

Science Assessment Development

WCAS Accommodated Paper-Pencil Training Test Lesson Plans

Grade 5

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Introduction

Federal and state legislation requires all students to participate in state testing. Students eligible to receive special education or 504 services are permitted access to accessibility features when documented in the student's Individualized Education Plan (IEP) or 504 Plan within the parameters allowed by the assessment constructs.

Washington Comprehensive Assessment of Science (WCAS) Accommodated Paper Booklets are available for students with a documented need in their IEP or 504 Plan. Accommodated paper booklets include standard print, large print, Spanish, and Braille.

Students may benefit from opportunities to explore and practice with the layout of the test and the tools available to them. This document contains guidance and activities to help students practice with the item types and features of the **Grade 5 WCAS Accommodated Paper-Pencil Training Test Booklet**. A standard print version of the booklet is available on the <u>Washington Comprehensive Assessment Portal (WCAP)</u>.

The WCAS Accommodated Paper-Pencil Training Test Booklets include the same standalone questions and item clusters as the WCAS Online Training Tests. However, some modifications may have been made to maximize the accessibility of the item in the accommodated booklet, while adhering to the intent of the item in the online testing system. The modifications are described in this lesson plan. The WCAS Online Training Tests can be accessed on the WCAP) for comparison.

Classroom time spent on this training test lesson should be carefully limited so the focus remains on instruction aligned to the concepts and skills in the <u>Washington State 2013 K–12 Science Learning Standards</u> (hereafter referred to as "the standards"). Students should use the WCAS Accommodated Paper-Pencil Training Tests just enough to be able to demonstrate their understanding of science concepts and skills on the WCAS Summative Tests without being hindered by lack of familiarity with using an accommodated paper booklet.

For more information on state testing accommodations, see the <u>Guidelines on Tools, Supports and Accommodations for State Assessments (GTSA)</u> and the <u>Test Coordinator's Manual (TCM)</u>.

Considerations

- All students should have the opportunity to access WCAS Training Tests before taking the summative WCAS at the end of the school year (hereafter referred to as "the summative test").
- All item types EXCEPT table input are available on the Grade 5 Accommodated Paper-Pencil Training Test Booklet. Students can practice with a table input item by completing Question 1 on the Grade 11 WCAS Accommodated Paper-Pencil Training Test Booklet.
- Teachers are encouraged to answer students' inquiries and give support while students are working in the Training Test.
 - NOTE: During the summative test, test administrators (TA) <u>must</u> follow the *TA Script of Student Test Directions* verbatim.
- Emphasize that students should not be concerned with the science content or correct answers but should concentrate on how to enter responses in the accommodated paper-pencil booklet and how to use other tools, supports, and/or accommodations available to them.
- The activities in the lesson are not a checklist. There is no expectation that students complete all suggested activities. The activities do not describe all possible ways students could engage with the questions or tools.
- The activities in the lesson may be modified and/or shared with any interested teacher, parent, or student.

Questions or comments? Email us at science@k12.wa.us.

Features of the WCAS

Student to TA Ratio

During live summative testing, WCAS accommodated paper booklets should be administered to small groups of students to ensure the validity, reliability, and fairness of student results. The student to Test Administrator (TA) ratio should be no greater than 3 students to 1 TA. This ensures that the TA is able to provide all of the supports described in a student's IEP or 504 Plan.

The 3 students to 1 TA ratio does not need to be maintained when practicing with the training tests.

Information Sections

The WCAS includes standalone items and item clusters (information sections and related questions). Some item clusters include more than one information section. Each information section is given before the questions most closely associated to that information. However, students may refer back to previous information sections as needed.

Locking Questions

Some item clusters include locking questions. The locking of questions allows subsequent items or information sections to update the student with correct information and limits clueing among questions in a cluster. Students cannot change an answer to a locking question once they have moved on to the next question.

In the online testing system, students are given a warning about locking questions before they move forward in the test. The online testing system also prevents students from changing an answer if they return to a previously answered locking question. To account for this functionality in the accommodated paper-pencil booklets, locking questions have a red box at the bottom of the page which states:

THIS QUESTION WILL BE LOCKED AFTER COMPLETION.

You must answer this question before moving on to the next question.

After you move to the next question, you cannot change your answer to this question.

