

Practice Item Guide
Virginia Standards of Learning
Grade 3 Science

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Pearson

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OVERVIEW

The practice items available in the Virginia Standards of Learning (SOL) grade 3 science practice set provide examples of the new content and increased rigor represented by the 2010 *Science Standards of Learning*. Additionally, these items illustrate the technology-enhanced item (TEI) types. These practice items do not cover all grade 3 science SOL and should not be used in place of review of the SOL test content.

This practice guide may be used by teachers or other adults to guide students through the practice items for grade 3 science. While the use of this guide with the practice items is not required, it is strongly encouraged, as it will help ensure that students are familiar with the types of items that they may encounter while taking the grade 3 science test. The directions in the guide will also lead students through practice with the online tools, familiarize students with how to navigate through the test, and help students understand how to use the Section Review screen within TestNav™. Appendix B summarizes how student responses for TEI are indicated on the Section Review screen.

Prior to guiding students through the practice items, carefully read this practice item guide and review the practice items to become familiar with them. All directions that must be read aloud to the students are in **bold Arial font** so that they stand out from the rest of the text. All other text is for your information and should not be read to students.

The following Change Log indicates any updates to this document.

Change Log		
Version	Date	Description
V.1	03/01/2012	Original document posted.
V.2	04/09/2012	The diagram in question 4 was updated. The correct answer for this item was also updated within the script of the guide and in the appendix.
V.3	10/31/2012	Various changes throughout guide regarding how TEI appear on the Section Review screen. Removed one practice item. Updated directions and screen shots for exiting TestNav. Added Appendix B.
V.4	03/15/2013	Overview amended; 7 new practice items added.
V.5	12/06/13	10 new practice items added.

SYSTEM REQUIREMENTS FOR TESTNAV

The minimum hardware requirements for all workstations used to access TestNav are available at <http://www.pearsononlinetesting.com/TestNav/7/index.html>

TECHNOLOGY-ENHANCED ITEM (TEI) TYPES

There are four types of technology-enhanced items:

- drag and drop,
- hot spot (which includes number line and coordinate plane items),
- bar graph or histogram, and
- fill-in-the-blank.

A brief description of each technology-enhanced item (TEI) type is provided below. The SOL practice items for grade 3 science will introduce each of the TEI types: drag and drop, hot spot, bar graph, and fill-in-the-blank.

Drag and Drop

Drag and drop items contain draggers and bays.

- Draggers are the answer options that are moved to bays in response to the question.
- Bays are areas of an item where draggers will remain once moved there.

Drag and drop items require a student to respond by moving one or more draggers from one place on the screen into a bay(s) elsewhere on the screen.

The student will click on the dragger and keep the button down while moving the dragger to the desired location. Once the button is released, the dragger will be in the new location. Students can still move the dragger once it has been dropped into a bay.

Drag and drop items may be used in reading, writing, mathematics, and science assessments.

Hot Spot

Hot spot items contain hot spot zones which represent student answer options.

- Hot spot zones are answer options which may be part of a graphic, art, numbers, or text, that are selected in response to a question.
- Unlike a traditional multiple-choice item where only one answer option is correct, hot spot items may require the student to select one or more hot spot zones (answer options) in order to answer the item correctly.
- Number line and coordinate plane items require students to respond by clicking on a number line or coordinate plane to plot one or more points. In these items, the points themselves are the hot spot zones. Only points plotted with the pointer tool within TestNav are scorable responses. Points plotted with the dot tool are not scorable responses.

The student selects a hot spot by clicking on it. In some hot spot items, there will be an indication on the screen, such as the zone being outlined in blue, which confirms that the pointer is over a hot spot. After the hot spot is clicked, there will always be an indication that the zone has been selected as an answer, such as the hot spot being outlined in burnt orange, the hot spot being shaded, an asterisk being placed on the hot spot, the phrase or statement on the hot spot being marked with a strikethrough line, or a red point being plotted on the number line or coordinate plane.

Hot spot items may be used in reading, writing, mathematics, and science assessments.

Bar Graph or Histogram

Bar graph or histogram items require students to graph data by indicating the height (if the bars are vertical) or length (if the bars are horizontal) of one or more bars or intervals. The bar height or length is graphed by clicking on a location within the graph or by dragging the bar to the desired location.

Bar graph and histogram items may be used in mathematics and science assessments.

Fill-in-the-Blank

Fill-in-the-blank items require students to input characters from the keyboard (numbers, letters, or symbols) to answer the question. For this item type, the student responds to a question by typing into a blank box provided in the item.

- Some response boxes may limit the characters that can be entered. For instance, if the response is expected to be numeric, the student will not be able to enter letters.
- Students should carefully follow directions in fill-in-the-blank items, such as providing an answer in simplest form, rounding a number as indicated, or using significant digits.
- Currently, no fill-in-the-blank item requires students to correctly spell a word; however, alphabetic characters or symbols may be used in an answer.

Fill-in-the-blank items are currently used in mathematics and science assessments.

OPENING THE VIRGINIA SOL SCIENCE PRACTICE ITEMS

1. Go to the Virginia Department of Education Web site:
http://www.doe.virginia.gov/testing/sol/practice_items/index.shtml
2. Under the heading “Science Practice Items” click on the grade 3 link. Since this is a web based application, the link will take you directly to the grade 3 science practice items.

MATERIALS NEEDED FOR COMPLETING THE VIRGINIA SOL PRACTICE ITEMS

Scratch paper and pencil

ONLINE TOOLS AVAILABLE ON THE VIRGINIA SOL SCIENCE PRACTICE ITEMS

The following tools can be accessed by clicking the appropriate icon on the toolbar at the top of the screen. These tools can be used to assist the test taker in finding answers, and only the pointer can be used to respond to the questions.

Tool Icon	Description
	Pointer – Use the pointer to answer questions.
	Eraser – Use the eraser to remove lines or highlights.
	Highlighter – Use the highlighter tool to highlight text or graphics.
	Eliminator – Use the eliminator tool on multiple-choice questions to mark choices you do not wish to consider.
	Pencil – Use the pencil tool to make marks on the test questions.
	Ruler – Use the ruler tool to measure something on screen.
	Straightedge – Use the straightedge tool to draw straight lines and underline text.
	Exhibit – Use the exhibit icon to view information about the Commonwealth of Virginia copyright. This icon only appears on the first screen of the practice items.
	Help – Use the help tool to display information about a specific tool on the top toolbar.

SPECIFIC DIRECTIONS FOR THE SOL GRADE 3 SCIENCE PRACTICE ITEMS

Introduction

After the practice items are launched, the first practice item will be displayed. Read the following instructions to the students.

SAY Today you will be working on some grade 3 science practice questions for the SOL test. There are 26 questions that will show you some of the types of test items that you may see on the grade 3 science test. Some questions are multiple-choice and others are technology-enhanced items. Technology-enhanced items may require you to show your answer in another way, such as typing your answer in a box, clicking and dragging your answer to a specific location, clicking to raise the bars on a graph, or clicking on an answer to choose it.

Listen carefully as I read the directions. I will guide you through each item one at a time. Please remember these questions are for practice. They will not be graded, and I will tell you the answer for each questions.

Do you have any questions before we start?

Pause to answer questions.

SAY *Next* and *Previous* buttons appear at the bottom of the screen for each question. Clicking *Next* takes you to the next question. Clicking *Previous* takes you back to the previous question. Notice that the question numbers are also located at the bottom of the screen. For example, the screen with the first question reads “Question 1 of 26.”



SAY At any time, you may click on the *Flag for Review* button () located at the bottom left of the screen. This should be used for any question that you want to review at a later time. We will practice using this button when we are working on the practice items.

Now let's look at the top of your screen.

Pause.

The picture below is the toolbar students will see at the top of the screen.



SAY The tools you may use are in the toolbar at the top of the screen. We will practice with each of the tools as we work through the practice questions. If you forget what a tool does, you can click on the Help symbol () to read about the tool.

The Help tool has information about the tools. If you would like your students to explore the Help tool, you can have them do this at the end of the practice items, after they have been exposed to the tools while working these items.

Note that the exhibit window contains information only about the Commonwealth of Virginia copyright. The exhibit icon only appears on the first screen of the practice items.

SAY One thing to remember is that the tools at the top of the screen are there to help you answer a question. The only tool that can be used to mark an answer to a question is the pointer tool ()

Underneath the toolbar is a gray directions banner. The directions banner is included in every technology-enhanced item, and it tells you how to answer the question. Always read the directions banner before selecting the answer.

Make sure students see the directions banner at the top of the screen.

SAY The directions say, “Click on a location above each bar to show the bar height.”

Underneath the directions, the problem says “Finish the graph using the bullfrog data collected in this investigation.”

In order to get the item correct, you must choose the correct bar height for each bullfrog, based on the data given to you in the chart.

