

# Online SRT Tutorials Supplemental Information

## SRTs Overview

This guide is intended to provide educators with additional detailed information about the MCA online testing platform (TestNav), tools, question types, test supports, and accommodations covered in the online Student Readiness Tools (SRTs) tutorials.

To locate a specific tutorial, press Ctrl + F and enter the tutorial name into the search bar of the Find box. For example, if searching for information about the multiple-response question type, type “Multiple Response” into the search bar of the Find box and hit Enter. The document will jump to that section of the guide, or you may have to select the Previous or Next buttons to navigate to the applicable section.

Note: Standard text-to-speech is available throughout the online SRTs for students who want or need audio support.

Note: Separate assistive technology (AT) online test forms are now available for the new Reading and Science MCAs and Alt MCAs that allow AT to interact directly with the online test in TestNav. There are two versions of the AT online forms: one for screen-readers and one for non-screen readers. Prior to testing, it is important to verify the AT will work with the online test. Because AT online test forms are required to exist in a secure environment, the non-secure online SRTs environment does not allow AT use that mimics the actual online testing experience in TestNav with an AT online form. Educators will need to work with the District or School Assessment Coordinator to gain access to a sample test form in TestNav in order for the teacher and student to verify the AT’s compatibility with TestNav. These sample test forms consist of online Reading and Science MCA and Alt MCA SRT sample items that allow the student to practice interacting with items online using their AT. For more information on AT online forms, refer to the [Student Tools and Supports](#) page on the Minnesota Assessment Hub (Minnesota Assessment Hub > Resources & Training > Student Tools and Supports > Assistive Technology Online Forms).

## Grade-level SRT Tutorials

The grade-level SRT tutorials are organized by grade and include lessons and practice opportunities relevant to the navigation, tools, and question types students may experience on the MCAs. Although the online SRTs are not subject specific, each grade-level SRT contains only the tools and question types applicable to the subjects students will test in within each grade. The tutorials of the grade-level SRTs are organized into three sections: Getting Around, My Tools, and The Questions.

## Getting Around Section

This section provides educators with information on how students will navigate through the test and interact with the testing platform, TestNav. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the Getting Around section of the grade-level [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs).

Note: While the functionality is similar, there are some navigation differences between adaptive tests (Reading and Mathematics MCAs) and fixed-form tests (Science MCA) that will be addressed in this section.

### Navigation

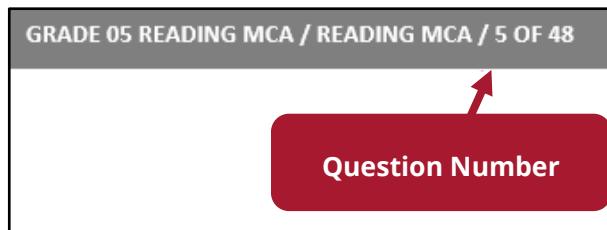
#### Information on the Gray Bar – Number of Questions

In the **online SRTs**, the gray bar indicates the grade-level SRT and tutorials section in which the student is practicing.

In the **online MCAs**, the gray bar contains subject-specific information about the test and the number of questions on the test or in a section of the test.

For Reading and Mathematics MCAs:

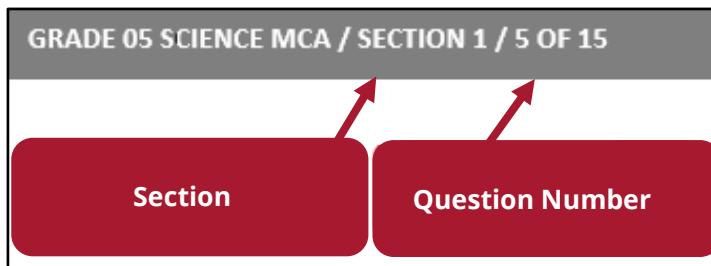
- Questions (and for reading, passages) are divided into multiple groups.
- However, no group numbers appear in the gray bar. Even though the test is broken up into multiple groups, TestNav handles the entire adaptive test as just one section and cannot show which group of questions a student is on.
- The question number shows the number of questions in the entire test.



## Navigation

For Science MCA:

- The questions and phenomena are divided into two sections.
- Because the test is a fixed form and questions are pre-selected, the gray bar indicates which section the student is in (Section 1-2).
- The question number shows the number of questions in each section, not the entire test.

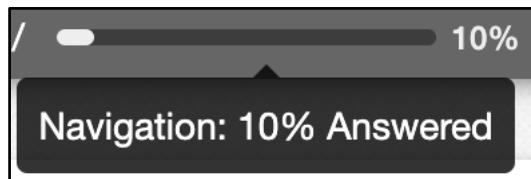


### Information on the Gray Bar – Progress Indicator

In the **online MCAs only**, a progress indicator with a completion percentage appears in the gray bar. The completion percentage indicates the student's completion progress as they answer questions.

For Reading and Mathematics MCAs, the progress indicator shows the student's progress for the entire test.

For Science MCA, the progress indicator shows the student's progress for the section. It will start over in each section.

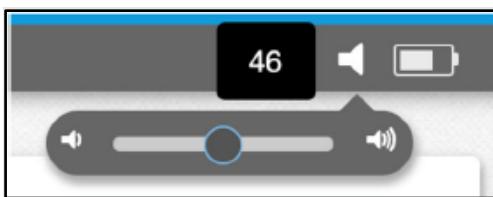


## Navigation

### Information on the Gray Bar – Volume Control

In the online MCAs only, for most testing devices, a volume control slider is available in the gray bar. Students select the audio icon to open the volume control slider to increase or decrease volume. If their testing device is muted when the student signs into TestNav, the student can unmute the device using the volume control slider.

Note: The volume control slider is not available for iOS devices. Students can use the device's volume control buttons to adjust the volume. If the testing device is muted when the student signs into TestNav, the student can unmute the device using the device's volume control buttons.



### Start Your Test

In the **online SRTs**, this tutorial contains a short informational video explaining how students will log in to the MCAs. However, students will not be able to practice logging in to the SRTs.

In the **online MCAs**, student directions are the first section of each test. These directions appear after students sign in and before they begin each test. Text-to-speech is available for these directions in all subjects.

The *Testing Directions: Online* contains a transcript of these directions. A transcript and screenshots are also provided in the *Overview of Student Directions* document for reference. Both documents are updated annually and are available on the [Test Administration Resources](#) page before test administration (Minnesota Assessment Hub > Resources & Training > Test Administration Resources).