During live summative testing, TAs must monitor students closely to ensure that they do not change their answers after they move on in their test booklet. Students can re-read the question, and their answer, but they cannot change their answers for any part of a locking question after they have moved to the next question in the booklet

Multipart Questions

Some questions are divided into multiple parts. Typically, this includes two parts (Part A and Part B). Multipart questions can include different item types (e.g., multiple choice followed by an edit task inline choice). Question parts work together to strengthen alignment to a standard. 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.

Preparing for the Training Test Lesson

In addition to the Grade 5 WCAS Accommodated Paper-Pencil Training Test Booklet, each student should have:

- a paper copy of the Grade 5 WCAS Training Test Glossary of Non-Science Terms which is available on the WCAP Portal;
- access to a basic, four function calculator, see the <u>Calculator and Electronic Device Policy</u> for more information;
- scratch and/or graph paper.

Some students use additional non-embedded tools, designated supports, and/or accommodations during state testing. Those tools, supports, and accommodations should be available when practicing with the Accommodated Paper-Pencil Training Test booklets.

The lesson plan that follows gives general suggestions for how students can interact with each information section and item. Teachers should include opportunities for students to practice with non-embedded tools, designated supports, and/or accommodations that they use during the course of a school day and that are allowed on the summative WCAS into the lesson plan, where applicable for their students.

For more information, please see the **Guidelines on Tools, Supports, and Accommodations for State Assessments**.

Grade 5 Training Test Overview

Table 1 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.

Details about each item type and a full set of item specifications are available in the <u>Grade 5 Test Design and Item Specifications</u> document on the <u>Science Assessment webpage</u>. Please refer to those documents for more information about the design of the summative test. If the Key column states "Rubric", then more details about the correct answer will be provided on the following pages.

Table 1: Grade 5 Training Test Metadata

#	Title	Item Type	Lock	Key	Score Point	Performance Expectation	Item Specification	Science and Engineering Practice	Disciplinary Core Idea	Crosscutting Concept
1	Energy Sources standalone	Multiple Choice	No	D	1	4-ESS3-1	4-ESS3-1.4	Obtaining, Evaluating, and Communicating Information	~	Cause and Effect
2	Rabbit Response standalone	Hot Text	No	Rubric	1	4-LS1-2	4-LS1-2.1	Developing and Using Models	LS1.D	Systems and System Models
3 A/B	Cat in Mirror standalone	Grid/ Multiple Select	No	Rubric/ B, E	2	4-PS4-2	4-PS4-2.1	Developing and Using Models	PS4.B	Cause and Effect
4 A/B	Goldfinch Energy Transfer standalone	Grid/ Multiple Select	No	Rubric/ B, C	1	5-PS3-1	5-PS3-1.1	Developing and Using Models	PS3.D, LS1.C	Energy and Matter
5	Soggy Solutions cluster	Multiple Choice	No	С	1	4-ESS3-2	4-ESS3-2.3	~	ESS3.B	Cause and Effect
6	Soggy Solutions cluster	Matching	No	Rubric	1	4-ESS3-2 3-5 ETS1-2	4-ESS3-2.1 3-5 ETS1-2.SEP	Constructing Explanations and Designing Solutions	ESS3.B	Cause and Effect
7	Soggy Solutions cluster	Multiple Select	No	C, D, E	1	4-ESS3-2 3-5 ETS1-2	4-ESS3-2.SEP 3-5 ETS1-2.2	Constructing Explanations and Designing Solutions	ETS1.B	~
8	Soggy Solutions cluster	Short Answer	No	Rubric	1	4-ESS3-2 3-5 ETS1-2	4-ESS3-2.SEP 3-5 ETS1-2.2	Constructing Explanations and Designing Solutions	ETS1.B	~
9	Rock Pocket Mice cluster	Short Answer	Yes	Rubric	2	3-LS4-2	3-LS4-2.1	Constructing Explanations and Designing Solutions	LS4.B	Cause and Effect
10 A/B	Rock Pocket Mice cluster	Multiple Choice/ Multiple Choice	Yes	C/A	1	3-LS4-2	3-LS4-2.1	Constructing Explanations and Designing Solutions	LS4.B	Cause and Effect
11 A/B	Rock Pocket Mice cluster	Edit Task Inline Choice/ Multiple Choice	No	Rubric/ D	1	3-LS4-2	3-LS4-2.1	Constructing Explanations and Designing Solutions	LS4.B	Cause and Effect

Grade 5 Training Test Lesson

Cover Page

The text on the front cover is repeated here as a reminder of the purpose of the Training Test: "This training test paper-pencil booklet is intended to provide students who are administered paper-pencil versions of the Washington Comprehensive Assessment of Science (WCAS) with the opportunity to become familiar with the format of the assessment."

