Science Online
Training Test Support
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Overview

This document has information about the grades 5, 8, and 11 online Washington Comprehensive Assessment of Science (WCAS) Training Tests available on the WCAP portal. This includes activities to help students practice the online tools, navigation, and item types.

Students who take online assessments need opportunities to explore the features of the online assessment and to practice using the tools available to them on those assessments. However, classroom time spent on such exploration and practice should be carefully limited so that the focus remains on instruction aligned to the concepts and skills in the Washington State 2013 K–12 Science Learning Standards (hereafter referred to as “the standards”). Students should use the Training Tests just enough to be able to demonstrate their understanding of science concepts and skills on the WCAS without being hindered by lack of familiarity with the online system.

Considerations:

- All students should have the opportunity to access the WCAS Training Tests before taking the WCAS itself at the end of the school year (hereafter referred to as “the summative assessment”).
- We recommend first presenting the Training Test to an entire class using one computer and an LCD projector, then following up with opportunities for students to walk through the Training Test on individual computers with varying levels of teacher guidance.
- Students can work with all three Training Tests (grades 5, 8, and 11), including those not in their grade level. The sets of items within a single Training Test do not cover all of the features and item types that will be on the summative assessment. The only item type not currently represented on any of the Training Tests is a simulation. (A simulation directs student to use drop-down lists to control an investigation and/or generate data.) Students may have difficulty with the science content on questions targeting the standards for the other grade levels, but this should not interfere with the students’ ability to interact with the features, navigation, and item types for training purposes.
- Teachers are encouraged to answer students’ inquiries and give support while students are working in the Training Tests. Emphasize that students should not be concerned with the science content or correct answers, but should concentrate on exploring the features, navigation, and tools.
- These activities assume students are using a computer with a mouse and keyboard. When using tablets or touch-screen enabled devices, these activities may need to be modified. Ideally, students should use the size of screen and type of interaction (mouse or touch-screen) that they will use during the summative assessment.
- These activities are not a checklist. There is no expectation that students complete all of the suggested activities. These activities do not describe all the possible ways students could engage with the questions or tools.
• The activities may be modified and/or shared with any interested teacher, parent, or student.
• The **Training Tests** are set up for practice only; students’ answers are not scored or saved.

Questions or comments? Email us at science@k12.wa.us.
Features Specific to the WCAS

Collapsible Stimuli
Some item clusters include more than one stimulus. Each stimulus is delivered along with the questions most closely associated to that stimulus. To minimize vertical scrolling and the need to move back to previous screens within a cluster, a stimulus is collapsed once the next stimulus is provided. However, stimuli that have been presented are available to the student throughout the assessment. A +/- icon in the heading of a collapsed stimulus section allows stimuli to be hidden from view (collapsed) or expanded to suit a student’s need.

Locking Items
Some item clusters include locking items. The locking of questions allows subsequent questions or stimuli to update the student with correct information and limits clueing among questions in a cluster. Students cannot change their answer to these questions once they have moved on to the next question. A green padlock icon next to the question number alerts students that they are answering a locking item. When a student starts to move to the next question, an “attention” box warns that they will not be able to change their answer once they move on. The student can either return to the question or move forward and lock in their answer. After moving on, the student can return to locked questions and see their answer, but they cannot change their answer. A red padlock icon next to the question number indicates that the item is now locked.

Multipart Items
Some questions are divided into multiple parts. Typically, this includes two parts (Part A and Part B). Multipart items can include different item types (e.g., multiple choice followed by an edit task inline choice). Question parts are mutually reinforcing and strengthen alignment to multiple dimensions of a PE. For example, a question could ask a student to evaluate a claim in Part A, and then, in Part B, ask the student to identify how a particular trend in data or piece of evidence supports their evaluation of that claim.

Periodic Table
In grades 8 and 11, students have access to an online periodic table. Students should become familiar with the periodic table by accessing it on the Training Test. The periodic table can be downloaded from the Test Administrators User Guides and Manual folder (in the GTSA section) of the WCAP Portal and printed for use during class.
Settings

The online test engine has many features that can be changed to allow equitable access for all students. Default settings vary by grade level and content area. Educators should be familiar with the information in the Guidelines on Tools, Supports & Accommodations for State Assessment (GTSA) in order to determine if these default settings should be modified for students. The GTSA also describes:

- which features of the assessment can be modified and in what ways;
- which universal tools are available for all students;
- which designated supports can be set for certain students or groups of students based on educator discretion; and
- which accommodations are allowed based on a student’s documented Individual Education Plan (IEP) or 504 Plan.

The Training Tests are set to have only the universal tools turned “on.” The designated supports and accommodations are set in the default “off” position. The Training Tests have a special feature that allows the student to adjust the settings when logging in, so they can practice using the different tools as part of determining if the default settings should be modified for the student for use during the summative assessment. A tool that is “on” will have a blue box with “ON” next to the tool title:

![Strikethrough ON](image)

A tool that is “off” will have a gray box with “OFF” next to the tool title:

![Masking OFF](image)

The tool can be turned “on” by clicking the white space to the left of the “OFF,” which will cause the “ON” box to slide in, and some dots to appear next to the tool name:

![Masking ON](image)

**NOTE:** Settings for summative assessments cannot be adjusted during student logon procedures. They must be set within the Test Information Distribution Engine (TIDE) by your school or district test coordinator (DC, DA, or SA) prior to summative testing.
Access and Login

Options for Accessing the Training Test
There are two options for student access to the Training Test.

1. **Non-Secure Browser Guest User**
   The student and/or the Test Administrator (TA) use the Practice & Training Test card on the homepage of the WCAP Portal and login to the Training Test as a guest user. This less complex option could be used by educators to become familiar with the Training Test and to present it to groups of students. It is also useful, as explained in the Setting section above, to have students try out some of the designated supports and accommodations before officially setting them in TIDE for the summative assessment. The designated supports that can be adjusted by the student in Guest User mode include Color Contrast, Masking, Mouse Pointer, and Text-to-Speech. The Accommodations that can be set in Guest User mode include Permissive Mode, Print-on-Demand, and Streamline.

2. **Secure Browser Training Test Login: Create, Manage, and Administer Training Test**
   There are two components to this option. The educator in the role of TA uses the Practice & Training Test site to create and manage the test session. The students use the Practice Test part of the secure browser to login to the Training Test. This allows students to practice entering their login information (including their SSID), and allows students with accommodations a chance to practice using all of their specified accommodations. The designated supports that can be adjusted by the TA in Secure User mode include Color Contrast, Masking, Mouse Pointer, and Text-to-Speech. The Embedded Accommodations that can be adjusted by the TA in Secure User mode include Permissive Mode, Print-on-Demand, Streamline, and Calculator. The Non-Embedded Accommodations that can be set in Secure User mode include: Abacus, Alternate Response Options, Calculator, and Speech-to-Text.

   Note: These adjustments to the settings are not available to the TA during the summative test.

   *Work with your school test coordinator (SA) to obtain login information for you and your students before using this option.*

Both options allow students to practice navigating the online test engine and become familiar with the tools and features of the summative assessment.

Steps for Option 1: Non-Secure Guest User
1. Direct students to access the WCAP Portal homepage [WCAP portal](https://wa.portal.airast.org/) using one of the following web browsers: Chrome, Firefox, Edge, or Safari.
2. Select the Practice & Training Tests button from the list on the right side of the screen.

3. Select the Take the Practice and Training Tests card.

4. When students see the Please Sign In page, direct them to click Sign In.

5. On the Your Tests page, direct students to use the drop-down menu to pick their grade.

6. Students will then see the Your Tests page. They may need to scroll down to see the WCAS Training Tests listed in pink boxes, each with an arrow and the words “Start Grade...Science.”

7. Direct students to click the link for the test you would like them to start. (Note: All three Training Tests are available to students in any grade 3–12. Students can view all three Training Tests to see all the features and item types.)

8. Students should then see the Choose Settings page. Students should review and/or adjust the settings, then click Select at the bottom of the screen.

9. The You Are Almost Ready to Begin Your Test page then provides an opportunity for students to review the Help Guide and/or their Test Settings.

10. Direct students to click View Test Settings. Students should review the settings and then click Yes at the bottom of the screen.

11. Direct students to click View Help Guide and then an Online Test Directions page appears. See the Help Guide section below for how to walk students through this page.
Steps for Option 2: Secure Browser

1. You (the TA) will first access the WCAP Portal homepage [WCAP Portal](https://wa.portal.airast.org/) using one of the following web browsers: Chrome, Firefox, Edge, or Safari.

2. Select the **Test Administrators** user card.

3. Select the **Practice & Training Tests** card.

4. The Login page appears.

   ![Practice & Training Tests Card](image)

   Enter your username and password. (This is the same information used to login to all the systems in the WCAP Portal. If you do not know your information, ask your district or school test coordinator (DC or SC) for help. If this is the first time you have logged in this school year, you will have to go through a series of steps to verify your information.)

5. Click **Secure Login**. The TA Interface appears and the **Practice or Training Test Selection** window pops up (you may have to disable your browsers pop-up blocker for this site).

6. When you are ready to begin the Training Test, select the test(s) to administer in the **Practice or Training Test Selection** window. Use the plus sign to expand the list of WCAS Training Tests to select a specific grade or multiple grades. Select the Start arrow at the bottom of the box to start the session.
7. The session ID appears at the top of the screen. Write down this session ID. You will provide the session ID to the students logging into your test session.

8. Now students can log in to the secure browser. Direct students to locate the icon titled WASecure Browser on their computer screen, and then to double-click the icon to launch the secure browser.

   (If the icon is not available, contact your SC for help, and move the student to a different computer.)

9. Once the browser is open and students see the Please Sign In page, direct students to the bottom, left corner of the screen. There is a blue box with the words “This is the Operational Test Site. If you wish to complete the Practice Test, please click the button below.” Direct students to click on the “Go to the Practice and Training Tests Site” button. Now they should see a Please Sign In page. If students try to log in on the first Please Sign In page for the Operational Site with the Training Test session ID, they will get an error message.

10. Direct students to click on the ON button next to Guest User and the ON button next to Guest Session. Once those buttons are toggled to OFF, lines for students to enter their first name, SSID, and the Session ID will appear. Direct students to enter their information and then click Sign In.