Students can navigate between different student directions pages as needed. For reading and mathematics, once students navigate past the student directions, they cannot go back to them. For science, the student directions are embedded in the first section so students can go back to them throughout the first section as needed.

## Navigation

### Next and Back Buttons

Students use the Next and Back buttons to move forward and back in the test. If students try to go forward or back before answering the current question, they will receive a Must Answer to Continue message prompting them to answer the question before moving on.

Some questions have multiple parts, and a message will display if students select the Next or Back buttons without answering all parts of the question.

Note: In the **online SRTs**, students do not need to answer the current question before they can move forward or back in the SRTs.

### Review and Bookmark

Students can revisit questions they have completed by selecting the Review button to open the review list. Within the review list, students can select any unlocked question to go back to and review their answers. However, if the current question is not answered, students cannot select or visit another question in the review list. A message will display if students select a question in the review list without first answering the current question.

Note: In the **online SRTs**, students are able to review or go to all questions throughout the tutorials. However, when students select the Review button in the **online MCAs**, the review list will show only the questions they have already answered and the current question.

The number shown on the All Questions tab of the review list tells students how many questions they have answered.

The number shown on the Not Answered tab of the review list will always display as zero or one in the test, depending on if the student has answered the current question or not.

The Bookmark button lets students mark questions they want to review later.

When students select the Bookmark button, a blue bookmark appears next to the question on the review list. The number shown on the Bookmarks tab of the review list tells students how many questions they have bookmarked.

Note: In the **online SRTs**, the All Questions and Not Answered tabs in the review list will always show the number zero, even if students have interacted with a video tutorial or "Try It!" section. Only the Bookmark tab number will reflect students' actions.

## Submit Reading/Math & Submit Science

In the **online SRTs**, these tutorials contain short informational videos explaining how students will submit their answers for each section or group of questions and how students will submit their test for the Mathematics and Reading MCAs and for the Science MCA.

## Completing a Section and Going to a New Section

In the **online MCAs**, after students have answered all of the questions in a group or section, they will see a review screen. The review screen will vary depending on which test students are taking. The way in which students go to the next group of questions or section also varies depending on the test students are taking.

- For the Reading and Mathematics MCAs, students must use the review list to go back to review questions. Students use the Next button to go to the next group of questions.
- For Science MCA, the questions will be listed under the Submit button, and students can select a question from this list to be taken directly to the question. Questions that were bookmarked by the student will be marked with a bookmark icon. Students use the Submit button to go the next section. A section exit warning will pop up. Students select No to go back or select Yes to go to the next section.

Once students go to a new section, they cannot return to questions or sections completed previously.

Note: Although the tutorials are organized into different categories, the **online SRTs** are not divided into multiple sections or groups, and students can view any tutorial at any time, even those completed previously.

## Exiting the Test

In the **online MCAs**, to exit the test, students will:

- Select the button next to their name.
- Select Sign out of TestNav in the user dropdown menu.
- Select Save and Return Later.

Note: In the **online SRTs**, students will select Sign out of TestNav; they will not be able to save their responses or mark where they left off in the SRTs.

## Completing the Test

In the **online MCAs**, when students have completed their test, they will see a final review screen. The review screen will vary depending on which test students are taking.

To submit their test from the review screen:

## Navigation

- For the Reading and Mathematics MCAs, students will select the Next button. Once students select the Next button, they will not be able to go back to their test. Then, students will select Submit Final Answers.
- For Science MCA, students will first select Submit Final Answers. Then they will select Yes, Submit Final Answers.

Once students submit their test, they will not be able to go back into it.

Note: In the **online SRTs**, students will be notified when they have completed a set of tutorials and prompted to sign out of TestNav. Students are not required to sign out of TestNav, but if they do, they can still go back into the SRTs. It is important that students understand the SRTs are **not** scored.

## Inactivity

In the **online SRTs**, although the inactivity function is not covered in the tutorials, the SRTs will time out after 20 minutes of inactivity and students will be automatically exited from the tutorial.

In the **online MCAs**, student tests in TestNav will time out after 20 minutes of inactivity. Inactivity is defined as not touching the screen, moving the mouse, and/or pressing keys.

Students will receive a warning 30 seconds prior to being exited due to inactivity. When they are exited, they will also receive a message that the session (their test) has closed due to inactivity. The student's test will need to be resumed in PearsonAccess Next in order for the student to continue testing.

If students are exited due to inactivity, they still have 20 minutes to resume the test with the ability to go back and review previously answered questions. If more than 20 minutes have passed after exiting the test, students cannot go back to review their answers.

## My Tools Section

This section provides educators with information on the purpose and functionality of the tools students may use while testing. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the My Tools section of the grade-level [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs).

Students can select tools from the following places: the toolbar, the user dropdown menu, and the right side of the screen. Other tools are accessed directly on the question itself.

### Tools

#### Answer Eliminator (Toolbar)

Students can use the answer eliminator tool to cross out an answer choice. It is available only for multiple-choice and multiple-response questions.

To use this tool, students:

- Select the Answer Eliminator button in the toolbar.
- Select the answer choice or choices they want to cross out.

To remove the X from the answer choice(s), students select the crossed-out choice again with the answer eliminator tool.

Keyboard shortcuts: When the answer eliminator tool is selected, students can use the Tab key to navigate to the answer choices. Once an answer choice is selected, students can use the Tab key and/or the up and down arrow keys to navigate through each answer choice. Students press the space bar to cross out an answer choice. To remove the X, students press the space bar again.

Students use the pointer tool to select their answer. The X must be removed before students can select an eliminated answer choice as their answer. To stop using the answer eliminator, students select the answer eliminator button in the toolbar again.

Note: If a student changes the color contrast settings to colors other than the default Black on White, the X may also appear in a color that is not red.

## Tools

### Calculators (Mathematics and Science All Grades Only) (Toolbar)

Students can use the calculator tools to help them answer questions on their mathematics and science tests. The calculators are available only on questions where students are allowed to use them. The calculator type varies by grade and subject.

Two variations (TI and Desmos) of each type of calculator are available in the tests. The icon on each Calculator button is the same, so students need to hover over the buttons to identify which calculator is the TI and which is the Desmos. Refer to the [Student Tools and Supports](#) page on the Minnesota Assessment Hub to view and practice using the types of calculators available on the MCAs (Minnesota Assessment Hub > Resources & Training > Student Tools and Supports > Stand-Alone Calculators).