John doe
Grade 3 Science Practice Items (2010 Scie... X Exit

Directions: Click on a location above each bar to show the bar height.

Finish the graph using the bullfrog data collected in this investigation.

Jumping Bullfrogs Investigation

Bullfrog Data	
Bullfrog	Number of Jumps
1	12
2	10
3	8
4	9
5	11

Flag for Review Question 1 of 26 Section 1 Section Review Previous Next

SAY Now finish the bar graph by clicking the spot above each bar to show where the bar should go. If you change your mind about a bar height, you can click on another location, and the bar height will change.

Pause while students complete the bar graph. Assist students as necessary.

SAY How did you complete the bar graph?

Pause for replies.

SAY You should have these bar heights on your graph:

Bullfrog 1: The height should be at 12.

Bullfrog 2: The height should be at 10.

Bullfrog 3: The height should be at 8.

Bullfrog 4: The height should be at 9, which is halfway between the line marked 8 and the line marked 10.

Bullfrog 5: The height should be at 11, which is halfway between the line marked 10 and the line marked 12.

SAY When we finish looking at the practice items, we will look at a Section Review screen. The Section Review screen shows which questions you have answered and which questions you have not answered. For bar graph questions, if one bar has been raised above the original height, the question will show as “Answered” on the Section Review screen. If you return all of the bars to their original heights, the question will be “Unanswered.”

Do you have any questions on how to graph the data?

Pause to answer questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 2.

Pause while students move to the next question.

SAY Question 2 is a technology-enhanced item. To answer this question, you will drag answers from one part of the screen to another.

The directions banner at the top of your screen says, “Click and drag the name to the correct location in the chart. Each name can be used more than once.”

Now I will read the question to you. It says, “Sort each name of the animals shown into a set on the chart. Then sort each animal name into a subset.”

John doe
Grade 3 Science Practice Items (2010 Scie... X Exit

Help

Directions: Click and drag the name to the correct location in the chart. Each name can be used more than once.

Sort each name of the animals shown into a set on the chart. Then sort each animal name into a subset.

Animals With Horns

African Antelope Yak

Pronghorn Antelope Bighorn Sheep

Goat Bull

Animals With Horns

Set Set

Long Hair Short Hair

Subset Subset Subset Subset

Long Tail No Visible Tail Long Tail No Visible Tail

Flag for Review Question 2 of 26 Section Review Previous Next

Section 1

SAY In order to get the item correct, you must sort each animal’s name into a set and then into a subset in the chart.

Now, click on an animal name and drag it to the correct location in the chart. Each animal name may not be used more than two times.

Pause while students work to sort the animals’ names to the correct boxes. The animal names cannot be used more than two times. Using a dragger more than one time is a function used with some drag and drop TEI.

SAY Let’s go over the answer.

On the left side of the chart is the set “Long Hair.” The top left box should have the Goat and Yak in it. These answers can be listed in either order. Underneath the set “Long Hair” are two subsets. The subset on the far left, “Long Tail,” should have the Yak in it. The subset “No Visible Tail” should have the Goat in it.

SAY On the right side of the chart is the set “Short Hair.” The top right box should have the African Antelope, Pronghorn Antelope, Bull, and Bighorn Sheep in it. Underneath the set “Short Hair” are two subsets. The subset “Long Tail” should have the African Antelope and Bull in it. The subset “No Visible Tail” should have the Pronghorn Antelope and Bighorn Sheep in it.

The answers listed above may be listed in any order, as long as the animals’ names are in the correct set and subset. For example, in the subset “Long Tail,” both African Antelope and Bull must be included, but the order does not matter.

SAY In order for this question to appear as “Answered” on the Section Review screen, each animal’s name needs to be sorted into a set and subset. Do you have any questions on how to answer this item?

Answer all questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Let’s take a moment to practice using the highlighter tool. You can use the highlighter tool on the toolbar to highlight words. To use this tool, click the icon that looks like a picture of a yellow highlighter (). Clicking the highlighter tool will change your pointer to an arrow with a highlighter next to it.

Practice using the highlighter by highlighting this sentence: “Sort each name of the animals shown into a set on the chart.” Then click again on the highlighter tool on the toolbar to put the tool away.

Pause while students highlight the text and put the tool away. Assist students as necessary.

SAY Do you have any questions on how to highlight text?

Answer all questions.

SAY Next, let’s practice using the eraser tool to erase the highlighter mark we just made. Click the icon with the pink eraser (). Now click on the highlighter mark to make it disappear.

Please practice highlighting and erasing now. When you are finished practicing, click on both tools to put them away.

Pause while students practice and put the tools away.

SAY Click *Next* at the bottom of the screen to go to question 3. (Pause.)

For this question you must type your answer in a box.

The directions in the gray banner say, “Type your answer in the box. Your answer must be a whole number.”

SAY Now read the question, determine the answer, and type it in the box.

Pause while students answer the question.

The screenshot shows a digital assessment interface. At the top, there is a toolbar with icons for a mouse, eraser, pencil, highlighter, eraser, and a help icon. The user's name "John doe" and the page title "Grade 3 Science Practice Items (2010 Scie..." are visible in the top right corner. Below the toolbar is a gray banner with the directions: "Directions: Type your answer in the box. Your answer must be a whole number." The main question is "How many milliliters (mL) of liquid are in this graduated cylinder?" Below the question is a text input box containing "1" followed by "mL". The title "Measuring Liquid in a Graduated Cylinder" is centered above the image of a graduated cylinder. The graduated cylinder has a scale from 0 to 50 mL with major markings every 10 mL and minor markings every 2 mL. The liquid level is at 38 mL. At the bottom of the interface, there is a navigation bar with a "Flag for Review" button, "Question 3 of 26 Section 1", a "Section Review" button, and "Previous" and "Next" buttons.

SAY What answer did you type?

Pause for replies.

SAY The correct answer is 38mL. Notice that the answer you entered does not need to be the same length as the box.

SAY For questions that are fill-in-the-blank, once any character is entered into the response box and remains in the response box, the question will as “Answered” on the Section Review screen. If you enter an answer but then completely remove that answer from the fill-in-the-blank box, the item will show as “Unanswered” on the Section Review screen. Do you have any questions about how to type your answer in the box?

Answer all questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Try entering other characters into the box, such as letters or symbols.

Pause while students try to enter other characters. In this item, they will not be able to enter any character other than a number.

If a fractional answer is required in a technology-enhanced item, the forward slash (/) symbol is to be used for the fraction bar. If a decimal answer is required, a period (.) is to be used for the decimal point.

SAY Notice that the box for this question will only accept numbers. If a letter, number, or symbol does not appear in the answer box after you’ve tried it, then you cannot use that symbol in your answer.

You can use the backspace key on the keyboard to clear your answer, or you can use the delete key. To use the delete key, place the pointer in front of the character you wish to delete and press the delete key. Or, highlight the character you wish to delete and press the delete key. Try clearing your answer and retyping it in the box.

Pause while students clear their answer and reenter it into the box.

SAY Do you have any questions about how to type your answer in the box or how to change your answer?

Answer any questions.

SAY Click Next at the bottom of the screen to go to the next question. Question 4 requires you to drag answers to the empty boxes. The processes that you need to drag are inside the dark gray box.

Directions: Click and drag the process to the correct location in the diagram.

Each arrow represents a process that occurs during a phase change. Label each process in the diagram.

Changes in Phases of Matter

Solid Liquid Gas

Processes

- condensation
- evaporation
- melting
- freezing

Question 4 of 26
Section 1

Flag for Review Section Review Previous Next

SAY The directions in the gray banner say, “Click and drag the process to the correct location in the diagram.” Now read question 4 to yourself.

Pause while students read the question.

SAY Notice there are four empty boxes. To answer this question completely, you must drag each of the processes from the dark gray box into an empty box in the diagram.

Answer options for drag and drop items will typically be within a dark gray box.

SAY In order for this question to show as “Answered” on the Section Review screen, all four boxes in the diagram must contain a process. If you do not click and drag a process into each one of the boxes in the diagram, the question will show as “Unanswered” on the Section Review screen, because you did not completely answer the question.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY If you change your mind after clicking and dragging a process to a box, you can drag the process label back to the dark gray box and select another process to drag into the empty box. Now answer the question.

Pause while students work to answer the question.

SAY In which order did you list the processes?

Pause for replies.

SAY To be correct:

The top left box should have the process “freezing.”
The bottom left box should have the process “melting.”
The top right box should have the process “condensation.”
The bottom right box should have the process “evaporation.”

Do you have any questions on how to answer the question or how to click and drag the processes to the correct boxes?

Answer all questions.

SAY Before we go onto the next question, click on the Flag for Review button on the bottom left of the screen. If this were an actual SOL test, you would click this button if you wanted to come back and review the question again.

Pause while students click on this icon.

SAY When we reach the end of the practice questions, I will show you how the questions that you flagged for review will look on the Section Review screen. They will have a picture of a flag next to them.

