

# OKLAHOMA SCHOOL TESTING PROGRAM

---

PARENT, STUDENT, AND TEACHER GUIDE

**ENGLISH LANGUAGE ARTS,  
MATHEMATICS & SCIENCE**

2018–2019 **GRADE 8**



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**  
— CHAMPION EXCELLENCE —

**Oklahoma School Testing Program  
Administration Dates  
2018–2019 School Year  
Mathematics, English Language Arts, and  
Science**

**Online Assessment Window  
April 1–May 3, 2019**

**Paper and Pencil Assessment Window  
April 1–19, 2019**



Developed and published under contract with the Oklahoma State Department of Education by Measured Progress, 100 Education Way, Dover, NH 03820. Copyright © 2019 by the Oklahoma State Department of Education. All rights reserved. Only State of Oklahoma educators and citizens may copy, download, and/or print the document, located online at <https://www.measuredprogress.org/web/occt1>. Any other use or reproduction of this document, in whole or in part, requires written permission of the Oklahoma State Department of Education and the publisher. All brand and product names found in this publication are the trademarks of their respective owners.



JOY HOFMEISTER

STATE SUPERINTENDENT *of* PUBLIC INSTRUCTION  
OKLAHOMA STATE DEPARTMENT *of* EDUCATION

Dear Families and Educators,

In April, students will begin taking the Oklahoma School Testing Program (OSTP) tests to provide a snapshot of academic performance near the end of the school year. For an overview of the tests and digital version of the OSTP Parent, Student and Teacher Guides that will be given this spring, please visit <https://sde.ok.gov/assessment-guidance>.

OSTP tests measure your child's progress in learning the Oklahoma Academic Standards for school subjects. To learn more about the standards, please visit <http://sde.ok.gov/sde/oklahoma-academic-standards>. Inside this guide, you will find an explanation of what's covered in the test and sample questions to become familiar with the test format. These will help your child understand what to expect on the tests.

Families will receive reports that include their child's progress, areas of success and areas in need of additional growth. Paper reports will be sent home by the local school district in late summer 2018. In addition, families will have access to their student's results in the online Parent Portal in early summer 2018.

We know that all families have dreams for their children and want what is best for them. The spring tests are an opportunity for children to showcase their learning this school year. Students are most successful when schools and families work together. During the week of testing, please be sure your child gets plenty of sleep, eats a healthy breakfast and is at school on time.

If you have questions, please contact your school or the State Department of Education at (405) 521-3341 or [assessments@sde.ok.gov](mailto:assessments@sde.ok.gov).

Sincerely,

A handwritten signature in cursive script, appearing to read "Joy Hofmeister".

State Superintendent of Public Instruction

# TABLE OF CONTENTS

---

<b>Administration Dates</b> .....	<b>ii</b>
<b>Superintendent Letter</b> .....	<b>1</b>
<b>The Oklahoma School Testing Program</b> .....	<b>3</b>
Helping Your Student Be Ready .....	3
<b>Grade 8 English Language Arts (ELA)</b> .....	<b>4</b>
What is my student learning? .....	4
How can I help my student at home? .....	4
English Language Arts Practice Questions .....	5
<b>Grade 8 Mathematics (Pre-Algebra)</b> .....	<b>36</b>
What is my student learning? .....	36
How can I help my student at home? .....	36
Mathematics Practice Questions .....	37
<b>Grade 8 Science</b> .....	<b>46</b>
What is my student learning? .....	46
How can I help my student at home? .....	46
Science Practice Questions .....	47
<b>Answer Keys</b> .....	<b>60</b>
<b>Answer Sheet</b> .....	<b>71</b>

## **THE OKLAHOMA SCHOOL TESTING PROGRAM**

---

Federal law requires all students to be assessed in English Language Arts (ELA) and Math each year in Grades 3–8 and once in high school. Federal law also requires students to be assessed in Science once in Grades 3–5, once in Grades 6–8, and once in high school. The grade and subject level tests delivered through the Oklahoma School Testing Program (OSTP) meet federal law. Oklahoma educators were instrumental in building our state tests to ensure alignment to our Oklahoma Academic Standards (OAS). State tests provide a common measure of students’ performance relative to our academic standards. The Oklahoma Academic Standards (OAS) serve as a road map for what students should know and be able to do at each grade-level. Measuring real-world skills like problem-solving and critical thinking, state tests provide a valid way to measure students’ progress in gaining the knowledge, skills, and abilities they need to be ready for the next grade, course, or level. Results from state tests can be used to inform school or district level changes to programs and curriculum. They also help schools measure how students in a given class, school, or district are performing in relation to other students who take the same test. As such, OSTP State Tests serve as a component of the state’s accountability system—the Oklahoma School Report Card.

This year, students in Grade 8 will take assessments in English Language Arts (ELA), Mathematics, and Science. This *Parent, Student, and Teacher Guide* contains information to give you an idea of what your student is learning and being tested on and how you can help at home.

### **Helping Your Student Be Ready**

As a parent, there are a number of ways that you can support your student’s learning habits on a daily basis that will help him or her be more prepared when it’s time to be tested.

Here are some ideas to consider before your student takes a test.

- Make sure your student gets plenty of rest and has a well-balanced diet.
- Reassure your student that the test is just one opportunity to show what he or she knows. Classwork, projects, and other tests also show how much a student has learned throughout the year.

### What is my student learning?

In grade 8, students analyze high-quality, complex fiction and nonfiction texts. Students can cite the textual evidence that most strongly supports an analysis or critique. Students can analyze arguments by questioning a writer’s assumptions and assessing the accuracy of his or her claims. Students become more adept at reading closely and uncovering evidence to use in their own writing. For instance, students can write an analysis about two or more texts on the same topic that provide conflicting information and identify whether the disagreement is over facts or interpretation. Students can analyze how point of view can be changed to create specific effects such as dramatic irony and investigate how particular passages within a text connect to one another to advance the plot, reveal a character, or highlight an idea. Students develop a rich vocabulary of academic words, which they use to speak and write with more precision. Students demonstrate a solid understanding of correct English grammar, usage, and mechanics in their speaking and writing.

Students write at higher levels, strengthening their skills of organizing ideas, concepts, and information into broader categories; choosing relevant facts well; using varied transitions to clarify or show the relationships among ideas; and using active and passive voice purposefully. Students contrast their claims with alternate or opposing claims. In argument essays, students use words and phrases to clarify the relationships and transitions among claim(s), counterclaims, reasons, and evidence.

### How can I help my student at home?

- Make time to read with your student. You can read different books silently in the same room, or you can read the same book.
- Ask your child about the book she or he is currently reading. Which characters are most relatable? What will happen next? What is the point of the story?
- Think of a current topic in the news and find an op-ed about it. Read it with your child, and then have your child identify the strongest and weakest arguments in the piece.
- Find an op-ed written by someone who shares a different stance or belief on the topic. Read it with your child, and identify the strongest and weakest reasoning or evidence in the piece. Then think of reasons that support your line of thinking.
- Keep a list of new or interesting words you find in the books and news that you and your child read. Display the list in a prominent place like the refrigerator or bathroom mirror.
- Find an interesting sentence from a book or news story. Copy it down, and work with your student to imitate its sentence structure with a new sentence of your own. Discuss what makes the sentence structure interesting and what effect it may have on the reader.