Note: In the **grade 8 online SRT**, the basic and graphing calculators are available for practice. However, only the basic calculators will appear on the grade 8 Science MCA and only the graphing calculators will appear on the grade 8 Mathematics MCA.

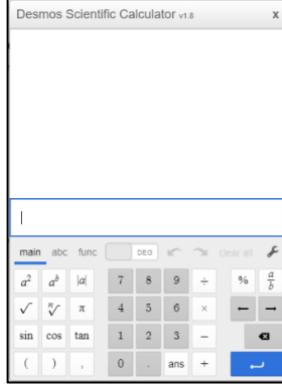
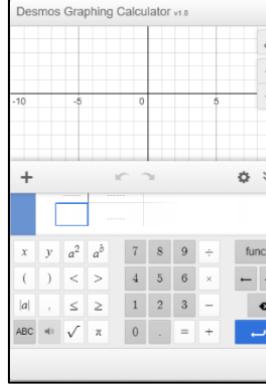
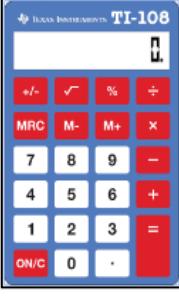
To open a calculator, students select the Calculator button in the toolbar. Students can select the buttons on the calculator or use the keyboard.

To move the calculator, students select the calculator and drag it.

Students select the Calculator button in the toolbar again to close it.

Note: The calculators do not operate with external keyboards on iPads. Students testing on iPads should be instructed to operate the calculators using the touchscreen.

## Tools

Grades 3–5 Mathematics and All Grades of Science	Grades 6 and 7 Mathematics	Grades 8 and 11 Mathematics
		
<p>Desmos Basic Four Function Calculator</p>  <p>TI-108™ Basic Calculator</p>	<p>Desmos Scientific Calculator</p>  <p>TI-30XS™ Scientific Calculator</p>	<p>Desmos Graphing Calculator</p>  <p>TI-84 Plus CE™ Graphing Calculator</p> <p>Note: The default setting for the graphing calculator is Radian. To change to Degree, students must select MODE, use the arrow keys to highlight DEGREE, and then select ENTER.</p>

## Tools

### **Exhibits: Formula Sheets and Mathematics Tables (Mathematics All Grades Only) (Button on right side of screen)**

Grades 3–4 exhibits contain two mathematics tables: the multiplication table and the hundreds table. Refer to the [Student Tools and Supports](#) page on the Minnesota Assessment Hub to view stand-alone mathematics tables (Minnesota Assessment Hub > Resources & Training > Student Tools and Supports > Mathematics Tables).

Grades 5–8 and 11 exhibits contain both mathematics tables and a formula sheet. Refer to the [Student Tools and Supports](#) page on the Minnesota Assessment Hub to view the formula sheets that will appear in each grade (Minnesota Assessment Hub > Resources & Training > Student Tools and Supports > Formula Sheets).

The mathematics tables are available only on questions that allow the use of a calculator. The formula sheet is available on all questions.

To access the available resources, students select the Exhibits button. Students select the labeled tabs within the window to view each resource. Students may need to scroll to see all of the contents in the tab. To move the window to a different part of the screen, students select the top of the window and drag it.

The Exhibits window cannot be resized, but students can scroll to see the entire formula sheet and/or mathematics tables. Students can also use the magnifier tool, if needed, to view the resources in the Exhibits window.

To close the window, students select the Exhibits button again or the X in the upper right of the window.

In the **online SRTs**, the Exhibits window is available only in the Exhibits SRT lesson.

In the **online MCAs**, the Exhibits window is available throughout the test.

## Tools

### Highlighter (Appears on Questions)

Students can use the highlighter tool to highlight words on the test.

To use this tool, students select and drag over the words in the passage, phenomena, and/or question they want to highlight.

As they do so, a color-selection bar will appear over the text, and students can choose the color they wish to use. Once they do so, the area will be highlighted. Note: Color choices on the color-selection bar will differ depending on the test's background and foreground colors (color contrast settings)



To remove the highlighting, students re-select the words and choose Unhighlight .

The Listen button  lets students highlight a word or section of text to hear text-to-speech. If a student highlights only one word within a sentence, text-to-speech will read the entire sentence from which the word was selected. Note: The Listen functionality is similar to Toggle Click to Listen, except that it only reads aloud the sentence(s) in which text was selected and then stops.

Note: The highlighter will not highlight the options of hot-text questions, which are questions that ask students to select boxed selections of text to answer the question. Also, for reading questions in which the hot-text selections appear in the passage itself, any highlights the student applied to the passage prior to the hot-text question will be automatically removed. Refer to *The Questions* subsection of this guide for an example of a hot-text question type.

## Tools

### **Pencil (Mathematics All Grades Only) (Toolbar)**

To use this tool, students select the Pencil button in the toolbar. A tool panel appears on the right-hand side of the screen with the following buttons:

- Pencil
- Undo and Redo
- Delete (trash-can icon)

Students can use the Pencil tool to take notes and draw directly on the test question. The student's pointer will appear as a pencil icon to indicate where students are able to use the tool. If the student selects Delete from the tool panel, all parts of their notes/drawings will be deleted; students cannot erase individual marks.

Students select the Pencil button again in the toolbar or in the tool panel to close it. Their notes/drawings will remain on the test question unless the student deletes them. If students leave and return to a question, any drawings made on the question will be saved as a static image. Students won't be able to delete the image or use the undo/redo buttons to remove individual marks. Students can add to the existing image, or they can make a new mark and then use the Delete (trash can) button to remove the image entirely.

Note: If students use the White on Black contrast setting, the pencil marks become white and may not be visible on certain images.

### **Pointer Tool (Toolbar)**

Students use the pointer tool to:

- Select an answer
- Drag an answer choice
- Mark objects or text
- Turn other tools on and off

Note: The online SRTs do not contain a pointer tool tutorial, although students will use the pointer tool throughout the SRTs.

### **Protractor (Mathematics Grade 4 Only)**

To use this tool, students select the Protractor button in the toolbar. Students select and drag the protractor to move it around on their screen. Students can select the circles on each side of the protractor to rotate it.

Students select the Protractor button in the toolbar again to close it.

## Tools

### **Ruler (Mathematics Grades 3 and 4 and Science All Grades Only) (Toolbar)**

In the **online SRTs**, the ruler is available throughout the entire SRT for students to practice.