11. Students then check their information (name, SSID, grade) on the Is This You? page and click Yes at the bottom of the screen.
12. Students will then see the **Your Tests** page. Whichever test(s) you selected in step 6 should appear in a pink box with an arrow and the words “Start Grade...Science.”

Direct students to click the link for the test you would like them to start. The screen will then tell the student that they are waiting for TA approval.

13. You (the TA) need to return to the TA Interface on your computer and look for the Approvals box in the upper-right corner of the screen, next to the session ID. Click **Approvals** to view the list of students awaiting approval.

- To review and adjust a student’s test settings and accommodations, click the eye 🕳 in that student’s row. (The ability to adjust is only available on the **Training Test**, not during the summative test.)
- To approve an individual student for testing, click the green check ✔️.
- To deny a student for testing, click the red x ❌ and enter the reason in the box.
- To approve all students in the list for testing, click Approve All Students tab in the top of the Approvals window.

14. Students should then see the **Choose Settings** page. Students should review and/or adjust the settings, then click **Select** at the bottom of the screen.

15. The **You Are Almost Ready to Begin Your Test** page then provide an opportunity for students to review the **Help Guide** and/or their **Test Settings**.

16. Direct students to click **View Test Settings**. Students should review the settings and then click **Yes** at the bottom of the screen.

17. Direct students to click **View Help Guide** and then an **Online Test Directions** page appears. See the Help Guide section below for how to walk students through this page.
Help Guide

The last step of the student login process is the Help Guide page. This page gives an overview of the test rules and tools. This page is the same for all WCAS online testing, whether the training tests or the summative test. The main purpose of the Training Tests are to provide students opportunities to become familiar with the test rules and tools. During the summative test, the students are instructed to read the information on this screen to themselves and then ask their TA if they have any questions. We suggest using the Training Test as an opportunity to walk through the entire Help Guide page with students, discussing each of the bullets and information about the tools, to ensure that all students fully understand the test rules and tools before they take the summative test. The text from the Help Guide page is included on the next few pages in boxes. Helpful information and suggestions for teachers and TAs is in italics outside the boxes.

NOTE: During the summative assessment, TAs must follow TA Script of Student Test Directions verbatim.

Walk Through the Help Guide.

<table>
<thead>
<tr>
<th>Science WCAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to Move Through the Test</td>
</tr>
<tr>
<td>• You may need to move down the screen to see all the information for a question.</td>
</tr>
<tr>
<td>• You may need to move down the screen to see every question.</td>
</tr>
<tr>
<td>o Some screens show one question. Other screens show many questions.</td>
</tr>
<tr>
<td>o You must answer every question on a screen.</td>
</tr>
<tr>
<td>• You can move between screens using the [Back] or [Next] buttons.</td>
</tr>
<tr>
<td>o You can also choose a question number from the “Questions” drop-down list</td>
</tr>
</tbody>
</table>

If there is a question or question-part that is not answered when the student clicks the Next button, a warning box will pop up and list the questions that still need to be answered before moving on.

The “Questions” drop-down list only has the items that the student has already seen.

A strong word of caution: questions that are responded to by typing text into a box are considered “answered” by the Test Delivery System (TDS). This includes typing something as small as a period or clicking in the box and hitting the space bar—the text box might look blank, but the TDS considers the question “answered.” Some students may choose to enter random or incomplete text into the box so the TDS will allow them to move on to the next page of questions. They might intend to return to this question later because they have not really answered the question, and they may or may not mark the question for review. Students might be trying to employ the test-taking strategy of answering all the multiple choice questions first, and returning to the constructed response items at the end. This can become a problem if the student’s test becomes paused for any reason, or if the question is a locking item.
• Some answers cannot be changed after you go to the next question.
  o A green lock  next to a question number means that your answer will lock
    after you go to the next question. When you click the [Next] button, a pop-up
    box will remind you to check your answer before you go on.
  o A red lock  next to a question number means that you have answered the
    question and gone on. You can look at the question and your answer, but you
    cannot change your answer.

Please emphasize to students that a locked item cannot be changed even if it is marked for
review.

Pause Rules

• You can pause your test at any time.
  o You will see a message asking, “Are you sure you want to pause the test?”
  o If you pause the test, you will be logged out.
  o You do not lose answers when the test is paused.
  o If the test is paused for more than 20 minutes, you cannot go back or
    change answers to questions you already answered or marked for review.

• When you log back into your test, the screen will show your next blank question.
• If you do nothing for 30 minutes, the test will pause and you will be logged out.

For the Training Tests students cannot go back to any questions they previously answered,
even if they log back in within 20 minutes. This is related to the fact that student responses are
not saved for Training Tests. Students will need to restart the Training Test entirely from the
beginning. During the summative assessments, students who log out using the “Pause” button
will be able to continue testing from the last question not answered (left untouched). If a
student entered random text into a short-answer response box, the TDS will considered the
question answered and will restart the student at a later question.

The next section is “Overview of Test Screen” with an image of the tool bars at the top of the
TDS screen, followed by tables describing the major tools available during testing. The text of
those tables is in Tables 1-3 on the following pages. Appendix A has a student-friendly WCAS
Tool Button Sheet, including images of the tool buttons and descriptions. This WCAS Tool
Button Sheet can be printed and used with students during the Training Test to help them
understand the tool buttons, but cannot be used during the summative assessment.
<table>
<thead>
<tr>
<th><strong>Global Test Tools</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions drop-down list</td>
<td>Click the box next to “Questions” to pick a question or page to go to. If you marked a question for review, the word “marked” will be next to the question or page number.</td>
</tr>
</tbody>
</table>
| Navigation | • The [Back] and [Next] buttons let you go from page to page in a test.  
• Click the [Back] button to go back to the previous page.  
Click the [Next] button to go to the next page. You can only go to the next page after you answer all the questions on the current page you are looking at. |
| Save | Click the [Save] button to save your answer to a question. You do not have to use the [Save] button. Your answers are saved when you answer the question. This button is not on pages that have only multiple choice questions. |
| End Test | You will only see the [End Test] button on the page with the last test question. Be sure you are done answering all the test questions on the page before you click the [End Test] button. Check with your teacher before clicking the [End Test] button. |
| Help | Click the question mark [?] button at the top right to open the Online Test Directions Help Guide so you can see this information again. |
| Volume Control | *Tests with audio only:*  
Click the [Volume Control] button to change the audio volume. |
| Pause | Click the [Pause] button to pause the test. When you pause the test, you will be logged out. Check with your teacher before clicking the [Pause] button. |
| Calculator | Click the [Calculator] button to open the calculator. You can use the calculator for all of the questions on the test. |
| Line Reader | Click the [Line Reader] button to highlight a single line of text in a stimulus or question. Click where you want to start reading, then use the up and down arrows to move the line up and down. |
| Zoom | Click the [Zoom In] button to make the words on the screen bigger. Click the [Zoom Out] button to make the words on the screen smaller. There are four zoom levels. |
| Periodic Table | *Grade 8 and High School only:*  
Click the [Periodic Table] button to open the periodic table. You can use the calculator for all questions on the science tests. |

*The Calculator is available for all grade levels of the summative assessment, for all items, even though students will not need to use it for every item. More information about the calculator is available in Appendix B. The Save button only has use during the summative assessments as student responses to the Training Tests are not saved.*
The Periodic Table is available on the Grade 8 and Grade 11 WCAS. Students will not need to use it for every item, but, like the calculator, it is available for the entire test. Students should practice working with it during the Training Test, to see what it looks like when opened and to explore how to move it and resize it on the screen.

Table 2 Context Menu Tools

<table>
<thead>
<tr>
<th>Context Menu Tools</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial</td>
<td>Each question has a video example. The video shows how to answer that type of question.</td>
</tr>
<tr>
<td>Notepad</td>
<td>Each question has a notepad where you can write a note or comment about the question. After you type your note, click [Save and Close]. A pencil picture shows up next to the question number.</td>
</tr>
<tr>
<td>Mark for Review</td>
<td>Use this tool to mark questions that you want to look at again later. The box around the question number will change and show a flap in the corner. A flag picture also shows up next to the question number.</td>
</tr>
</tbody>
</table>
| Highlighter        | Use this tool to highlight a section of text in yellow. There are two ways to highlight.  
1: Choose text on the screen using the left-click. Then right-click on that text and choose [Highlight Selection]. The chosen text will highlight in yellow.  
2: Choose text on the screen using the left-click. Then click on the Context Menu and select [Highlight Selection]. The chosen text will highlight in yellow.  
Use [Reset Highlighting] to get rid of all highlighting. Pictures cannot be highlighted. Multiple choice options cannot be highlighted. This tool cannot be used when the Line Reader is turned on. |
| Strikethrough      | For multiple choice questions, you can “strike out” an option. There are two ways to “strike out” an option.  
1: Right-click on an option and choose [Strikethrough].  
2: Click on the Context Menu and select [Strikethrough]. Click on answer options to strike them out.  
When you are done, click outside the answer area or press the Esc key. |

Most of the Tutorial videos do not use science content in the example items. The Tutorials should be used to remind students about how the item type functions, not what the correct answer is for that particular question. The Tutorials should be viewed and discussed during the Training Test. Remind students that even if they use the Mark for Review tool on an item, they will not be able to return to that item if their test is paused for more than 20 minutes.
The Strikethrough tool can also be used on multiple select items. The Strikethrough tool does not determine which options students can select or which option or combination of options the system interprets as the student’s answer. An option can have both the strikethrough and the box checked or bubble filled. When this happens, the system will ignore the strikethrough and count the checked box(es) or the filled bubble as the answer the student has selected.