## English Language Arts Practice Questions

---

The OSTP Grade 8 ELA test is designed to measure our Oklahoma Academic Standards. The practice questions you see here represent the types of questions and interactions your student will see when they take the state test. The tests are designed to be administered on the computer and feature a variety of tools and interactive questions that are more engaging and aligned with 21<sup>st</sup> century teaching and learning practices. The platform can be accessed using the information shown below:

**URL:** <https://okpracticetest.measuredprogress.org/student/login>

**Username:** practice

**Password:** testing

Student performance on the sample items provided on the platform and in this guide does not indicate student's overall performance on the OSTP Assessment. The purpose of the sample items is to allow students and parents to familiarize themselves with the types of questions that may be seen. An explanation as to why a particular response is correct or incorrect is located at the end of this guide with the answer key.

For more information about the Grade 8 ELA Standards and/or Assessment, visit the Test and Item Specs at: [https://sde.ok.gov/sites/ok.gov.sde/files/documents/files/OSTP\\_2018-19\\_ItemSpecs\\_ELA\\_G8\\_web.pdf](https://sde.ok.gov/sites/ok.gov.sde/files/documents/files/OSTP_2018-19_ItemSpecs_ELA_G8_web.pdf).



## Practice Writing Task

Presented on the following pages is a practice Writing Task. This may be used as a classroom activity to help students prepare for the state assessment.

### WRITER'S CHECKLIST

- Is the topic addressed in my writing?
- Are my ideas expressed in complete sentences?
- Do I explain or support my ideas with enough details using information from both passages?
- Are the details I included directly related to my topic?
- Have I written the response in my own words, paraphrasing or summarizing the information?
- Are my ideas arranged in a clear order for the reader to follow?
- Do my paragraphs have topic sentences when appropriate?
- Do I start each sentence with a capital letter and capitalize other appropriate words?
- Have I used correct punctuation at the end of each sentence and within each sentence?
- Is my spelling correct throughout my writing?
- Will the reader be able to read my handwriting?



**Directions:**

Today you will be tested in English Language Arts. For this test, you will read two passages, then respond to a writing prompt. It is important that you do your best. If you are not sure of the writing prompt, you should still attempt to answer it. You may use your planning page for planning, but be sure to write your answer on the five lined pages provided in your answer document.

When scorers evaluate your writing, they will look for evidence that you can:

- address the prompt;
- develop your ideas thoroughly;
- organize your ideas;
- stay focused on your purpose for writing;
- make your writing thoughtful and interesting; and
- use correct spelling, capitalization, punctuation, grammar, usage, and sentence structure.

Only your writing in the answer space will be scored. Using the *Writer's Checklist* tool, check your writing for paragraphing, grammar, spelling, punctuation, and the use of Standard English.

**Practice Writing Topic:**

**People have different viewpoints about whether animals, including endangered animals, should live in the wild or in man-made environments. Write an argument essay whether any animal should be kept in a controlled environment, such as zoos or nature parks. Be sure to state a claim and address an opposing viewpoint using evidence presented in both passages.**

**Before you begin planning and writing your response, read the two passages:**

- 1. "The Impact of Animal Protection"**
- 2. "Do Animals Lose in Zoos?"**

**The Impact of Animal Protection**

- 1 Throughout history, human activities have changed or destroyed the habitats that animals need to survive. One of these activities has been the construction of roads and buildings in areas that were once wild. Building in these areas has destroyed animal homes, food, or water supplies. People have also cut down trees for lumber, which has destroyed the homes of animals living in those trees. Likewise people have hunted animals for their meat, fur, or other body parts. In addition, pollution caused by humans has affected some of the places that animals live.
- 2 Due to animals' habitats being disturbed as well as other reasons, scientists and researchers track animals in the wild to see if their numbers are changing. When an animal's numbers decrease until they are at risk of disappearing completely, they may be classified as threatened or endangered. When there are no more of the species left in the world, they are classified as extinct. As some animals become extinct, other animals are affected. Because some human activities can have a negative impact on animals, many people believe that animals must be protected.
- 3 One way that people have tried to protect animals from extinction is to establish nature parks and sanctuaries. People cannot build or hunt in those areas, and rangers are there to watch over the animals. The public is often allowed to enjoy these animals by driving through the reserves and viewing the animals in a wide-open atmosphere.



- 4 Many nature parks have programs that keep animals in protected places. By putting them in controlled environments, the animals can live safely, and their numbers can increase through supervised breeding programs. However, in these environments animals many times cannot choose their own mates as they do when living in the wild. Issues with this type of forced breeding have been seen in zoos when a male and female fail to have offspring.
- 5 In man-made animal habitats, animals are fed on a regular schedule, receive medical care, and are protected from predators and hunters. The goal is to properly care for animals that may not survive in the wild. After time though, some of these animals may be released back into their wild habitats. However, if not handled properly, this release can be dangerous for animals since they will now be forced to hunt for prey and use their instincts and survival skills once again.
- 6 Keeping animals protected has proven to be beneficial and increase the populations of endangered animals. These programs have helped bring several animals—black-footed ferrets, California condors, red wolves, golden lion tamarins, and others—back from near extinction over the last 30 years.
- 7 Despite saving animals that were close to extinction, protecting animals in a controlled environment is not always the best plan. When animals are in these environments, they are isolated from other animals, their ability to hunt and their natural diet is limited, and the space they have to roam is decreased. In the wild, animals share their territory with other species, and the idea of survival of the fittest is very apparent. When animals are taken out of the wild, the innate instincts they have to survive are suppressed and, in some cases, completely gone.
- 8 By allowing endangered animals to live in a protected environment, animals are able to reproduce and be saved from extinction, but it is not a catchall to resolve all of the issues when protecting animals. For those that are released into the wild, the hope is that they can relearn how to find food and take care of themselves. Even though nature parks are trying to mimic the wild, they are not able to do that completely.



### Do Animals Lose in Zoos?

- 1 Zoos have been around for centuries. In the past, zoos were a simple collection of animals in cages. Many animals in early zoos were diseased and treated poorly. Zoos today are very different. Modern zoos pride themselves as centers for scientific study and research. They focus on animal welfare and are on a mission to educate people about animals and protect the animals in the wild.
- 2 Animals in zoos live longer than animals in the wild. They are well fed, protected from predators, and treated by veterinarians. Seeing majestic animals in a controlled environment creates a sense of amazement and wonder. A study published by the National Science Foundation actually shows that visiting a zoo changes a person's attitude toward animals. If people are not able to see the animals, they will not be inspired to protect them.
- 3 However, critics of the modern zoo compare the zoo to a prison. Animals need room to climb, fly, swim, roam, or run. They need room to live a healthy life. When animals are confined in small spaces, it has a negative impact on their behavior and health. Polar bears have been observed swimming in circles. Parrots have groomed themselves until they have no feathers left. Big cats have been seen endlessly pacing. When animals are not behaving as they normally would in the wild, visitors are not observing natural behaviors.
- 4 Zoos spend millions of dollars to create bigger and better animal enclosures in order to improve the conditions for the animals. Zoos also help to raise millions of dollars to support conservation projects in Africa and Asia. Some of the money is used to create sanctuaries to help protect animals in their natural environment. Although animals should be protected in these nature preserves, some countries do not cooperate. They do not enforce penalties for illegal hunting of protected animals.
- 5 Nevertheless, not all zoos are created the same. Many organizations, like PETA, oppose zoos because the "homes" made for zoo animals meet only their basic needs. Even with man-made areas to fly, swim, climb, and explore, animals are still restricted in their behavior. These groups feel that zoos and even wildlife parks show cruelty against animals that would thrive so much better if they were allowed to live in the wild and be free.