In the **online MCAs**, students see the ruler in the toolbar only on questions where they need to use it.

To use the ruler, students select the Ruler button in the toolbar.

Students then drag the ruler to the place on the object they want to measure. Students can select the circles on each side of the ruler to rotate it.

Students select the Ruler button in the toolbar again to close it.

**Note:** When using non-secure browser versions of TestNav, such as the online SRTs, some factors such as screen size and screen resolution will affect the display. Therefore, when zooming above 150%, the ruler in the online SRTs may not adjust accordingly across all devices.

### **Scratchpad (Toolbar)**

The scratchpad allows students to take notes by typing or drawing.

To use this tool, students select the Scratchpad button in the toolbar. Students can either type their notes in the text box or draw in the drawing pane.

To draw, students select Open drawing pane at the bottom of the scratchpad and then select the Draw icon to draw or write in the drawing pane.

To fix mistakes in the drawing pane, students can use the Eraser and Undo/Redo buttons or select the Clear pane (trash can) button to clear the pane entirely.

To move the scratchpad, students select the top of the scratchpad and drag it.

To close the scratchpad, students can either select the Scratchpad button in the toolbar again or select the X in the upper right of the scratchpad. Notes save automatically; if students return to the question later, they can see their notes again by selecting the Scratchpad button. Within the drawing pane, if students leave and return to a question, any drawings made in the drawing pane will be saved as a static image. Students won't be able to undo or redo any individual changes previously made to the drawing, as it now exists as an image. Students can add to the existing drawing image or use the Undo button and/or Clear pane (trash can) button to clear the pane entirely.

- For reading, notes are saved for the whole passage.
- For mathematics, notes are saved for each question.
- For science, notes are saved for each phenomenon.

## Tools

### **Straightedge (Mathematics Grades 8 and 11 Only) (Toolbar)**

In the **online SRTs**, in the straightedge tutorial video, the question shown contains a hint prompting students to use the straightedge.

In the **online MCAs**, students are not prompted to use the straightedge tool in the test.

The straightedge is available on all test questions.

To use the straightedge, students select the Straightedge button in the toolbar.

To move the straightedge, students select the blue circles on the ends of the tool and drag them.

Students select the Straightedge button in the toolbar again to close it.

### **White Noise (User Dropdown Menu)**

The white noise tool lets students listen to background noise as a way to reduce ambient sound and help them focus on the test. There are three white noise sound buttons to choose from: Waves, White Noise, and Wind.

On some devices, students can adjust the white noise volume using the on-screen controls. On iPads, the volume can be adjusted using the buttons on the side of the device, so students will not see the on-screen volume controls.

To turn off the white noise, students can select the Stop button, de-select the specific sound option they have chosen (Waves, White Noise, or Wind), or select the X in the upper right on the white noise box. The active white noise button is blue; this button returns to its original gray color once it has been turned off.

To keep the white noise sound playing but remove the white noise box from the screen, students can select the minimize button or go back to the dropdown menu and select Close White Noise. Note: Removing the white noise box from the screen does not turn off white noise sound. To turn off white noise sound, students must select the Stop button, de-select the specific sound option they have chosen, or select the X in the upper right on the white noise box.

To move the white noise tool, students select the top of the tool and drag it.

Note: White noise and text-to-speech negatively affect each other on iPads. Students testing on iPads should be instructed to turn off the white noise if using text-to-speech.

## The Questions Section

This section provides educators with details on the types of questions students may encounter on the test. Before using the SRTs with students, educators can familiarize themselves with the tutorials in The Questions section of the grade-level [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs).

Note: Standard text-to-speech is available for all question types in the online SRTs. However, students should know that reading questions and passages in the online Reading MCA do not have text-to-speech except when students are eligible for the new read-aloud (text-to-speech) for reading accommodation.

### Question Types

#### **Bar Graph (Mathematics and Science Only)**

Bar graph questions are answered by dragging the top of one or more bars in the bar graph. For some questions, students may be able to move only some of the bars.

To change their answer, students drag the top of the bar to move it.

Note: In some bar graph questions, if the bar is dragged too close to the bottom of the graph, it may look as if the bar has disappeared. However, the bar is still accessible and can be dragged back up as needed.

## Question Types

### Constructed Response (Science Only)

For constructed-response questions, students compose their own answer to the question or prompt by entering their response into the text box using the keyboard or touchscreen on their device. Students must enter at least one character into the text box before they can go to the next question. Students will be scored based on their understanding of science concepts and practices, not on grammar, spelling, sentence mechanics, or formatting.

- A variety of text formatting options are available within the text box: bold, italics, underline, bulleted lists, and numbered lists. Students may use these formatting tools, but they are not required.
- The Undo and Redo buttons are available to remove or add back text that was entered or formatting that was applied.
- Spell check is available for students to confirm correct spelling if they wish. If the Spell Check button is selected, words that may be incorrectly spelled will appear with a red underline. Students can select the red-underlined word to view suggested spelling corrections.

The response is limited to 1,000 characters (for example, letters, numbers, punctuation, spacing) for all constructed-response questions.

Responses entered into the text box are automatically saved. Students do not need to take any further action before navigating to the next question.

## Question Types

### Drag and Drop 1 (Gap Match) and Drag and Drop 2 (Text Extractor)

Students answer drag-and-drop questions by dragging an answer choice into the correct box. Answer choices may be text or graphics.

While there are different types of drag-and-drop questions, the functionality is similar across all types of questions:

- Some questions let students drag two or more answer choices into the same box, while other questions allow only one answer choice in a box.
- For some questions, answer choices can only be dragged into certain boxes.
- For some questions, the same answer choice can be dragged into multiple boxes (that is, it replenishes after it is dragged); in other questions, each answer choice can be dragged only one time.

When an answer choice is selected and dragged, the boxes into which it can be placed turn blue. To change an answer, students need to drag a choice out of the box before they can put another one in.

In addition to the drag-and-drop functionality detailed above, Drag-and-Drop 1 (Gap Match) questions let students select an answer choice by clicking/touching it and then clicking/touching the correct box to drop it into, without having to drag and drop. When an answer choice is selected, an outline will appear around it, and the boxes into which it can be placed will be shaded in.

### Text Extractor (Reading Only)

Text extractor questions are a specific type of drag-and-drop question. Students must drag text selections from a passage into boxes to answer the question. Each text selection can only be used one time. To remove a selection, students must select the "X" in the upper-right corner of the box or drag a new text selection into the box.

