

Guidelines for Administering the Read-Aloud Accommodation for the Virginia Standards of Learning Assessments

Virginia Department of Education

December 1, 2015

Table of Contents

Introduction.....	2
Responsibilities for Administering the Read-Aloud Accommodation	3
Eligibility Guidelines for the Read-Aloud Accommodation	5
General Guidelines for Administering the Read-Aloud Accommodation.....	6
Read-Aloud Guidelines for SOL Reading Assessments	7
Read-Aloud Guidelines for SOL Writing Assessments	13
Read-Aloud Guidelines for SOL Mathematics Assessments	17
Read-Aloud Guidelines for SOL Science Assessments.....	26
Read-Aloud Guidelines for SOL History/Social Science Assessments.....	33
Read-Aloud Guidelines for Technology Enhanced Items (TEI).....	38

Questions or comments related to this document may be directed to the Division of Student Assessment and School Improvement by e-mail at student_assessment@doe.virginia.gov or by telephone at (804) 225-2102.

Change Log:

Date	Description
4/20/2015	Published <i>Guidelines for Administering the Read-Aloud Accommodation for the Virginia Standards of Learning Assessments</i>
4/23/2015	P.42: Deleted the word “and” SAY Search: Puzzles. (pause) Results one to five of six hundred and eighty three thousand four hundred and twenty-one.
--	--

Property of the Virginia Department of Education

© 2015 by the Commonwealth of Virginia Department of Education, P.O. Box 2120, Richmond, Virginia, 23218-2120. All rights reserved. Except as permitted by law, this material may not be reproduced or used in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without written permission from the copyright owner.

Commonwealth of Virginia public school educators may photocopy or print any portion of these guidelines for the administration of the read-aloud accommodation for educational purposes without requesting permission. All others should direct their written requests to the Virginia Department of Education, Division of Student Assessment and School Improvement at the above address or by e-mail to student_assessment@doe.virginia.gov

Introduction

This document is a resource for school personnel administering the read-aloud accommodation to eligible students participating in the Virginia Standards of Learning (SOL) assessments. It includes school personnel responsibilities, read-aloud test administration guidelines, and examples of how to read test items aloud in each of the content areas.

Only students with disabilities identified under the *Individuals with Disabilities Education Improvement Act of 2004* or Section 504 of the *Rehabilitation Act of 1973* and students identified as Limited English Proficient (LEP) are eligible for the read-aloud accommodation. Decisions regarding assessment participation and testing accommodations must be made by the Individualized Education Program (IEP) team, 504 committee, and/or the LEP committee, and documented in the respective IEP, 504 Plan, and/or LEP Student Assessment Participation Plan.

Before providing eligible students with any accommodation for state assessments, IEP teams, 504 committees, and LEP committees should read and understand the documents related to assessment participation and test accommodations. These documents are available on the Virginia Department of Education Web site at: <http://www.doe.virginia.gov/testing/participation/index.shtml> and include:

- *Students with Disabilities: Guidelines for Assessment Participation*
- *Students with Disabilities: Guidelines for Special Test Accommodations*
- *Limited English Proficient Students: Guidelines for Participation in the Virginia Assessment Program*

Responsibilities for Administering the Read-Aloud Accommodation

School Divisions

It is the responsibility of the school division to ensure that teachers receive the proper training to administer the read-aloud accommodation to eligible students participating in statewide assessments. Staff responsible for administering the read-aloud accommodation must follow all security procedures for the administration of SOL tests and the additional security procedures for the administration of the read-aloud accommodation.

Division Directors of Testing and School Test Coordinators

Division Directors of Testing (DDOT) and School Test Coordinators (STC) must ensure that all read-aloud administrations are recorded and/or proctored. If recorded, the audio recording of the entire read-aloud testing session must be retained on file and secured in the office of the DDOT until scores are received and verified and Authorization to Proceed (ATP) is approved for that test administration.

If proctored, the Examiner and Proctor must verify in writing that the test administration was conducted according to standardized procedures. This written verification must be retained on file in the office of the DDOT until scores are received and verified and Authorization to Proceed (ATP) is approved for that test administration.

The *SOL Writing and Non-Writing Test Implementation Manuals* for each test administration include details about the read-aloud accommodation. DDOTs and STCs must be familiar with the information in the manual for the current test administration.

Test Examiners

Test Examiners (Examiners) have the responsibility of ensuring that test security and validity are maintained at all times. The Examiner must administer the read-aloud accommodation without leading the student through voice inflection or by repeating any part of the test which is not specifically requested by the student. Prior to reading a test item aloud, Examiners should take a moment to review the item so that an answer is not inadvertently given to the student through how the item is read.

Examiners who read an online test aloud to eligible students will be given access to an online test to be viewed on the Examiner's workstation, through the use of an Examiner Test Ticket. Access to the test is provided to allow the Examiner to read the questions and answer options to the student(s) from a screen that is not part of the student's workstation. An exception to this is if the SOL test being administered is a computer adaptive test. Test questions presented to students on a computer adaptive test are selected by the computer based on the student's responses during the test. Because the selection of items is customized for each student, a computer adaptive test cannot be presented to an Examiner on a separate workstation. Guidelines for administering a read-aloud computer adaptive test are in the *SOL Examiner's Manual* for the test.

Examiners may use the PearsonAccess Training Center Tests in the audio format and the audio SOL Practice Items to hear examples of how SOL tests should be read aloud and to practice reading SOL test items.

The *SOL Writing* and *Non-Writing Examiner's Manuals* for each SOL assessment include details about the read-aloud accommodation. Examiners must be familiar with information in the manual for the specific SOL test they are administering.

Interpreters/Transliterators

Interpreters/Transliterators may be used for students who are deaf or hard of hearing and who have interpretation documented as an accommodation in their IEP or 504 plans. The Interpreter/Transliterators may interpret SOL test directions, sample items, questions regarding the mechanics of testing directed to and answered by the Examiner, and SOL test items. Examiners and Interpreters/Transliterators should follow directions for interpreting/ transliterating test items on SOL assessments located in the *SOL Non-Writing* and *Writing Test Implementation Manuals*.

Interpreters/Transliterators for all assessments:

- must participate in Examiner/Proctor training offered at the division or school;
- must read, understand, and agree to adhere to the *School Division Personnel Test Security Agreement*;
- may help prepare students for testing by interpreting practice items, released tests, or other materials designed for test preparation;
- may have access to the tests for review purposes **24 hours prior** to the test administration as authorized by the DDOT. If the Interpreter/Transliterators requires access to an online test for review purposes, the DDOT must contact student assessment staff at the Virginia Department of Education for assistance. The pre-testing review must be conducted under supervision.
Note: A Computer Adaptive Test cannot be reviewed prior to the test administration.
- function as the communication facilitator and must read each item silently before interpreting/transliterating it to the student to ensure that a response is not inadvertently disclosed.
- must be careful not to lead the student to an answer through a facial expression or by repeating any part of the test the student did not specifically request to have repeated.

The short-paper component of the writing test requires the student to write a short paper and the Interpreter/Transliterators may only interpret the directions and writing prompt. If the student uses the dictation to a scribe accommodation and signs his or her short paper response to an Interpreter/Transliterators, the Interpreter/Transliterators must scribe the student's response verbatim. The student would then revise or edit the scribed response.

Note: The Interpreter's/Transliterators' role and professional code of ethics prohibit answering questions directly or providing assistance in answering test questions.

Eligibility Guidelines for the Read-Aloud Accommodation

Read-Aloud Accommodation on Mathematics, Science, History/Social Science, and Writing Assessments

The read-aloud accommodation for *Mathematics, Science, History/Social Science, and Writing* assessments is allowed for students with disabilities and LEP students as specified in the student's IEP, 504 Plan, or LEP Student Assessment Participation Plan. Special attention must be given to the student's IEP, 504 Plan, and LEP Student Assessment Participation Plan regarding the use of reading the test aloud. For example, the IEP, 504 Plan and LEP Student Assessment Participation Plan may require the entire test to be read aloud or may require having words, questions, or sentences read aloud only when requested by the student.