Table 3 Other Tools

<table>
<thead>
<tr>
<th>Other Tools</th>
<th>Description</th>
</tr>
</thead>
</table>
| Stimulus/Question Expansion Button | You can expand both the stimulus section and the question section to make them easier to read. You can only expand one section at a time.  
• To expand the stimulus section, click the right arrow button next to the context menu. To go back to the normal view, click the left arrow button in the upper-right corner.  
• To expand the question section, click the left arrow button next to the context menu. To go back to the normal view, click the right arrow button in the upper-left corner. |
| Glossary/Translation | Some words have a gray line above and below them. Click on these words to see a definition of the word, a translation of the word, or both.                                                                                         |
| Collapsing Stimuli | Some item sets on the science tests have collapsing stimuli (two or more sections) paired with questions. The first screen has stimulus Section 1 with a set of questions. Once all the questions on this screen are answered, use the [Next] button to move to a second screen. You will see the Section 1 stimulus "collapsed" above the Section 2 stimulus and some new questions.  
Click the expand (+) symbol to have Section 1 expand again if Section 1 information is needed to answer the new questions.  
Section 1 may be "collapsed" again by clicking the collapse (-) symbol. |

The Stimulus/Question Expansion tool can help students focus on one part of the screen at a time. The Glossary words are available to all students. The Translation words are a Designated Support that must be set for students in TIDE; see the “Glossary—Translations” section in the GTSA for more details and guidance. The Collapsing Stimuli are unique to the WCAS and should be thoroughly explored during the Training Test.

After completing the Help Guide page, have students select the Back button to return to the You Are Almost Ready to Begin Your Test page. Have students select Begin Test Now at the bottom of their screen to begin viewing questions and stimuli.
WCAS Training Test Questions

Students can use all three Training Tests (grades 5, 8, and 11) to see all features and item types that will be on the summative assessment, except simulations. Students may have difficulty with the science content on items assessing the standards for grade levels higher than their own, but this should not interfere with the students’ ability to interact with items for training purposes.

Grade 5

Table 4 provides the metadata for each of the questions on the Grade 5 Training Test including item type, locking information, answer key, score point, and alignment information.

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Item Type</th>
<th>Lock</th>
<th>Key</th>
<th>Score Point</th>
<th>Performance Expectation Alignment</th>
<th>Item Specification Alignment</th>
<th>Science and Engineering Practice Alignment</th>
<th>Disciplinary Core Idea Alignment</th>
<th>Crosscutting Concept Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Energy Sources standalone</td>
<td>Multiple Choice</td>
<td>No</td>
<td>D</td>
<td>1</td>
<td>4-ESS3-1</td>
<td>4-ESS3-1.4</td>
<td>Obtaining, Evaluating, and Communicating Information</td>
<td>~</td>
<td>Cause and Effect</td>
</tr>
<tr>
<td>2</td>
<td>Cat in Mirror standalone</td>
<td>Grid Item/Multiple Select</td>
<td>No</td>
<td>Rubric/ B, E</td>
<td>2</td>
<td>4-PS4-2</td>
<td>4-PS4-2.1</td>
<td>Developing and Using Models</td>
<td>PS4.B</td>
<td>Cause and Effect</td>
</tr>
<tr>
<td>3</td>
<td>Soggy Solutions cluster</td>
<td>Multiple Choice</td>
<td>No</td>
<td>C</td>
<td>1</td>
<td>4-ESS3-2</td>
<td>4-ESS3-2.3</td>
<td>~</td>
<td>ESS3.B</td>
<td>Cause and Effect</td>
</tr>
<tr>
<td>4</td>
<td>Soggy Solutions cluster</td>
<td>Table Match</td>
<td>No</td>
<td>Rubric</td>
<td>1</td>
<td>4-ESS3-2</td>
<td>4-ESS3-2.1</td>
<td>Constructing Explanations and Designing Solutions</td>
<td>ESS3.B</td>
<td>Cause and Effect</td>
</tr>
<tr>
<td>5</td>
<td>Soggy Solutions cluster</td>
<td>Multiple Select</td>
<td>No</td>
<td>C, D, E</td>
<td>1</td>
<td>3-5 ETS1-2</td>
<td>3-5 ETS1-2.2</td>
<td>Constructing Explanations and Designing Solutions</td>
<td>ETS1.B</td>
<td>~</td>
</tr>
<tr>
<td>6</td>
<td>Soggy Solutions cluster</td>
<td>Short Answer</td>
<td>No</td>
<td>Rubric</td>
<td>1</td>
<td>4-ESS3-2</td>
<td>4-ESS3-2.2</td>
<td>Constructing Explanations and Designing Solutions</td>
<td>ETS1.B</td>
<td>~</td>
</tr>
<tr>
<td>7</td>
<td>Rock Pocket Mice</td>
<td>Short Answer</td>
<td>Yes</td>
<td>Rubric</td>
<td>2</td>
<td>3-LS4-2</td>
<td>3-LS4-2.1*</td>
<td>Constructing Explanations and Designing Solutions</td>
<td>LS4.B</td>
<td>Cause and Effect</td>
</tr>
<tr>
<td>8</td>
<td>Rock Pocket Mice</td>
<td>Multiple Choice/Multiple Choice</td>
<td>Yes</td>
<td>C/ A</td>
<td>1</td>
<td>3-LS4-2</td>
<td>3-LS4-2.1*</td>
<td>Constructing Explanations and Designing Solutions</td>
<td>LS4.B</td>
<td>Cause and Effect</td>
</tr>
<tr>
<td>9</td>
<td>Rock Pocket Mice</td>
<td>Edit Task Inline Choice/Multiple Choice</td>
<td>No</td>
<td>Rubric/ D</td>
<td>1</td>
<td>3-LS4-2</td>
<td>3-LS4-2.1*</td>
<td>Constructing Explanations and Designing Solutions</td>
<td>LS4.B</td>
<td>Cause and Effect</td>
</tr>
</tbody>
</table>

*The item specification for 3-LS4-2 will be published in late spring 2019.
Details about each item type and item specifications are available in the Test Design and Item Specification documents on the Science Assessment webpage. Please refer to those documents for more information about the design of the summative assessment. If the answer key states “rubric” then more details about the correct answer will be provided on the following pages.

Question 1: Multiple Choice Standalone

Standalone items display on the entire width of the screen. Depending on the height of the screen, students may need to scroll down on the screen to see all of the answer options. Multiple choice items typically provide four options. The student selects one option by clicking the circle in front of the option.

Suggestions for working with students on multiple choice items include:

- Have students note that the circles with letters inside them are a clue that only one answer option will be selected.
- Have students click on a circle, observe that the circle turns gray, and then click on the same circle again. Note that the circle returns to white when the student clicks the second time.
- Have students click the circle in front of one option and observe that the circle turns gray. Then have students click the circle in front of another option. The gray circle should move from the first option selected to the second option selected, showing students that they can only select one option at a time. Help students understand this is one way they can change their answer.
- Have students strikethrough an option. There are two ways to do this:
  - Click the context menu button ☑️ and select the strikethrough tool to turn strikethrough mode on.
  - Click on an option to strikethrough; students can strikethrough multiple options.
  - Click anywhere outside of the box that appears around all the options to turn strikethrough mode off.

  OR
  - Right-click, using the mouse, on an option and select strikethrough from the menu that appears. To strikethrough multiple options, students must right click on each option individually.
- Have students experiment with selecting an option and placing a strikethrough on the same option. Note the information in the Instructions and Help section earlier in this document regarding the interaction of selecting an option and using the strikethrough.
- Have students select the first option and observe that a box appears around the option. Then have students press the “Tab” key on the keyboard and observe that the box around the option moves to the next option. Have students press the Spacebar on the keyboard to select that second option. Work with students to understand how to use the “Tab” key (to move down the list) and “Shift+Tab” keys (to move up the list) to move between options and how to use the Spacebar to select or un-select options.

Correct answer:
Worth 1 score point
Answer choice D
Question 2: Grid/Multiple Select Standalone

Standalone items display on the entire width of the screen. Depending on the height of the screen, students may need to scroll down on the screen to see all of the text of the question. This item is also a multipart item. Multipart items can include different item types for each part (e.g., multiple choice followed by an edit task inline choice) and students will have to scroll down to see all the parts.

Suggestions for working with students on multipart items include:

- Have students read the first line of the item. It will say something like, “The following question has two parts. First, answer part A. Then, answer part B.” Discuss with students that this line of text is important to notice, since it tells them how many parts are related to each other. Some items will also have a part C.
- Have students read the entire item carefully to determine where each part of the item begins and ends. Bold text stating “Part A” and “Part B” is there to guide them. A complete response must provide answers to all parts. Help students understand they may have to use different tools and methods to answer different parts of the item.
- Have students answer only one part of the item and select the Next button. An Attention box should pop up, telling the student that they still need to answer the question.

Part A of Question 2 is a grid item. There are two main types of grid items:

1) **Hot spot grid items** provide a blank bar graph and students click on the graph to add bars of different heights. (There are no hot spot grid items on the WCAS Training Tests but students should have experience with hot spot grid items from Smarter Balanced Mathematics tests.)

2) **Drag-and-drop grid items** provide arrows, symbols, labels, or other graphical objects that students drag and drop into boxes on an answer space. The objects can appear to the left of the answer space or below the answer space.

Suggestions for working with students on drag-and-drop grid items include:

- Have students examine the question and answer space carefully to determine where they should draw arrows to answer the question.
- Have students draw one arrow in the answer space. Then have students delete that arrow by clicking on the Delete button then clicking on the arrow. Then have students draw another arrow into the answer space.
- Encourage students to use the Delete button to remove any arrows and dots in the answer space that they do not want as part of their answer. Students should not leave extra arrows or dots in the answer space.
- Have students draw two to three more arrows the answer space in different locations and directions.
Part B of Question 2 is a **multiple select item**. Multiple select items provide five or more options. The student selects two or more options by clicking the box in front of each option. The direction will indicate how many options a student should select to complete the item.

Suggestions for working with students on **multiple select items** include:
- Have students note that the boxes **without** letters inside them are a clue that more than one answer option will be selected. Remind them that the item will tell them **in a bold font** how many total options to choose.
- Have students click all the boxes and observe that they can check more than one box, but only as many boxes as indicated in the directions.
- Have students click on the maximum number of boxes and observe that they are unable to check any more boxes. Then have them uncheck one box and check another box. Help students understand this is how to change their answer by unselecting one option (deleting the checkmark) to selecting another option (adding a checkmark).
- Have students select only one box, and then select the **Next** button. An Attention box should pop up, telling the students that they still need to answer question 2 before moving to the next page. Have students select a second box and try the **Next** button again. The test will only allow the students to move on from a multiple select item after selecting the correct number of boxes.
- Have students practice with strikethroughs like they did with the multiple choice item (question 1). Remind them that if the box is checked, the system will ignore the strikethroughs and accept the checked box as an answer.