Pause.

SAY Click *Next* at the bottom of the screen to go to question 5. This item requires you to drag the pictures to the empty boxes.

Directions: Click and drag the picture to the correct location in the Pond Food Chain.

Place these living organisms in the correct box to complete this food chain.

Pond Food Chain

① → ② → ③ → ④

Raccoon Algae Trout Tadpole

Question 5 of 26
Section 1

Flag for Review Section Review Previous Next

SAY Read the directions and the question to yourself.

Pause while students read the directions and question.

SAY Now, drag the pictures to the correct boxes.

Pause while students answer the question.

SAY In which order did you place the pictures?

Pause for replies.

SAY The correct order is Box 1: Algae, Box 2: Tadpole, Box 3: Trout, Box 4: Raccoon.

SAY In order for this question to show as “Answered” on the Section Review screen, all four boxes must contain a picture. Do you have any questions on how to answer the question?

Answer all questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 6. This item requires you to drag each picture to the correct location in the diagram.

Read the directions and question to yourself.

Pause while student read the directions and question.

The screenshot displays a digital assessment interface. At the top, there is a toolbar with icons for a mouse cursor, eraser, highlighter, red X, green checkmark, and a help icon. The user's name 'John doe' and the page title 'Grade 3 Science Practice Items (2010 Scie...)' are visible in the top right corner. The main content area contains the following text: 'Directions: Click and drag each picture to the correct location in the diagram.' and 'Sort each of these living organisms into the correct group.' Below this, a diagram shows 'Living Organisms' at the top, with two lines leading down to two empty boxes labeled 'Consumers' and 'Producers'. To the right of these boxes is a grid of six organisms, each in a small box with its name and a picture: Rosebush (a bush with pink flowers), Aphid (a green insect), Squirrel (a brown squirrel), Ladybug (a red ladybug with black spots), Butterfly (an orange and black monarch butterfly), and Cactus (a green cactus with yellow flowers). At the bottom of the interface, there is a footer with a 'Flag for Review' button, 'Question 6 of 26 Section 1', a 'Section Review' button, and 'Previous' and 'Next' navigation buttons.

SAY Now answer the question by clicking and dragging each picture to the “Consumers” box or the “Producers” box.

Pause.

SAY How did you answer this question?

Pause for replies.

SAY The pictures of the Aphid, Ladybug, Butterfly, and Squirrel should be in the “Consumers” box, and the pictures of the Rosebush and Cactus should be in the “Producers” box.

In order for this question to show as “Answered” on the Section Review screen, each of the six animals must be sorted into one of the boxes. Do you have any questions?

Answer all questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 7. This question requires that you click on a picture to answer the question. For this item, you will be selecting more than one picture.

The directions say, “Click on two boxes to choose the organisms you want to select.” So for this item, you will be selecting two answers. When you click on a box, an orange outline will appear around the box to show that you have selected it as your answer. Only two boxes may be selected.

John doe
Grade 3 Science Practice Items (2010 Scie... X Exit

Directions: Click on two boxes to choose the organisms you want to select.

Identify a predator with its prey shown by this food chain.

Food Chain

Flower → Bee → Dragonfly → Frog → Raccoon → Bobcat

Flag for Review Question 7 of 26 Section 1 Section Review Previous Next

SAY On the actual SOL test, you may see questions that require you to pick one or more answers. Some questions, like this one, tell you the number of correct answers to select. When the number of answers to select is indicated, you must select that number of answers before the question will appear as “Answered” on the Section Review screen.

Some questions will not indicate the number of answers to select. You will have to decide how many correct answers there are. Those items will show as “Answered” on the Section Review screen once one answer is selected, so there is no hint or clue given as to how many answers there are.

Please make sure students understand this concept, as a traditional multiple-choice question only requires one answer.

SAY Now, read the question, but do not answer it yet.

Pause.

SAY Before answering this question, let’s practice using the pencil tool with this item.

Click on the pencil icon () located on the top toolbar. You may use this tool to make marks on the test questions. One of the ways you can use the pencil tool is to narrow down your answer choices by marking out options on technology-enhanced items like this one. The eliminator tool () the tool on the upper left side of the screen that is shown as a red “X,” can only be used to eliminate answer choices on multiple-choice questions.

Make sure students see the eliminator tool on the toolbar and understand that it can be used on multiple-choice items but not technology-enhanced items.

SAY Let’s practice making marks on this item to cross out some choices. Use your pencil tool to put an “X” over the pictures you do NOT wish to select. Click on the pointer tool to put the pencil tool away.

Pause while students mark an “X” on the pictures and put the tool away.

SAY Now use the pointer tool to click on the answers you want to select.

If you change your mind about an answer, you can click the answer choice and it will remove the orange box, or you can use the eraser tool at the top of the screen to remove the orange box.

Pause while students answer the question.

SAY Which two boxes did you select as your answer?

Pause for replies.

SAY All of the following combinations are correct answers. You had to select only one pair:

- Dragonfly and Bee;
- Frog and Dragonfly;
- Raccoon and Frog; or
- Bobcat and Raccoon.

In order for this question to show as “Answered” on the Section Review screen, you must select two answers, as was indicated in the directions. If you only selected one answer, this question would show as “Unanswered” on the Section Review screen.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Do you have any questions about the answer or using the pencil tool?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 8.

To answer this question correctly, you will need to drag each picture to the correct location in the diagram. Read the directions and question to yourself and then answer the question.

Pause while students read and answer the question.

The screenshot shows a digital assessment window with a blue header bar. On the left, there are icons for a mouse cursor, eraser, pencil, highlighter, and a red 'X'. On the right, it says 'John doe' and 'Grade 3 Science Practice Items (2010 Scie...)' with an 'EXIT' button. Below the header, a grey bar contains the directions: 'Directions: Click and drag each picture to the correct location in the diagram.' The main content area has the text 'Place the life cycle stages of a Virginia pine in the correct order.' Below this is a circular diagram with four empty boxes labeled 'Box 1', 'Box 2', 'Box 3', and 'Box 4'. Arrows connect the boxes in a clockwise cycle: Box 1 to Box 2, Box 2 to Box 3, Box 3 to Box 4, and Box 4 to Box 1. The text 'Life Cycle of a Virginia Pine' is centered in the diagram. To the right of the boxes is a 2x2 grid of images: top-left shows a pine cone and needles; top-right shows a young sapling; bottom-left shows a mature pine tree; bottom-right shows a seedling. Below the grid is the text '(not to scale)'. At the bottom of the window, there is a blue bar with 'Question 8 of 26', 'Section 1', a 'Flag for Review' button, a 'Section Review' button, and 'Previous' and 'Next' navigation buttons.

SAY In which order did you place the pictures?

Pause for replies.

SAY There are four different ways you could have answered this question correctly. The correct answers are:

There are various ways to answer this question, depending on which box the student used as the starting point. Any of these answers would be scored as correct.

SAY Box 1: Pine Cone/Seeds; Box 2: Seedling; Box 3: Young Tree; Box 4: Adult Tree
Box 1: Seedling; Box 2: Young Tree; Box 3: Adult Tree; Box 4: Pine Cone/Seeds
Box 1: Young Tree; Box 2: Adult Tree; Box 3: Pine Cone/Seeds; Box 4: Seedling
Box 1: Adult Tree; Box 2: Pine Cone/Seed; Box 3: Seedling; Box 4: Young Tree

In order for this question to show as “Answered” on the Section Review screen, all four boxes must contain a picture. Do you have any questions about how to answer the question?

Answer all questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 9.

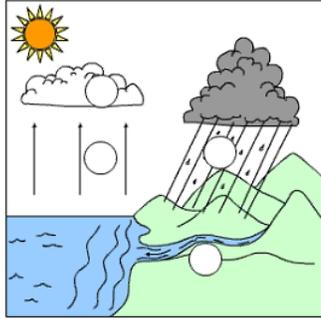
To answer this question, you must drag each number to the correct location in the diagram. Read the directions and question to yourself. Then answer the question.

John doe
Grade 3 Science Practice Items (2010 Scie... [Exit](#)

Directions: Click and drag each number to the correct location in the diagram.

Use the circled numbers to correctly label the water cycle diagram.

Water Cycle



The diagram illustrates the water cycle. On the left, a sun is shown above a white cloud. Three straight arrows point upwards from a body of water towards the white cloud. On the right, a dark, grey cloud is shown raining onto a green landscape. A stream flows from the base of the dark cloud towards the left, eventually merging into the larger body of water. There are four empty circles in the diagram: one inside the white cloud, one on the upward-pointing arrows, one at the bottom right of the diagram near the stream, and one within the rain falling from the dark cloud.

Labels

1	Condensation
2	Evaporation
3	Surface Runoff
4	Precipitation

Flag for Review Question 9 of 26 Section 1 [Section Review](#) [Previous](#) [Next](#)

SAY How did you answer the question?