Read-Aloud on the Reading Assessment

The read-aloud accommodation on the statewide *Reading* assessments is allowed only for students with a visual impairment, including blindness, and those students with a specific disability that severely limits or prevents them from decoding text at any level of difficulty as determined by a diagnostic tool or instrument administered by a qualified professional. Students with disabilities who are having difficulty reading text and/or are reading below grade-level are not allowed the read-aloud accommodation on the statewide *Reading* assessments. Additional information on eligibility requirements for the read-aloud accommodation of the statewide *Reading* test is provided in Supt. Memo No. 235 dated October 27, 2006, and in the *SOL Non-Writing Test Implementation Manual*.

General Guidelines for Administering the Read-Aloud Accommodation

The following guidelines should be used when administering the read-aloud accommodation to an individual student or group of students for all SOL assessments.

The Examiner must:

- administer the read-aloud accommodation only in English.
- read the test question followed by the multiple-choice answer options or the related text for technology-enhanced items.
- read text exactly as written using a natural tone.
- minimize the use of voice inflection, word emphasis, or other reading styles, as this can lead students toward a response or make the test content confusing.
- stop reading aloud if the text is misread. The Examiner should stop and say, **“No, that is wrong. I must read it to you again.”** Then re-read the text.
- be aware of specific accommodations identified in a student’s IEP, 504 Plan or LEP Student Assessment Participation Plan. For example, an IEP may require the entire test to be read aloud to a student, or it may require that words, questions, or sentences are read aloud only when requested by the student.
- adapt the pace of reading to the needs of the student(s).
- **not** explain, translate, or verbally interpret any portion of the test items or answer options. No assistance (e.g., defining words, substituting words, attempting to clarify the intent of test items, etc.) may be provided to students.

Read-Aloud Guidelines for SOL Reading Assessments

Students who are determined eligible for the read-aloud accommodation on *Reading* assessments may have test items read aloud to them. Guidelines for administering the read-aloud accommodation for *Reading* tests are provided below.

- All reading passages are to be read exactly as written. Examiners should not describe any pictures that accompany the passage.
- The Examiner should read sentence numbers and paragraph numbers in passages and poetry before the paragraph or sentence.
- For test items that ask a question about a specific sentence or sentences within a reading passage, read the question first, then the multiple-choice answer options or related text for technology-enhanced items. At the student's request, the Examiner may go back and read the sentences, or paragraph referenced in the test item, or may reread any part of the text.
- The Examiner is not to emphasize individual words or phrases that are underlined as part of the item or answer options

Reading Assessment Read-Aloud Item Examples

The examples on the following pages are test items from released test forms and practice items and are intended to assist Examiners in reading various reading test items. Some items have explanations as to why the items are read a particular way and notes of issues that could arise when reading a specific type of item.

All statements that the Examiner must read aloud to the students are in **bold Calibri font**. This text must be read exactly as written using a *natural tone* and *manner*. Other text is information for the Examiner and should not be read to students. If a mistake is made in reading a test item, the Examiner should stop and say, **"No, that is wrong. I must read it to you again."** Then re-read the test item.

Reading Passages

All reading passages are to be read exactly as written. Examiners should not describe any pictures that accompany the passage. Some reading passages may contain footnotes and/or underlined words or sentences within the passage. Below is an example of a reading passage and how it should be read. **Note:** The example provided is a set of “paired reading passages” or an example where students are presented with two reading selections and a set of test items based on either one or both passages. Not all reading selections in SOL tests are paired passages.

Example 1: Paired Reading Passages (Underlined Words or Phrases)

When reading paired passages, the Examiner should read both selections first, then the test items that follow. Some reading passages may have underlined individual words, sentences, or phrases. The Examiners should not emphasize the underlined individual words, sentences, or phrases within the passage.

Hummingbirds	Among the Leaves
<p style="text-align: center;">Hummingbirds</p> <ol style="list-style-type: none">1 Hummingbirds are one of nature's most amazing creatures. Native only to the Western Hemisphere, these small birds are known for their <u>deft flying abilities</u>. They have a unique ability to hover in midair by rapidly flapping their wings as much as 80 times per second. In fact, hummingbirds are named for the <u>distinct humming sound created by this rapid wing beat</u>. Hummingbirds are the only birds that can actually fly backwards, and they can move quickly and easily in almost any direction. Therefore, if you've seen a petite bird appearing to dart and hover from one spot to the next, you were most likely watching a hummingbird.2 Hummingbirds use their unique ability to hover in place while feeding on flower nectar. They sip their sweet meals by reaching inside the flower with their narrow bills and split tongues. They also eat hundreds of insects each day. In fact, their flying style requires so much energy that hummingbirds must consume enough food to nearly equal their body weight each day!3 Hummingbirds make delightful and beneficial visitors to any garden. They help pollinate plants and flowers much as bees do. Attracting these fascinating creatures is easy. Simply set up a hummingbird feeder in early spring, and keep it filled with a syrupy mixture. Before long, your garden will be “humming” with activity.4 Hummingbirds are migratory and will leave in late fall when the weather gets too cold. Keep the feeder up two to three weeks after the last hummingbird is spotted. It might serve as a helpful feeding spot for passing hummingbirds migrating south. Don't worry about delaying their migration because hummers know when it's time to leave, even if that means passing up a free lunch!	

***Note:** It is good practice for the Examiner to state underlining before and after each word, phrase, or sentence that contains underlining.*

SAY Hummingbirds (pause) One (pause) Hummingbirds are one of nature's most amazing creatures...

Example:

The word distinct is underlined in the passage above, it should be read:

SAY ...In fact, hummingbirds are named for the (underline) distinct (stop underline) humming sound created by...

Example 1: Paired Reading Passages (Footnotes)

Some reading passages contain footnotes beneath the passage. The Examiner should read the footnote within the passage aloud exactly as written.

Hummingbirds	Among the Leaves
<p style="text-align: center;">Among the Leaves</p> <p style="text-align: center;"><i>Barbara Evans Stanush</i></p> <p style="text-align: center;">1</p> <p>1 You found it, high amid thick branches upright on a twig, plastered with lichen,¹ blending with the live oak.</p> <p>You spied it, bright-eyed daughter, 5 keen to find another life among the hard leaves. You climbed</p> <p>to watch a hummer feeding nestlings; their tiny beaks gaped red. The mother did not scare. The nest bulged with growing.</p> <p>10 You called me to the mystery — so slight I lost the nest each time my stare wavered. You balanced on the ladder, took a photograph.</p> <p>¹lichen — a type of moss that grows on trees</p>	

***Note:** It is good practice for the Examiner to state the beginning of the footnote and its number, the end of the footnote and its number. A footnote is found in the first stanza of this poem and should be read as shown below:*

SAY Among the Leaves, Barbara Evans Stanush (pause) **One**

SAY You found it, high amid thick branches upright on a twig, plastered with lichen (pause) **begin footnote** One (pause) lichen a type of moss that grows on trees (pause) **end footnote** one (pause) **blending with the live oak...**

Reading Item 2:

Look at the web.



What information belongs in the circle titled "Date"?

- A** May 2
- B** May 3
- C** May 6
- D** May 9

This item should be read as follows:

SAY Look at the web (pause)

(Read from left to right, top to bottom)

SAY Cost: One dollar for students
Place: North Park Zoo
Information About Field Trip Day
Time: 9:00 A.M. to 2:30 P.M
Date: Empty Circle

SAY What information belongs in the circle titled "Date"?
A May 2
B May 3
C May 6
D May 9

Reading Item 3:

Read this dictionary entry.

ma•te•ri•al (mə-fîr'ē-əl) *n.* 1. Cloth or other fabric. 2. Ideas or notes that can be worked up. 3. What an object is made of. 4. Something that is studied.

Which meaning of materials is used in paragraph 2?

- A** 1
- B** 2
- C** 3
- D** 4

***Note:** The Examiner is not to emphasize individual words or phrases that are underlined or appear in all CAPS as part of item or answer options.*

This item should be read as follows:

SAY Read this dictionary entry

SAY A box (pause) material, noun (pause) One, Cloth or other fabric. (pause) Two, Ideas or notes that can be worked up. (pause) Three, What an object is made of. (pause) Four, Something that is studied.

SAY Which meaning of materials is used in paragraph 2?

- A** 1
- B** 2
- C** 3
- D** 4

***Note:** Examiner should only reread paragraph 2 if requested by the student.*

Reading Item 4:

Directions: You do not need to read a passage to answer the question. Read and answer the question. Click on the two correct answers.

Complete this analogy.