Do Not Write on This Page

Page 3

These pages are included to ensure the correct layout in the progression of items in the WCAS accommodated paper-pencil booklets.

Have students:

Notice the GO ON arrow in the bottom-right hand corner of the page.

Teacher notes:

This symbol means that there are more questions to answer in the test.

Question 1: Multiple Choice

Page 4

Multiple choice items include a question followed by four options. In the online system, the student uses a mouse, touchpad, or touchscreen to select a lettered circle in front of one option. In the paper booklet, the student fills in a lettered circle in front of the option.

Have students:

Notice the graph is in color.

Find the word "shows" in the question AND in the Glossary of Non-Science Terms.

Read the question and respond by filling in one circle.

Teacher notes:

Colored graphics in the WCAS are chosen to ensure the content is discernible for the widest range of viewers, including those with common types of colorblindness. If a student struggles to see the graphic clearly, you can explore additional tools, designated supports, or accommodations.

The word "shows" is defined as "gives information". There are several definitions for the word shows. Because "gives information" is not the most common definition, the word is included in the Glossary of Non-Science terms.

Correct Answer – 1 point

Option D

Question 2: Hot Text

Page 5

Question 2 is a **hot text** item. Hot text items ask students to order statements into a sequence. In the online test, students use a mouse, touch pad, or touch screen to drag and drop statements into a table. In the paper booklet, students fill in bubbles in the rows of a table to order a set of lettered statements. For this question, the first row of the table gives the first step in the sequence. Students fill in a circle in each of rows 2, 3, and 4 to complete a response.

Sometimes statements can be used only once. Sometimes they can be used more than once. Sometimes there are more statements than boxes, and not all statements are used.

Have students:

Find the word "twig" in the question AND on the Glossary of Non-Science Terms.

Read the question carefully and respond by filling in one circle for each row.

Teacher notes:

The word "twig" is defined as "small branch". This word is included in the Glossary of Non-Science Terms as it may be unfamiliar to English Learners.

This item also contains the word "shows."

Point out the sentence: "Fill in **one** circle for each row." The bolded word in the directions helps students fill in the correct number of circles for the hot text item.

Correct Answer – 1 point

Correct Sequence:

Row 1. Given: The rabbit hears a twig break.

Row 2 Option B: The rabbit's brain processes information.

Row 3 Option C: The rabbit's brain sends a message to act.

Row 4 Option A: The rabbit acts.

Question 3: Grid/Multiple Select

Pages 6 & 7

This question is a **multipart** question. Multipart questions can include different item types for each part (e.g., multiple choice followed by an edit task inline choice).

Have students:

Note that this item appears on two pages.

Read the first line of the question: "The following question has two parts. First, answer part A. Then, answer part B."

Read the entire question carefully to determine where each part of the question begins and ends.

Teacher notes:

Multipart Items may appear on one, two, or sometimes even three pages.

This line of text is important to notice, since it tells students how many parts are related to each other. Some questions may also have a part C.

Bold text stating "**Part A**" and "**Part B**" is there to guide them. A complete response must provide answers to all parts.

<u>Part A</u> is a **grid** item. Grid items ask students to drag and drop labels or images in a specific answer space, construct graphs, plot points, or draw arrows. In the online system, students use a mouse, touch pad, or touch screen to draw arrows on an answer space. In this modified grid item, students use a pencil to draw arrows.

Have students:

Examine the question and answer space carefully to determine where they should draw arrows to answer the question.

Find the word "shows" in the question AND in the Glossary of Non-Science Terms.

Teacher notes:

Encourage students to read directions very carefully so they know exactly how to answer a question.

Make sure student responses are clear enough to be scored.

<u>Part B</u> is a **multiple select** item. Multiple select items include a direction followed by five or more options. The directions indicate how many options a student should select to complete the question. In the online system, the student uses a mouse, touchpad, or touchscreen to select an empty box in front of an option. In the paper booklet, the student fills in an empty circle in front of an option.

