request for a test passage or item that will be printed in BRF format, a print dialog box like the one shown in Figure 81 will open.
2. Select Open with (not Save File).
3. In the drop-down list, make sure “Duxbury Braille Translator” is selected.
4. Select [OK]. The Import File dialog box will open.
5. On the Import File dialog box (see Figure 82), ensure that the following are selected:
   - Template:
     - For DBT 11.2 or earlier: “English (American) – Standard Literary Format”
     - For DBT 11.3 or later: “English (BANA Pre-UEB) – Literary Format”
   - Import Filter: Formatted braille
6. Select [OK]. The Duxbury Braille Translator preview window will open (see Figure 83).
7. In the Duxbury Braille Translator preview window, shown in Figure 83, open the File menu and select [Emboss…]. The File: Emboss… dialog box will open.
8. In the File: Emboss… dialog box, shown in Figure 84, ensure the following are selected:
   - Copies: 1
   - Page range: All
   - Brailler Device: Viewplus Max (or other ViewPlus embosser)

9. When you are ready, select [OK]. The print request will be sent to the Tiger Max embosser.

Printing PRN Files
1. Upon approving a print request for a test passage or item that will be printed in PRN format, a print dialog box like the one shown in Figure 85 will open.
   a. Select Open with (not Save File) once the dialog box opens.
   b. In the drop-down list, make sure “Tiger Viewer” is selected.
   c. Select [OK]. The Tiger Viewer preview window will open.
2. In the Tiger Viewer preview window, shown in Figure 86, open the File menu and then select [Print]. The Print current PRN file dialog box will open.

3. In the Print current PRN file dialog box, shown in Figure 87, the following must be selected:
   - **Printer**: Select ViewPlus Max or other supported ViewPlus embosser.
   - **Copies**: Ensure that only one copy is being printed.
4. When you are ready, select [Print]. The print request will be sent to the Tiger Max embosser.

**Removing Files from the Web Browser Download Archive**

Most supported Web browsers automatically save downloaded files. If your computer automatically saves the BRF and PRN files, you will need to ensure that no one else can print the requested test materials. For security purposes, all test-related files must be deleted from your Web browser’s download archive, and all hard copies must be securely destroyed.

**Google Chrome**

1. Open Google Chrome.
2. Open the [Chrome Menu] icon in the upper-right corner.
3. Select [Downloads]. The Downloads tab will open.
4. Remove all test-related files.
   - **Option 1:** For each file, select the [X] icon associated with each file.
   - **Option 2:** Select the [Clear all] link at the top of the page. (This will not delete any files you may have saved to your computer.)

**Internet Explorer**

1. Open Internet Explorer.
2. Select the [Settings] gear icon in the upper-right corner.
3. Select View downloads. The Downloads window will open.
4. Delete all test-related files.
   - **Option 1:** Select each file and press the [Delete] key on your keyboard or select the [X] icon associated with each file.
   - **Option 2:** Select the file name with your right mouse button and select “Delete File” from the pop-up menu.
   - **Option 3:** Select the [Clear list] button located at the bottom of the View Downloads window. This will remove all temporary downloaded files, including any other files you may have downloaded. (This will not delete any files you may have saved to your computer.)

**Mozilla Firefox**

1. Open Firefox.
2. Open the Tools menu and select the [Downloads] icon.
3. Select the [Show All Downloads] link. The Library window will open.
4. Delete all test-related files.

---

**Note:** Depending on your download settings (where temporary files are saved), you may also need to delete files from your Temporary Internet Files folder.
**Option 1:** Select each file and press the [Delete] key on your keyboard.