Puzzling is to mysterious as —

fragile is to delicate
sharp is to solid
rare is to scarce
leafy is to branched
brave is to concerned

This item should be read as follows:

SAY Directions: You do not need to read a passage to answer the question. Read and answer the question. Click on the two correct answers.

SAY Complete this analogy.
Puzzling is to mysterious as—

SAY A grey box

(Read box from top to bottom)

fragile is to delicate
sharp is to solid
rare is to scarce
leafy is to branched
brave is to concerned

Read-Aloud Guidelines for SOL Writing Assessments

Students who are determined eligible for the read-aloud accommodation on *Writing* assessments may have test items read aloud to them for the multiple-choice and short-paper components of the SOL *Writing* tests. When providing the read-aloud accommodation on the multiple-choice/technology-enhanced item component, the following guidance is provided:

- All writing drafts are to be read exactly as written. The Examiner must not describe any pictures that accompany the passage.
- The Examiner must read sentence numbers and paragraph numbers in writing drafts and poetry before the paragraph or sentence.
- For test items that ask a question specifically about a sentence or sentences within a writing draft, read the question first, then the multiple-choice answer options or related text for technology-enhanced items. At the student's request, the Examiner may go back and read the sentences, or paragraph referenced in the test item, or may re-read any part of the text.
- The Examiner must not emphasize individual words or phrases that are underlined as part of test item or answer option.

When providing the read-aloud accommodation on the short-paper component of the SOL *Writing* test, the following guidance is provided:

The Examiner must

- follow the directions for the short paper component located in the appropriate Examiner's Manual for that test administration.
- go to the individual student's work area and quietly read the prompt aloud to that student from student's test.
- read the *Checklist for Writers* from the student's test.
- not answer questions pertaining to the prompt, assist with interpreting the prompt, or engage in any discussion about the prompt or potential responses.

Writing Assessment Read-Aloud Item Examples

The examples on the following pages are test items from released test forms and practice items and are intended to assist Examiners in reading various writing items. Some items will have an explanation as to why the items are read a particular way and the possible issues that could arise when reading a specific type of item.

All statements that the Examiner must read aloud to the students are in **bold Calibri font**. This text must be read exactly as written using a natural tone and manner. Other text is information for the Examiner and should not be read to students. If a mistake is made in reading a test item, the Examiner should stop and say, "**No, that is wrong. I must read it to you again.**" Then re-read the test item.

Writing Item 1: Writing Draft

<p style="text-align: center;"><i>Dinosaur Diner</i></p> <p>Zane's English teacher asks the students to write a personal narrative about something that happened last summer. Zane decides to write about a surprising event that happened during his visit to California.</p> <p style="text-align: center;">Rough Draft</p> <p>(1)Last summer my twin brother Zack and I visited our aunt and uncle in California. (2)On the first day of our visit, Aunt Wanda went to work. (3)She told Uncle Hank and us to meet her for lunch before she left, and she seemed excited. (4)To be honest, Zack and I had been hoping to visit some of the famous movie studios we had read about before our trip. (5)Visiting our aunt at her job for lunch did not seem very interesting. (6)At 11:30 A.M. sharp, however, the three of us left the house.</p>	<p>Read Zane's rough draft, and use it to answer the questions that follow.</p>
---	---

Note: The Examiner should read sentence numbers and paragraph numbers in passages and poetry before the paragraph or sentence.

This rough draft should be read:

SAY Read Zane's rough draft, and use it to answer the questions that follow.

SAY A box (pause) **Dinosaur Diner**, Zane's English teacher asks the students ...

SAY Rough Draft, (pause) One (pause) Last summer my twin brother Zack and I visited our aunt and uncle in California. Two (pause) On the first day of our visit, Aunt Wanda went to work. Three (pause) She told Uncle Hank and us to...

Writing Item 1: Writing Draft (continued)

<p>(7)"How can you tell which building is Aunt Wanda's?" I asked as we passed block after block of identical warehouses. (8)Uncle Hank agreed that they all looked alike, but he pulled into a parking lot, and we went into a building. (9)We climbed a flight of stairs, walked through a heavy metal door, and found Aunt Wanda.</p> <p>(10)As we were talking, Aunt Wanda introduced Zack and me to her boss, a man she called Bill.</p> <p>(11)When Bill asked us if we would like a tour before lunch, Uncle Hank and Aunt Wanda both smiled as though a warehouse were something special.</p> <p>(12)Zack just smiled, so I said, <u>Sure, that would be great, though I was still thinking about the movie studios.</u></p> <p>(13)We walked through a long corridor, down a flight of stairs, and came to a huge garage door, which Bill opened by pushing a button. (14)As the door slid upward, and our eyes adjusted to the light, I was surprised. (15)Glaring down at us was a huge <i>Tyrannosaurus rex</i> with a wide-open mouth.</p> <p>(16)"Meet T. J.," Bill said. (17)"He guards the place. (18)Come on," he added, waving his arm at Zack and me, "there's more."</p>	<p>Read Zane's rough draft, and use it to answer the questions that follow.</p>
---	--

***Note:** It is good practice for the Examiner to state underlining before and after each word, phrase, or sentence that contains underlining. The underlined words, phrases or sentences should not be emphasized by the Examiner.*

As part of reading this draft aloud to a student, sentence twelve that includes underlined text should be read as follows:

SAY ...Twelve (pause) Zack just smiled, so I said (*underline*) Sure, that would be great, though I was still thinking about the movie studios (*stop underline*)...

Writing Item 2:

Directions: You do not need to read a passage to answer the question. Read and answer the question.

Read these excerpts from a debate about the structure of the school year.

Speaker 1: One advantage of year-round schools is that multiple vacations are built into the timetable. This allows families to spend valuable time together. Also, the scattered time off helps students avoid burnout as well as retain academic skills. A final bonus of the year-round school schedule is that students can be placed in smaller classes, a proven method of achieving higher grades.

Speaker 2: Although many proclaim that students of year-round schools have higher test scores than students at traditional schools, this is not true. Actually, students at both schools have similar test scores. A noticeable advantage of traditional schools is the benefit of summer vacation, when students can interact socially as well as work at seasonal jobs. Parents also appreciate the extended period of time they can spend with their children.

The two speakers would most likely agree that —

- ☐ A it is important for students to have family vacation time
- ☐ B crowded classrooms have an effect on student learning
- ☐ C students need the opportunity to gain work experiences
- ☐ D test scores are comparable for students in both types of schools

This item should be read as follows:

SAY **Directions:** You do not need to read a passage to answer the question.
Read and answer the question.

SAY **Read these excerpts from a debate about the structure of the school year.**

SAY **First Box** (pause) **Speaker 1:** One advantage of year around schools...

SAY **Second Box** (pause) **Speaker 2:** Although many proclaim that students of year round schools...

SAY **The two speakers would most likely agree that**
A it is important for students to have family vacation time
B crowded classrooms have an effect on student learning
C students need the opportunity to gain work experiences
D test scores are comparable for students in both types of schools

Read-Aloud Guidelines for SOL Mathematics Assessments

Students who are determined eligible for the read-aloud accommodation on *Mathematics* assessments may have test items read aloud to them. *Mathematics* assessments present unique challenges to Examiners providing the read-aloud accommodation due to the use of numbers, symbols, and mathematical terminology in test items. Guidelines for administering the read-aloud accommodation on *Mathematics* assessments and tables with examples of numbers, mathematical symbols, expressions, and terminology are provided.

- It is important for the Examiner to understand what the test item is questioning in order to avoid clueing the student by reading the numbers in a specific way.
- The Examiner should be familiar with all symbols that might be included in a specific type of test question. This can only be ensured if the Examiner is familiar with the content area being assessed. Common symbols and how to read them are included in this section.
- In many instances, the test item may refer the reader to a figure or drawing. It is appropriate for the Examiner to refer the student to the same figure or drawing immediately after reading the section of the test item that directs the student.
- Although many mathematics operations, tables, charts, graphs and signs are not given in the examples shown, the Examiner should ensure that reading information aloud does not clue the student to a response. When in doubt, the Examiner should use the statement, **"Please refer to the _____ in your test."**
- When reading an item with a complex diagram, the Examiner must only read the text contained in the diagram. A read-aloud accommodation should not provide additional assistance with diagrams, charts, or tables by explaining them to students.
- There is more than one correct way to read tables, below are acceptable ways of reading tables.
 - The Examiner may state rows in transition, *Ex. Header Row...Next Row...*
 - The Examiner may count the rows, *Ex. Row One...Row Two...*
 - The Examiner must pay attention to how tables are organized when determining how information is read.