**Correct answer:**
Part A—To earn 1 point, arrows are added to the Path of Light model in the following order: Lamp → Cat → Mirror → Student.

Part B—Both choices need to be selected to earn 1 score point
Answer choices B and E

**Questions 3–6: Soggy Solutions Item Cluster**
Question 3 starts an item cluster. Note that item clusters are displayed with a stimulus pane and question pane on the same screen. The stimulus takes up the left 40% of the screen, while the question pane takes up the right 60% of the screen. The Stimulus/Question Expansion Buttons are at the top of the screen on the border of these two panes, which allows the student to expand either pane to a width of 90% of the screen.

Suggestions for working with students on **item clusters** include:
- Have students use the gray scroll bar in the border between the sections to move through all the text of the stimulus. They may also need to scroll horizontally to see all of the text in the Student Solutions diagram.
- Have students click the right expansion arrow to expand the stimulus, then see how much scrolling is needed to read the entire stimulus. Click the left expansion arrow to return to the default setup.
• Have students click the left expansion arrow to expand the question pane, then click the right expansion arrow to return to the default setup.

**Question 3: Multiple Choice**

*Question 3* is a multiple choice item that contains the glossed word “ditch.”

Suggestions for working with students on **glossed words** include:

• Have students move their cursor over the word “ditch” in the question. The word should have a blue rectangle behind it. Have students click on the word. A window should pop up with the word “ditch” at the top, then the word “Glossary” in blue, and then a definition below that.

• Have students use their cursor to move the box around on the screen so they can read the whole item.

• Have students get rid of the box by selecting the “x” in the top right corner of the box.

• Have students find the word “ditch” in the answer options C and D, and in the stimulus.

• Have students move their cursor over the label “Water in ditch” in the diagram for Solution 3. Note that the word “ditch” does not change color, and cannot be selected. This is because words cannot be glossed in diagrams.

**Correct answer:**

Worth 1 score point

Answer choice C

**BEFORE ANSWERING QUESTION 4:**

• Have students select the **Next** button. An Attention box should pop up, telling the student that they still need to answer question 4 before moving to the next page. When working with question 4, have students see how many boxes they need to check before the system will let them move on to the next page.

**Question 4: Table Match**

*Table match items* provide students with a table and ask students to check boxes within the cells of the table to make identifications, classifications, or predictions. Students are informed when the boxes in a row or column may be checked once, more than once, or not at all. The test delivery system may or may not limit the number of boxes that can be checked in a row or column. Students should read carefully and follow directions for each **table match item**.

Suggestions for working with students on **table match items** include:

• Have students click on a box, observe the checkmark in the box, then click on the same box again. Help students understand that this is how to select a choice (checkmark in the box) and unselect a choice (a blank box).

• Have students click on a box, observe the checkmark in the box, then click on a different box. Help students understand that this is how they to change from selecting one choice (checkmark in one box) to selecting another choice (checkmark in another box).

• Have students click on all the boxes in the table and observe how many boxes can be checked. If only one box can be checked in a column or row, discuss how students change
their answer by clicking in other boxes in that column or row. If more than one checkmark is allowed in that column or row, discuss how students changed their answer by making additional checkmarks in that column or row. Be sure to help students understand that just because more than one box in a column or row can be checked, more than one box may not need to be checked.

- Have students click on a box, which results in blue shading appearing around the box. Then have the student press the “Tab” key on the keyboard, noting that the shading around the box moves to the next box. Have students press the Spacebar on the keyboard to put a checkmark in that second box. Work with students to understand how to use the “Tab” key (to move forward through the boxes in the table) and the “Shift+Tab” key combination (to move backward through the boxes in the table) to move between boxes and use the Spacebar to add or delete a checkmark in a box.

**Correct answer:**
All the rows must be correct to earn 1 score point
Row 1 (Provides more space…) select Solution 1: Dig the ditch deeper
Row 2 (Prevents water…) select Solution 3: Add a gate
Row 3 (Blocks water…) select Solution 2: Place sandbags.

**Question 5: Multiple Select**
Note that there is a new piece of stimulus associated with Question 5, labeled “Section 2.” Some item clusters include more than one stimulus. Each stimulus is delivered along with the items most closely associated to that stimulus. Students should read the new section before working with the new page of questions.

Suggestions for working with students on collapsing stimuli include:
- Have students click the + icon in the heading of the collapsed stimulus “Section 1” so that the stimulus that was used for the previous questions expands. Have students scroll down until they see the new stimulus at the bottom of the first stimulus. Have students click the – icon in the heading of Section 1 so that the first stimulus collapses and is hidden from view.
- Use the Stimulus/Question Expansion Buttons to see how much vertical scrolling is needed when the first stimulus is collapsed or not.
- Practice using the highlighter function for the stimulus. Choose text on the screen using the mouse, then right-click or use the context menu at the top of the stimulus pane to turn on/off the highlighting.

Question 5 is a multiple select item. See the suggestions listed with Question 2, Part B.

- Have students practice with strikethroughs like they did with the multiple choice and multiple-select items (questions 1 and 2). Remind them that if the box is checked, the system will ignore the strikethroughs and accept the checked box as an answer.

**Correct answer:**
All three choices need to be selected to earn 1 score point
Answer choices C, D, and E
BEFORE ANSWERING QUESTION 6, explore the following tools:

- Have students select the **Questions** drop-down list, which is located just above the **Save** and **Pause** buttons. A list of item numbers should appear. Have students select item “3 – 4” and see what happens. They should move back to questions 3 and 4, and only have stimulus “Section 1—Soggy Solutions” on the screen. Use the drop-down list again to move to the last number on the list. If the student had not yet clicked **Next** on question 5, they should move to question 5. If the student had already advanced to question 6, they will be able to access question 6.
- Have students select the **Calculator** button. The Grade 5 WCAS has a simple, 4-function calculator. Have students explore how the calculator works, including how it can be resized by dragging the bottom right corner with the cursor, and how it can be closed by selecting the x in the top right corner. See Appendix B for more information.
- Have students select the **Zoom In** button. There are four levels of zoom available to all students. Point out to students that the Zoom function makes the text larger, but that it also increases the scrolling needed to see all the text. Have students select the **Zoom Out** button to revert the screen.

**Question 6: Short Answer**

Short answer items provide a response box into which students type their answer. Some short answer items first ask students to choose from a list of options before typing in the response box. The circles next to the options (dig the ditch deeper, place sandbags, add a gate) are blank, which is usually an indication that the student’s choice is not scored. For this question, any choice is acceptable for the student to make. Students will be scored on the text they provide in the response box.

Suggestions for working with students on **short answer items** include:

- Have students click in one of the choice boxes and then select the **Next** button. An Attention box should pop up, telling the student that they still need to answer question 6.
- Have students type a short sentence. Then have students edit that sentence by changing, adding and/or removing words, adding punctuation, or other changes.
- Have students type a long enough paragraph to see the grey scroll bar appear. The response box does not change size, but students can fill the box and then type more if needed.

**Correct answer:**
The response only needs one choice selected and a correct corresponding description to earn 1 score point.

If the student selected, “Dig a ditch deeper” then they should type something like, “Although the ditch takes the most time to install, the ditch lasts longer than the sandbags but not as long as a gate. The ditch costs more than the sandbags but less than the gate.”

**OR**

If the student selected, “Place sandbags” then they should type something like, “The sand bags are faster and cheaper to install than the other two solutions but don’t last as long.”

**OR**
If the student selected, “Add a gate” then they should type something like, “The gate had the highest cost and the middle amount of time to build but lasts the longest of any solution.”

Questions 7–9: Rock Pocket Mice Item Cluster
Question 7 starts a second item cluster.

Suggestions for working with students on item clusters include:
• Have students use the gray scroll bar in the border between the sections to move through all the text of the stimulus. They may also need to scroll horizontally to see all of the text in the Student Solutions diagram.
• Have students click the right expansion arrow to expand the stimulus, then see how much scrolling is needed to read the entire stimulus. Click the left expansion arrow to return to the default setup.
• Have students click the left expansion arrow to expand the question pane, then click the right expansion arrow to return to the default setup.

Question 7 Short Answer (locking item)

Question 7 is a short answer item. See the suggestions listed with Question 6.

Question 7 is also a locking item. The locking of items allows subsequent items or stimuli to update the student with correct information and limits clueing among items within a cluster. When a student starts to move to the next item, an Attention box warns that they will not be able to change their answer once they move on. The student can either return to the question or move forward and lock in their answer. After moving on, students can return to locked items and see their answer, but they cannot change their answer.

Suggestions for working with students on locking items include:
• Have students notice the padlock icon next to the item number and observe that the padlock is green. Have students select the Next button and notice the “attention” box that warns them that they will not be able to change their answer if they continue. Have students select “No” to go back to the item and observe that they can change their answer to that question.
• Have students select the Next button and then click “Yes” in the attention box. Then have students select the Back button and observe that the padlock is now red and they cannot change their answer to that question. Help students understand that they must be completely finished with a locked item before they move on to the next page or Pause their test.

Correct answer:
The response only needs one choice selected and a correct corresponding description to earn 1 score point.
If the student selected, “Sand” then they should type something like, “There are 11 light-colored mice and 1 dark-colored mouse. The light-colored mice are the same color as the sand and can hide from predators.”

OR

If the student selected, “Volcanic rock” then they should type something like, “The number of dark mice is larger than the number of lighter mice. This is because the volcanic rock, which happens to be black, is a good camouflage for the dark mice, who are also many shades of dark grey and black.”

**Question 8 Multiple Choice/Multiple Choice (locking item)**

Question 8 is a **multipart** item. See the suggestions listed with Question 2.

Part A of Question 8 is a **multiple choice** item. See the suggestions listed with Question 1.

Part B of Question 8 is a **multiple choice** item. See the suggestions listed with Question 1.

Question 8 is also a **locking item**. See the suggestions listed with Question 7.

**Correct answer:**

Both choices need to be selected to earn 1 score point.

Part A: Answer choice C

Part B: Answer choice A

BEFORE ANSWERING QUESTION 9, explore the following tools:

- Have students use the Questions drop-down list, which is located just above the **Save** and **Pause** buttons, or the **Back** button to move back to Questions 6 and 7. Use the Context Menu for both items and select the Mark for Review tool. Have students notice the flag that now appears next to the question number, and the flap down on the question number. When students reach the Congratulations page at the end of the test, have them return to these two questions. Help them notice that they can change their response to Question 6, but not Question 7, which is locked.