- 6 More often than not, zoos cater to what people want to see. That usually means something large, charismatic, or cute is selected to live in a zoo and be on display. Another attraction to zoos is to see baby animals. In order to get more business, some zoos initiate a breeding program to have babies be on display more frequently. This leads to a surplus of animals at the zoo. Zoo enclosures are made for a certain amount of animals, so this overpopulation, even with babies, makes for crowding and a less than ideal living situation for the animals.
- 7 Supporters of keeping animals out of zoos and nature parks feel it is better for wild animals to live in a natural environment so they can hunt and eat a natural, varied diet. It has been shown that in the wild, animals interact with other species of animals which promotes natural behaviors. Wild animals roam over long distances in search of a mate, food, or water. Also many animals are a part of a social group or live in communities. Living within a community allows them to interact normally and create a social order where a dominant animal can emerge. Living in a zoo or protected environment can restrict all of these innate or inborn behaviors.
- 8 It is true that many of today's zoos are more than just a place to see animals. They have programs to protect endangered species from extinction. Visitors to zoos, or those planning a visit, should also realize that some situations they see are not the best environment for the animals they are planning to see. There are benefits to having zoos, but there are still negative impacts to animal's lives. Perhaps the best way to help animals is to protect them in zoos for a short time and release them back into nature while they still are wild animals.



## PRACTICE PLANNING PAGE

### Writing Topic:

**People have different viewpoints about whether animals, including endangered animals, should live in the wild or in man-made environments. Write an argument essay whether any animal should be kept in a controlled environment, such as zoos or nature parks. Be sure to state a claim and address an opposing viewpoint using evidence presented in both passages.**

---



In the space below, you may PLAN your composition. You might consider using a web, cluster, list, story map, or any other method to help you organize your writing. Do not write your final draft on these pages. Any writing on these pages will not be scored. Write your composition on the lined pages that follow.



## PRACTICE PLANNING PAGE

A large, empty rectangular box with a black border, intended for students to write their practice plan.













**Example of a Well-Written Response**

Presented in this section is an example of a well-written paper.

**Example Writing Topic:**

**People have different viewpoints about whether animals, including endangered animals, should live in the wild or in man-made environments. Write an argument essay whether any animal should be kept in a controlled environment, such as zoos or nature parks. Be sure to state a claim and address an opposing viewpoint using evidence presented in both passages.**

**Example Response**

Have you ever thought that keeping animals in zoos is actually beneficial to them in many ways? That is true because animals are threatened in the wilderness and are exposed to some unhealthy living conditions. However, some people say otherwise because they think animals are not given the same type of freedom as they are in the wild. That might be true in some cases but the reason why they should be kept in zoos or nature parks far outweighs the cause than why they shouldn't. Animals should be kept in zoos or nature parks because, they are being treated with love and care, also they are protected from all hurt, harm, and danger, and also it's increasing the population of endangered species.

**Example Response (continued)**

Animals that are being kept in zoos are being treated properly with love and care. For example, their being fed a proper nutrient diet on a regular schedule so they are able to maintain a healthy lifestyle. Also, animals are receiving medical care from veterinarians to make sure they are properly nourished. Animals are also being protected from wildlife predators and hunters. For example, with the animals being in the zoo they have rangers to watch over them just in case they are endangered by anything. All of these benefits allows the animals to live longer than they would in the wilderness.

With animals living in the zoo comes the benefit of animals being able to be protected from hurt, harm, and danger. They are given the opportunity to live in a safe environment, without having to worry about being threatened by the wildlife. Also, they live in great living conditions. According to the passage, "zoos spend millions of dollars to create bigger and better animal enclosures in order

**Example Response (continued)**

in order to improve the conditions for the animals' Animals lives were also effected in the wild from pollution caused by humans, with animals living in zoos they are protected from that happening.

Zoos are increasing the population of endangered animals. That is because, their able to reproduce more. According to the passage animals that are in controlled environments, their numbers can increase and prevent extinction. Animals that have been near extinction have been saved due to being properly cared in zoos. Although some might think the zoo is just a place to see animals, the zoos also have programs to protect endangered animals from extinction.

As you can see, although many people think animals should be kept in the wild for their own benefits, the reason why they shouldn't live in the wild far outweighs why they should. Zoos and nature parks are providing beneficial needs to the animals that can't be provided in the wilderness.



**Rubrics**

<b>Score</b>	<b>Ideas and Development</b>
<b>4</b>	<ul style="list-style-type: none"> <li>• The content is well suited for the audience, task, and mode</li> <li>• The focus is clear and maintained</li> <li>• Ideas are fully developed and elaborated using details, examples, reasons, or evidence</li> <li>• The writing expresses a clear, consistent perspective throughout the composition</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• The content is adequate for the audience, task, and mode</li> <li>• The focus is evident but may lack clarity</li> <li>• Ideas are developed using some details, examples, reasons, and/or evidence</li> <li>• The writing sustains the perspective throughout most of the composition</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• The content is inconsistent with the audience, task, and mode</li> <li>• The focus may be unclear or leaves the reader with questions and making inferences</li> <li>• Ideas are minimally developed with few details</li> <li>• May simply be a list of ideas</li> <li>• The writing has difficulty expressing or maintaining a perspective</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>• The content is irrelevant to the audience, task, and mode</li> <li>• The focus may be confusing or missing</li> <li>• Ideas lack development or may be repetitive</li> <li>• The writing lacks perspective</li> </ul>
<b>Blank</b>	

<b>Score</b>	<b>Organization, Unity and Coherence</b>
<b>4</b>	<ul style="list-style-type: none"> <li>• Introduction engages the reader</li> <li>• Sustained or consistent focus</li> <li>• Logical and appropriate sequencing and balanced with smooth, effective transitions</li> <li>• Order and structure are strong and move the reader through the text</li> <li>• Conclusion is satisfying</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• Evident introduction</li> <li>• Adequate focus</li> <li>• Adequate sequencing</li> <li>• Stays on topic with little digression</li> <li>• Uses limited but effective transitions</li> <li>• Order and structure are present</li> <li>• Conclusion is appropriate</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• May lack clear organizational structure</li> <li>• Weak evidence of unity</li> <li>• Little or limited sequencing and/or transitions</li> <li>• Details may be randomly placed</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>• Lacks logical direction</li> <li>• No evidence of organizational structure</li> </ul>
<b>Blank</b>	