Numbers and symbols:

- Whole numbers should be read according to their common English usage as long as place value is not part of the test question. For example, the number 1,234 would be read as **"one thousand two hundred thirty four"** if it were in a question not assessing place value, but would be read as **"one comma two three four"** if it were in a question assessing place value (i.e., "What is the value of the 2 in the number 1,234?").
- Decimal numbers should be read using the word "point" for the decimal point. For example, the number 1.23 would be read as **"one point two three."**
- Fractions should be read according to their common English usage. For example, the fraction $\frac{3}{4}$ should be read as **"three fourths."**
- Symbols should be read according to their common English usage. For example, ">" should be read as **"is greater than."**

Numbers:

Description:	Example:	Read as:
Whole numbers (not assessing place value)	16	“sixteen”
	56	“fifty-six”
	465	“four hundred sixty-five”
	1,310	“one thousand three hundred ten”
Whole numbers (assessing place value)	16	“one six”
	465	“four six five”
	1,310	“one comma three one zero”
Decimal numbers	0.5	“zero point five”
	36.7	“thirty-six point seven”
	25.16	“twenty-five point one six”
Fractions and Mixed Numbers	$\frac{1}{2}$	“one-half”
	$\frac{13}{28}$	“thirteen twenty-eighths”
	$3\frac{1}{4}$	“three and one-fourth”
	$63\frac{3}{4}$	“sixty-three and three-fourths”
Percentages	75%	“seventy-five percent”
	2.5%	“two point five percent”
	0.24%	“zero point two four percent”
Currency	\$3.25	“three dollars and twenty-five cents”
	\$0.45	“forty-five cents”
	\$5,325	“five thousand three hundred twenty-five dollars”
Negative Numbers	-7	“negative seven”
	$-\frac{5}{8}$	“negative five-eighths”
	-4.31	“negative four point three one”
Dates (years)	1945	“nineteen forty-five”
	2008	“two thousand eight”
Time	2:00	“two zero zero”
	3:45	“three forty five”
	6:08	“six zero eight”
Operations	+	“plus”
	-	“minus”
	× or •	“times”
	÷	“divided by”
	±	“plus or minus”

Description:	Example:	Read as:
Symbols	$=$	"equal to" or "equals"
	\neq	"not equal to" or "does not equal"
	$<$	"less than"
	$>$	"greater than"
	\leq	"less than or equal to"
	\geq	"greater than or equal to"
	$^{\circ}\text{F}$	"degrees Fahrenheit"
	$^{\circ}\text{C}$	"degrees Celsius"
	π	"pi"
	$\%$	"percent"
	$!$	"factorial"
	∞	"infinity"
	μ	"mu"
	σ	"sigma"
Powers and Roots	4^2	"four squared" or "four to the second power"
	9^3	"nine cubed" or "nine to the third power"
	5^4	"five to the fourth power"
	$\sqrt{\quad}$	"the square root of"
	$\sqrt[3]{\quad}$	"the cube root of"
Parentheses	$2(x + 6)$	"two times the quantity x plus 6, close quantity"
	$(x - 3) \div 4$	"the quantity x minus 3, close quantity, divided by four"
Ratios	$3:5$	"the ratio three to five"
Absolute Value	$ 5 $	"the absolute value of five"
	$ -4 $	"the absolute value of negative four"
	$ x + 4 $	"the absolute value of x plus four"
Ordered Pairs	$\{(2,3), (3,4), (4,5)\}$	"the set of ordered pairs two three (pause) three four (pause) four five."
	The line $y = x + 3$ passes through $(2, 4)$.	"The line y equals x plus three passes through the point represented by the ordered pair two four."
Function Notation	$f(x)$	"f of x"
	$f(g(x))$	"f of g of x"

Expressions:

Description:	Example:	Read as:
Expressions with variables	$n + 6$	"n plus six"
	$5x - 4$	"five x minus four"
	$2(x - 5) + 3 = 10$	"two times the quantity x minus five, close quantity (pause) plus three equals ten"
	$\frac{x-2}{8} \leq 16$	"a fraction, numerator x minus two, denominator eight, is less than or equal to sixteen"
Coordinate pairs	$x^2y^3 = -42$	"x squared y cubed equals negative forty-two" or "x to the second power times y to the third power equals negative forty-two"
	the point (-3,6)	"the point represented by the ordered pair negative three six"
	point C is at (8,3)	"point C is at the point represented by the ordered pair eight three"

Geometry:

Description:	Example:	Read as:
Logical Arguments	\leftrightarrow	"if and only if"
	\rightarrow	"implies" or "then"
	\sim	"not"
	\therefore	"therefore"
	\wedge	"and"
	\vee	"or"
Geometric Symbols	\overleftrightarrow{AB}	"line AB"
	\overline{AB}	"line segment AB"
	\overrightarrow{AB}	"ray AB"
	AB	"the length of line segment AB" or "the distance from A to B"
	$\angle ABC$	"angle ABC"
	$m\angle ABC$	"the measure of angle ABC"
	\widehat{AB}	"arc AB"
	$m\widehat{AB}$	"the measure of arc AB"
	Δ	"triangle"
	\cong	"is congruent to"
	\sim	"is similar to"
	π	"pi"
	\parallel	"is parallel to"
	\perp	"is perpendicular to"

Measurements:

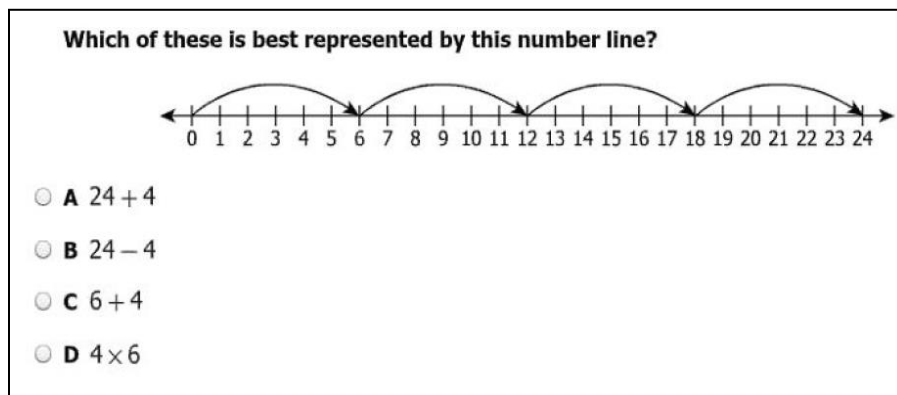
Description:	Example:	Read as:
Length (Metric)	mm	“millimeter”
	cm	“centimeter”
	dm	“decimeter”
	m	“meter”
	dam	“decameter”
	hm	“hectometer”
	km	“kilometer”
Mass (Metric)	mg	“milligram”
	cg	“centigram”
	dg	“decigram”
	g	“gram”
	dag	“decagram”
	hg	“hectogram”
	kg	“kilogram”
Volume (Metric)	ml	“milliliter”
	cl	“centiliter”
	dl	“deciliter”
	L	“liter”
	dcl	“dekaliter”
	hl	“hectoliter”
	kl	“kiloliter”
Length (US Customary)	in	“inch”
	ft	“foot”
	yd	“yard”
	mi	“mile”
Weight (US Customary)	oz	“ounce”
	lb	“pound”
Volume (US Customary)	oz	“ounce”
	c	“cup”
	pt	“pint”
	qt	“quart”
	gal	“gallon”
Volume and Area Measurements	in ³	“cubic inches” or “inches cubed”
	cm ²	“square centimeters” or “centimeters squared”

Mathematics Read Aloud Item Examples

The examples on the following pages are test items from released test forms and practice items and are intended to assist Examiners in reading various mathematics items. Some items have an explanation as to why the items are read a particular way and the possible issues that could arise when reading a specific type of item.

All statements that the Examiner must read aloud to the students are in **bold Calibri font**. This text must be read exactly as written using a *natural tone* and *manner*. Other text is information for the Examiner and should not be read to students. If a mistake is made in reading a test item, the Examiner should stop and say, “**No, that is wrong. I must read it to you again.**” Then re-read the test item.