**Question 9 Edit task Inline Choice/Multiple Choice**

Question 9 is a **multipart** item. See the suggestions listed with Question 2.

Part A of Question 9 is a **edit task inline choice** item. **Edit task inline choice items** provide partially completed sentences, which students complete by selecting words or phrases from drop-down lists.

Suggestions for working with students on **edit task inline choice items** include:

- Have students click in one blank space and observe that a drop-down list appears. Have students click on a choice in the list and observe that the blank space has been filled in with that choice. Have students click on another choice in the list and observe that the
answer in the blank space has changed. Help students understand that this is how they can change their answers.

- Have students fill in all the blank spaces in a sentence and observe that they can only see the drop-down list for one blank at a time.

Part B of question 9 is a **multiple choice** item. See the suggestions listed with Question 1. **Correct answer:**
Both choices need to be selected to earn 1 score point.
Part A: The sentences should read, “The population of the light-colored mice would **increase** over time.” AND “The population of the dark-colored mice would **decrease** over time.”
Part B: Answer choice D

Suggestions for how to work with students on ending a test can be found on pages 42-43.
Grade 8

Table 5 provides the metadata for each of the questions on the Grade 8 Training Test including: item type, locking information, answer key, score point, and alignment information.

Table 5 Grade 8 Training Test Metadata

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Item Type</th>
<th>Lock</th>
<th>Key</th>
<th>Score Point</th>
<th>Performance Expectation Alignment</th>
<th>Item Specification Alignment</th>
<th>Science and Engineering Practice Alignment</th>
<th>Disciplinary Core Idea Alignment</th>
<th>Crosscutting Concept Alignment</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Titan Images standalone</td>
<td>Hot Text/Table Match</td>
<td>No</td>
<td>Rubric/Rubric</td>
<td>2</td>
<td>MS-ESS1-3</td>
<td>MS-ESS1-3.4</td>
<td>Analyzing and Interpreting Data</td>
<td>~</td>
<td>Scale, Proportion, and Quantity</td>
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<tr>
<td>2</td>
<td>Sea Star Reproduction cluster</td>
<td>Grid Item</td>
<td>Yes</td>
<td>Rubric</td>
<td>2</td>
<td>MS-LS3-2</td>
<td>MS-LS3-2.2</td>
<td>Developing and Using Models</td>
<td>LS1.B</td>
<td>~</td>
</tr>
<tr>
<td>3</td>
<td>Sea Star Reproduction cluster</td>
<td>Table Match/Multiple Choice</td>
<td>No</td>
<td>Rubric/Rubric/B</td>
<td>2</td>
<td>MS-LS3-2</td>
<td>MS-LS3-2.1</td>
<td>Developing and Using Models ~</td>
<td>LS1.B</td>
<td>LS3.B</td>
</tr>
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<td>Sea Star Reproduction cluster</td>
<td>Grid Item</td>
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<td>Rubric</td>
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<td>MS-LS3-1</td>
<td>MS-LS3-1.2</td>
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<td>LS3.A</td>
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<td>Edit Task Inline Choice</td>
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<td>MS-LS3-1.1</td>
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<td>LS3.A</td>
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<td>6</td>
<td>Sea Star Reproduction cluster</td>
<td>Short Answer</td>
<td>No</td>
<td>Rubric</td>
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<td>MS-LS3-1</td>
<td>MS-LS3-1.3</td>
<td>~</td>
<td>LS3.B</td>
<td>Structure and Function</td>
</tr>
</tbody>
</table>

Details about each item type and a sample of item specifications are available in the Test Design and Item Specification documents on the Science Assessment webpage. Please refer to those documents for more information about the design of the summative assessment. If the answer key states “rubric” then more details about the correct answer will be provided on the following pages.

Question 1: Hot Text/Table Match Standalone

Standalone items display on the entire width of the screen. Depending on the height of the screen, students may need to scroll down on the screen to see all of the text of the question. This item is also a multipart item. Multipart items can include different item types for each part (e.g., multiple choice followed by an edit task inline choice) and students will have to scroll down to see all the parts.

Suggestions for working with students on multipart items include:

- Have students read the first line of the item. It will say something like, “The following question has two parts. First, answer part A. Then, answer part B.” Discuss with students...
that this line of text is important to notice, since it tells them how many parts are related
to each other. Some items will also have a part C.

- Have students read the entire item carefully to determine where each part of the item
begins and ends. Bold text stating “Part A” and “Part B” is there to guide them. A
complete student response must provide answers to all parts. Help students understand
they may have to use different tools and methods to answer different parts of the item.
- Have students answer only one part of the item and select the Next button. An Attention
box should pop up, telling the student that they still need to answer the question.

Part A of Question 1 is a **hot text item. Hot text items** provide students with statements and
ask students to move the statements into boxes to form an ordered sequence. Sometimes
statements can be used only once, sometimes they can be used more than once. Sometimes
there are more statements than boxes, and sometimes the number of statements matches
the number of boxes.

Suggestions for working with students on **hot text items** include:

- Have students click on a statement and move it up to an answer box. Notice that the
empty boxes turn a light shade of blue, then a darker shade of blue when a student
hovers over the answer box. Have students test to see how far they need to pull the
statement to make the empty box turn dark blue, then release the mouse and see how
the statement then fills the box.
- Have students click on statements and move them into boxes until all the boxes are full.
Even if there were more statements, students could not move any more statements. Then have
students move one statement out of a box and observe that now another statement
could be put into that box. Help students understand that this is how they can empty a
box to change their answer.
- Have students move a statement from one box to an empty box. Help students
understand that this is how they can change the order of statements in their answer.

Part B of Question 1 is a **table match item. Table match items** provide students with a table
and ask students to check boxes within the cells of the table to make identifications,
classifications, or predictions. Students are informed when the boxes in a row or column may
be checked once, more than once, or not at all. The test delivery system may or may not limit
the number of boxes that can be checked in a row or column. Students should read carefully
and follow directions for each **table match item**.

Suggestions for working with students on **table match items** include:

- Have students click on a box, observe the checkmark in the box, then click on the same
box again. Help students understand that this is how to select a choice (checkmark in the
box) and unselect a choice (a blank box).
- Have students click on a box, observe the checkmark in the box, then click on a different
box. Help students understand that this is how they to change from selecting one choice
(checkmark in one box) to selecting another choice (checkmark in another box).
• Have students click on all the boxes in the table and observe how many boxes can be checked. If only one box can be checked in a column or row, discuss how students change their answer by clicking in other boxes in that column or row. If more than one checkmark is allowed in that column or row, discuss how students changed their answer by making additional checkmarks in that column or row. Be sure to help students understand that just because more than one box in a column or row can be checked, more than one box may not need to be checked.

• Have students click on a box, which results in blue shading appearing around the box. Then have the student press the “Tab” key on the keyboard, noting that the shading around the box moves to the next box. Have students press the Spacebar on the keyboard to put a checkmark in that second box. Work with students to understand how to use the “Tab” key (to move forward through the boxes in the table) and the “Shift+Tab” key combination (to move backward through the boxes in the table) to move between boxes and use the Spacebar to add or delete a checkmark in a box.

Correct answer:
Part A—worth 1 score point
1) Minerals in the rocks on Titan
2) Shape of large landforms
3) Diameter of Titan
4) Titan’s orbital path around Saturn
5) Distance between Titan and the sun

Part B—worth 1 score point
Row 1 (Diameter of…) select Telescope Orbiting Earth
Row 2 (Distance between…) select Telescope Orbiting Earth
Row 3 (Minerals in…) select Probe on Titan’s Surface
Row 4 (Shape of…) select Spacecraft Orbiting Saturn
Row 5 (Titan’s orbital…) select Spacecraft Orbiting Saturn OR Telescope Orbiting Earth

Questions 2–6: Sea Star Reproduction Item Cluster
Question 2 starts an item cluster. Note that item clusters are displayed with a stimulus pane and question pane on the same screen. The stimulus takes up the left 40% of the screen, while the question pane takes up the right 60% of the screen. The Stimulus/Question Expansion Buttons are at the top of the screen on the border of these two panes, which allows the student to expand either pane to a width of 90% of the screen.

Suggestions for working with students on item clusters include:
• Have students use the gray scroll bar in the border between the sections to move through all the text of the stimulus. They may also need to scroll horizontally to see all of the text in the Student Solutions diagram.
• Have students click the right expansion arrow to expand the stimulus, then see how much scrolling is needed to read the entire stimulus. Click the left expansion arrow to return to the default setup.
• Have students click the left expansion arrow to expand the question pane, then click the right expansion arrow to return to the default setup.

Question 2: Grid (locking item)

Question 2 is a grid item. There are two main types of grid items:

1) **Hot spot grid items** provide a blank bar graph and students click on the graph to add bars of different heights. (There are no hot spot grid items on the WCAS Training Tests but students should have experience with hot spot grid items from Smarter Balanced Mathematics tests.)

2) **Drag-and-drop grid items** provide arrows, symbols, labels, or other graphical objects that students drag and drop into boxes on an answer space. The objects can appear to the left of the answer space or below the answer space.
   - When the objects appear to the left of the answer space, those objects can typically be placed in the diagram more than once.
   - When the objects appear below the answer space, those objects can be placed in the diagram only once.

Suggestions for working with students on drag-and-drop grid items include:

• Have students examine the question and answer space carefully to determine where they should drag objects to answer the question. Often students will place objects in a box in the answer space; however, sometimes objects will be placed on a number line or grid. Also have students note the number of objects they need to drag into the answer space to produce a complete answer.

• Have students drag one object into the answer space. Then have students delete that object by clicking on the Delete button then clicking on the object. Then have students drag a different object into the answer space.

• Encourage students to use the Delete button to remove any object in the answer space that they do not want as part of their answer. Students should not leave extra objects in the answer space.

• Have students drag one object into the answer space. Then have students drag the same object into the answer space again. Help students understand when they can drag the same object more than once into the answer space (when the objects appear to the left of the answer space) and when they can only drag the object once (when the objects appear below the answer space).