**Option 2:** Select the [Clear Downloads] link located at the top of the Library window. This will remove all temporary downloaded files, including any other files you may have downloaded. (This will not delete any files you may have saved to your computer.)
Configuring and Administrating Job Access with Speech (JAWS®)

Additional Resources:

You must configure JAWS before students use it for online testing. This section contains the instructions for the following tasks:

- Configuring JAWS to Recognize the Secure Browser
- Applying Settings for Contracted and Uncontracted Braille
- Configuring JAWS to Speak “Dollars”
- Optional JAWS Voice Adjustment Settings

Configuring JAWS to Recognize the Secure Browser

**Note:** The examples and screenshots that follow are for JAWS 18 installed to the default location. If you have another supported version of JAWS or it is installed to a different location, navigate to the appropriate directory.

1. Open the JAWS ConfigNames.ini file. This file may appear in two folders. Depending on how JAWS is installed on your computer, both files may need to be modified. Figure 88 shows a file location.
   - Start → All Programs → JAWS 18.0 → Explore JAWS → Explore Shared Settings (required)
   - Start → All Programs → JAWS 18.0 → Explore JAWS → Explore My Settings (optional)

   ![Figure 88. Find the ConfigNames.ini file](image)

2. In the ConfigNames.ini file, locate the line of text that contains `firefox:3=firefox`. At the end of this line, press [Enter] on your keyboard to create a new line. In the new line, type in the following string: `CASecureBrowser=Firefox`

3. Note that this value should match the caption for the [Secure Browser] icon on the desktop.

4. Save the file.
Note: If you receive an error that you do not have permission to save the .ini file to this location, you will first need to save the file to your desktop as ConfigNames.ini. After saving the updated .ini file, copy it to the folder containing the original .ini file (referenced in Step 1). You will need to confirm that you want to replace the original file with the file you created.

Applying Settings for Contracted or Uncontracted Braille

In order for students to use contracted or uncontracted literary braille with their Refreshable Braille Display, the correct JAWS setting must be applied prior to launching the secure browser. Braille mode settings also need to be selected.

1. Open JAWS, and then select the Utilities menu. In the Utilities menu, select Settings Center. The Settings Center, shown in Figure 89, will open.

![JAWS Settings Center - firefox](image)

Figure 89. The Settings Center, Contracted Braille Translation screen

2. From the Application drop-down list at the top of the Settings Center screen, select firefox.

3. Do one of the following:
   a. If you are using JAWS 16, in the “Search for settings” panel displayed on the left side, scroll down to the “Braille” section and expand the subsettings. Select
**Contracted Braille Translation**, shown in Figure 90. The Settings Center window displays the options for Contracted Braille Translation.

![Figure 90. Selecting Contracted Braille Translation—JAWS 16](image)

b. In the *Translation* section (Figure 91), select the required option from the *Contracted Braille Translation* drop-down list. For a student who prefers contracted braille, select *Input and Output*. For a student who prefers uncontracted braille, select *Off*.

![Figure 91. Contracted Braille Translation type drop-down list—JAWS 16](image)

4. If you are using JAWS 17, in the “Search for settings” panel displayed on the left side, scroll down to the braille section and expand the subsettings. The Settings Center window displays the options for Braille Translation.

5. In the *Translation* section (Figure 92), verify the *Language* drop-down list is set to *English – United States*. For a student who prefers contracted braille, select *Unified English Braille Grade 2* from the *Output and Input* drop-down lists. For a student who prefers uncontracted braille, select *Unified English Braille Grade 1* from the *Output* drop-down list.
6. In the **Braille Mode** section, ensure that the three settings that follow—and shown in Figure 93—are checked (and only these settings are checked):

   - Active cursor follows Braille display
   - Enable Word Wrap
   - Auto Detect Braille Display using Bluetooth

   ![Figure 93. Braille Mode settings](image)

7. Select [Apply] and then select [OK].

**Configuring JAWS to Speak “Dollars”**

The instructions in this section will ensure that JAWS correctly speaks the dollar ($) symbol.

1. Open JAWS, then select the **Utilities** menu. In the **Utilities** menu, select **Settings Center**. The **Settings Center** will open.
2. In the “Search for settings” panel on the left side, scroll down to the Text Processing section and expand the subsettings. Select Speak Dollars.