Mathematics Item 1:



This item should be read as follows:

SAY Which of these is best represented by this number line?

Refer to the graphic in your test.

A number line from left to right, zero to twenty-four in increments of one

SAY

- A twenty four plus four**
- B twenty four minus four**
- C six plus four**
- D four times six**

Mathematics Item 2:

Which statement is true?

☐ A $89,045 < 84,905$

☐ B $84,950 < 85,049$

☐ C $8,240,579 < 8,209,745$

☐ D $8,504,297 < 8,054,972$

This item should be read as follows:

SAY Which statement is true?

- SAY**
- A eight nine comma zero four five is less than eight four comma nine zero five**
 - B eight four comma nine five zero is less than eight five comma zero four nine**
 - C eight comma two four zero comma five seven nine is less than eight comma two zero nine comma seven four five**
 - D eight comma five zero four comma two nine seven is less than eight comma zero five four comma nine seven two**

Mathematics Item 3:

Based on the order of operations, which shows the first step in simplifying this expression?

$$16 \div 2 + 6(7 + 4 \times 5)$$

- ☐ A $8 + 6(7 + 4 \times 5)$
- ☐ B $16 \div 8(7 + 4 \times 5)$
- ☐ C $16 \div 2 + 6(11 \times 5)$
- ☐ D $16 \div 2 + 6(7 + 20)$

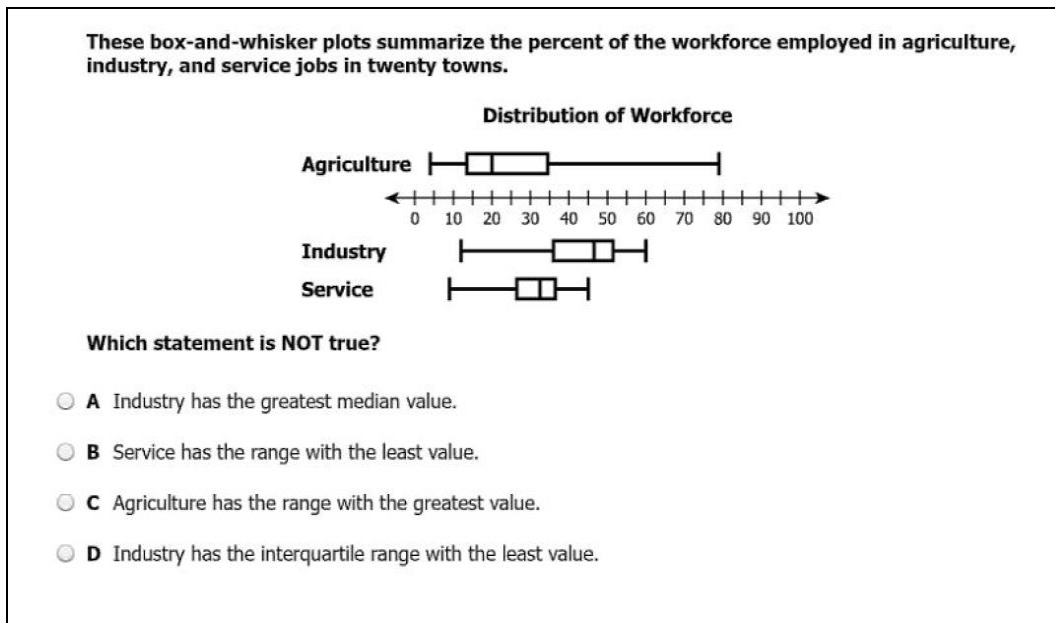
This item should be read as follows:

SAY Based on the order of operations, which shows the first step in simplifying this expression?

SAY Sixteen divided by two plus six times the quantity seven plus four times five, close quantity

SAY A eight plus six times the quantity seven plus four times five, close quantity
B sixteen divided by eight times the quantity seven plus four times five, close quantity
C sixteen divided by two plus six times the quantity eleven times five, close quantity
D sixteen divided by two plus six times the quantity seven plus twenty, close quantity

Mathematics Item 4:



This item should be read as follows:

SAY These box-and-whisker plots summarize the percent of the workforce employed in agriculture, industry, and service jobs in twenty towns.

SAY Three box and whisker plots titled “Distribution of Workforce”

Top box-and-whisker plot titled Agriculture

Second box-and-whisker plot titled Industry

Bottom box-and-whisker plot titled Service.

SAY The number line is labeled from zero to one hundred in labeled increments of ten. Please refer to the box-and-whisker plots in your test.

SAY Which statement is NOT true?

- A Industry has the greatest median value.
- B Service has the range with the least value.
- C Agriculture has the range with the greatest value.
- D Industry has the interquartile range with the least value.

Read-Aloud Guidelines for SOL Science Assessments

Students who are determined eligible for the read-aloud accommodation on *Science* assessments may have test items read aloud to them. Since the frequent use of abbreviations and scientific symbols in *Science* test items may pose a challenge for Examiners providing the read-aloud accommodation on *Science* tests, guidance and examples are provided.

- Some test items may contain graphic representations as part of the item or as answer options. In these instances, it is always safer to simply refer the student to the graphics or art contained in the item or answer options. It is inappropriate for an Examiner to interpret or describe the graphics or art contained within an item.
- The Examiner must not refer to the "beginning and ending" or "starting at" and "ending with" when reading time charts or time lines. These terms may clue an answer. The Examiner should read the question silently first and make a judgment on the best way to read the question without cluing an answer.
- As in the mathematics examples, symbols or processes may be read as long as reading the symbol or process does not lead the student to an answer. For items containing complex maps, it may be impossible to accurately read the contents of the map aloud without making the question too complex to understand. In these cases, use the statement, "**Please refer to the _____ in your test.**"
- When reading an item with a complex diagram, the Examiner must only read the text contained in the diagram. A read-aloud accommodation should not provide additional assistance with diagrams, charts, or tables by having them explained.

Symbols and Elements:

- Symbols of elements are read as printed.
- Do not read the name of the element unless it is spelled out.
- Quantity abbreviations are read as words unless item specifically asks which abbreviation means the word. Example: L-liter, m/s: meters per second
- If unit of quantity is one or fewer, use singular of the quantity. Example: liter, milligram, meter, gram.

Measurements:

Description:	Example:	Read as:
Length (Metric)	μm	"micrometer"
	mm	"millimeter"
	cm	"centimeter"
	dm	"decimeter"
	m	"meter"
	dkm	"dekameter"
	hm	"hectometer"
	km	"kilometer"
Mass (Metric)	ng	"nanogram"
	mcg	"microgram"
	mg	"milligram"
	cg	"centigram"
	dg	"decigram"
	g	"gram"
	dkg	"dekagram"
	hg	"hectogram"
	kg	"kilogram"
Volume (Metric)	ml	"milliliter"
	cl	"centiliter"
	dl	"deciliter"
	L	"liter"
	dkl	"dekaliter"
	hl	"hectoliter"
	kl	"kiloliter"
Length (US Customary)	in.	"inch"
	ft	"foot"
	yd	"yard"
	mi	"mile"
Weight (US Customary)	oz	"ounce"
	lb	"pound"
Volume (US Customary)	oz	"ounce"
	c	"cup"
	pt	"pint"
	qt	"quart"
	gal	"gallon"
Volume and Area Measurements	in^3	"cubic inches" or "inches cubed"
	cm^2	"square centimeters" or "centimeters squared"

Description:	Example:	Read as:
Speed	rpm	“revolutions per minute”
	mph	“miles per hour”
Temperature	°C	“degrees Celsius”
	°F	“degrees Fahrenheit”
	K	“Kelvin”
	T	“absolute temperature”
Pressure	psi	“pounds per square inch”
	atm	“atmospheres”
	kpa	“kilopascals”
Time	msec	“millisecond”
	sec	“second”
	mya	“millions of years ago”
Miscellaneous	ac	“ alternating current”
	dc	“direct current”
	bp	“boiling point”
	mp	“melting point”
	v	“volt”
	w	“watt”
	kw	“kilowatt”
	kwh	“kilowatt hour”
	mol wt	“molecular weight”
	SD	“standard deviation”
	Db	“decibel”
	Hz	“hertz”
	ppm	“parts per million”
	STP	“standard temperature and pressure”

Science Read-Aloud Item Examples

The examples on the following pages are test items from released test forms and practice items and are intended to assist Examiners in reading various science items. Some items will have an explanation as to why the items are read a particular way and the possible issues that could arise when reading a specific type of item.