Pause for replies.

SAY To be correct:

The number one should be inside the white cloud.

The number two should be inside the straight arrows pointing to the white cloud.

The number three should be at the bottom right of the diagram.

The number four should be within the drops of rain underneath the dark cloud.

In order for this question to show as “Answered” on the Section Review screen, all four circles must contain a number. Do you have any questions on how to answer the question?

Answer all questions.

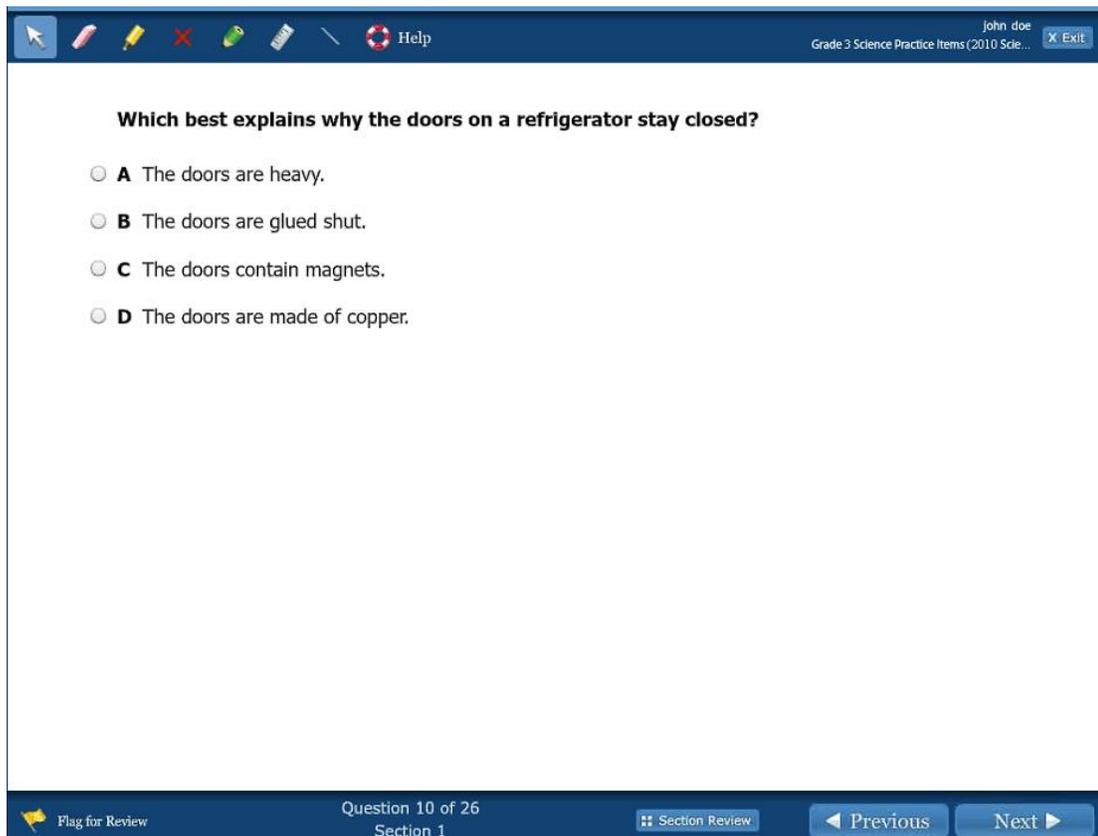
Please note that additional information regarding the requirements for an item to appear

as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY The next seven practice items are multiple-choice questions. Click *Next* at the bottom of the screen to go to question 10. (Pause.)

Read the question to yourself, then use your pointer tool to select an answer.

Pause while students read and answer the question.



SAY How did you answer the question?

Pause for replies.

SAY The correct answer is C, The doors contain magnets.

Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to advance to the next question.

Read the question to yourself, but don't select an answer yet.

Pause while students read the question.

Student Investigating the Growth of Plants

Which tool is best for measuring the growth of the plants?

- A Meter stick
- B Stopwatch
- C Thermometer
- D Graduated cylinder

Question 11 of 26
Section 1

Flag for Review Section Review Previous Next

SAY Before you answer the question, let's practice using the eliminator tool

(). On a multiple-choice question, the eliminator tool will help you mark choices you do not wish to consider. You can use this tool to eliminate as many choices as you want. On the toolbar at the top of the screen, click on the button with the red "X." (Pause.) To eliminate answers, you will click the choices you believe are not correct.

Let's practice by placing a red "X" over choices C and D. Then click the eliminator tool again to put the tool away.

Wait for students to eliminate choices C and D and put the tool away. The eliminator tool can only be used on multiple-choice questions and not on technology-enhanced items. There is a pop-up window that will alert a student who is attempting to select an

answer that was eliminated or attempting to eliminate an answer that was selected.

SAY If you eliminate a choice and then change your mind, you can use the eraser tool () that we practiced with earlier to erase a red X. Move the pointer over to choices C and D and click on the red X's to remove them.

Pause while students use the eraser.

SAY Put the eraser tool away, then use the pointer tool to select the answer to the question.

Pause while students answer the question.

SAY How did you answer the question?

Pause for replies.

SAY The correct answer is A, Meter stick.

Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 12.

Read the question to yourself. Then choose the best answer.

Pause while students read and answer the question.

Which shows a correct order of the sunflower life cycle?

A C

B D

Flag for Review Question 12 of 26 Section 1 Section Review Previous Next

SAY How did you answer the question?

Pause for replies.

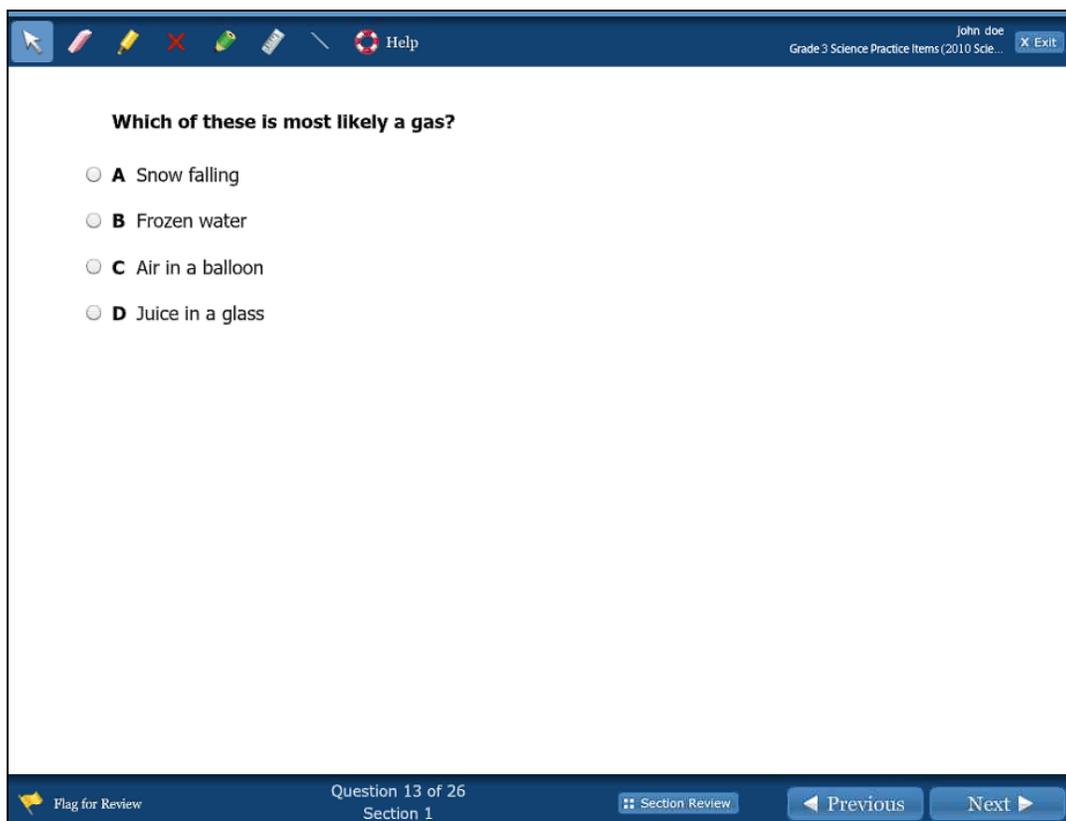
SAY The correct answer is B. Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 13.

Read the question to yourself and answer it.

Pause while students read and answer the question.



SAY How did you answer the question?

Pause for replies.

SAY The correct answer is C, Air in a balloon.

Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 14.

Read the question to yourself.

Pause while students read the question.

John doe
Grade 3 Science Practice Items (2010 Scie... [X](#) Exit

Which of these will most likely reduce the number of trees that have to be cut down?