3. The Settings Center, shown in Figure 94, will display the Number And Date Processing options, including Speak Dollars.

![Figure 94. Setting Center Number And Date Processing options](image)

4. Check the box for Speak Dollars.

5. Select [Apply] and then select [OK].

Optional JAWS Voice Adjustment Settings

JAWS voice settings may be adjusted for individual students based on their needs. The following settings must be set prior to administering assessments: Voice Profile, Speaking Rate, and Punctuation. Instructions for each setting follow.

**Alert:** Any optional JAWS settings for a student must be set prior to launching the secure browser. Students should take one or more practice tests using JAWS so they can determine whether these settings need to be adjusted.

Opening the JAWS Voice Adjustment Window

Open JAWS and select the Options menu. In the Options menu, select Voices and then Voice Adjustment as shown in Figure 95. The Voice Adjustment interface will open.
Adjusting JAWS Voice Profile, Speaking Rate, and Punctuation Settings

*Voice Profile, Speaking Rate, and Punctuation* can be set in the *Voice Adjustment* interface, shown in Figure 96.

**Voice Profile**
1. Select a Voice Profile from the *Profile Name* drop-down list.
2. Select [Apply].

**Voice Rate**
1. In the *Voice* section, drag the slider to the desired rate of speed. The lower the rate, the slower the words will be read aloud.
2. Select [Apply].

**Punctuation**
1. In the *Voice* section, select the *Punctuation* drop-down list. Select from the following options: *None, Some, Most,* and *All.*
2. Select [Apply].
3. When all settings are saved, select [OK].
Navigating a Test with JAWS

**Note:** For detailed information about administering online tests, refer to the *Online Test Administration Manual for California Assessment of Student Performance and Progress (CAASPP) Testing*.

This section provides an overview of how students can navigate through the test and test items using Job Access with Speech (JAWS®) commands.

As test administrators work with students to familiarize them with using the test delivery system, they should make students aware that the braille transcriptions may not follow the usual braille rules. Test administrators and students should review the information in this section prior to taking a Practice or Training Test or operational assessment.

**Tip:** As the student interface has recently been updated, students are encouraged to take multiple practice tests to ensure familiarity with JAWS navigation during testing.

**Navigating Within the Test**

This subsection provides instructions that describe how students can move around on a test page, which is sampled in Figure 97.

**Notes:**

- The first time the test loads, JAWS may start reading everything until the student stops it by pressing the [Control] key. However, on the next test page, JAWS will focus on the first text on the page, which is usually the page’s banner (student colon question # tab panel).
- The instructions in this section provide only the keyboard commands for online testing. Students testing with a Refreshable Braille Display (RBD) that has router keys may also press the router key above the text for a particular button to move the cursor to that button. They can press the router key a second time to select that button instead of using the provided keyboard commands.
- The default setting for JAWS 16+ for California is *Only Read Items Aloud*.

![Figure 97. Example test page](image)
1. To listen to each line of text, press the [Down] arrow.
2. To move to the [Return to Login] and [Begin Test Now] buttons, press the [Tab] key until you reach the button you want.
3. To select the [Return to Login] or [Begin Test Now] button, press [Enter].

About Test Elements

A test page has up to three primary landmark elements: the Banner (test and student information) Region, Navigation and Test Tools Region, and the Test Content Region, where the test content is located (shown in Figure 97). To navigate between these landmarks using JAWS, press the [R] key.

1. **Banner Region**: The banner contains the test information row, which displays the current question number(s), test name, student name, test settings button, and help button.
2. **Navigation and Test Tools Region**: This region displays the navigation and tool buttons.
3. **Test Content Region**: This section contains the test content, which has the following parts:
   - **Stimulus**: The Stimulus section contains the following elements:
     - Stimulus title
     - Stimulus context menu
     - Stimulus content
   - **Item**: Each item contains the following elements:
     - Item number
     - Item labels
     - Item context menu
     - Item stem
     - Response area/answer options

JAWS Keyboard Commands

Students can use the keyboard commands in Table 8 to navigate within a test page. Please note that this is a subset of all available JAWS commands.