**Rubrics**

<b>Score</b>	<b>Word Choice</b>
<b>4</b>	<ul style="list-style-type: none"> <li>• Appropriate word choice which conveys the correct meaning and appeals to the audience in an interesting, precise, and natural way</li> <li>• The writing may be characterized by, but not limited to                             <ul style="list-style-type: none"> <li>- Lively Verbs</li> <li>- Vivid Nouns</li> <li>- Imaginative adjectives</li> <li>- Figurative language</li> <li>- Dialogue</li> </ul> </li> <li>• No vague, overused, repetitive language is used (a lot, greatly, very, really)</li> <li>• Words that evoke strong images such as sensory language</li> <li>• Ordinary words used in an unusual way</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• Words generally convey the intended message</li> <li>• The writing includes a variety of words that are appropriate but do not necessarily energize the writing</li> <li>• The writing may be characterized by                             <ul style="list-style-type: none"> <li>- Attempts at figurative language</li> <li>- Some use of lively verbs, vivid nouns and imaginative adjectives</li> <li>- Few vague, overused, and repetitive words are used</li> </ul> </li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• Word choice lacks precision and variety or may be inappropriate to the audience and purpose</li> <li>• May be simplistic and/or vague</li> <li>• Relies on overused or vague language (a lot, great, very, really)</li> <li>• Few attempts at figurative language and dialogue</li> <li>• Word choice is unimaginative and colorless with images that are unclear or absent</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>• Word choice indicates an extremely limited or inaccurate vocabulary</li> <li>• No attempts at figurative language</li> <li>• General, vague words that fail to communicate meaning</li> <li>• Text may be too short to demonstrate variety</li> </ul>
<b>Blank</b>	

<b>Score</b>	<b>Sentences and Paragraphs</b>
<b>4</b>	<ul style="list-style-type: none"> <li>• Writing clearly demonstrates appropriate sentence structure</li> <li>• Writing has few or no run-on or fragment errors</li> <li>• Writing has a rich variety of sentence structure, types, and lengths</li> <li>• Ideas are organized into paragraphs that blend into larger text</li> <li>• Writing shows evidence of appropriate paragraphing</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• Writing adequately demonstrates appropriate sentence structure</li> <li>• Writing may contain a small number of run on or fragment errors that do not interfere with fluency</li> <li>• Writing has adequate variety of sentence structure</li> <li>• Ideas are organized into paragraphs</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• Writing demonstrates lack of control in sentence structure</li> <li>• Writing contains errors such as run-ons and fragments that interfere with fluency</li> <li>• Writing has limited variety of sentence structure</li> <li>• Writing may show little or no attempt at paragraphing</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>• Writing demonstrates inappropriate sentence structure</li> <li>• Writing contains many errors in structure (run-ons, fragments)</li> <li>• Writing has no variety in structure</li> <li>• Writing displays no attempt at paragraphing</li> <li>• Text may be too short to demonstrate use of sentences or paragraphs</li> </ul>
<b>Blank</b>	



**Rubrics**

Score	Grammar, Usage and Mechanics
<b>4</b>	<ul style="list-style-type: none"> <li>• The writing demonstrates appropriate use of correct                             <ul style="list-style-type: none"> <li>- Spelling</li> <li>- Punctuation</li> <li>- Capitalization</li> <li>- Grammar</li> <li>- Usage</li> <li>- Errors are minor</li> </ul> </li> <li>• Errors are minor and do not affect readability</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• The writing demonstrates adequate use of correct                             <ul style="list-style-type: none"> <li>- Spelling</li> <li>- Punctuation</li> <li>- Capitalization</li> <li>- Grammar</li> <li>- Usage</li> </ul> </li> <li>• Errors may be more noticeable but do not significantly affect readability</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• The writing demonstrates limited use of correct                             <ul style="list-style-type: none"> <li>- Spelling</li> <li>- Punctuation</li> <li>- Capitalization</li> <li>- Grammar</li> <li>- Usage</li> </ul> </li> <li>• Errors may be distracting and interfere with readability</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>• The writing demonstrates minimal use of correct                             <ul style="list-style-type: none"> <li>- Spelling</li> <li>- Punctuation</li> <li>- Capitalization</li> <li>- Grammar</li> <li>- Usage</li> <li>- Errors are numerous</li> </ul> </li> <li>• Errors are numerous and severely impeded readability</li> </ul>
<b>Blank</b>	



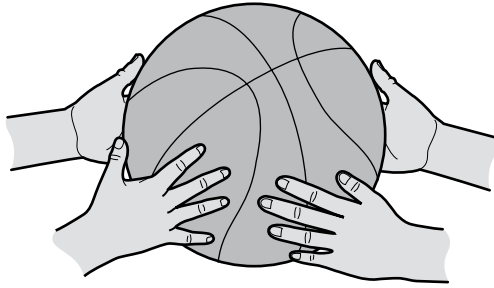


# Directions

Choose the best answer for the question. Mark the circle for the answer you have chosen.

Read the passage below. Then answer the questions that follow.

## Lifelong Friends



- 1 Megan's family moved in down the street the summer of our third-grade year. I can still remember the feeling of excitement when Mr. Jackson, our next-door neighbor, mentioned to my dad that the new family had a girl my age. I was thrilled. I was looking forward to having a best friend!
- 2 We became inseparable almost immediately, spending every waking moment together. All of my expectations for the potential friendship turned out just as I had anticipated. The first day of school that August was a bit of a disappointment for us when we were not in the same class, but we both eventually came to the realization that it was actually in our best interest, for we would most certainly have too much fun if we were in the same class together. It is unbelievable that five years have passed since then.
- 3 Megan has a basketball net on her garage, and throughout the years, we have spent countless hours shooting baskets. We both actually became pretty good, and in sixth grade decided to try out for our school's basketball team. We both made the team and became starters, thriving on the support we gave one another. When one of us had a disappointing game, the other provided an encouraging pep talk.
- 4 We started eighth grade last August, and at the onset of the season, Coach called all of the starters into his office to discuss the added pressure that would be thrust upon us this year. With high school quickly approaching and coaches scrutinizing our every move on the court, there would be a lot of added pressure. He asked Megan and me to wait around after everyone else left. After the locker room had cleared, he told us that a number of high school coaches were talking about the two of us, and how we both seemed to be really strong candidates for the middle school all-city team. We left his office feeling self-assured, reveling at the possibility of both of us being selected for the honor.