A Using paper to wrap glass objects

B Recycling paper and newspapers

C Watering plants and flowers once a week

D Planting seedlings in open fields every spring

Flag for Review Question 14 of 26 Section 1 [Section Review](#) [Previous](#) [Next](#)

SAY Now answer the question.

Pause while students answer the question.

SAY How did you answer the question?

Pause for replies.

SAY The correct answer is B, Recycling paper and newspapers.

Now let's practice using the straightedge tool. You can use the straightedge tool to draw straight lines and underline text. To select this tool, click the icon that looks like a straight line (). Practice using the straightedge tool by making a straight line to underline the words "reduce the number of trees" in the question. Then click again on the straightedge tool icon on the toolbar to put the tool away.

Pause while students use the straightedge tool and put the tool away. Assist students as necessary.

SAY Do you have any questions about the answer of about how to use the straightedge tool?

Answer any questions.

Answer all questions and assist students with the tools if necessary. During the administration of the actual SOL assessments, examiners and proctors are not allowed to help students use the tools; providing assistance while answering the practice items is encouraged.

SAY Click *Next* at the bottom of the screen to go to question 15.

Read the question to yourself, and then select the best answer.

Pause while students read and answer the question.

The screenshot shows a digital interface for a Grade 3 Science Practice Item. At the top, there is a toolbar with icons for a mouse, eraser, pencil, highlighter, selection tool, and a red 'X' icon, along with a 'Help' button. The user's name 'John doe' and the text 'Grade 3 Science Practice Items (2010 Scie...)' are visible in the top right corner, along with an 'Exit' button. The main content area is titled 'Investigation of the Same Apple Tree' and contains three illustrations of an apple tree labeled 'June', 'July', and 'October'. The June tree has small green leaves and tiny white flowers. The July tree has larger green leaves and small green apples. The October tree has yellow and orange leaves and large red apples. Below the illustrations is the question: 'Which conclusion can best be formed from this picture?' and four multiple-choice options: A. Apples take years to grow. B. Apples have large stems. C. Apples come from tiny seeds. D. Apples grow from flowers on the tree. At the bottom of the interface, there is a 'Flag for Review' button, 'Question 15 of 26 Section 1', a 'Section Review' button, and 'Previous' and 'Next' navigation buttons.

SAY How did you answer the question?

Pause for replies.

SAY The correct answer is D, Apples grow from flowers on the tree.

Do you have any questions?

Answer all questions.

SAY Before you move on to the last question, let's practice using the ruler tool.

Click on the ruler icon () located on the top toolbar, and the ruler choices will appear. You will need to choose the type of ruler you would like to use: a ruler you can use to measure in centimeters or a ruler you can use to measure in inches. For our practice, let's use the inches ruler. After you click the inches ruler icon, a ruler will display on your screen.

Pause while students select the ruler.

SAY You can move the ruler in two different ways. To rotate or turn the ruler, you will click on the blue arrows located at the end of the ruler and drag it in the direction you'd like it to go. To slide the ruler to another location on the screen, you will click on the ruler itself and drag it to the place you'd like it to be. Practice moving the ruler now.

Pause while students move the ruler.

SAY Let's use the ruler to measure the height of the box surrounding the trees in question 15. Using your mouse to move and rotate the ruler, align the beginning of the ruler with the left or right side of the box and measure how tall the box is in inches.

Pause while students measure the height of the box. Assist students as necessary.

SAY What is the height of the box in inches?

Pause for replies.

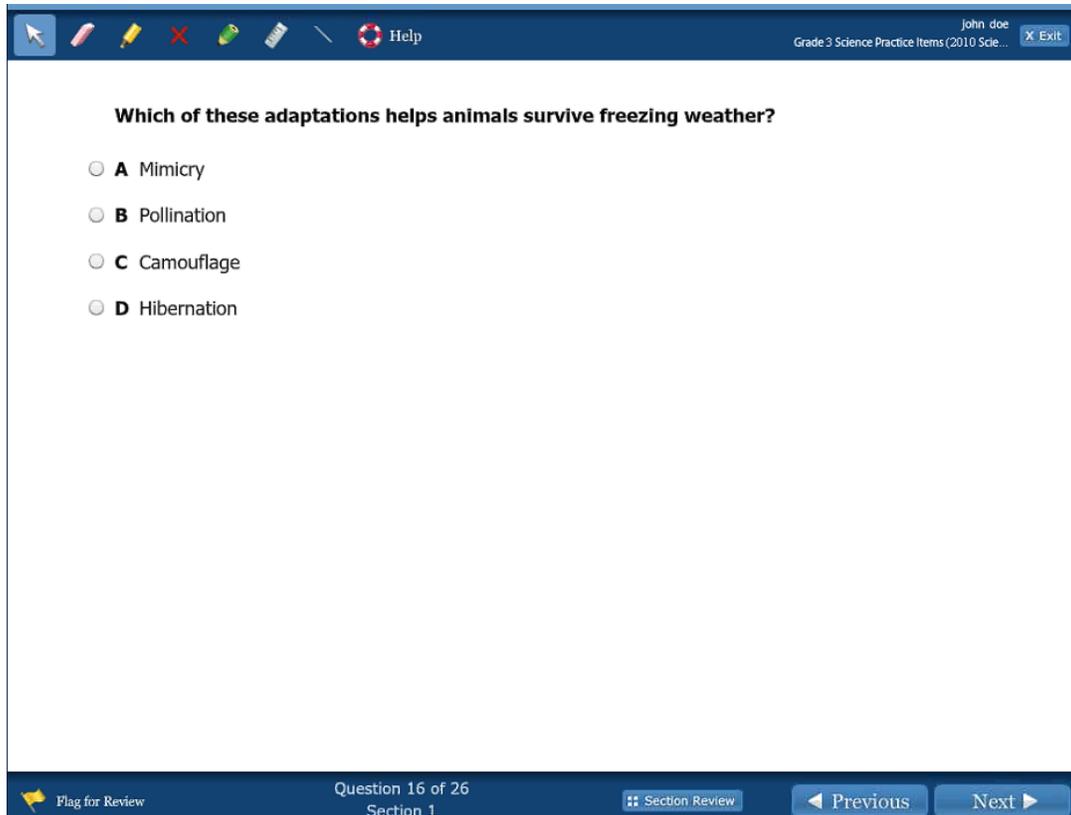
SAY The box is 2 ¼ inches tall. To put the ruler away, simply click on the ruler icon on the toolbar again or click on the pointer tool.

Pause while students put away the ruler.

SAY Does everyone understand how to use the ruler? (Pause.) Has everyone put the ruler away? (Pause).

SAY Click *Next* at the bottom of the screen to go to the last question. Read the question to yourself and answer it.

Pause while students read and answer the question.



SAY How did you answer the question?

Pause for replies.

SAY The correct answer is D, Hibernation.

Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 17.

Read the question to yourself. Then choose the best answer.

Pause while students read and answer the question.

The screenshot shows a digital interface for a science practice item. At the top, there is a toolbar with icons for navigation and a 'Help' button. The user's name 'John doe' and the page title 'Grade 3 Science Practice Items (2010 Scie...)' are visible in the top right. The main content area contains the question: 'Liquid in a Container' and 'Which picture shows how the liquid most likely changed when poured into another container?'. The initial state shows a beaker with 30 mL of liquid. Four options (A, B, C, D) are shown, each with a radio button. Option A shows a shallow dish with 30 mL of liquid. Option B shows a tall beaker with 30 mL of liquid. Option C shows a narrow flask with 30 mL of liquid. Option D shows a tall graduated cylinder with 30 mL of liquid and bubbles. The bottom of the interface has a navigation bar with 'Flag for Review', 'Question 17 of 26 Section 1', 'Section Review', 'Previous', and 'Next' buttons.

SAY Which answer did you choose?

Pause for replies.

SAY The correct answer is C. Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 18.

Read the question to yourself. Then choose the best answer.

Pause while students read and answer the question.

Student Riding a Bicycle

How many simple machines are in this picture?

- A Less than two simple machines
- B Two simple machines
- C Three simple machines
- D More than four simple machines

Question 18 of 26
Section 1

Section Review Previous Next

SAY How did you answer the question?

Pause for replies.

SAY The correct answer is D, *More than four simple machines*.

Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 19.

Read the question to yourself. Then choose the best answer.

Pause while students read and answer the question.

Deer

Butterfly

The deer and the butterfly both have life cycles. What makes their life cycles different?

- A The deer has more stages than the butterfly.
- B The larva looks different than the adult.
- C Each cycle shown goes through stages.
- D Both cycles have an egg stage.

Question 19 of 26
Section 1

Section Review Previous Next

SAY Which answer did you choose?

Pause for replies.

SAY The correct answer is *B, The larva looks different than the adult.*

Do you have any questions?

Answer all questions.

SAY Click *Next* at the bottom of the screen to go to question 20.

Read the question to yourself. Then choose the best answer.

Pause while students read and answer the question.