• Have students drag an object into the answer space, then have students drag a different object to the same location in the answer space. Note that the two objects appear on top of each other. Help students understand that when this happens in a box in the answer space, this means the answer box should only have one object placed inside the box and that the object on top is the object that will be scored.

• Have students drag an object into the answer space, then click on that object and observe the blue box that appears around the object. Have students use the up, down, and sideways keyboard keys to move the object around the answer space. Have students
press the Spacebar to place the object in a specific location and observe that the blue box is no longer around the object.

Question 2 is also a **locking item**. The locking of items allows subsequent items or stimuli to update the student with correct information and limits clueing among items within a cluster. When a student starts to move to the next item, an Attention box warns that they will not be able to change their answer once they move on. The student can either return to the question or move forward and lock in their answer. After moving on, students can return to locked items and see their answer, but they cannot change their answer.

Suggestions for working with students on **locking items** include:

- Have students notice the padlock icon next to the item number and observe that the padlock is green. Have the students select the Next button and notice the “attention” box that warns them that they will not be able to change their answer if they continue. Have the students select “No” to go back to the item and observe that they can change their answer to that question.
- Have students select the Next button and then click “Yes” in the attention box. Then have students select the Back button and observe that the padlock is now red and they cannot change their answer to that question.
- Help students understand that they must be completely finished with a locked item before they move on to the next page or Pause their test.

**Correct answer:**

A correct answer can be seen in the **Sea Star Offspring Allele Combinations** diagram, which appears in stimulus Section 2 when the student moves on to question 3. This is why question 2 is a locking item. The diagram in stimulus Section 2 gives students correct information for subsequent questions.

A correct answer in the Asexual Reproduction side of the chart is worth 1 score point. The response only has to have one offspring sea star filled in with the one allele combination to be correct. (The diagram in stimulus Section 2 has all four offspring filled in with that same combination. This would also be acceptable, as would filling in 2 or 3 of the sea stars with the correct allele combination)

A correct answer in the Sexual Reproduction side of the chart is worth 1 score point. The response must have all four offspring sea stars filled in, each with a different possible allele combination, to be correct.

**Question 3: Table Match/Multiple Choice**

Note that there is a new piece of stimulus associated with Question 3, labeled “Section 2.” Some item clusters include more than one stimulus. Each stimulus is delivered along with the items most closely associated to that stimulus. Students should read the new section before working with the new page of questions.
Suggestions for working with students on **collapsing stimuli** include:

- Have students click the + icon in the heading of the collapsed stimulus “Section 1” so that the stimulus that was used for the previous questions expands. Have students scroll down until they see the new stimulus at the bottom of the first stimulus. Have students click the – icon in the heading of Section 1 so that the first stimulus collapses and is hidden from view.
- Use the Stimulus/Question Expansion Buttons to see how much vertical scrolling is needed when the first stimulus is collapsed or not.
- Practice using the highlighter function for the stimulus. Choose text on the screen using the mouse, then right-click or use the context menu at the top of the stimulus pane to turn on/off the highlighting.

**Question 3** is a **multipart item**. See the suggestions listed with Question 1.

**Part A of Question 3** is a **table match item**. See the suggestions listed with Question 1.

**Part B of Question 3** is a **multiple choice item**. *Multiple choice items* typically provide four options. The student selects one option by clicking the circle in front of the option.

Suggestions for working with students on **multiple choice items** include:

- Have students note that the circles with letters inside them are a clue that only one answer option will be selected.
- Have students click on a circle, observe that the circle turns gray, and then click on the same circle again. Note that the circle returns to white when the student clicks the second time.
- Have students click the circle in front of one option and observe that the circle turns gray. Then have students click the circle in front of another option. The gray circle should move from the first option selected to the second option selected, showing students that they can only select one option at a time. Help students understand this is how they can change their answer.
- Have students strikethrough an option. There are two ways to do this:
  - Click the context menu button \(\equiv\) and select the strikethrough tool to turn strikethrough mode on.
  - Click on an option to strikethrough; students can strikethrough multiple options.
  - Click anywhere outside of the box that appears around all the options to turn strikethrough mode off.
  
  **OR**
  - Right-click, using the mouse, on an option and select strikethrough from the menu that appears. To strikethrough multiple options, students must right click on each option individually.
- Have students experiment with selecting an option and placing a strikethrough on the same option. Note the information in the Instructions and Help section earlier in this document regarding the interaction of selecting an option and using the strikethrough.
• Have students select the first option and observe that a box appears around the option. Then have students press the “Tab” key on the keyboard and observe that the box around the option moves to the next option. Have students press the Spacebar on the keyboard to select that second option. Work with students to understand how to use the “Tab” key (to move down the list) and “Shift+Tab” keys (to move up the list) to move between options and how to use the Spacebar to select or un-select options.

Correct answer:
Part A—all the rows must be correct to earn 1 score point
Row 1 (All offspring…) select Asexual Reproduction
Row 2 (Genetic information…) select Both
Row 3 (Different combinations…) select Sexual Reproduction
Row 4 (Each offspring…) select Both

Part B—worth 1 score point
Answer choice B

Question 4: Grid (locking item)
Note that there is a new piece of stimulus associated with Question 4. Remind students that they need to read the new section before working with the new page of questions.

Question 4 is a drag-and-drop grid item. See the suggestions listed with Question 2.

Question 4 is also a locking item. See the suggestions listed with Question 2.

Correct answer:
The correct answer can be seen in the Genetic Information Model diagram, which appears in Question 5. This is why Question 4 is a locking item.
A correct answer is worth 1 score point and must have all three boxes in the correct order (gene, protein, trait).

Question 5: Edit Task Inline Choice (locking item)
Edit task inline choice items provide partially completed sentences, which students complete by selecting words or phrases from drop-down lists.

Suggestions for working with students on edit task inline choice items include:
• Have students click in one blank space and observe that a drop-down list appears. Have students click on a choice in the list and observe that the blank space has been filled in with that choice. Have students click on another choice in the list and observe that the answer in the blank space has changed. Help students understand that this is how they can change their answers.
• Have students fill in all the blank spaces in a sentence and observe that they can only see the drop-down list for one blank at a time.

Question 5 is also a locking item. See the suggestions listed with Question 2.
**Correct answer:**
The sentence should read, “A mutation changes the structure of the **gene** which can change the structure and function of the **protein**.” for the response to earn 1 score point.

BEFORE ANSWERING QUESTION 6, explore the following tools:
- Have students use the **Questions** drop-down list, which is located just above the **Save** and **Pause** buttons, or the **Back** button to move back to Questions 2 and 3. Use the Context Menu for both items and select the Mark for Review tool. Have students notice the flag that now appears next to the question number, and the flap down on the question number. When students reach the Congratulations page at the end of the test, have them return to these two questions. Help them notice that they can change their response to Question 3, but not Question 2, which is locked.
- Have students select the **Calculator** button. The Grade 8 WCAS has a scientific calculator. Have students explore how the calculator works, including how it can be resized by dragging the bottom right corner with the cursor, and how it can be closed by selecting the x in the top right corner. See Appendix B for more information.
- Have students select the **Periodic Table** button. The Grade 8 WCAS has the **Periodic Table** available for all questions, although it may only be needed for a few. Have students explore how the tool works, including how it can be resized by dragging the bottom right corner with the cursor, how to use the scroll bars on the bottom and on the right to see more of the table, and how it can be closed by selecting the x in the top right corner.

**Question 6: Short Answer**
Short answer items provide a response box into which students type their answer. Some short answer items first ask students to choose from a list of options before typing in the response box. The circles next to the options (Harmful mutation, Beneficial nutation) are blank, which is usually an indication that the student’s choice is not scored. For this question, any choice is acceptable for the students to make. Students will be scored on the text they provide in the response box.

Suggestions for working with students on **short answer items** include:
- Have students click in one of the choice boxes and then select the **Next** button. An Attention box should pop up, telling the students that they still need to answer question 6.
- Have students type a short sentence. Then have students edit that sentence by changing, adding, and/or removing words, adding punctuation, or other changes.
- Have students type a long enough paragraph to see the gray scroll bar appear. The response box does not change size, but students can fill the box and then type more if needed.

**Correct answer:**
The response only needs one choice selected and a correct corresponding description to earn the 1 score point.
If the student selected, “Harmful mutation” then they should type something like, “The sea star can be pulled off of rocks by predators more easily.”

**OR**

If the student selected, “Beneficial mutation” then they should type something like, “The sea star could move more easily to catch prey if the sea stars feet don’t stick to rocks as much.”

Suggestions for how to work with students on ending a test can be found on pages 42-43.
Grade 11

Table 6 provides the metadata for each of the questions on the Grade 11 Training Test including: item type, locking information, answer key, score point, and alignment information.

### Table 6 Grade 11 Training Test Metadata

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Item Type</th>
<th>Lock</th>
<th>Key</th>
<th>Score Point</th>
<th>Performance Expectation Alignment</th>
<th>Item Specification Alignment</th>
<th>Science and Engineering Practice Alignment</th>
<th>Disciplinary Core Idea Alignment</th>
<th>Crosscutting Concept Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Combustion of Propane standalone</td>
<td>Table Input/</td>
<td>No</td>
<td>Rubric/Rubric</td>
<td>2</td>
<td>HS-PS1-7</td>
<td>HS-PS1-7.1</td>
<td>Using Mathematics and Computational Thinking</td>
<td>PS1.B</td>
<td>Energy and Matter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Edit Task Inline Choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Competing Forces cluster</td>
<td>Multiple Choice</td>
<td>Yes</td>
<td>A</td>
<td>1</td>
<td>HS-PS2-4</td>
<td>HS-PS2-4.1</td>
<td>Using Mathematics and Computational Thinking</td>
<td>PS2.B</td>
<td>Patterns</td>
</tr>
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</tr>
<tr>
<td>3</td>
<td>Competing Forces cluster</td>
<td>Edit Task</td>
<td>No</td>
<td>Rubric</td>
<td>1</td>
<td>HS-PS2-4</td>
<td>HS-PS2-4.1</td>
<td>Using Mathematics and Computational Thinking</td>
<td>PS2.B</td>
<td>Patterns</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Competing Forces cluster</td>
<td>Multiple Choice/Multiple Choice</td>
<td>No</td>
<td>C/A</td>
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<td>HS-PS2-4</td>
<td>HS-PS2-4.1</td>
<td>Using Mathematics and Computational Thinking</td>
<td>PS2.B</td>
<td>Patterns</td>
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<tr>
<td>5</td>
<td>Competing Forces cluster</td>
<td>Multiple Choice/Multiple Choice</td>
<td>No</td>
<td>B/D</td>
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<td>HS-PS2-4</td>
<td>HS-PS2-4.2</td>
<td>Using Mathematics and Computational Thinking</td>
<td>PS2.B</td>
<td>~</td>
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</tbody>
</table>

Details about each item type and a small sample of item specifications are available in the Test Design and Item Specification documents on the Science Assessment webpage. Please refer to those documents for more information about the design of the summative assessment. If the answer key states “rubric” then more details about the correct answer will be provided on the following pages.