All statements that the Examiner must read aloud to the students are in **bold Calibri font**. This text must be read exactly as written using a *natural tone* and *manner*. Other text is information for the Examiner and should not be read to students. If a mistake is made in reading a test item, the Examiner should stop and say, “**No, that is wrong. I must read it to you again.**” Then re-read the test item.

Science Item 1:

Virginia Long-Term Average Temperature and Precipitation (1895–1998)

Month	Average Temperature (°F)	Average Precipitation (Inches)
January	35.9	3.13
February	37.2	3.08
March	45.5	3.86
April	54.9	3.29
May	64.0	3.99
June	71.5	3.69

A teacher asked his class to help plan their science field trip schedule from January to June. Based on the table, which month with an average temperature above 50°F has the *least* amount of average precipitation?

- A** March
- B** April
- C** May
- D** June

Note: When tables are presented the Examiner should always read the title first, then read the table from left to right, top to bottom, one column at a time followed by the test question and answer options

This item should be read as follows:

SAY A three column table entitled, Virginia Long-Term Average Temperature and Precipitation (1895-1998)

(Read the title of the table, read the table from left to right, top to bottom one column at a time)

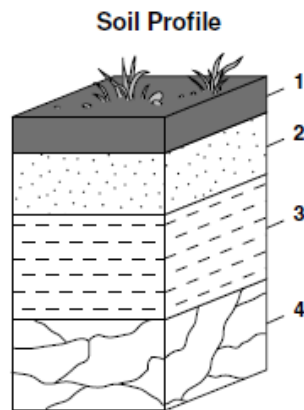
**SAY Left column Month from top to bottom
January, February, March, April, May, June**

**SAY Center column Average Temperature (degrees Fahrenheit) from top to bottom
35.9, 37.2, 45.5, 54.9, 64.0, 71.5**

**SAY Right column Average Precipitation (inches) from top to bottom
3.13, 3.08, 3.86, 3.29, 3.99, 3.69**

SAY A teacher asked his class to help plan their science field trip schedule from January to June. Based on the table, which month with an average temperature above 50°F has the least amount of average precipitation?
A March
B April
C May
D June

Science Item 2:



Which layer of the soil profile would be affected the *most* by weathering and erosion?

- F 1
- G 2
- H 3
- J 4

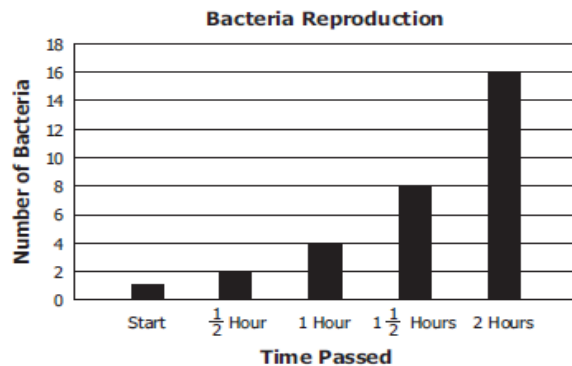
Note: Some items may contain graphic representations as part of the item or as answer options. In these instances, it is always safer to simply refer the student to the graphics contained in the item or answer options. It is inappropriate for an Examiner to interpret or describe the graphics contained within an item.

This item should be read as follows:

SAY A diagram titled, Soil Profile.
Please refer to the diagram in your test.

SAY Which layer of the soil profile would be affected the most by weathering and erosion?
F 1
G 2
H 3
J 4

Science Item 3:



On a graph, students recorded how quickly bacteria reproduced over two hours. If the rate of reproduction stayed the same, how many bacteria would be present after $2\frac{1}{2}$ hours?

- A 8
- B 16
- C 32
- D 64

This item should be read as follows:

SAY A bar graph titled Bacteria Reproduction

SAY Vertical axis Number of Bacteria from zero to eighteen in increments of two

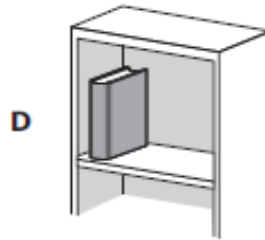
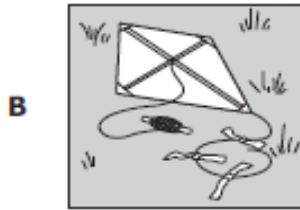
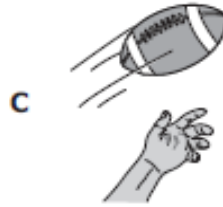
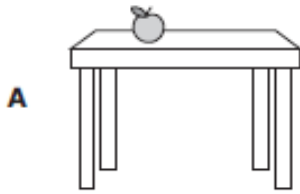
SAY Horizontal axis Time Passed, Start, half hour, one hour, one and a half hours, two hours

SAY On a graph, student recorded how quickly bacteria reproduced over two hours. If the rate of reproduction stayed the same, how many bacteria would be present after two and one half hours?

- A 8**
- B 16**
- C 32**
- D 64**

Science Item 4:

Which picture shows an object that has kinetic energy?



***Note:** Some items may contain graphic representations as part of the item or as answer options. In these instances, it is always safer to refer the student to the graphics or art contained in the item or answer options. It is inappropriate for an Examiner to interpret or describe the graphics or art contained within an item.*

This item should be read as follows:

SAY Which picture shows an object that has kinetic energy?

SAY Please refer to the pictures in your test.

Read-Aloud Guidelines for SOL History/Social Science Assessments

Students with disabilities who are determined eligible for the read-aloud accommodation on *History/Social Science* assessments may have test items read aloud to them. *History/Social Science* test items can include a variety of maps, charts, diagrams, and tables. These items require attention from the Examiner prior to being read aloud to the student. Guidelines are provided below.

- The Examiner should be familiar with all symbols that might be included in a specific type of test question. This can only be ensured by using an Examiner familiar with the content area being assessed.
- In many instances, the item may refer the reader to a figure or drawing. It is appropriate for the Examiner to refer the reader to the same figure or drawing immediately after reading the section of the item that directs the reader.
- The Examiner should ensure that reading information aloud does not clue the student to a response. When in doubt, the Examiner should use the statement, "**Please refer to the _____ in your test.**"

Maps, charts, diagrams, and tables:

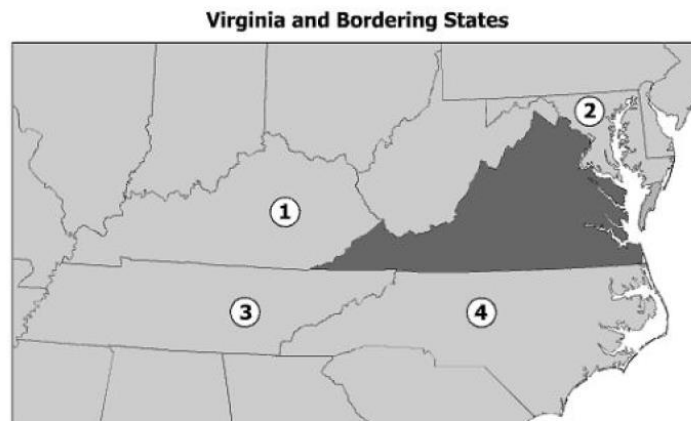
- It is permissible to read text in maps, charts, diagrams, and tables. It is not permissible to describe or interpret information contained in maps, charts, diagrams, and tables in any way.
- Maps, charts, diagrams and tables should be read in the order that is most relevant for that individual item.
- Examiner should not describe or interpret information contained in a photograph. An attempt to describe or interpret information in a photograph could clue the student to a response.

History/Social Science Read-Aloud Item Examples

The examples on the following pages are test items from released test forms and practice items and are intended to assist teachers, administrators, and other school personnel in reading various history/social science items. Some items will have an explanation as to why the items are read a particular way and the possible issues that could arise when reading a specific type of item.

All statements that the Examiner must read aloud to the students are in **bold Calibri font**. This text must be read exactly as written using a *natural tone* and *manner*. Other text is information for the Examiner and should not be read to students. If a mistake is made in reading a test item, the Examiner should stop and say, "**No, that is wrong. I must read it to you again.**" Then re-read the test item.