The screenshot displays a software interface for a Grade 3 Science practice item. At the top, there is a toolbar with icons for navigation and editing, and a user profile section showing 'John doe' and 'Grade 3 Science Practice Items (2010 Scie...)' with an 'Exit' button. The main content area features a classification diagram titled 'Natural Resources'. The diagram is structured as follows:

- Natural Resources** (Root)
 - Energy** (Branch)
 - Renewable** (Sub-branch)
 - Group 1** (Box with '?')
 - Nonrenewable** (Sub-branch)
 - Group 2** (Box with '?')
 - Resource** (Branch)
 - Renewable** (Sub-branch)
 - Group 3** (Box with '?')
 - Nonrenewable** (Sub-branch)
 - Group 4** (Box with '?')

Below the diagram, the question asks: "In which two groups would water be placed?"

The multiple-choice options are:

- A Groups 1 and 2
- B Groups 1 and 3
- C Groups 2 and 3
- D Groups 2 and 4

At the bottom of the interface, there is a navigation bar with the following elements: 'Flag for Review', 'Question 20 of 26', 'Section 1', 'Section Review', 'Previous', and 'Next'.

SAY Which answer did you choose?

Pause for replies.

SAY To answer this question correctly you should have chosen **B, Groups 1 and 3.**

Do you have any questions?

Answer all questions.

SAY Click **Next** at the bottom of the screen to go to question 21.

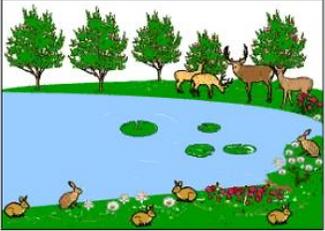
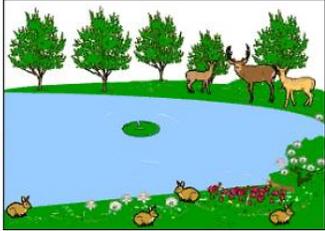
Pause while students go to the next question.

John doe
Grade 3 Science Practice Items (2010 Scie... X Exit

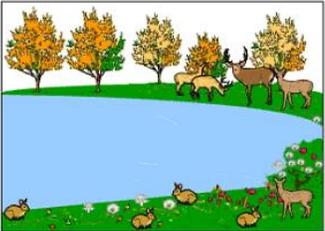
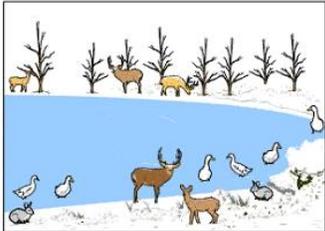
Help

Directions: Click on a location above each bar to show the bar height.

Spring **Summer**

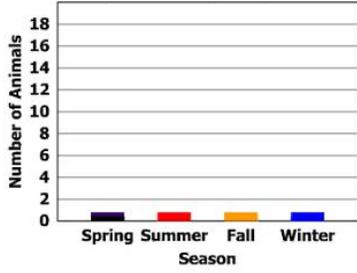



Fall **Winter**

Count the number of animals needed to complete the graph.

Graph of Non-Migratory Animals



Number of Animals

18
16
14
12
10
8
6
4
2
0

Spring Summer Fall Winter
Season

Flag for Review Question 21 of 26 Section Review Previous Next

Section 1

SAY This question asks you to graph data. Notice the gray directions banner underneath the toolbar. The directions say, “Click on a location above each bar to show the bar height.”

Underneath the directions, the problem says, “Count the number of animals needed to complete the graph.” The graph’s title is *Graph of Non-Migratory Animals*. The bars are labeled with the *Seasons: Spring, Summer, Fall* and *Winter*. The left side of the graph is labeled as the *Number of Animals*.

To answer the question, look at each picture that represents a season. Then click on the location above that bar in the graph representing the total number of non-migratory animals in that picture.

Make sure that you are paying close attention to the intervals on the left side of the graph. The numbers increase by two, and all of the numbers shown are even. If you want to graph an odd number, you will need to click on a location in between two even numbers shown. For example, if you want to graph the number 11, you will need to click on a location above the correct bar that is in between the line representing 10 animals and the line

representing 12 animals. Are there any questions on how to complete the graph?

Answer all questions.

SAY Now look at the pictures and graph the number of non-migratory animals.

Pause while students answer the question.

SAY What answers did you graph?

Pause for replies.

SAY The correct bar heights are: *Spring-10 animals, Summer-7 animals, Fall-9 animals, and Winter-7 animals.*

This question will show as “Answered” on the Section Review screen once one season is graphed. Do you have any questions?

Answer all questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY In order for this item to show as “Answered” on the Section Review screen, all four seasons must have a number selected on the graph. Do you have any questions about how to select the number of animals on the graph?

Answer any questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 22.

John doe
Grade 3 Science Practice Items (2010 Scie... X Exit

Directions: Click and drag the answers to the correct boxes.

Place the picture of the phase of matter underneath the picture that it matches.

Air
(inside ball)

Nail
(inside jar)

Soup
(inside bowl)

Phases of Matter

Flag for Review Question 22 of 26 Section 1 Section Review Previous Next

SAY Read the directions and the question. (Pause.) For this question, you will be matching the pictures of the phases of matter to the pictures on the left. You will need to place an answer in each box in order to completely answer the question. Answer the question now.

Pause while students answer the question.

SAY How did you answer this question?

Pause for replies.

SAY The first box on the left should have the picture representing a *gas*, which is the picture with the molecules spread out, filling the space inside the container. The middle box should have the picture representing a *solid*. This picture is the one with the molecules keeping a shape, with the molecules in the middle of the container. The last box on the right should have the picture representing a *liquid*. This is the picture with the molecules spread across the bottom, taking the shape of the container.

In order for this item to show as “Answered” on the Section Review screen,

each of the boxes must contain a phase of matter. Do you have any questions on how to answer this question?

Answer any questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 23.

Directions: Click and drag the answers to the correct boxes.

Students used examples of their own food to model what organisms might eat. Match the type of consumer with its most likely types of food.

Type of Consumer

- Herbivore
- Carnivore
- Omnivore

Key

- Steak
- Bacon
- Oranges
- Potato
- Salad
- Peas
- Chicken

Question 23 of 26
Section 1

Flag for Review Section Review Previous Next

SAY Read the directions and the question.

Pause while students read the question.

SAY This problem shows three plates of food. Underneath each plate is a box. On the right side of the screen, inside the dark gray box, are three types of consumers. At the bottom of the screen, there is a key that represents the food on each plate.

To answer this question, look at the types of food on a plate. Then decide what type of consumer would eat the food that is on that plate. Click and

drag the type of consumer to the empty box underneath the plate. You will do this for all three plates. Do you have any questions before begin to answer this problem?

Answer all questions.

SAY How did you answer the question?

Pause for replies.

SAY You should have placed the types of consumers in this order, from left to right: *Carnivore, Omnivore and Herbivore.*

In order for this item to show as “Answered” on the Section Review screen, each of the three boxes must contain an answer. Do you have any questions on how to answer this question?

Answer any questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 24.

John doe
Grade 3 Science Practice Items (2010 Scie... [X Exit](#)

Directions: Click on all the correct answers.

Click on each sentence that describes animals using plants to raise their young.



The trees are using soil to grow.

The squirrel is using the tree for its nest.

The deer is using the grass for protection.

The butterfly is getting nectar from the flowers.

Flag for Review Question 24 of 26 Section 1 [Section Review](#) [Previous](#) [Next](#)

SAY Read the directions and the question.

Pause while students read the directions and question.

SAY For this question, you must click on all of the sentences that correctly answer the question. You will have to look at each sentence and decide whether it is a correct answer. When you place your pointer over a sentence, it will highlight in blue. When you select it, it will outline in orange. If you change your mind about an answer, you can click on it again, and the orange outline will disappear.

Now select your answers.

Pause while students answer the question.

SAY Which answers did you select?

Pause for replies.

SAY The correct answers are: *The squirrel is using the tree for its nest,* and *The deer is using the grass for protection.* You must have selected both of

those sentences, and only those sentences, to be correct.

This question will show as “Answered” on the Section Review screen once one answer is selected. This is so no hint or clue is given as to how many correct answers there are. Do you have any questions?

Answer any questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 25.

John doe
Grade 3 Science Practice Items (2010 Scie... Exit

Directions: Click and drag the answers to the correct boxes.

Match the type of weather with the words describing each condition.

Tornado	Drought	Snowstorm	Thunderstorm

Flash flooding
Strong winds
Heavy rains

Low temperatures
Strong winds
Solid precipitation

Uproots trees
Tears down buildings
Moves large objects

Soil cracks
Water dries up
Plants wilt

Flag for Review Question 25 of 26 Section 1 Section Review Previous Next

SAY Read the directions and the question.

Pause while students read the directions and the question.