---

About JAWS Keyboard Commands

The commands in Table 8 are based on JAWS 15. Commands may be slightly different in other versions.

**Tip**: Students are encouraged to practice with the version of JAWS they will use during testing to ensure familiarity with the keyboard commands.
### Table 8. JAWS Keyboard Commands

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigate to the next landmark element on the page.</td>
<td>[R]</td>
</tr>
<tr>
<td>- In general, the following elements are landmarks:</td>
<td></td>
</tr>
<tr>
<td>- Banner Region at top of screen (contains test information)</td>
<td></td>
</tr>
<tr>
<td>- Navigation and Test Tools Region</td>
<td></td>
</tr>
<tr>
<td>- Test Content Region (contains passages and items)</td>
<td></td>
</tr>
<tr>
<td>Move to the next line on the page.</td>
<td>[DOWN] Arrow</td>
</tr>
<tr>
<td>Move to the previous line on the page.</td>
<td>[UP] Arrow</td>
</tr>
<tr>
<td>Move to the next component on the page.</td>
<td>[TAB]</td>
</tr>
<tr>
<td>- In general, the following test elements are components:</td>
<td></td>
</tr>
<tr>
<td>- Item number (and associated item stem text)</td>
<td></td>
</tr>
<tr>
<td>- Item context menu</td>
<td></td>
</tr>
<tr>
<td>- Response options</td>
<td></td>
</tr>
<tr>
<td>- Navigation and tool buttons</td>
<td></td>
</tr>
<tr>
<td>Move to the previous component on the page.</td>
<td>[SHIFT] + [TAB]</td>
</tr>
<tr>
<td>Jump to the next heading on the page.</td>
<td>[H]</td>
</tr>
<tr>
<td>- In general, the following test components are defined with a heading:</td>
<td></td>
</tr>
<tr>
<td>- Within the Banner Region:</td>
<td></td>
</tr>
<tr>
<td>- Test name (H1)</td>
<td></td>
</tr>
<tr>
<td>- Student name (H2)</td>
<td></td>
</tr>
<tr>
<td>- Within the Test Content Region:</td>
<td></td>
</tr>
<tr>
<td>- Passage title (H3)</td>
<td></td>
</tr>
<tr>
<td>- Item number (H3) (not the actual question text)</td>
<td></td>
</tr>
<tr>
<td>Note: On test pages that have multiple items, students can jump directly from one item to the next. To do so, press the [H] key and then press the [Down] arrow twice. The item stem will then be read aloud.</td>
<td></td>
</tr>
<tr>
<td>Jump to the previous header on the page.</td>
<td>[SHIFT] + [H]</td>
</tr>
<tr>
<td>Select an option or button.</td>
<td>[ENTER]</td>
</tr>
<tr>
<td>Read everything on the page (from your current place on the page).</td>
<td>[INSERT] + [DOWN] Arrow</td>
</tr>
<tr>
<td>Stop JAWS from reading.</td>
<td>[CTRL] or [Space Bar]</td>
</tr>
</tbody>
</table>

### Opening a Context Menu

The first item on a test page will automatically be selected (i.e., “in focus”). Any action taken with a keyboard, mouse, or adaptive peripheral device on a selected element will cause a reaction in that element. For example, pressing the [Space Bar] when the page from which Figure 98 was excerpted would cause a check mark to appear in the highlighted box next to Strikethrough.

![Figure 98. Page excerpt showing an element in focus](image)

A circle with a solid or dotted line, a highlight, and a blinking cursor are common ways of indicating that an element is in focus.
The instructions in this section assume the student wants to open the context menu for the active (in focus) landmark element on the page and has not yet used the [Tab] key to navigate anywhere.