History/Social Science Item 1:



Where did many Virginians settle after traveling through the Cumberland Gap?

- ☐ **A 1 and 2**
- ☐ **B 1 and 3**
- ☐ **C 2 and 4**
- ☐ **D 3 and 4**

This item should be read as follows:

SAY A map entitled Virginia and Bordering States

The map contains the numbers one, two, three, and four

Please refer to the map in your test.

SAY Where did many Virginians settle after traveling through the Cumberland Gap?

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

History/Social Science Item 2:



This emblem symbolizes the struggles of women to —

- ☐ **A** join the military
- ☐ **B** earn respect as mothers
- ☐ **C** gain rights as workers
- ☐ **D** earn the right to vote

***Note:** Attempting to describe or explain the pictures in this item could clue the student to a response. When in doubt, refer the student to the picture.*

This item should be read as follows:

SAY A picture of an emblem with National Women's Trade Union League

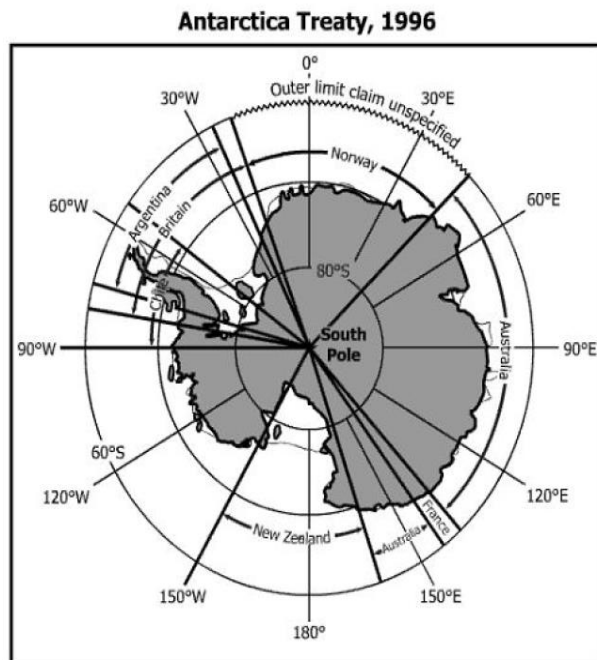
The Eight Hour Day, A Living Wage, To Guard The Home, 1903

Please refer to the picture in your test.

SAY This emblem symbolizes the struggles of women to-

- A join the military**
- B earn respect as mothers**
- C gain rights as workers**
- D earn the right to vote**

History/Social Science Item 3:



According to this map, which country does NOT have a territorial claim to Antarctica?

- ☐ A Britain
- ☐ B France
- ☐ C Norway
- ☐ D China

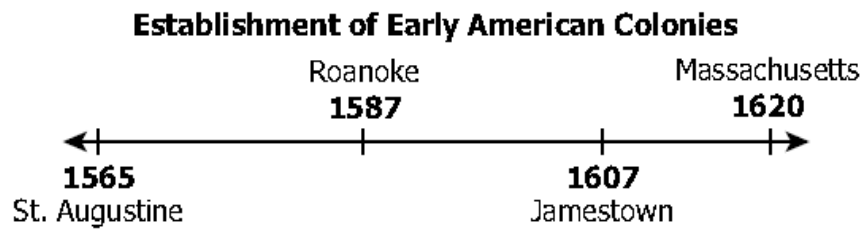
Note: For many items containing complex maps, it may be impossible to accurately read aloud the contents of the map without making the question too complex for the student to understand. In these cases use the statement, "Please refer to the map in your test."

This item should be read as follows:

SAY A map titled, Antarctica Treaty, 1996
Please refer to the map in your test.

SAY According to this map, which country does NOT have a territorial claim to Antarctica?
A Britain
B France
C Norway
D China

History/Social Science Item 4:



Which date on this timeline represents the beginning of a permanent British presence in North America?

- A** 1565
- B** 1587
- C** 1607
- D** 1620

This item should be read as follows:

SAY A timeline titled, Establishment of Early American Colonies

(Read the timeline from left to right)

SAY 1565 St. Augustine, Roanoke 1587, 1607 Jamestown, Massachusetts 1620

SAY Which date on this timeline represents the beginning of a permanent British presence in North America?

- A** 1565
- B** 1587
- C** 1607
- D** 1620

Read-Aloud Guidelines for Technology Enhanced Items (TEI)

Technology-enhanced items (TEI) are computer delivered items that allow students to indicate their responses in ways other than multiple choice formats. Technology-enhanced item types include formats such as *drag-and-drop*, *hot spot*, *bar graph or histogram*, and *fill-in-the-blank*. These types of items are used in all content area Standards of Learning (SOL) assessments except History/Social Science.

Guidelines for administering the read aloud accommodation for the TEIs are provided below.

- Some items contain directions that appear on the top of the screen. If directions are provided, they must be read by the Examiner.
- In items that contain shading, highlighting or underlining, the Examiner must state shading, highlighting or underlining before and after each word(s) that contains shading, highlighting or underlining.
- Examiners must not describe any pictures that accompany the item. Students should be referred to the screen.

The following items are intended to assist Examiners with how to read the various TEI types found in the SOL tests. Some items include an explanation of why the items are read a particular way and possible issues that could arise when reading a specific type of item.

Item 1: Drag and Drop

Among the Leaves
Barbara Evans Stanush

1

1 You found it, high amid thick branches
upright on a twig, plastered with lichen,¹
blending with the live oak.

You spied it, bright-eyed daughter,
5 keen to find another life
among the hard leaves. You climbed

to watch a hummer feeding nestlings;
their tiny beaks gaped red. The mother
did not scare. The nest bulged with growing.

10 You called me to the mystery — so slight
I lost the nest each time my stare wavered.
You balanced on the ladder, took a photograph.

¹lichen — a type of moss that grows on trees

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

Complete this flow chart about the poem.

↓

↓

Girl balances on a ladder.

↓

Girl takes a photograph.

Girl sees a nest.

Bird feeds its young.

Bird builds a nest.

Girl climbs a tree.

Note: When reading flow charts (indicated by an arrow pointing to the next box) the phrase “leads to” should be used between the text in each box.

Read the passage aloud exactly as it is written.

After the passage is read aloud, this item should be read as follows:

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

Complete this flow chart about the poem.

SAY Empty Box leads to Empty Box leads to Girl balances on a ladder leads to empty box

Please refer to the flow chart in your test.

(Read from top to bottom inside the dark shaded grey box.)

Girl takes a photograph.

Girl sees a nest.

Bird feeds its young.

Bird builds a nest.

Girl climbs a tree.

Item 2: Drag and Drop

Robo Games

Alan writes a column covering school events for the high school newspaper. He decides to write about a recent school competition.

Rough Draft

(1) "Let the games begin!" a voice boomed over the loudspeakers in the gym. (2) The cheers and applause that erupted from the crowd normally signaled the start of an athletic competition. (3) The event was the official opening of the third annual, district-wide competition known as Robo Games. (4) This year's games were held at Hollow Creek High School last Saturday night.

Page 1 of 4

Directions: Click and drag the correct sentence to the shaded area.

Which transitional sentence could best be added after sentence 2?

(2) The cheers and applause that erupted from the crowd normally signaled the start of an athletic competition.

(3) The event was the official opening of the third annual, district-wide competition known as Robo Games.

Furthermore, the gym was filled with energy and excitement.

This time, however, the roar was for a math and science event.

In fact, it sounded like a championship basketball game in the gym.

Even so, the noise did not compare to most high school football games.

Nevertheless, this was the loudest event the school had sponsored.

Read the draft aloud exactly as it is written.

After the draft is read aloud, this item should be read as follows:

SAY Directions: Click and drag the correct sentence to the shaded area.

SAY Which transitional sentence could best be added after sentence 2?

SAY A box (pause) Two (pause) The cheers and applause that erupted from the crowd normally signaled the start of an athletic competition.