GO ON ►



- 5 "One thing for sure, though," Megan said in a suddenly sobering tone, "let's not let this opportunity come between us."
- 6 "What do you mean?" I questioned.
- 7 "Well, I know that we're both pretty confident about being selected," Megan said, "but what if one of us makes it, and the other doesn't?"
- 8 "No way," I said. "That's not going to happen," I insisted, squashing the idea before it could grow.
- 9 Well, the season marched on at a swift pace, and we alternated being the standout of each game. But then, things changed. Megan had three outstanding games in a row. Coach called me aside and told me to relax because he thought I was putting too much pressure on myself and was forcing too many of my shots. But the more I tried to relax, the worse I played.
- 10 It was my worst fear, but unexpectedly, things started to change between Megan and me. The friendly competition we once enjoyed transformed into a rivalry. By the end of the season, Megan and I were barely acknowledging each other.
- 11 The announcement of the middle school all-city team came about a week after the conclusion of the season, and as I anticipated, Megan made the team, and I did not. I struggled to utter a sincere "Congratulations."
- 12 The end of the school year brought the beginning of an unsettling summer. Our faltering friendship found me with plenty of time on my hands. By the beginning of July, I had recurring thoughts about how foolish I had been to let pettiness and jealousy seep into our friendship. I struggled with the thought of apologizing to Megan, but pride and embarrassment hindered me from doing the admirable thing.
- 13 Megan must possess psychic powers because, not a week later, the doorbell rang and Mom called out, "It's Megan." I struggled with the thought of facing the inevitable.
- 14 "Hey," Megan struggled to say, but continued, "how's it going?"
- 15 "I'm hanging in there," I replied.
- 16 There was an awkward moment of silence when I finally uttered, "Listen, Megan, I was wrong to let jealousy interfere with our friendship. I know it's a lot to ask for you to accept my apology, but I'm really sorry."
- 17 "No problem," Megan responded. "I was getting pretty conceited with all of the attention I was getting."
- 18 "I sure learned a valuable lesson from all of this," I said. "Nothing is worth jeopardizing a friendship like ours."
- 19 "You're right about that," she said. "Let's go shoot some baskets."



**1** In paragraph 4, the word scrutinizing means

- A unfairly judging.
- B closely watching.
- C loudly criticizing.
- D passionately cheering.

**2** Which sentence is the best summary of paragraphs 3 and 4?

- F Megan and the narrator are warned by the coach about pressures that may be directed toward them as starters on their school team.
- G Megan and the narrator are confident in their individual basketball abilities and provide support to each other as they play on school teams.
- H Because Megan and the narrator have skills in basketball and spend a great deal of time practicing and supporting each other, they have been encouraged by their coach to try out for a special city team.
- J Since they first began playing basketball in sixth grade, Megan and the narrator have been starters on their school teams, and they continue to demonstrate their talents as members of the eighth-grade team.

**3 Read the sentence.**

The friendly competition we once enjoyed transformed into a rivalry.

**This sentence contributes to the meaning of the passage by**

- A** identifying the conflict.
- B** introducing the theme.
- C** describing the characters.
- D** developing the point of view.

**4 What effect does the use of the first-person point of view have on the role of the narrator in the story?**

- F** The narrator provides all the thoughts, actions, and feelings of all the other characters in the story.
- G** The narrator shares with the reader her personal events, thoughts, and feelings as a main character in the story.
- H** The narrator relays the story as only an observer of the action of the other characters and not as an active participant.
- J** The narrator focuses on trying to convince the reader that her actions are more important than those of the other characters in the story.



Read this passage. Then answer the questions that follow.

### Ice Cube On a Wire



- 1 When the pressure's on, ice can get a grip.
- 2 For this activity you need a thin, strong wire about two feet long. You can find a good one by carefully unraveling a strand from the bundle of thin wires used to make a thicker wire for hanging up a picture frame.
- 3 Using this wire and two sticks or pencils, make a one-foot-long wire with a handle at each end. To do it, wind one end of the wire around one stick. Then twist the short end of the wire around the longer end to hold it tightly to the pencil. Repeat these steps to attach the opposite end of the wire to the other stick.
- 4 Place an ice cube on top of a tin can. Holding one of the pencils in each hand, press the wire down across the top of the ice cube.
- 5 Now comes the only tricky part. You must keep pressing down steadily and firmly—but not so hard that you break the wire. Slowly, the wire will sink into the ice.
- 6 It is strange to think that you can cut into ice with a wire. But if you look carefully, you will see that you are not cutting the ice cube into two pieces. The wire ends up threaded right through the ice.

**How It Works**

- 7 Like heat, pressure can prevent water from freezing into ice. Pressure can also melt ice.
- 8 If you force a fine wire down hard enough against ice, the pressure underneath the wire can be great enough to melt the ice. As the wire sinks, the water freezes again above the wire.
- 9 A thick wire doesn't work. A person would have to press down very hard to create enough pressure under a large wire.
- 10 To create an interesting effect, use ten-pound nylon fishing line instead of wire. Fishing line is harder to press into the ice, but it can be more fun because the fishing line is almost invisible in dim light.

**5 How does the author organize the information in paragraphs 7 through 10?**

- A** by sequencing the processes and steps for using pressure in the ice activity
- B** by describing problems and providing solutions for applying pressure in the wire activity
- C** by providing the cause and effect of different wire sizes on the pressure used in the ice activity
- D** by making a claim about how pressure is used in the ice activity and providing evidence to support the claim





**6** Which sentence is an opinion?

- F** "For this activity you need a thin, strong wire about two feet long."
- G** "Now comes the only tricky part."
- H** "Like heat, pressure can prevent water from freezing into ice."
- J** "Pressure can also melt ice."

**7** This selection is mainly about

- A** a surprising fact about wires.
- B** an entertaining science activity.
- C** a lesson in temperature changes.
- D** an experiment showing how ice forms.



**8** Which would be the best way to test the accuracy of this information?

- F** ask a teacher
- G** do the activity
- H** search the Internet
- J** read about it in a book



**A student wrote a report on a historic home. Read the first part of the report, think about what revision you would make, and then answer the question.**

### **The Mount Laurel Home and Estate—Part 1**

1 The Mount Laurel Home and Estate was built in 1780 and was the primary  
2 residence for the Robert Clayton family for several generations. In 1927, the  
3 home and grounds were placed on the historical register and donated to the  
4 public.

5 Last year, conservationists restored the home and opened it for tours.

#### **About Robert Clayton**

6 Robert Clayton (1742–1793) was an American colonist in Massachusetts.  
7 Although he was only marginally involved in early American politics. Robert  
8 Clayton was a contemporary of the Founding Fathers. And reportedly once dined  
9 with George and Martha Washington. Excused from serving in the Revolutionary  
10 War because of health problems, he earned his wealth through trading. He  
11 marries Mary Culpepper in 1770, and together they raise five sons and three  
12 daughters. He died of pneumonia at the age of 51.



**9** What change, if any, should be made to the sentences in lines 7-9?

- A** Although he was only marginally involved in early American politics, and he was a contemporary of the Founding Fathers. And reportedly once dined with George and Martha Washington.
- B** Although only marginally involved in early American politics. Clayton was a contemporary of the Founding Fathers, and he reportedly once dined with George and Martha Washington.
- C** Although only marginally involved in early American politics, Clayton was a contemporary of the Founding Fathers, and he reportedly once dined with George and Martha Washington.
- D** No change



Read the next part of the report, think about what revision you would make, and then answer the question.