### Question 1: Table Input/Edit Task Inline Choice Standalone

Standalone items display on the entire width of the screen. Depending on the height of the screen, students may need to scroll down on the screen to see all of the text of the question. This item is also a multipart item. Multipart items can include different item types for each part (e.g., multiple choice followed by edit task inline choice) and students will have to scroll down to see all the parts.

Suggestions for working with students on multipart items include:
- Have students read the first line of the item. It will say something like, “The following question has two parts. First, answer part A. Then, answer part B.” Discuss with students that this line of text is important to notice, since it tells them how many parts are related to each other. Some items will also have a part C.
• Have students read the entire item carefully to determine where each part of the item begins and ends. Bold text stating “Part A” and “Part B” is there to guide them. A complete student response must provide answers to all parts. Help students understand they may have to use different tools and methods to answer different parts of the item.

• Have students answer only one part of the item and select the Next button. An Attention box should pop up, telling the students that they still need to answer the question.

Part A of Question 1 is a table input item. Table input items provide an empty table into which students type numbers to complete the table. There may be multiple cells to complete, or only a single cell. Note the cells into which students type are shaded blue. Clicking in a blue cell will turn it white and a cursor will appear. Note that students must use the keyboard to type a number into a cell; there are no buttons to click. Table input items are likely to require that a mathematical calculation be done by the student. If the student uses the Calculator tool to do the calculation, they must still input their answer into the blue cell. None of the work done in the Calculator is saved or scored.

Suggestions for working with students on table input items include:
• Have students click in one cell and observe that the cursor appears. Have students enter a letter in the cell and observe the error message. Then have students correct the error by entering a number.
• Have students try to use the + or – symbols or decimals in the cell and observe whether these symbols are allowed as part of a numeric answer.
• Have students see how many digits they can enter in the cell and see what the maximum can be.

Part B of Question 1 is an edit task inline choice item. Edit task inline choice items provide partially completed sentences, which students complete by selecting words or phrases from drop-down lists. Note that the blank spaces are at the bottom of the screen for this standalone item, so the drop-down lists actually appear above the sentences instead of below.

Suggestions for working with students on edit task inline choice items include:
• Have students click in one blank space and observe that a drop-down list appears. Have students click on a choice in the list and observe that the blank space has been filled in with that choice. Have students click on another choice in the list and observe that the answer in the blank space has changed. Help students understand that this is how they can change their answers.
• Have students fill in all the blank spaces in a sentence and observe that they can only see the drop-down list for one blank at a time.
Correct answer:
Part A
There are multiple correct answers. The number 400, as well as any value (including decimals) between the numbers 362 and 364, can be entered to earn 1 score point. Answers given using significant figures are acceptable, but not required.

Part B
The sentence should read, “The coefficients in the chemical equation represent the number of moles and show that mass is conserved throughout the reaction.” for the response to earn 1 score point.

Questions 2–5: Competing Forces Item Cluster
Question 2 starts an item cluster. Note that item clusters are displayed with a stimulus pane and question pane on the same screen. The stimulus takes up the left 40% of the screen, while the question pane takes up the right 60% of the screen. The Stimulus/Question Expansion Buttons are at the top of the screen on the border of these two panes, which allows the student to expand either pane to a width of 90% of the screen.

Suggestions for working with students on item clusters include:
• Have students use the gray scroll bar in the border between the sections to move through all the text of the stimulus. They may also need to scroll horizontally to see all of the text in the Student Solutions diagram.
• Have students click the right expansion arrow to expand the stimulus, then see how much scrolling is needed to read the entire stimulus. Click the left expansion arrow to return to the default setup.
• Have students click the left expansion arrow to expand the question pane, then click the right expansion arrow to return to the default setup.

Note that this Competing Forces stimulus includes a demonstration. Demonstrations are short animations of a phenomenon, investigation, etc., with labeled diagrams and text describing the actions on the screen. Students can view the demonstration as often as they need to as they work through the questions associated with the cluster.

Suggestions for working with students on demonstrations include:
• Have students note the last sentence in the first paragraph, which reads, “Click the arrow to the left of the gray line to begin the demonstration.” This line of text is the standard introduction for a demonstration.
• Have students scroll down in the stimulus section so they can see the gray line at the bottom of the diagram. They may want to use the right expansion arrow to expand the stimulus pane. Have students click the arrow on the left to start the demonstration. The arrow turns to a pause symbol as the animation plays.
• Have students practice playing and pausing the demonstration.

Note that this Competing Forces stimulus also contains the glossed word “interaction.”
Suggestions for working with students on **glossed words** include:

- Have students move their cursor over the word “interaction” in the stimulus. The word should have a blue rectangle behind it. Have students click on the word. A window should pop up with the word “interaction” at the top, then the word “Glossary” in blue, and then a definition below that.
- Have students use their cursor to move the box around on the screen so they can read the rest of the stimulus.
- Have students get rid of the box by selecting the x in the top right corner of the box.

**Question 2: Multiple Choice (locking item)**

**Multiple choice items** typically provide four options. The student selects one option by clicking the circle in front of the option.

Suggestions for working with students on **multiple choice items** include:

- Have students note that the circles with letters inside them are a clue that only one answer option will be selected.
- Have students click on a circle, observe that the circle turns gray, and then click on the same circle again. Note that the circle returns to white when the student clicks the second time.
- Have students click the circle in front of one option and observe that the circle turns gray. Then have students click the circle in front of another option. The gray circle should move from the first option selected to the second option selected, showing students that they can only select one option at a time. Help students understand this is how they can change their answer.
- Have students strikethrough an option. There are two ways to do this:
  - Click the context menu button and select the strikethrough tool to turn strikethrough mode on.
  - Click on an option to strikethrough; students can strikethrough multiple options.
  - Click anywhere outside of the box that appears around all the options to turn strikethrough mode off.

**OR**

- Right-click, using the mouse, on an option and select strikethrough from the menu that appears. To strikethrough multiple options, students must right click on each option individually.
- Have students experiment with selecting an option and placing a strikethrough on the same option. Note the information in the Instructions and Help section earlier in this document regarding the interaction of selecting an option and using the strikethrough.
- Have students select the first option and observe that a box appears around the option. Then have the student press the “Tab” key on the keyboard and observe that the box around the option moves to the next option. Have students press the Spacebar on the keyboard to select that second option. Work with students to understand how to use the
“Tab” key (to move down the list) and “Shift+Tab” keys (to move up the list) to move between options and how to use the Spacebar to select or un-select options.

Question 2 is also a **locking item**. The locking of items allows subsequent items or stimuli to update the student with correct information and limits clueing among items within a cluster. When a student starts to move to the next item, an Attention box warns that they will not be able to change their answer once they move on. The student can either return to the question or move forward and lock in their answer. After moving on, students can return to locked items and see their answer, but they cannot change their answer.

Suggestions for working with students on **locking items** include:

- Have students notice the padlock icon next to the item number and observe that the padlock is green. Have students select the **Next** button and notice the “attention” box that warns them that they will not be able to change their answer if they continue. Have students select “No” to go back to the item and observe that they can change their answer to that question.

- Have students select the **Next** button and then click “Yes” in the attention box. Then have students select the **Back** button and observe that the padlock is now red and they cannot change their answer to that question. Help students understand that they must be completely finished with a locked item before they move on to the next page or Pause their test.

- Use the Context Menu to select the Mark for Review tool. Have students notice the flag that now appears next to the question number, and the flap down on the question number. When students move to Question 3, have them return to this question. Help them notice that they cannot change their response to Question 2, even though they have marked it for review.

**Correct answer:**
Worth 1 score point  
Answer choice A

**Question 3: Edit Task Inline Choice**
This **edit task inline choice item** has an incomplete table that students fill in by selecting words from drop-down lists within each cell of the table. See the suggestions for **edit task inline choice items** listed with Part B of Question 1.

**Correct answer:**
There are four different combinations of answers that can be selected to earn 1 score point.  
**Combo 1:**  
Negative—attract, positive, negative  
Positive—repel, negative, negative  
**OR**  
**Combo 2:**  
Negative—attract, negative, positive  
Positive—repel, negative, negative
OR
Combo 3:
Negative—attract, negative, positive
Positive—repel, positive, positive
OR
Combo 4:
Negative—attract, positive, negative
Positive—repel, positive, positive

Question 4: Multiple Choice/Multiple Choice
See the suggestions for multipart items listed with Question 1.

See the suggestions for multiple choice items listed with Question 2.

Correct answer:
Part A—worth 1 score point
Answer choice C
Part B—worth 1 score point
Answer choice A

BEFORE ANSWERING QUESTION 5, explore the following tools:
  • Have students select the Calculator button. The Grade 11 WCAS has a scientific calculator. Have students explore how the calculator works, including how it can be resized by dragging the bottom right corner with the cursor, and how it can be closed by selecting the x in the top right corner. See Appendix B for more information.
  • Have students select the Periodic Table button. The Grade 11 WCAS has the Periodic Table available for all questions, although it may only be needed for a few. Have students explore how the tool works, including how it can be resized by dragging the bottom right corner with the cursor, how to use the scroll bars on the bottom and on the right to see more of the table, and how it can be closed by selecting the x in the top right corner.

Question 5: Multiple Choice/Multiple Choice
See the suggestions for multipart items listed with Question 1.

See the suggestions for multiple choice item listed with Question 2.