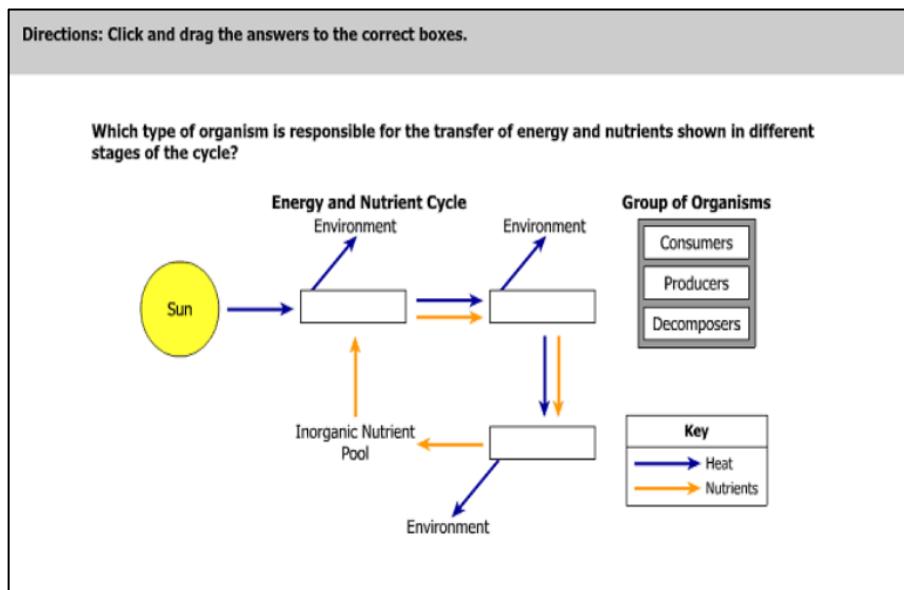
SAY Empty Shaded Box

SAY Three (pause) The event was the official opening of the third annual, district-wide competition known as Robo Games.

(Read from top to bottom inside the dark shaded grey box.)

SAY Furthermore, the gym was filled with energy and excitement.
This time, however, the roar was for a math and science event.
In fact, it sounded like a championship basketball game in the gym.
Even so, the noise did not compare to most high school football games.
Nevertheless, this was the loudest event the school had sponsored.

Item 3: Drag and Drop



This item should be read as follows:

SAY Directions: Click and Drag the answers to the correct boxes.

SAY Which type of organism is responsible for the transfer of energy and nutrients shown in different stages of the cycle?

SAY A diagram titled, Energy and Nutrient Cycle

(Read each row from left to right)

Top Row Environment Environment

Next Row Sun empty box empty box

Next Row Inorganic Nutrient Pool empty box

Last Row Environment

SAY Key (pause) **blue arrow** heat (pause) **orange arrow** nutrients

SAY Dark grey box titled, Group of Organisms

(Read from top to bottom)

Consumers

Producers

Decomposers

Item 4: Hot Spot

<p>(22)The second puzzle I created was a word search. (23)I decided to use words that Mr. Keller said would be on our next spelling test. (24)First, I drew lines to form an empty grid on my paper. (25)I decided how to arrange the words after the grid was complete. (26)Then I added many letters around the words so they were hidden. (27)Luis one of my friends was the first person to try out my new puzzle. (28)He was able to find all of our spelling words after only a few minutes of searching. (29)My word search was an easy way for us to study for Mr. Keller's spelling test. (30)Mr. Keller was proud of me for finding a new way to make our class assignments interesting.</p> <p>(31)Making the different puzzles in the book was fun but sometimes difficult. (32)I think anyone who is interested in puzzles will enjoy reading this book.</p>	<p>Directions: Click on the correct shaded area.</p> <p>Which website would be most helpful for Adrian to find information about how to make a crossword puzzle?</p> <div><div>Search: <u>Puzzles</u></div><div>Results: 1-5 of 683,421</div><div><u>Wild About Puzzles</u> Allows teachers, students, and parents to create word puzzles for home and school . . .</div><div><u>Puzzles and Games for Kids</u> A collection of word puzzles, matching games and mazes for beginners and . . .</div><div><u>Puzzles Planet</u> Share your word puzzles for others to enjoy . . .</div><div><u>Working Out With Puzzles</u> Solving word puzzles is good for keeping your brain active . . .</div><div><u>Puzzles a Day</u> Try different and challenging puzzles every day on our site . . .</div></div>
---	---

Read the draft aloud exactly as it is written.

After the draft is read aloud, this item should be read as follows:

SAY Directions: Click on the correct shaded area.

SAY Which website would be most helpful for Adrian to find information about how to make a crossword puzzle?

(Read from left to right)

SAY Search: Puzzles. (pause) Results one to five of six hundred eighty three thousand four hundred twenty-one.

(Read from top to bottom and from left to right)

SAY (Shading and underline) Wild About Puzzles (stop shading stop underline) Allows teachers, students, and parents to create word puzzles for home and school...

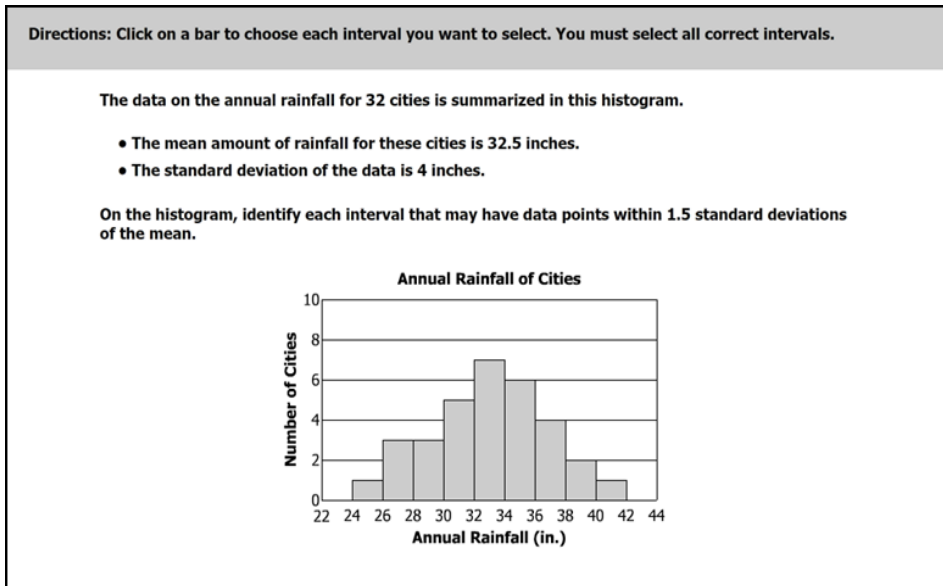
SAY (Shading and underline) Puzzles and Games for Kids (stop shading stop underline) A collection of word puzzles, matching games and mazes for beginners and...

SAY (Shading and underline) Puzzles Planet (stop shading stop underline) Share your word puzzles for others to enjoy...

SAY (Shading and underline) Working Out With Puzzles (stop shading stop underline) Solving word puzzles is good for keeping your brain active...

SAY (Shading and underline) Puzzles a Day (stop shading stop underline) Try different and challenging puzzles every day on our site...

Item 5: Bar Graph



This item should be read as follows:

SAY Directions: Click on a bar to choose each interval you want to select. You must select all correct intervals.

SAY The data on the annual rainfall for thirty two cities is summarized in this histogram. The mean amount of rainfall for these cities is thirty-two point five inches. The standard deviation of the data is four inches.

On the histogram, identify each interval that may have data points within one point five standard deviations of the mean.

SAY A histogram titled, Annual Rainfall of Cities
The vertical axis is Number of Cities from zero to ten in increments of two.
The horizontal axis is Annual Rainfall in inches, from twenty-two to forty-four in increments of two.

SAY Please refer to the histogram in your test.

Item 6: Fill-in-the-Blank

Directions: Type your answer in the box. Your answer must be in decimal form, rounded to the nearest hundredth. Use "." for the decimal point.

A data set has a mean of 68.42 and a standard deviation of 7.91. An element in this set is 57.

What is the z-score for 57? Round the answer to the nearest hundredth.

z-score =

This item should be read as follows:

SAY Directions: Type your answer in the box. Your answer must be in decimal form, rounded to the nearest hundredth. Use "period" for the decimal point.

SAY A data set has a mean of sixty-eight point four two and a standard deviation of seven point nine one. An element in this set is fifty-seven.

SAY What is the z-score for fifty-seven? Round the answer to the nearest hundredth.
z-score equals empty box