### About the Mount Laurel Home and Estate—Part 2

13 The Mount Laurel Home and Estate includes five structures: the main house,  
14 the kitchen, the icehouse, the barn, and the blacksmith shed. The division of the  
15 kitchen from the main house was common at the time because of the risk of fire.  
16 The grounds of the estate cover approximately 250 acres. The gardens, the barn,  
17 and the blacksmith's shed are maintained as they were during Clayton's lifetime.  
18 Visitors can talk with a blacksmith as he works and see live animals in the barn.

**10** What is the mood of the verb includes in line 13?

- F** indicative
- G** imperative
- H** conditional
- J** subjunctive



### What is my student learning?

Students in Pre-Algebra are extending their understanding of numbers to include scientific notation, rational/irrational and square roots. Students are using this understanding to solve problems in various contexts. Students are developing their understanding of linear functions and rate of change and using this understanding in real-world and mathematical situations. Students are extending their understanding of equality and inequality to solve problems involving variables. Students are extending their understanding of two- and three-dimensional figures to solve problems involving right triangles, volume, and surface area. Students are collecting, displaying, and interpreting data, including using scatterplots and estimating the line of best fit. Students are calculating and reasoning about experimental probabilities to solve real-world and mathematical problems.

### How can I help my student at home?

- Stay positive about math! When you stay positive, your student is more likely to have a positive mindset.
- Every day, ask your student to summarize his or her math class and teach you the concept he or she learned that day.
- Ask your student real-world math questions.
- Have your student explain how they know their answers are correct.
- Research the math involved in different career-paths.

### Sample Questions to ask your Pre-Algebra Student:

- *At the grocery store:* How much cardboard would it take to make a box to package this item? How much fits inside this container?
- *At the store:* If the store sells four of these shirts per day, how many shirts will they sell in 10 days? How many shirts would they sell in a year?
- *On the drive home:* Graph the car's speed each minute for the entire way home. What patterns do you notice? What is the average rate of change?
- *Commenting on the weather:* If there is a 25% chance of rain each day for the week, what is the probability that it will rain two days in a row?
- *At the fair:* If it costs \$5 to get into the fair, \$0.25 per carnival game, and \$1.50 per ride, what combination of carnival games can I play and rides can I go on if I spend \$20 total?

## Mathematics Practice Questions

---

The OSTP Grade 8 mathematics test is designed to measure our Oklahoma Academic Standards. The practice questions you see here represent the types of questions and interactions your student will see when they take the state test. The tests are designed to be administered on the computer and feature a variety of tools and interactive questions that are more engaging and aligned with 21<sup>st</sup> century teaching and learning practices. The platform can be accessed using the information shown below:

<p><b>URL:</b> <a href="https://okpracticetest.measuredprogress.org/student/login">https://okpracticetest.measuredprogress.org/student/login</a> <b>Username:</b> practice <b>Password:</b> testing</p>
---

Student performance on the sample items provided on the platform and in this guide does not indicate student's overall performance on the OSTP Assessment. The purpose of the sample items is to allow students and parents to familiarize themselves with the types of questions that may be seen. An explanation as to why a particular response is correct or incorrect can be found at the end of this guide with the answer key.

Students in Grade 8 will be have access to a reference sheet (<https://oklahoma.onlinehelp.measuredprogress.org/referencesheets/>) as well as to a scientific calculator (<https://sde.ok.gov/sites/ok.gov.sde/files/CalculatorPolicy17-18%20ver%202.pdf>) to use during the mathematics assessment.

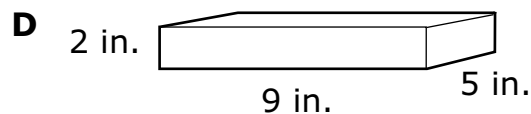
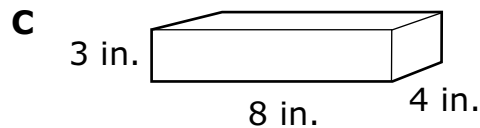
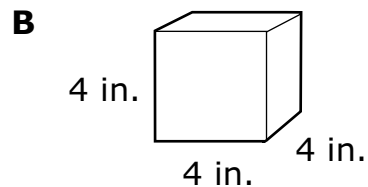
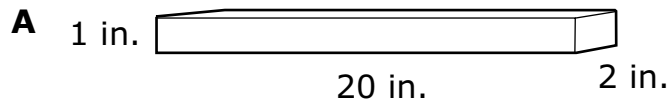
For more information about the Grade 8 Math Standards and/or Assessment, visit the Test and Item Specs at [https://sde.ok.gov/sites/ok.gov.sde/files/documents/files/OSTP\\_2018-19\\_ItemSpecs\\_Math\\_G8\\_web.pdf](https://sde.ok.gov/sites/ok.gov.sde/files/documents/files/OSTP_2018-19_ItemSpecs_Math_G8_web.pdf).



# Directions

Read each question and choose the best answer. Then mark your answer on the answer document. Make sure you find the question number on the answer document that matches the question number in the Mathematics Test.

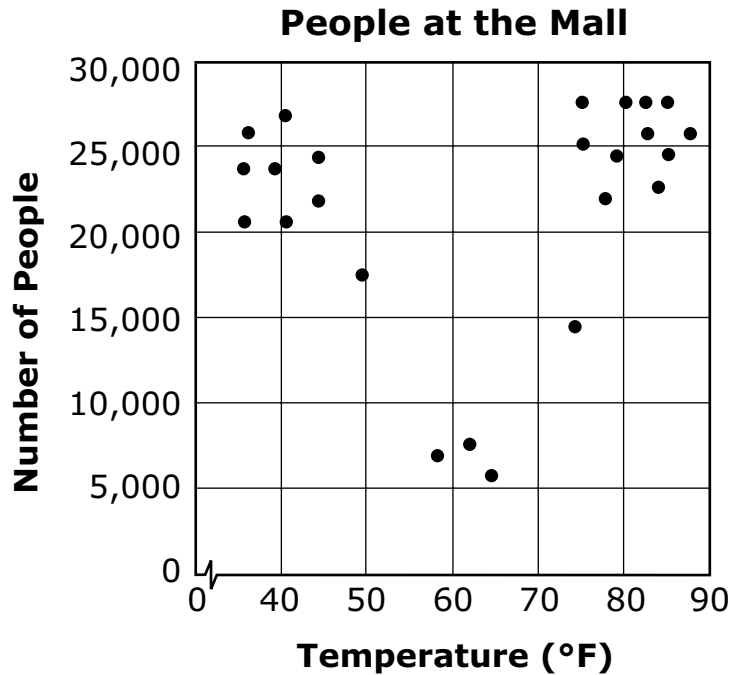
**1** Caitlin wants to pack her craft supplies in the box with the greatest volume. Which box has the greatest volume?







- 2 This scatter plot shows the number of people at a mall each day and the average temperature for the day.



**Based on the scatter plot, which statement is true?**

- F** The number of people at the mall always increases as the temperature rises.
- G** The number of people at the mall always decreases as the temperature rises.
- H** Fewer people are at the mall when the temperature is between 70 °F and 90 °F.
- J** Fewer people are at the mall when the temperature is between 50 °F and 70 °F.