**To open the context menu for a stimulus or passage:**

1. Ensure the focus is on the stimulus.
2. To navigate directly to the context menu button, select the [Tab] key twice to display the context menu button. JAWS will read the context menu as a Menu button.
3. Press the [Enter] key. The context menu will open and display the list of available menu options, as shown in Figure 99. JAWS will read aloud the first item in the menu (for example, “Comments”).

![Figure 99. Opening a context menu for a stimulus or passage](image)

4. To move up and down the list, press the [Up] and [Down] arrow keys. JAWS will automatically read aloud each item.
5. To select a menu option, press [Enter]. To exit the menu without making a selection, press the [Esc] key. JAWS will return the focus to the context menu button.

**To open the context menu for an item:**

1. After navigating directly to the context menu button by tabbing, JAWS will read aloud “Menu for (item number) has pop-up link.”
2. Press the [Enter] key. The context menu will open and display the list of available menu options, as shown in Figure 100. JAWS will read aloud the first item in the menu (for example, “Marked for Review”).

![Figure 100. Opening a context menu for an item](image)
3. To move up and down the list, press the [Up] and [Down] arrow keys. JAWS will automatically read aloud each item.

4. To select a menu option, press [Enter]. To exit the menu without making a selection, press the [Esc] key. JAWS will return the focus to the context menu button.

**Responding to Items**

This section provides basic guidance for responding to item types that may appear on practice or training tests and operational assessments.

⚠️ **Alert:** Students should review questions via an RBD or printout from a braille embosser before responding to items.

**Multiple-Choice**

Multiple-choice items require you to select one answer option. The response area will display several multiple-choice options as radio buttons. You must select a radio button.

1. After listening to the question text, press the [Tab] key twice.

2. JAWS will read aloud the option letter and option text that is in focus; these are shown in Figure 101. If the option is an image, JAWS will read the text description associated with the image.

![Figure 101. Selecting a radio button](image)

3. To navigate between each answer option, use the [Tab] and [Shift] + [Tab] commands. (You can also use the [Up] and [Down] arrow keys to move between options.)

4. JAWS will read aloud the corresponding option letter and option text.

5. To select an answer option in focus as your response, press the [Space Bar]. The radio button will be selected (as shown in Figure 101), and JAWS will read “Space” aloud.

**Multi-Select**

Multi-select items require you to select one or more answer options from a group of options. The response area will display several answer options as check boxes. You must select at least one check box.

1. After listening to the question text, press the [Tab] key twice.
2. JAWS will read aloud the option letter and option text that is in focus. If the option is an image, JAWS will read the text description associated with the image.

3. To navigate between each answer option, use the [Tab] and [Shift] + [Tab] commands. (You can also use the [Up] and [Down] arrow keys to move between options.)

4. JAWS will read aloud the corresponding option letter and option text.

5. To select an answer option in focus as your response, press the [Space Bar]; a sample question with options selected is shown in Figure 102. A check mark will appear for that answer option, and JAWS will read “Space” aloud.

![Figure 102. Responding to a multi-select item](image)

**Note:** If the student uses the Strikethrough tool to strike out an answer option in a multiple-choice or multi-select item, JAWS will read “Option is struck-through” when the student navigates to that answer option.

**Hot Text**

Hot text items require you to select at least one word, phrase, or sentence. For these item types, it is critical to follow the instructions provided in the item. Some items may tell you to select two responses. Others may tell you to select one response.

**Note:** Each selectable text area is predefined. If you select a phrase or sentence, all of the words in that text area will automatically be marked as selected.

1. After listening to the question text, press the [Tab] key twice.

2. JAWS will read aloud the text that is in focus (“Selectable sentence 1” in Figure 103).

![Figure 103. Selecting hot text](image)
3. To navigate between each selectable text area, use the [Tab] and [Shift] + [Tab] commands.