Have students:

Note the circles do not have letters inside them.

Find the bolded words in the question.

Read the question carefully and respond to Part B by filling in two circles.

Teacher notes:

This is a clue that more than one answer option will be selected.

Remind students that the directions to some questions will tell them exactly how many options to choose.

If a student wishes to change their answer, be sure they erase the mark completely and fill in a different circle.

Correct Answer – 1 point for Part A, 1 point for Part B

<u>Part A:</u> Arrows are drawn in the model: Lamp \rightarrow Cat \rightarrow Mirror \rightarrow Student <u>Part B:</u> Option 2 and Option 5

Question 4: Grid/Multiple Select

Pages 8, 9, & 10

<u>Part A</u> is a **grid** item. In the online system, students use a mouse, touch pad, or touchscreen to drag and drop images into pre-placed answer spaces to make a model. In this modified item, students fill in a circle in each row of a table to identify the locations in a lettered model where objects belong. The directions clarify how many circles can be filled in per row or column of the table.

Have students:

Read the question carefully and respond to Part A by filling in one circle in each row.

Part B is a multiple select item.

Have students:

Find the bolded words in the question.

Read the question carefully and respond to Part B by filling in two circles.

Correct Answer – 1 point

Part A:

Gold Finch Row: Option Z
Sunflower Seed Row: Option Y
Sun Row: Option W

Sunflower Row: Option X

Part B: Option 2 and Option 3

Teacher notes:

Point out the sentence: "Fill in **one** circle for each object." The bolded word in the directions helps students fill in the correct number of circles for the item.

Teacher notes:

Remind students that the directions to some questions will tell them exactly how many options to choose.

Notice that this question directs students to "Select **two** statements that are supported by the answer to part A."

Questions 5-8: Soggy Solutions Cluster

The first item cluster starts on pages 12 and 13. The information provided in Section 1 will support students in answering the questions in the cluster.

Have students:

Read the directions: "Read the information and answer the questions."

Find the word "ditch" in Section 1 AND on the Glossary of Non-Science Terms.

Read the information carefully, then GO ON to the questions in the cluster.

Question 5: Multiple Choice

Page 14

Have students:

Read the question carefully and respond by filling in one circle.

Correct Answer – 1 point

Option C

Teacher notes:

All text and diagrams should be read very carefully before answering any questions.

The word "ditch" is defined as "a long, narrow hole dug in the earth". This word is included in the Glossary of Non-Science Terms as it may be unfamiliar to English Learners.

This information section also contains the word "shows."

Students can use scratch paper to organize their thoughts and make notes while reading the information.

Students can return to the information while answering questions.

Teacher notes:

Remind students that they can refer back to the information in Section 1 when answering questions.

Question 6: Matching Item

Page 15

Matching items provide students with a table and ask the students to fill in circles within the cells of the table to make identifications, classifications, or predictions. The directions may clarify how many circles can be filled in per row or column. In the online system, the student uses a mouse, touchpad, or touchscreen to select cells in the table. In the paper booklet, the student fills in circles in cells.

Have students:

Read the question carefully and respond by filling in one circle in each row.

Teacher notes:

Point out the last sentence: "Fill in **one** circle for each row." The bolded word in the directions helps students fill in the correct number of circles for the matching item.

Correct Answer – 1 point

Provides more space for water to flow: Solution 1
Prevents water in the ditch from flowing past the playfield: Solution 3
Blocks water flowing out of the ditch from reaching the playfield: Solution 2

Question 7: Multiple Select

Page 17

Note that there is a new information section (Section 2) on page 16. Some clusters include more than one information section. Each information section is delivered along with the questions most closely associated to that information. Students should carefully read the text and diagram in Section 2 before working with Question 7. The information in Section 1 is also available for the student to reference if needed.

Have students:

Find the bolded words in the question.

Read the question carefully and respond by filling in three circles.

Teacher notes:

Remind students that the directions to some questions will tell them exactly how many options to choose.

Remind students that they can refer back to the information in Section 1 or Section 2 when answering questions

Correct Answer – 1 point

Option 3, Option 4, and Option 5

Question 8: Short Answer

Page 19

Note that there is a new information section (Section 3) on page 18. Students should carefully read the text and graph in section 3 before working with Question 8.