Note: In the **online SRTs**, students will practice dragging text selections from sentences within the question, not from within a reading passage, because the SRTs are not subject specific.

Note: Although a text extractor question is shown in the video lesson, students in grade 3, grade 11 mathematics, and high school science will **not** have a Drag-and-Drop 2 "Try It!" section.

## Question Types

### Equation Editor (Mathematics Only)

Students answer equation editor questions by selecting number and symbol buttons on the keypad to fill in the answer area. A warning message will appear if students try to add more to their answer than is allowed or if they type in a character that is not allowed.

Depending on the grade and question, different symbols are available on the keypad.

The types of answers students may need to enter include fractions, mixed numbers, equations, and expressions.

Note: In the **online MCAs**, students must enter a character in all scaffolded gaps within the answer area in order to move on in the test.

### Fill in the Blank (Mathematics and Science Only)

Students answer fill-in-the-blank questions by typing an answer into the text box using the keyboard or touchscreen on their device.

For all grades of mathematics:

- Students can answer using digits 0-9, the forward slash (/) to show fractions, and the period (.) to show decimals. Note: For some questions, only numbers are allowed.
- Students must change a mixed number to an improper fraction or decimal (as appropriate for the question) because a space is not an allowable character.
- For questions with an answer greater than or equal to 1,000, students must enter the answer without a comma.

For grades 7, 8, and 11 mathematics, in addition to the digits 0-9, forward slash, and period, students can use the hyphen (-) to show negative numbers.

For science, students can answer using letters A-Z or the digits 0-9, depending on the question. On some questions, a hyphen for a negative sign (-) and a period (.) for a decimal are allowable characters. Note: In the **online SRTs**, students will not be able to practice entering letters.

To change or remove their answer, students use the backspace key on the keyboard. They then can enter their new answer.

## Question Types

### Function Graph (Mathematics Grade 11 Only)

Students answer function graph questions by selecting one graph type, when prompted, and graphing a solution.

Not all graph types are available on all questions. For questions with only one graph type, the graph-type button will not display as the coordinates will automatically appear on the graph. In this case, a Reset button is available if the function needs to be reset to the original coordinates.

- **Linear Functions:** Students select the Linear button. A line with two points will appear, and students drag each point to the appropriate location on the grid. To remove or reset the linear function, students select the Reset (if available) or Linear (if available) button again.
- **Absolute Value Functions:** Students select the Absolute Value button. An absolute value function with two points will appear. One point is the vertex, and the other is another point on the function. Students drag each point to the appropriate location on the grid. To remove or reset the absolute value function, students select the Reset (if available) or Absolute Value (if available) button again.
- **Quadratic Functions:** Students select the Quadratic button. A quadratic function with two points will appear. One point is the vertex, and the other is another point on the function. Students drag each point to the appropriate location on the grid. To remove or reset the quadratic function, students select the Reset (if available) or Quadratic (if available) button again.
- **Exponential Functions:** Students select the Exponential button. An exponential function with two points will appear. An asymptote will also appear on the graph as a gray dashed line on the x-axis. Students drag the asymptote line up or down to the appropriate location on the grid. Then, students drag each point to the appropriate locations on the grid. To remove or reset the exponential function, students select the Reset (if available) or Exponential (if available) button again.

### Fraction Models (Mathematics Only)

Fraction model questions are answered by selecting the More button to divide the model into more parts or the Fewer button to divide the model into fewer parts. Students then select the parts they want to shade to complete the model. Note: In the **online MCAs**, for some fraction model questions, the More and Fewer buttons are grayed out and students only need to select the parts of the model they want to shade to answer the question.

To remove the shading on a part of the model, students select the part again. To start the question over, students select the Reset button.

## Question Types

### Hot Spot 1 and Hot Spot 2

All grades contain the Hot-Spot 1 question type.

Grades 3–8 and 11 (mathematics only) contain the Hot-Spot 2 question type.

Hot-Spot 1 questions are answered by selecting an object, which may be text or graphics.

There may be more than one answer, so students will select as many objects as needed to answer the question.

To change their answer, students select the object(s) again. They then select the new object(s) they want to choose.

Hot-Spot 2 questions are answered by selecting active points (or hot spots) on an image of a number line.

To change their answer, students select a different active point on the image. Students do not need to unselect their previous answer.

There may be more than one answer, so students will select as many active points as needed to answer the question.

For both hot-spot types, an orange warning box will appear if students try to select more options than the question requires. However, a warning box will not appear if students select too few options, so it is important that students read the directions carefully.

### Hot Text (Reading Only)

Hot-Text questions are a specific type of hot-spot question. Students answer these questions by selecting one or more highlighted selections of the text.

To change their answer, students select the highlighted text again. They then select the new highlighted text they want to choose.

Depending on the question, an orange warning box will appear if students try to select too many options. However, a warning box will not appear if students select too few options, so it is important that students read the directions carefully.

### Inline Choice

Inline-Choice questions are answered by selecting the answer from one or more dropdown menus.

To view all of the answer choices, students select the dropdown menu. Students select one answer from each dropdown menu.

To change their answer, students select a different answer from the dropdown menu.

## Question Types

### Multiple Choice

Multiple-Choice questions have only one correct answer. These questions have a circle next to each answer choice.

Students answer multiple-choice questions by selecting the answer or the circle to the left.

Students change their answer by selecting a different answer.

### Multiple Response

For multiple-response questions, students should select all of the answers that they think are correct. These questions have a square checkbox next to each answer choice. Students select the checkbox to add a checkmark to their answer.

Students must read the directions carefully before answering the question so they know the specific number of responses that are required. Some questions will not let the student move forward or back until the required number of responses is selected. Depending on the question, an orange warning box will appear if students try to select too many options. However, a warning box will not appear if students select too few options, so it is important that students read the directions carefully.

To remove an answer selection, students select the checkbox again.

### Number Line (Mathematics Grades 8 and 11 Only)

Number line questions are answered by selecting a type of solution set and then moving the endpoints to the correct position. Number line questions can include both open- and closed-endpoint answer options.

Some questions allow students to graph more than one solution on the number line. For these questions, students select additional solution set types as needed to display their answer. The active (selected) solution is in black and the inactive solution is in gray.

Students can remove a solution set by selecting Remove on the active solution.

## Question Types

### Order

Students answer order questions by dragging the answer options into the correct order. Students must read the directions carefully before answering the question so they know the specific way in which the answers should be arranged.