4. JAWS will read aloud the selectable text.

5. To choose a selectable text area in focus as your response, press the [Enter] key. JAWS will announce the text is checked.

**Edit Task**

Edit task items require you to replace an incorrect selectable word or phrase. For these item types, it is critical to follow the instructions provided in the item. Note the following:

- Some edit task items require you to enter the response into a text box, as shown in Figure 104.

![Figure 104. Edit task: text box entry](image)

- Some edit task items require you to select a response from a drop-down list, as shown in Figure 105.

![Figure 105. Edit task: drop-down options](image)

**Important Notes about JAWS and Edit Task Items**

Each selectable text area is predefined. For selectable text, JAWS will indicate whether the word or phrase is selectable and then continue reading the rest of the sentence or line.

Some edit task items require students to make changes that are punctuation-based (e.g., students may be asked to replace a comma with a different punctuation mark). For these edit task items, JAWS will need to read in character mode. (To toggle between character mode, word mode, or character and word mode, press [Insert] + [2].)

**Tip:** It is strongly recommended that students read through an entire item before editing text. Students can listen to the item as well as read it via an RBD or printout from an embosser.
1. Use the [Down] arrow to read through each line of text.
2. If a line of text has a selectable word or phrase, JAWS will say “clickable” after the word or phrase.
3. Navigate to each selectable text field in the item.
   
   **Option 1:** Return to the beginning of the item.
   a. Press [Shift] + [H].
   b. Press the [Tab] key to go to the first selectable text field.

   **Option 2:** Move backward through the selectable text fields in the item.
   a. Press [Shift] + [Tab].
4. When the selectable text is in focus, press the [Space Bar]. This will open the edit menu. JAWS will read “Edit tools dialog” aloud and provide additional instructions.
   
   **Text box:** Type in the replacement word or phrase.
   
   **Drop-down list:** Use the [Up] and [Down] arrow keys to move between options in the list. JAWS will read each option aloud. To select an option, press [Enter].
5. Press the [Tab] key to navigate to the [OK] button in the edit menu. Press [Enter]. The edit menu will close and the item will be back in focus.

**Text Response**

Text-response items, like the sample item in Figure 106, require you to enter text into a text box. You may be asked to write a sentence, paragraph, or essay.

![Figure 106. Answering a text-response item](image)

1. Read the question and tab to the response area (text box). JAWS will beep and then read, “Edit, type in text” aloud.
2. Enter a response, then press the [Tab] key.
3. You will leave the text box and move to the next item on the page.
Text Response with Text Formatting Row

Additional Resources:
- CKEditor 3.X Accessibility Guide Web page—http://docs.ckeditor.com/CKEditor_3.x/Accessibility

Text-response items require you to enter text into a text box. You may be asked to write a sentence, paragraph, or essay. These items include a row for formatting text, which is circled in Figure 107. Formatting options include bold, underline, italics, numbered bulleting, symbol bulleting, and more. However, these formatting options are not available to students testing with braille.

Figure 107. Answering a text-response item with text formatting

1. Read the question and then tab to move to the response. JAWS will beep and then read, “Edit, type in text” aloud.
2. Enter your response into the text box.
3. When you are done entering a response, tab to exit the response area.
4. You will leave the text box and move to the next item or field on the page.

Equation

Equation questions require you to enter a mathematics equation or expression in a text field using an on-screen keypad.

1. To navigate between the keypad buttons, press the [Tab] key or [Shift] + [Tab]. JAWS reads aloud the character or action for each button.
2. To enter a character in the text field or perform an action from the keypad toolbar, press the [Enter] key. You can also press the corresponding key on your keyboard, if available.
3. Optional: To add special characters to the text field, press [Alt] + [7], with the focus on the text field. A pop-up window opens, with a drop-down list of the available characters.
To move between the options in this list, use the arrow keys. JAWS reads the name of each special character. To insert the selected character, press the [Enter] key.