**3** Tom has read 11 pages of a 215-page book. He will read 6 pages each day until he finishes the book. Which equation can be used to find the number of days,  $d$ , it will take Tom to finish reading the book?

- A  $6 + 11d = 215$
- B  $11 + 6d = 215$
- C  $17d = 215$
- D  $6d = 215$

**4** Brandon used an indoor rock-climbing wall seven times. His climbing times, in minutes, are shown in this list.

**35, 16, 17, 18, 13, 13, 14**

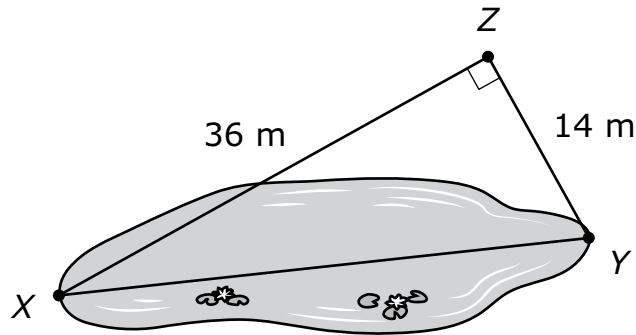
**Why is the median the most useful measure of central tendency for these times?**

- F The median is not affected by an outlier.
- G The median is equal to the range of the data.
- H The median is the time that occurs most often.
- J The median is a larger value than the mean of the data.



Use this information to answer the following two questions.

Mathew wants to find the length of a pond. He picks three points and records the measurements, as shown in the diagram.



**5** Which measurement is closest to the length of the pond from point *X* to point *Y* in meters?

- A 10 meters
- B 22 meters
- C 39 meters
- D 50 meters

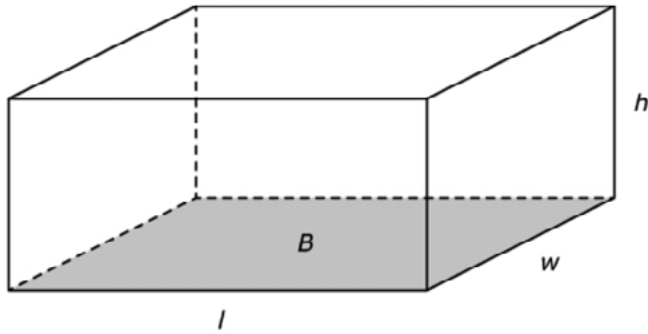
**6** Mathew finds the deepest part of the pond to be  $\sqrt{185}$  meters. Which measurement describes the depth of the pond?

- F between 13 and 14 meters
- G between 14 and 15 meters
- H between 92 and 93 meters
- J between 93 and 94 meters



7

A right rectangular prism has a base area of  $24 \text{ cm}^2$ . Its volume, in cubic centimeters, is not a whole number.



Select the measures that could be two of the dimensions of this prism. To select a measure, click the measure. To deselect a measure, click it again.

- |                                   |                                    |                                   |
|-----------------------------------|------------------------------------|-----------------------------------|
| length = 6 cm<br>width = 4 cm     | length = 6.1 cm<br>height = 2 cm   | width = 3.9 cm<br>height = 8.4 cm |
| length = 7.5 cm<br>width = 3.5 cm | length = 12 cm<br>height = 15.1 cm | width = 10.5 cm<br>height = 9 cm  |



8

Complete the statements to describe the outcomes of operations with the following numbers.

- $a$  and  $b$  are non-zero rational numbers.
- $x$  and  $y$  are irrational numbers.

**Select the word that best completes each statement.** To select a word, click the menu and then click the desired word. To choose a different word, click the menu and click the new word.

$a + b$  is  rational.

$x \cdot y$  is  irrational.

$a + x$  is  rational.

$b \cdot x$  is  irrational.



9

Drag each pair of events into the table to show whether the events are dependent or independent. To place a pair of events in the table, click and hold the pair, and then drag it to the desired space. To change the classification of a pair of events, click and hold it, and then drag it to the desired space.

Dependent	Independent

one roll of a red number cube;  
one roll of a blue number cube

pulling two cards, one at a time,  
from a deck of playing cards  
without replacement

pulling one card from a deck of  
playing cards and rolling a number  
cube

pulling one card from a deck of  
playing cards, replacing it, and  
pulling a second card



**10 Match the equation in the left column to the description of the slope and  $y$ -intercept of its graph in the right column.** To connect an equation to a description, click an equation in the left column and then a description in the right column, and a line will automatically be drawn between them. To remove a connection, hold the pointer over the line until it turns red, and then click it. Each equation in the left column matches to exactly two descriptions in the right column. Each description in the right column can connect to one and only one equation in the left column.

$$3x - 2y = 8$$

$$2x + 3y = 12$$

$$3y + 6 = 2x$$

$$\text{slope} = -\frac{2}{3}$$

$$\text{slope} = \frac{2}{3}$$

$$\text{slope} = \frac{3}{2}$$

$$y\text{-intercept} = -4$$

$$y\text{-intercept} = -2$$

$$y\text{-intercept} = 4$$



### What is my student learning?

The science standards complement English Language Arts and mathematics standards, enabling classroom instruction to reflect a clearer picture of the real world, where solving problems often requires skills and knowledge from multiple disciplines. In the eighth grade standards, students are expected to demonstrate grade-appropriate proficiency in developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, engaging in argument from evidence, and obtaining, evaluating, and communicating information; and to use these practices to demonstrate understanding of the core ideas.

The performance expectations in eighth grade help students develop a deeper understanding of key ideas in physical, life, and earth and space science. Topics covered in physical science include atomic chemistry, forces and motion, thermal energy in a system, and waves. Life science topics include how life has changed over time and how food supplies living things with energy. Earth and Space science investigates fossils and geological time, plate tectonics and catastrophic events, and human impact.

### How can I help my student at home?

- Acknowledge and encourage your student’s interests and natural abilities in science, and help them further develop their interests and abilities over time.
- Encourage your student to observe, ask questions, experiment, tinker, and seek their own understandings of natural and human-made phenomena.
- Encourage your child to take things apart! Old toys, clocks, and household appliances are great lessons—and don’t worry about putting them back together!
- Foster your student’s creative and critical thinking, problem solving, and resourcefulness through everyday tasks such as cooking, doing household chores, gardening, repairing a bike or other household object, planning a trip, and other activities.
- Actively engage with your student during mealtime discussions or group games requiring mental or physical skills, or by talking about books they are reading or television programs about science they have watched.
- Provide opportunities for science learning at home and in the community through outdoor play; participation in summer programs; or trips to parks, museums, zoos, nature centers, and other interesting science-rich sites in the community.
- Provide your student easy access to science learning resources such as books, educational toys and games, videos/DVDs, and online or computer-based resources.
- Join your student in learning new things about science and technology. Take advantage of not knowing all the answers to your student’s questions, and embrace opportunities to learn science together.
- Discuss science and technology careers. When you encounter people in science-related careers, encourage your student to ask questions about these jobs and the training needed for them.