To change their answer, students drag an answer choice to another position.

Note: In the **online MCAs**, students must move or select at least one dragger to go on to the next question.

### Point Graphs (Mathematics and Science Only)

Point graph questions are answered by plotting one or more points on a graph.

Students select a location on the graph to plot a point.

To move a point, students select and drag the point they want to move.

To remove a point, students select the point they want to remove.

For some questions, a line or line segment will connect the points the student plotted. Note: In the **online SRTs**, students will practice plotting two points to create a line.

### Reading Passage (Reading Only)

In the **online SRTs**, students will see one reading passage, located in the Passage tab next to the Video tab, and one associated question in the "Try It!" section.

In the **online MCAs**, at the beginning of each reading passage, students will see a title page screen that shows the title of the passage. Next, students will see a split screen with the passage on the left side of the screen and the question and answer choices on the right.

Each reading passage begins with an introductory text box that summarizes the passage and provides instructions for students.

Some students will see text sets, or paired passages. Text sets include two reading passages and their associated questions. The title pages for text sets will contain two passage titles.

Students may need to drag the scrollbar up or down to read the whole passage.

In the **online SRTs**, text-to-speech (TTS) is available for the question associated with the reading passage lesson. In the **online MCAs**, TTS is not available for any reading content (reading passages and questions), except when students are eligible for the new read-aloud (text-to-speech) for reading accommodation.

## Question Types

### Shape Transformation (Mathematics Grades 7 and 11 Only)

Shape transformation questions are answered by selecting and dragging a shape to the appropriate position on the grid.

To change their answer, students move the shape to a different position or drag a different shape onto the grid.

### Simulations (Science Only)

In the **online SRTs**, students will see a simulation, located in the Simulation tab next to the Video tab, and instructions in the "Try It!" section.

In the **online MCAs**, at the beginning of each phenomenon, students will see a title page screen that shows the title of the phenomenon. Next, students will see a split screen showing the science tab(s) and the question. The science tab(s) are repeated on the left side of the screen and the question and answer choices are shown on the right.

Some science phenomena require students to run a simulated experiment using a simulation. Some questions require using data generated by running the simulation.

Students choose variables or options using dropdown menus and buttons.

Students can remove a row of data from the table by selecting the trash can icon in the applicable row, and they can delete all the information in the table by selecting the trash can icon in the header row.

Students may repeat the simulation as many times as needed.

### Slider (Mathematics and Science Only)

Slider questions are answered by dragging an arrow slider up or down to answer the question.

To change their answer, students drag the arrow slider to a new location.

## Question Types

### Solution Set (Mathematics Grade 11 Only)

Students select the Inequality 1 box to graph the first inequality. A large arrow will appear to the right of the box when it has been selected. Inside the box, students select the solid or dashed line for the inequality and plot two points on the grid. A solid or dashed line will connect the two points.

Students then select the Inequality 2 box to graph the second inequality. A large arrow will appear to the right of the box when it has been selected. Inside the box, students select the solid or dashed line for the second inequality and plot two points on the grid. A solid or dashed line will connect the two points.

To change a line, students select the box representing the line they want to change. On the grid, students select or move the point(s) they want to change.

Next, students select the box labeled Shaded Region and then select a region on the grid to shade.

To remove the shading, students must first ensure the box labeled Shaded Region is selected. A large arrow will appear to the right of the box when it has been selected. Then students select the shaded region.

### Table Grid

Some table grid questions are answered by selecting one or more answers in each row or column. Students should select all of the answers that they think are correct. These questions have a square checkbox for each answer choice. To remove an answer, students select the square checkbox again.

Other table grid questions are answered by selecting only one answer in each row or column. These questions have a circle for each answer choice. To change their answer, students select a different circle.

## Question Types

### Tabs (Science Only)

Science stimuli are based on phenomena, which are observable events occurring in the universe that can be explained or predicted with scientific reasoning. The text, graphics, animations, or simulations included in the phenomena provide context for the student to engage in the questions.

Students will see a split screen showing the science phenomenon and question. The left side of the screen will display the phenomenon, while the question and answer choice(s) are shown on the right. Phenomena may be shown on multiple tabs. Students must select each tab to view the full phenomenon.

Students may need to drag the scrollbar up or down to see the whole tab or question.

The tab that appears with the question usually has all the information students need to answer the question. Students can use text-to-speech to listen to the information on this tab. Occasionally, a question will ask a student to view information on other tabs in order to determine an answer. However, text-to-speech is only available on the tab that first appears next to the question.

### Video Player (Science Only)

Some science phenomena include a video player. Students select Play to start the video.

Students have the option to pause the video, and it can be replayed as needed.

Students can adjust the speed and volume of the video. Closed captioning is available for students who wish to use it; students must select the gear or the Closed Captions ("CC") button, and then select "English" to turn it on. Students can customize the appearance of closed captions by selecting "Settings." Once closed captioning is turned on, it will remain on for all subsequent videos.

The following keyboard shortcuts can be used with the video player:

- "C" key – toggles closed captioning on or off
- "M" key – mute or unmute video volume
- Space bar/"Enter" key – pause or play video
- Down/up arrows – decrease or increase volume in 10% increments
- Left/right arrows – seek forward or backward in the video in 5-second increments
- 0-9 keys – fast seek to a certain percentage of the video

Note: In the **online SRTs**, the video player does not have the closed captions option in Settings because the video lessons have embedded closed captions.

## Test Supports Tutorials

The Test Supports tutorials provide educators and students with information on the purpose and functionality of the various test supports that are available on the MCAs. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the Test Supports and Accommodations section of the [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs > Online Student Readiness Tools (SRTs) > Test Supports and Accommodations).

These test supports are available to all students throughout the entire test, and students can access the test supports from the user dropdown menu. However, not all supports may be needed or appropriate for all students, and educators should ensure that students who use specific supports during instruction know how to use them during testing.

### Test Supports

#### Answer Masking

Answer masking allows students to cover all answer options and then uncover one option at a time. This support is available only for multiple-choice and multiple-response questions.

To use this tool, students select Enable Answer Masking from the user dropdown menu.

To show a masked answer, students select the “eye” button  to the right of the answer option. To cover the answer choice, students select the “eye” button  again. For options that are selected, the “eye” button will be grayed out and the answer mask disabled. Students will not be able to cover the option until the option is unselected.

To close answer masking, students go back to the user dropdown menu and select Disable Answer Masking.