SAY For this problem you are being asked to match the type of weather with the correct description. Click and drag each description into the correct box.

Pause while students answer the question.

SAY How did you answer this question?

Pause for replies.

SAY The correct answer in the “Tornado” box is *Uproots trees, Tears down buildings, Moves large objects*. Do you have any questions about this answer?

Answer all questions.

SAY Now we will review the rest of the answers. IN the “Drought” box, you should have *Soil Cracks, Water dries up, Plants wilt*. In the “Snowstorm” box, you should have *Low temperatures*. In the “Thunderstorm” box, you should have *Flash flooding*. You must have all of the answers in the correct location in order to be correct.

In order for this item to show as “Answered” on the Section Review screen, all of the boxes must contain a description. Do you have any questions?

Answer any questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

SAY Click *Next* at the bottom of the screen to go to question 26.

John doe
Grade 3 Science Practice Items (2010 Scie... [X Exit](#)

Help

Directions: Click and drag the answers to the correct boxes.

Place the pictures of the tree in the correct order.

Tree in a Change of Weather

1 2 3

Flag for Review Question 26 of 26 Section 1 Section Review Previous Next

SAY Read the directions and the question.

Pause while students read the directions and question.

SAY There are three empty boxes labeled 1, 2, and 3. Click and drag a picture into each box. Arrange the pictures so that they are in order, showing how the tree looks as the weather changes. If you change your mind, you can drag the picture back to the dark gray box and select another one to drag into an empty box. Now answer the question.

Pause while students answer the question.

SAY To answer this question correctly, you should have the picture with the white clouds and the leaves starting to fall off the tree in Box 1. In Box 2, you should have placed the picture with the gray clouds, precipitation, and tree with more leaves falling off. In Box 3, you should have placed the picture with the blue sky and no clouds, and the tree that has few leaves on it.

In order for this question to show as “Answered” on the Section Review screen, each box must have a picture in it. Do you have any questions?

Answer any questions.

Please note that additional information regarding the requirements for an item to appear as “Answered” on the Section Review screen within TestNav is located in Appendix B for reference.

If you want your students to practice using the Help tool (as mentioned on page 10), they can do so now.

SAY Click *Next* at the bottom of the screen to go to the Section Review screen.

Section 1 Review

Choose an item below or click *CONTINUE* to go to the Test Overview.

All Items	1 Flagged for Review	26 Answered	0 Unanswered
Question 1		✓ Answered	
Question 2		✓ Answered	
Question 3		✓ Answered	
Question 4	🚩 Flagged for Review	✓ Answered	
Question 5		✓ Answered	
Question 6		✓ Answered	
Question 7		✓ Answered	
Question 8		✓ Answered	
Question 9		✓ Answered	
Question 10		✓ Answered	
Question 11		✓ Answered	
Question 12		✓ Answered	

CONTINUE
TO TEST OVERVIEW

john doe | Grade 3 Science Practice Items (2010 Science SOL)

SAY The Section Review screen shows which questions have been answered, which questions have not been answered, and which questions you have flagged for review. To return to a question, click on the question number.

Practice returning to a question by clicking on question 4, the question we flagged for review. You should see a picture of a flag in the “Flagged for

Review” column next to the question. (Pause.) You can then return to this screen by clicking on the “Section Review” button at the bottom of the screen on question 4.

Pause while students practice navigating between question 4 and this screen.

- SAY You can also use the Section Review screen to sort the questions. The top row of the Section Review screen tells you how many questions you have flagged for review, answered, or left unanswered. If you want to view only the questions you Flagged for Review, simply click on the column header that says “Flagged for Review.” If you want to view only questions you have answered, click the “Answered” header. If you want to view only questions you left unanswered, click on the header that says “Unanswered.”**
- SAY Move your pointer over each column heading and notice how that section of the heading changes.**

Pause while students practice sorting the columns.

- SAY If the Section Review screen indicates that a question is unanswered, you have not answered that question completely. If this happens, it is a good idea to return to the question and read the directions and the question again before making any changes to your answer.**

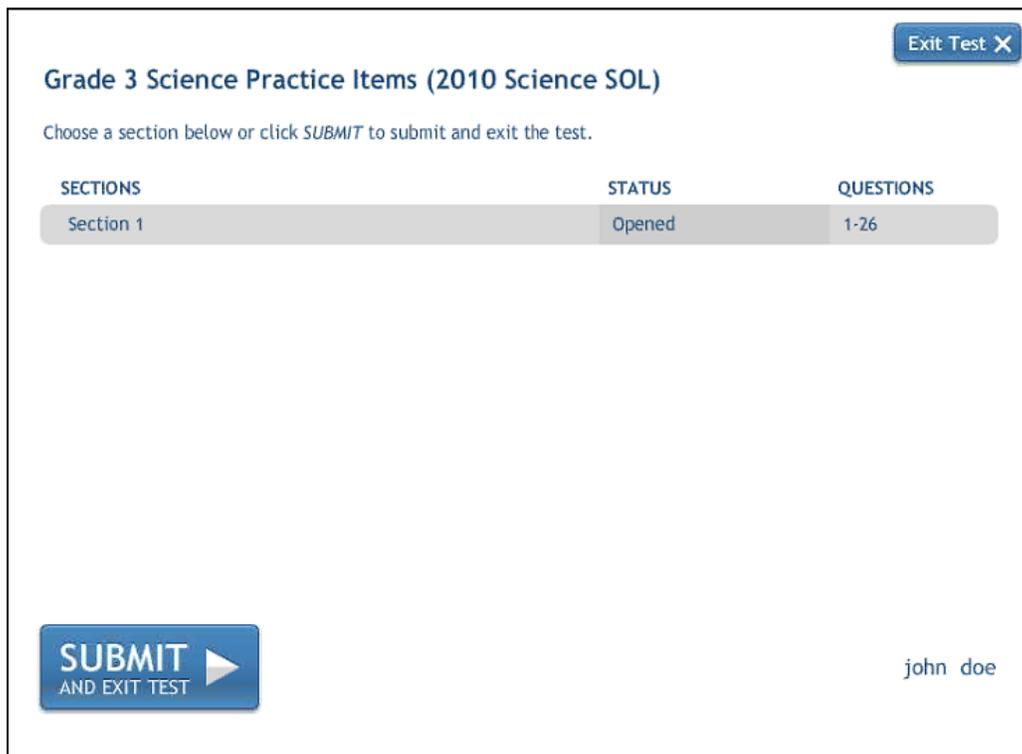
Are there any questions?

Students should check any questions that show as “*Unanswered*” on the Section Review screen. When the student returns to the question, he or she may see that there is an answer, but it may be incomplete. It is important to note, however, that some questions will show as answered once a student responds with a single answer. This is necessary at times to avoid hinting or cluing an answer. For example, hot spot items that require students to “Select all” fall into this category. Please see Appendix B for detailed information.

- SAY To get back to the Section Review screen that lists all questions and the status of each, click the top left-hand column header, titled “_ of 26 All Items.” (Pause.)**

The number in the blank will vary, depending on the column the student filters on last.

- SAY We are going to review two more screens. Click on the “Continue to Test Overview” button on the lower left corner of the screen. (Pause.)**

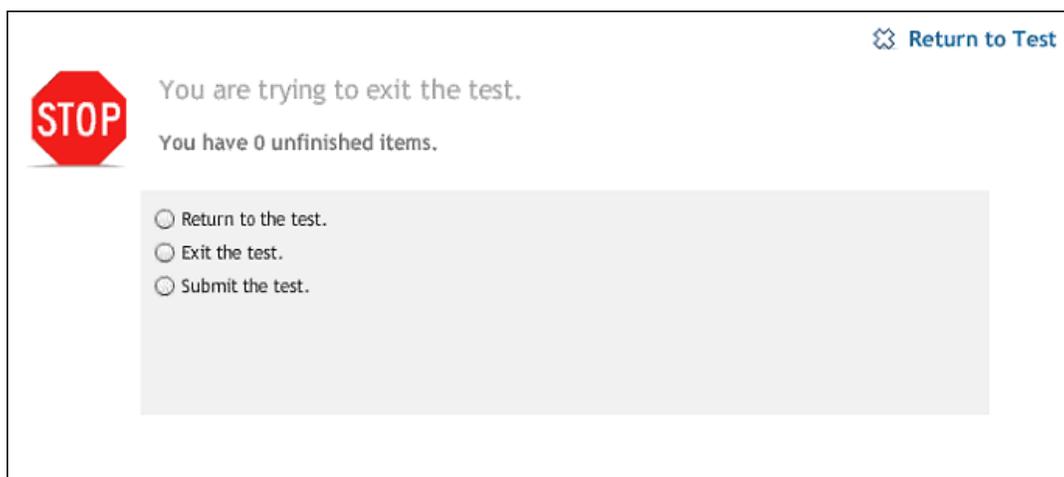


SAY From the Test Overview screen, you can return to the test or move to the final screen. Clicking on Section 1 will take you to the last practice item you were working on or went back to review. Since we have finished with the practice items, we will not return to any question within the section. Clicking on the “Submit and Exit Test” button at the bottom of the screen will move you to the final screen. Are there any questions?