Short answer items ask students to construct a written response to a question. Some short answer items first ask students to choose from a list of options before constructing the response. In the online system, students type their answers into a response box. In the paper booklet, students write their answers on lines in a response box.

Have students:

Find the bolded words in the question.

Read the question carefully and respond by filling in one circle AND writing a response to the prompt in the area with lines.

Teacher notes:

Remind students that the directions to some questions will tell them exactly how many options to choose. Remind students they may look back at information in Sections 1, 2, and 3.

Notice how the prompt before the writing space has bolded "that" to help link the option the student selects to the description the student writes.

Students can use scratch paper to organize their thoughts, make notes, etc. Only responses written into the response box will be scored for the summative test, so students should practice that here.

A student does not need to fill all of the lines in the response box.

Correct Answer – 1 point

If the student selected "Dig a ditch deeper", then they should write 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 write something like, "The sandbags 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 write something like, "The gate had the highest cost and the middle amount of time to build but lasts the longest of any solution."

Questions 9-11: Rock Pocket Mice Cluster

The second item cluster starts on pages 20 and 21. This cluster has only one information section. The section has 2 diagrams and a data table. Students should read the information carefully before answering the associated questions. The cluster includes locking questions.

Question 9: Short Answer (locking question)

Pages 22 & 23

Question 9 is a **short answer** item. Question 9 is also a **locking** question. The locking of questions allows subsequent items or information sections to update the student with correct information and limits clueing among questions within a cluster.

Students must answer a locking question before moving to a different question. After moving to a different question, students can return to locked questions and see their answer, but they <u>cannot</u> change their answer.

Have students:

Carefully read the red text in the box at the bottom of page 23.

Carefully read the entire question at the tops of pages 22 and 23.

Read the question carefully and respond by filling in one circle AND writing a response to the prompt in the area with lines.

Teacher notes:

Explain to students that they must answer the question before moving to a different question. They cannot change their answer to this question after they move to a different question.

Remind students that some questions will tell them exactly how many options to choose.

The bulleted statements on page 23 help students focus their response. Students need to correctly address both bullets to receive full points for their response.

Notice how the prompt before the writing space has bolded "that" to help link the option the student selects to the description the student writes.

Students can use scratch paper to organize their thoughts, make notes, etc. Only responses written into the response box will be scored for the summative test. A student does not need to fill all of the lines in the response box.

Correct Answer – 2 points

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 gray and black."

Question 10: Multiple Choice/Multiple Choice (locking question)

Pages 24 & 25

Students must finish both Part A and Part B before moving to another question. They cannot change the answer to either part after moving to a different question. Remember, after moving to a different question, students can return to locked questions and see their answer, but they <u>cannot</u> change their answer.

Have students:

Read the question carefully and respond to Part A by filling in one circle.

Read the question carefully and respond to Part B by filling in one circle.

Correct Answer – 1 point

Part A: Option C
Part B: Option A

Teacher notes:

Questions that have options preceded by circles containing letters will have students select only one option.

Part B requires students to select a reason that supports the answer chosen in part A.

Question 11: Edit Task Inline Choice/Multiple Choice

Pages 26 & 27

<u>Part A</u> is an **edit task inline choice** item. Edit task inline choice items provide partially completed sentences that students complete by selecting words, phrases, letters, or numbers from a set of options. In the online system, students use a mouse, touch pad, or touchscreen to select options from each drop-down list in the question. In the paper booklet, students fill in a circle in each box in the question.

Have students:

Find the bolded words in the question.

Read the question carefully and respond to part A by filling in one circle in each of the two boxes.

Teacher notes:

In this item, "each" is bolded to remind students that each box needs to have one circle filled in.

Have students read the completed sentence aloud after filling in one circle for each box to demonstrate how this item type works.

<u>Part B</u> is a **multiple choice** item. Use this opportunity to answer student questions about specific tools or item types.

Correct Answer – 1 point

Part A: The population of the light-colored mice would increase over time.

The population of the dark-colored mice would decrease over time.

Part B: Option D

STOP You have reached the end of the test.

Page 29

This page tells students that they have finished with the test. This is an opportunity to review their work. Remember, students can return to locked questions and see their answer, but they <u>cannot</u> change their answer.

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