Once answer masking is enabled, students can use the Tab, Tab + Shift, and Enter keys to show and hide the answer masks.

## Test Supports

### Color Contrast

Color contrast settings give students the option to change the color of the screen and words. The default, Black on White, uses black text on a white background. Color contrast is also available on start screens, welcome pages, and end-of-group/section screens.

To use this test support, students:

- Select Change the background and foreground color from the user dropdown menu.
- Select a color choice.
  - Black on White (Default)
  - Black on Cream
  - Black on Light Blue
  - Black on Light Magenta
  - White on Black
  - Yellow on Blue
  - Gray on Green
- Select Continue.

Note: If students try to open the color contrast tool while text-to-speech is playing, the read-aloud will stop.

### Line Reader Mask

The line reader mask helps students focus on one part of a question, reading passage, or science tab at a time.

To use this test support, students:

- Select Show Line Reader Mask from the user dropdown menu.
- Select and drag the line reader mask over the question, reading passage, or science tab.
- Select and drag the bottom right corner of the mask to change the size of the mask.
- Select and drag the bottom right corner of the window to change the size of the window.
- Select and drag the arrow icon to change the position of the window within the mask.

To close the line reader mask, students go back to the dropdown menu and select Hide Line Reader Mask.

## Test Supports

### Magnifier

The magnifier allows students to enlarge portions of the testing screen for better readability.

To use this tool, students select Enable Magnifier from the user dropdown menu and drag the magnifier over the area they want to make larger. To close it, students go back to the user dropdown menu and select Disable Magnifier.

The following notes include details about how the magnifier tool interacts with other tools:

- Students must move the magnifier tool away from an answer option before using the pointer tool to select their answer.
- The magnifier tool does not magnify the TI calculators. If students open both the TI calculator and the magnifier, then move the magnifier over the TI calculator, the magnifier will not recognize the TI calculator. However, the magnifier tool does magnify the Desmos calculators.
- The magnifier tool does not magnify video players. If students move the magnifier over a video player, the magnifier will not recognize it.
- If students enable the color contrast tool after the magnifier tool, the magnifier will automatically close. After changing the color contrast, students will need to re-open the magnifier.
- Enabling the magnifier tool while playing text-to-speech on iPads can cause issues with the audio.

## Test Supports

### Text-to-Speech (Standard)

Students can use the text-to-speech tool to listen to the directions at the beginning of each test for all subjects. For mathematics and science, students can also use the text-to-speech tool to listen to text in the test. For reading, TTS is not available for any reading content (reading passages and questions), except when students are eligible for the new read-aloud (text-to-speech) for reading accommodation.

The Play Text-to-Speech button  lets students start and stop the read-aloud. As the text is read, the sentence is highlighted in yellow and each word is highlighted in blue as it is spoken.

The Toggle Click to Listen button  lets students select the sentence where the read-aloud will begin. Text-to-Speech will continue to read past the selected sentence unless the student selects the Stop Text-to-Speech button.

The Jump Back  and Skip Ahead  buttons let students easily jump back or skip ahead in the read-aloud.

The Text-to-Speech Settings button  lets students change how fast the text is read by using the Increase speed (+) and Decrease speed (-) buttons. On some devices, students can change the volume. On iPads, the volume can be adjusted on the outside of the device, so students will not see the volume control.

#### Notes:

- For most devices, the Jump Back  button lets students jump back to the start of a sentence or a previous sentence.
- If a student uses Toggle Click to Listen  on an answer choice, it will be selected as their answer. Be sure that students are aware of this so that during the test, they review their answer before going to the next question.
- If students open the color contrast tool while text-to-speech is playing, the read-aloud will stop. Students should change the color contrast, as needed, before starting text-to-speech.
- Enabling the magnifier while playing text-to-speech on iPads can cause issues with the audio.
- Refer to the *Accommodated Text-to-Speech Tutorials* section of this guide for information about accommodated text-to-speech.

## Test Supports

### Zoom (Mac, PC, and Touchscreen)

Students can zoom in and out to make the entire screen larger or smaller.

- On Chromebooks and some computers, students press CTRL and the plus sign (+) at the same time to zoom in. Students press CTRL and the minus sign (-) to zoom out. Students press CTRL and zero (0) to reset the screen to its original size (100%).
- On Macs, students press CMD and the plus sign (+) at the same time to zoom in. Students press CMD and the minus sign (-) to zoom out. Students press CMD and zero (0) to reset the screen to its original size (100%).
- On touchscreens, students pinch to zoom in and out.

Depending on the device, if students zoom in more than 200%:

- Tools may appear in the Menu .
- The Review and Bookmark buttons may also appear in the Menu.
- Students will need to select the Menu to view all tools.
- The text-to-speech buttons may appear along the bottom.

Also, depending on how much students zoom in, some graphics and text on the screen may not be visible, and students may be unable to answer the question or use the other tools. Instruct students to zoom out if this occurs.

## Pop-up Translations Tutorials (Mathematics Only)

The pop-up translations tutorials provide educators and students with information on the purpose and functionality of pop-up translations that are available. These translations may provide support to multilingual learners, including English learners, former English learners, or students in immersion or dual language programs. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the Test Supports and Accommodations section of the [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs > Online Student Readiness Tools (SRTs) > Test Supports and Accommodations > Language Supports and Accommodations > Mathematics).

### Pop-up Translations

#### Hmong, Spanish, and Somali

Eligible students can use the word-to-word pop-up translations to view words translated in Hmong, Somali, or Spanish. As determined by the district, this support is available for English learners, former English learners, or students in immersion or dual language programs.

Students select a word with a dotted line under it to see it translated.

- On PCs, Chromebooks, or Macs, students use the mouse or touchpad to select an underlined word to see it translated.
- On touchscreens, students touch an underlined word to see it translated.
- The pop-up window will open as a separate window, allowing the student to move it around on the screen as needed. The pop-up will stay open until the student closes it, either by selecting the X in the upper right of the window or by moving to another question. An open pop-up will also close if the student selects a new word with a dotted line.

Depending on the device, when students hover over a translated word, they will see either the pointer with a question mark below it or just a question mark. This question mark indicates that students have a question about the meaning of the word.

Note: When students select an underlined word in an answer choice, that choice will not be selected as their answer. However, if a student selects any part of the answer choice that is not underlined, that choice will be selected as their answer, which may be unintended. Be sure that students are aware of this so that during the test, they review their answer before going to the next question.