**Table Match**

Table-match items, like the sample item in Figure 108, require you to mark at least one check box in a table. The table will have multiple rows and columns. The table row heading and column heading are not selectable. The selectable table cells have check boxes.

![Figure 108. Responding to a table-match item](image)

1. After listening to the question text, press the [Tab] key twice. This takes you to the first table cell that has a check box.
2. JAWS will read aloud the corresponding column name and row name for that table cell.
3. To navigate to each cell that has a check box, press the [Tab] key.
4. JAWS will read aloud the corresponding column and row name for each cell.
5. To mark a check box, press the [Space Bar].
This page is left blank intentionally.
User Support

Local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) coordinators should first contact your LEA technology coordinator or system administrator prior to contacting the California Technical Assistance Center (CalTAC). Technology coordinators and CAASPP test site coordinators should contact their LEA CAASPP coordinators for assistance.

California Technical Assistance Center for LEA CAASPP Coordinators

If you must contact CalTAC, you will be asked to provide as much detail as possible about the issue(s) you encountered.

CalTAC

Hours: 7 a.m. to 5 p.m., Monday–Friday
Toll-Free Phone Support: 800-955-2954
E-mail Support: called@ets.org
Web site: http://www.caaspp.org/

Always include the following information:

- Test administrator or test examiner name and information technology/network contact person and contact information
- Statewide Student Identifier(s) of affected students
- Results ID for the affected student test session
- Operating system and secure browser version information
- Any error messages and codes that appeared, if applicable
- Information about your network configuration:
  - Secure browser installation (to individual devices or network)
  - Wired or wireless Internet network setup

Warning: Never provide any other student information, as doing so may violate Family Educational Rights and Privacy Act policies.
## Change Log

<table>
<thead>
<tr>
<th>Change(s)</th>
<th>Section(s)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removed the California Science Test (CAST) as an assessment approved for the Audio Transcript (Including Braille Transcript) embedded accommodation.</td>
<td>Chapter 1 Accessibility Features for California Assessment of Student Performance and Progress (CAASPP) Assessments (various pages)</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Added and updated links to tutorials.</td>
<td>Chapter 1 Accessibility Features for CAASPP Assessments (various pages)</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Expanded the description of an embedded universal tool.</td>
<td>Chapter 1 Accessibility Features for CAASPP Assessments &gt; Universal Tools &gt; Embedded, page 8</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Added listing for the Science Tools embedded universal tool.</td>
<td>Chapter 1 Accessibility Features for CAASPP Assessments &gt; Universal Tools &gt; Embedded, page 18</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Provided additional information about CAST stacked translations in Spanish.</td>
<td>Chapter 1 Accessibility Features for CAASPP Assessments &gt; Designated Supports &gt; Embedded &gt; Stacked Translations (Spanish), page 26</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Updated the names of the CAST languages of translation.</td>
<td>Chapter 1 Accessibility Features for CAASPP Assessments &gt; Designated Supports &gt; Embedded &gt; Translation Glossaries, page 30</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Clarified that a different periodic table can be used as a non-embedded support if requested as an unlisted resource.</td>
<td>Chapter 1 Accessibility Features for CAASPP Assessments &gt; Designated Supports &gt; Non-Embedded &gt; Science Charts, page 37</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Updated for the new administration.</td>
<td>Chapter 2 Configuring Selected Accessibility Resources, page 55</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Updated for the new administration.</td>
<td>Chapter 3 Testing Students with Accessibility Resources, page 67</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Updated for the new administration.</td>
<td>Chapter 4 Requirements for Testing Students with Visual Impairments, page 81</td>
<td>February 26, 2018</td>
</tr>
<tr>
<td>Added a section with additional information on using braille hybrid adaptive testing.</td>
<td>Chapter 4 Requirements for Testing Students with Visual Impairments &gt; Overview of Testing Students Requiring Braille &gt; Using Braille HAT page 91</td>
<td>February 26, 2018</td>
</tr>
</tbody>
</table>