Correct answer:
Part A—worth 1 score point
Answer choice B
Part B—worth 1 score point
Answer choice D
Ending a Test

After a student answers the last question of the Training Test and selects the Next button, an Attention box will appear. The message says, “You have answered all the questions in this test. When you have finished checking your answers, click the [End Test] button.” The student should select “Ok” to close the box. They will return to the last page of questions and the red End Test button will appear next to the Pause button in the global toolbar. Students should only click this button when they are finished answering all questions on the Training Test.

Please note the following:

- Students should check that they are completely done answering all questions before clicking End Test.
- Usually students will need to hit the green Next button to make the End Test button appear. If the last question is a short answer item and the student uses the Save tool, the End Test button will appear. Students should only click this button when they are finished answering all questions.
- When students see the End Test button before they have completely answered the last question on the test, reassure them that they can finish answering that last question on the test before clicking that button.
- We recommend that students wait for directions from a TA before they click End Test.

Clicking the End Test button will take students to the review page.

Review and Logout

The review page states, “Congratulations, you reached the end of the test!” and lists the question numbers in boxes. The page provides students a final opportunity to check their work on any question.

Suggestions for working with students on this page include:

- Have students notice whether any questions have been flagged with the Mark for Review tool. A blue flag and check mark will show next to the number: 1. Students can click on that number to return to that question. Note that students can still submit a test using the Submit Test button even with questions Marked for Review.
- Have students click on a question number to return to any question, whether or not the question has been flagged. Then, from that question, have them click the End Test button to return to the review page. Note that the End Test button now appears at the top of every question, not just the last question on the test.
- Have students click on a question number to return to any question, whether or not the question has been flagged. Have students try to change their answer to the question. Remind students that they cannot change a locking item after it has been locked, even if it has been flagged with the Mark for Review tool.
• Remind students that during the summative test, they will not be able to return to questions that are answered if their test has been Paused for more than 20 minutes, including any questions that been flagged with the Mark for Review tool.

• When students are finished, have them click the Submit Test button. Students should only click this button when they are finished answering all questions on the Training Test.

• During summative testing, they should wait for directions from a TA before they click the Submit Test button.

The last screen that students see is the Your Results page. This page serves as a confirmation that the test was submitted, and the student can log out of the browser. There are no actual test scores shown on this page.

Once the Log Out button is selected, the browser returns to the Please Sign In page.
### Appendix A: WCAS Tool Button Image and Description

This sheet may only be used during test preparation activities and the **Training Test** for the WCAS. It may **not** be used during the summative assessment.

<table>
<thead>
<tr>
<th>Row</th>
<th>Button Image</th>
<th>Button Name</th>
<th>Tool Button Descriptions</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="Help Button" /></td>
<td>Help</td>
<td>Shows the Instructions page at any time during the test.</td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="Zoom Button" /></td>
<td>Zoom</td>
<td>Make the words and pictures on the screen bigger or smaller.</td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Line Reader Button" /></td>
<td>Line Reader</td>
<td>Highlights a line of text.</td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="Calculator Button" /></td>
<td>Calculator</td>
<td>Opens the Desmos calculator.</td>
</tr>
<tr>
<td>5</td>
<td><img src="image" alt="Question dropdown Button" /></td>
<td>Question dropdown</td>
<td>Click the dropdown menu to move to any previously viewed stimulus or question on the test.</td>
</tr>
<tr>
<td>6</td>
<td><img src="image" alt="Save Button" /></td>
<td>Save</td>
<td>Save your response to a question (Answers are saved even if you do not click this button.)</td>
</tr>
<tr>
<td>7</td>
<td><img src="image" alt="Pause Button" /></td>
<td>Pause</td>
<td>Exit the test before finishing. (Raise your hand for help before choosing this button on your own.)</td>
</tr>
<tr>
<td>8</td>
<td><img src="image" alt="Next Button" /></td>
<td>Next</td>
<td>Moves you to the next page of questions on the test.</td>
</tr>
<tr>
<td>9</td>
<td><img src="image" alt="Back Button" /></td>
<td>Back</td>
<td>Goes back to the previous page of questions on the test.</td>
</tr>
<tr>
<td>10</td>
<td><img src="image" alt="End Test Button" /></td>
<td>End Test</td>
<td>Will show up after you answer all the test questions. Click to finish your test.</td>
</tr>
<tr>
<td>11</td>
<td><img src="image" alt="Context Menu Button" /></td>
<td>Context Menu</td>
<td>Opens a list of tools to use with the item. The list varies by item type.</td>
</tr>
<tr>
<td>12</td>
<td><img src="image" alt="Tutorial Button" /></td>
<td>Tutorial</td>
<td>Plays a video example of how to answer that type of question.</td>
</tr>
<tr>
<td>13</td>
<td><img src="image" alt="Notepad Button" /></td>
<td>Notepad</td>
<td>Type notes to yourself about a stimuli or question to read later.</td>
</tr>
<tr>
<td>14</td>
<td><img src="image" alt="Mark for Review Button" /></td>
<td>Mark for Review</td>
<td>Marks a question for you to look at again later.</td>
</tr>
<tr>
<td>15</td>
<td><img src="image" alt="Highlighter Button" /></td>
<td>Highlighter</td>
<td>Mark key words or areas. Select the text first, then click on the Context Menu to select the Highlighter tool.</td>
</tr>
<tr>
<td>16</td>
<td><img src="image" alt="Strikethrough Button" /></td>
<td>Strikethrough</td>
<td>Cross out answer choices.</td>
</tr>
<tr>
<td>17</td>
<td><img src="image" alt="Expansion Tool Button" /></td>
<td>Expansion Tool</td>
<td>Makes the stimulus cover the whole screen, or the questions cover the whole screen.</td>
</tr>
<tr>
<td>18</td>
<td><img src="image" alt="Glossary/Translation Button" /></td>
<td>Glossary/Translation</td>
<td>Click words with gray lines to see a definition (or translation) of the word.</td>
</tr>
<tr>
<td>19</td>
<td><img src="image" alt="Collapsing Stimuli Button" /></td>
<td>Collapsing Stimuli</td>
<td>Click the + symbol to expand Section 1 if you need it. Click the – symbol to close it again.</td>
</tr>
<tr>
<td>20</td>
<td><img src="image" alt="Periodic Table Button" /></td>
<td>Periodic Table</td>
<td>Opens a Periodic Table for use during the Grade 8 and Grade 11 tests.</td>
</tr>
</tbody>
</table>
Appendix B: Online Calculator

Students have access to an online calculator during the WCAS. The type of calculator varies by grade level:

- Students in grade 5 have access to a basic, four-function calculator.
- Students in grades 8 and 11 have access to a scientific calculator.

Students should become familiar with the functionality of the calculator prior to the summative assessment. The calculator is the same Desmos calculator used during Smarter Balance Mathematics tests. The calculators are available on the Desmos website for use outside of the Training Test.

General Comments

- What the student enters into the calculator is not recorded for purposes of answering a question. Students must still answer questions using the directions given in the questions.
- Using the Zoom In button will increase the font size of the calculator.
- Each calculator can be moved on the screen using the mouse, and can be resized using the tabs on the bottom of and right-hand side of the calculator.
- Calculators retain information that is typed into the calculator until the student moves to another page, such as when they use the Next or Back buttons. Students can open and close the calculator as they work through the question or question(s) on the same page without losing work done on the calculator.
- When the calculator is unable to process what the student has entered, a yellow caution triangle will display. Hovering the cursor over the yellow triangle shows text related to the issue, such as: “Sorry, I don’t understand this.” (all calculators) or “This calculator does not support equations.”

Functionality Comments

- Students can enter expressions using the buttons on the calculator or the number keys on the keyboard.
- Both calculators include an Undo and Redo button.
- The backspace key on the keyboard or the back arrow with an x on it can be used to move backwards.
- The answer to an expression shows on the right. The enter button on the keyboard or the gray arrow in the bottom right corner of the calculator can be used like an = sign.
- Students can use the value of one expression in subsequent expressions by using the “ans” button on the calculator.
Basic, four-function Calculator
In the basic, four-function calculator, students enter numeric expressions that the calculator evaluates according to the order of operations. The value of the expression is displayed on the same line, to the right, in real time. When students change an expression, the value will be updated in real time.

Scientific Calculator
In the scientific calculator, students enter numeric or algebraic expressions that the calculator evaluates according to the order of operations. The value of the expression is displayed on the same line, to the right, in real time. When students change an expression, the value will be updated in real time.

The scientific calculator includes several functions, shown across three tabs, but the tab labeled “main” in the only one students should need for the summative assessment:
Appendix C: Other Resources

The Washington Comprehensive Assessment Program online test portal, known as the WCAP Portal, has many resources related to the WCAS. The homepage for the site is https://wa.portal.airast.org/. The Training Test can be accessed directly from the homepage. Resources for educators can be accessed by selecting the “Test Administrators” card, and then the “Test Administration Resources” card. Users can use the search function in the left corner, or the folder structure to find resources. These folders contain information about all of Washington’s online tests, including Smarter Balanced assessments. Within each folder, similar resources are grouped together with a main title or resource that is listed in alphabetical order. A sampling of the resources that will be most useful to science educators are listed here:

The General Information folder contains documents or links to outside resources.
- The Periodic Table is located in the Classroom Resources Overview section. This can be downloaded and printed for classroom use prior to the summative assessment.

The User Guides and Manuals folder contains documents related to the other systems accessed through the WCAP Portal.
- The Guideline on Tools, Supports & Accommodations for State Assessment document is the main title of a section with related resources. If users have questions about testing students with Individualized Education Program (IEPs) or 504 plans, this GTSA document is the first place to look.
- The ORS—Online Reporting System User Guide document is the comprehensive guide to using the Online Reporting System (ORS) for viewing student test scores.
- The TA User Guide document is the comprehensive guide to using the Test Administration Interface for summative testing.
- The TAM: Assessments Overview section contains the comprehensive Test Administration Manual (TAM) document and other resources. The TA Script of Student Directions document for the WCAS will be posted to this section closer to the opening of the summative test window in the spring.

The Modules folder contains training presentations. Most of the files were produced by OSPI in cooperation with our online testing vendor, and are related to the other systems accessed through the WCAP Portal.
- The TDS—TA/Student Interface is another tool to help educators and students become familiar with the Test Delivery System (TDS). These PowerPoint presentations contain a training script in the notes section.