## Accommodated Text-to-Speech Tutorials (Mathematics Only)

The accommodated text-to-speech tutorials provide educators and students with information on the purpose and functionality of text-to-speech accommodations that are available to students with an IEP or 504 plan. Each individual student's needs must be considered when determining which version of text-to-speech (standard or accommodated) will be the most beneficial for them. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the Test Supports and Accommodations section of the [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs > Online Student Readiness Tools (SRTs) > Test Supports and Accommodations > Language Supports and Accommodations > Mathematics).

### Accommodated Text-to-Speech

For accommodated text-to-speech, graphics and tables have text-to-speech available in addition to the audio that is provided for standard text-to-speech.

Accommodated text-to-speech is available only for students with an IEP or 504 plan.

In the **online SRTs**, the Accommodated Text-to-Speech tutorials include select questions from the grade-level SRT tutorials but with accommodated, rather than standard, text-to-speech applied. Additionally, all tutorial videos, except the Text-to-Speech tutorial video, have been removed so students can focus on the functionality of accommodated text-to-speech rather than on the functionality of the question type. If students need information about the question type, please refer to the full tutorial in the applicable grade-level SRT.

## English Glossary Tutorials (Reading and Science Only)

The English Glossary tutorials provide educators and students with information on the purpose and functionality of the English Glossary feature that is available. English glossaries may provide support to multilingual learners, including English learners (ELs), former ELs, or students in immersion or dual-language programs. Additionally, the English Glossary may be beneficial to any student who typically receives classroom support with academic vocabulary development. Before using the SRTs with students, educators can familiarize themselves with the English Glossary tutorial in the Test Supports and Accommodations section of the [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs > Online Student Readiness Tools (SRTs) > Test Supports and Accommodations > Language Supports and Accommodations > Reading or Science).

### English Glossary

The English glossary feature provides concise definitions in English. The words selected for glossing represent academic vocabulary frequently found in grade-appropriate reading and science texts; however, the lists are not exhaustive and students may still encounter unfamiliar terms in the test.

The Reading English Glossary only provides definitions for terms in questions, not the reading passages. The Science English Glossary provides definitions for terms in phenomena and questions.

This is a universal support available to all students.

Students select a word with a dotted line under it to see and hear its definition.

- On PCs, Chromebooks, or Macs, students use the mouse or touchpad to select an underlined word to see and hear its definition. The window will stay open until the student closes the window or moves to another question. While open, if the student clicks on a different underlined word, the window will update to show the new word's definition/audio.
- On touchscreens, students touch an underlined word to see or hear its definition. The window will stay open until the student closes the window or moves to another question.

Depending on the device, when students hover over a glossed word, they will see either the pointer with a question mark below it or just a question mark. This question mark indicates that students have a question about the meaning of the word.

Note: When students select an underlined word in an answer choice, that choice will not be selected as their answer. However, if a student selects any part of the answer choice that is not underlined, that choice will be selected as their answer, which may be unintended. Be sure that students are aware of this so that during the test, they review their answer before going to the next question.

## Script/Human Reader (HR) Tutorials (Reading and Science Only)

The Script/Human Reader tutorials provide educators and students the opportunity to practice administering and taking the online assessment in conjunction with a script, an accommodation for Reading MCA and Science MCA that is available to students with an IEP or 504 plan. Each individual student's needs must be considered when determining if this accommodation will be beneficial for them. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the Test Supports and Accommodations section of the [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs > Online Student Readiness Tools (SRTs) > Test Supports and Accommodations > Language Supports and Accommodations > Reading or Science). Scripts for each subject and grade level can be accessed on the [Minnesota Assessment Hub](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Paper SRTs).

Note: Because the online Mathematics MCA is adaptive and the test items presented vary by student, the script can only be administered with a paper test book (regular print, large print, or braille). For Reading MCA and Science MCA, if a student requires a paper test book, the script can also be used with a paper test book (regular print, large print, or braille). To prepare educators and students for administration of a script with a paper test book, refer to the [paper SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Paper SRTs).

### Script Accommodation

Eligible students can take the online reading or science test while a Test Monitor reads aloud the test content using a script.

Scripts are available only for students with an IEP or 504 plan.

In the **online MCAs**, the script can be used to read aloud both the paper and online tests because the content of these tests is the same.

## TestNav Extension (Science Only)

The TestNav Extension tutorial provides educators and students with information on the purpose and functionality of Read&Write, which is available to all students. Before using the SRTs with students, educators can familiarize themselves with the tutorials in the Test Supports and Accommodations section of the [online SRTs](#) (Minnesota Assessment Hub > Resources & Training > Student Readiness Tools (SRTs) > Online SRTs > Online Student Readiness Tools (SRTs) > Test Supports and Accommodations > Language Supports and Accommodations > Science).

### TestNav Extension

The Read&Write TestNav extension tool helps students read and write as they respond to constructed-response questions on their science test. This TestNav extension is available for all students. As determined by the district, this support can be indicated for students based on whether they use word prediction or speech-to-text and word prediction writing supports in their classroom instruction. Note: The use of speech-to-text requires the student to test in an individual setting due to the student speaking aloud during their test. Students testing with just the word prediction feature are not required to test in an individual setting. Students with processing-related needs, print disabilities, and writing disabilities may find this support helpful. Multilingual learners may also benefit from this support.

In the **online SRTs**, the TestNav extension must be set up. To do this, select the Enable button next to the Read&Write extension. **New for 2025-26:** In the **online MCAs**, the Read&Write TestNav extension will be indicated in Test WES and automatically set up when the student signs into TestNav. Students will not need to enable the Read&Write Extension as described for the SRT.

The Read&Write panel will appear at the top of the student's screen when they enter the test. Students can select the arrows to drag the panel to another part of the screen. When students are ready to answer the question, they must select either the Type&Talk (headset icon) button or the Prediction (crystal ball icon) button. The Talk&Type feature allows students to speak the response into their microphone and have Read&Write record the response for them. As students speak, their words appear in a black box at the bottom of the screen. When students pause or stop, their response will automatically be recorded in the answer box. Students should select the Type&Talk button again when they have finished recording their response. If a word is not recorded correctly, students can select the Prediction button and select from one of the suggested words to fix the error. The Prediction feature produces a list of suggested words based on the letters and words the student types. Students can select any word from the list, and it will be added to their response. Students can hear the suggested words read aloud by hovering over each word in the list.