Pause to answer all questions.

SAY Now click on “Submit and Exit Test.” (Pause.)

You will see a stop sign with three choices. It is important to review these three choices. (Pause.)



SAY Notice this screen indicates the number of unfinished items you have on the test.

The first choice states, *“Return to the test.”* This option allows you to go back to the practice questions. You would click this option if you wanted to return to any of the questions. Selecting this would first take you to the screen we just reviewed, and then you would click on Section 1 to return to the practice items.

The second choice states, *“Exit the test.”* This option should **NOT** be chosen. This option may be used during actual SOL testing but should **NOT** be used for this practice set. If you click on this option, you will lose all of your work. It will not be saved.

Pause and make sure students understand not to choose option 2. During actual SOL testing, students may be directed to choose this option if they are being moved to a different location to complete their tests or if they need to leave the testing environment (while monitored) for a short time.

SAY The third choice states, *“Submit the test.”* This option allows you to submit your answers.

Once you have finished using these practice items, proceed with exiting the application.

SAY Since we have finished with the practice items, please click on the third option, *“Submit the test.”* Next, click on the green button that says *“Final submit.”* When you click this button during actual SOL testing, your test will be submitted for scoring, and you will not be able to return to the test.

This completes our review of the grade 3 science SOL practice items.

Thanks you for reviewing the Grade 3 Science Practice Items with your students.

APPENDIX A

Answers to Grade 3 Science Practice Items

Question 1

Bullfrog 1: The height should be at 12; Bullfrog 2: The height should be at 10; Bullfrog 3: The height should be at 8; Bullfrog 4: The height should be at 9, which is halfway between the line marked 8 and the line marked 10; Bullfrog 5: The height should be at 11, which is halfway between the line marked 10 and the line marked 12.

Question 2

On the left side of the chart is the set “Long Hair.” The top left box should have the Goat and Yak in it. Underneath the set “Long Hair” are two subsets. The subset on the far left, “Long Tail”, should have the Yak in it. The subset “No Visible Tail” should have the Goat in it.

On the right side of the chart is the set “Short Hair.” The top right box should have the African Antelope, Pronghorn Antelope, Bull, and Bighorn Sheep in it. Underneath the set “Short Hair” are two subsets. The subset “Long Tail” should have the African Antelope and Bull in it. The subset “No Visible Tail” should have the Pronghorn Antelope and Bighorn Sheep in it.

Question 3

The correct answer is 38mL.

Question 4

The top left box should have the process “freezing.” The bottom left box should have the process “melting.” The top right box should have the process “condensation,” and the bottom right box should have the process “evaporation.”

Question 5

Box 1: Algae, Box 2: Tadpole, Box 3: Trout, Box 4: Raccoon.

Question 6

The pictures of the aphid, ladybug, butterfly and squirrel should be in the Consumers box, and the pictures of the rosebush and cactus should be in the Producers box.

Question 7

All of the following are correct answers. Students have to select only one pair: Dragonfly and Bee; Frog and Dragonfly; Raccoon and Frog; or Bobcat and Raccoon.

Question 8

There are four different ways to answer this question correctly. Any one of these combinations is correct:
Box 1: Pine Cone/Seeds; Box 2: Seedling; Box 3: Young Tree; Box 4: Adult Tree
Box 1: Seedling; Box 2: Young Tree; Box 3: Adult Tree; Box 4: Pine Cone/Seeds
Box 1: Young Tree; Box 2: Adult Tree; Box 3: Pine Cone/Seeds; Box 4: Seedling
Box 1: Adult Tree; Box 2: Pine Cone/Seeds; Box 3: Seedling; Box 4: Young Tree

Question 9

The number one should be inside the white cloud. The number two should be inside the straight arrows pointing to the white cloud. The number three should be at the bottom right of the diagram. The number four should be within the drops of rain underneath the dark cloud.

APPENDIX A

Answers to Grade 3 Science Practice Items (Continued)

Question 10

The correct answer is C, The doors contain magnets.

Question 11

The correct answer is A, Meter stick.

Question 12

The correct answer is B.

Question 13

The correct answer is C, Air in a balloon.

Question 14

The correct answer is B, Recycling paper and newspapers.

Question 15

The correct answer is D, Apples grow from flowers on the tree.

Question 16

The correct answer is D, Hibernation.

Question 17

The correct answer is C.

Question 18

The correct answer is D, More than four simple machines.

Question 19

The correct answer is B, The larva looks different than the adult.

Question 20

To answer this question correctly you should have chosen B, Groups 1 and 3.

Question 21

The correct bar heights are: Spring-10 animals, Summer-7 animals, Fall-9 animals, and Winter-7 animals.

Question 22

The first box on the left should have the picture representing a gas, which is the picture with the molecules spread out, filling the space inside the container. The middle box should have the picture representing a solid. This picture is the one with the molecules keeping a shape, with the molecules in the middle of the container. The last box on the right should have the picture representing a liquid. This is the picture with the molecules spread across the bottom, taking the shape of the container.

Question 23

You should have placed the types of consumers in this order, from left to right: Carnivore, Omnivore and Herbivore.

APPENDIX A

Answers to Grade 3 Science Practice Items (Continued)

Question 24

The correct answers are: The squirrel is using the tree for its nest, and The deer is using the grass for protection. You must have selected both of those sentences, and only those sentences, to be correct.

Question 25

The correct answer in the “Tornado” box is Uproots trees, Tears down buildings, Moves large objects. In the “Drought” box, you should have Soil Cracks, Water dries up, Plants wilt. In the “Snowstorm” box, you should have Low temperatures. In the “Thunderstorm” box, you should have Flash flooding. You must have all of the answers in the correct location in order to be correct.

Question 26

To answer this question correctly, you should have the picture with the white clouds and the leaves starting to fall off the tree in Box 1. In Box 2, you should have placed the picture with the gray clouds, precipitation, and tree with more leaves falling off. In Box 3, you should have placed the picture with the blue sky and no clouds, and the tree that has few leaves on it.

APPENDIX B

An overview of how student responses to technology-enhanced items will appear on the Section Review screen is outlined below:

Fill-in-the-blank (FIB) Items

For all fill-in-the-blank items, when a student enters any character into the response box, the item will show as answered on the Section Review screen. If a student enters an answer and then completely removes that answer from the fill-in-the-blank box, the item will show as unanswered on the Section Review screen.

Histogram or Bar Graphing Items

For all histogram or bar graphing items, when a student raises any bar, the item will show as answered on the Section Review screen. If the student moves all bars back down to the original heights, the item will show as unanswered on the Section Review screen.

Hot Spot Items

When the number of correct responses is indicated in the directions or in the item itself, the item will show as answered on the Section Review screen only when the student selects that number of hot spots. For example, if the student is directed to select three answers, then the Section Review screen will show unanswered if the student selects one or two answers and will only show as answered once the student has selected three answers. If the number of correct responses is not indicated in the directions or in the question itself, then the item will show as answered on the Section Review screen once the student selects one answer. For example, if the student is required to “Select all correct answers,” the item will show as answered once the student selects one answer option. In this case, it is assumed that the student thought there was only one correct answer. This practice avoids providing information as to how many correct answers there are in the “select all” hot spot items.

Number Line or Coordinate Plane Items

Many number line or coordinate plane items require the student to plot one or more points as the response. When the number of points necessary to answer the item is indicated in the directions or the item itself, the item will show as answered on the Section Review screen only when the specified number of points has been plotted. When the directions or the item do not specify the number of points to plot, the item will show as answered on the Section Review screen once the student plots one point. Only points that have been plotted with the pointer tool are scorable responses. Points plotted with the dot tool are not scorable responses. If a student answers a question with the dot tool, the question will show as unanswered on the Section Review screen.

APPENDIX B (Continued)

Drag and Drop Items

Drag and drop items contain answer receptacles called “bays” and “dragers” that the student moves into the bays to answer the question. There are many types of drag and drop items, and each item is evaluated individually so that the student is given the most detailed information possible on the Section Review screen, without providing hints as to the correct answer. For items with a specified number of bays, the item will show as answered on the Section Review screen once the student uses that number of dragers. For example, if there are three bays and it is intended for a dragger to be placed into each bay, then the Section Review screen will show the item as answered once three draggers have been input by the student. Or, in another example, if the directions or question indicate that all draggers need to be used to answer the item, then the item will show as answered on the Section Review only when all draggers have been used. If the number of draggers necessary to answer the question is not indicated, such as an item that requires the use of a dragger to complete a model or pictograph, then the Section Review Screen will show the item as answered once the student places one dragger in a bay.