## Science Practice Questions

---

The OSTP Grade 8 science test is designed to measure our Oklahoma Academic Standards. The practice questions you see here represent the types of questions and interactions your student will see when they take the state test. The tests are designed to be administered on the computer and feature a variety of tools and interactive questions that are more engaging and aligned with 21<sup>st</sup> century teaching and learning practices. The platform can be accessed using the information shown below:

**URL:** <https://okpracticetest.measuredprogress.org/student/login>

**Username:** practice

**Password:** testing

Student performance on the sample items provided on the platform and in this guide does not indicate student's overall performance on the OSTP Assessment. The purpose of the sample items is to allow students and parents to familiarize themselves with the types of questions that may be seen. An explanation as to why a particular response is correct or incorrect can be found at the end of this guide with the answer key.

For more information about the Grade 8 Science Standards and/or Assessment, visit the Test and Item Specs at [https://sde.ok.gov/sites/default/files/documents/files/OSTP\\_2018-19\\_TIS\\_Sci\\_G8\\_web.pdf](https://sde.ok.gov/sites/default/files/documents/files/OSTP_2018-19_TIS_Sci_G8_web.pdf).



## Directions

Read each question and choose the best answer. Then mark your answer on the answer document. Make sure you find the question number on the answer document that matches the question number in the Science Test.

Study the information. Then answer questions 1 through 4.

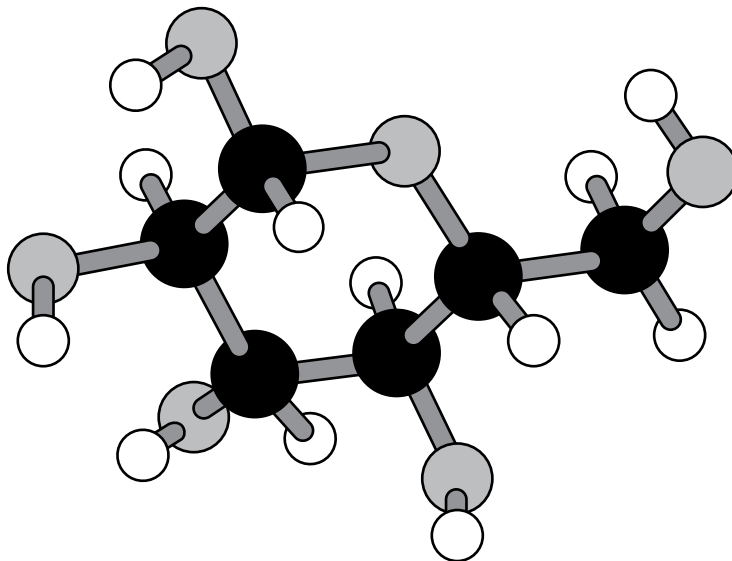
Students observed bacteria growing in a solution of water and glucose in a closed container. They made the following observations:

- The liquid became cloudy after a few days.
- The air inside the container no longer contained oxygen.
- There was very little glucose left in the solution.




To better understand what happened to the glucose in the solution, they started by making a model of the glucose molecule. They used spheres of different sizes that connect together with sticks to form the model of this molecule. The spheres represent atoms. The sticks represent the chemical bonds that hold the atoms together in a molecule.

The diagram shows a model of a glucose molecule made by a student.

**Glucose (Sugar) Molecule Model**



**Key**

	Hydrogen atom
	Oxygen atom
	Carbon atom



- 1** A student uses the model to show what happens to the 24 atoms in a glucose molecule after the observed changes occur.

**How many total atoms from the original glucose molecule does the student need to represent the products, and why does she need that amount?**

- A** fewer than 24 atoms, because some of the atoms in the glucose molecule are converted to energy
- B** 24 atoms, because the products contain all of the atoms that were in the glucose molecule
- C** 24 atoms, because atoms in the glucose molecule that were changed to energy are replaced by other atoms
- D** more than 24 atoms, because atoms from other molecules are combined with the atoms in the glucose molecule to make the products

- 2** A student wants to make a model of energy flow as the atoms in the glucose molecule are rearranged to form new molecules (products).

**Which label best describes energy of the reactants in the student's model?**

- F** energy stored in bonded atoms
- G** energy stored in carbon dioxide
- H** energy released from sunlight
- J** energy released when glucose forms

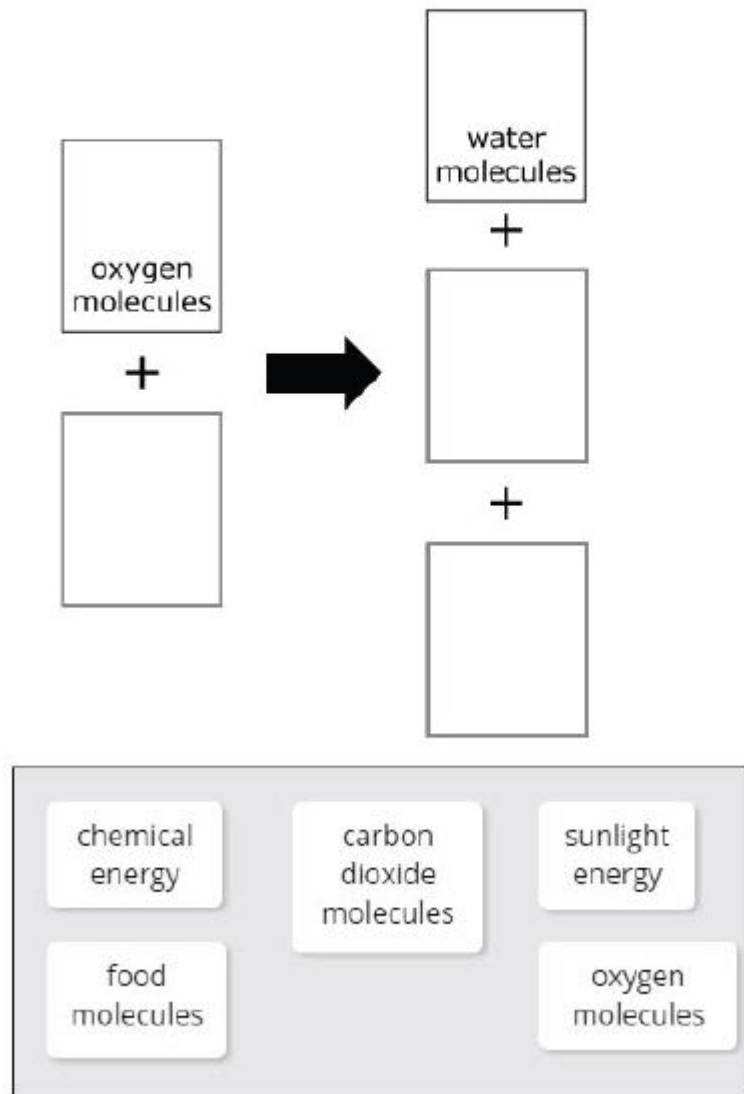


3

A student wants to model the reaction that took place in the closed container.

**Identify the reactants and products in the reaction model.**

Drag the labels to the correct parts of the following diagram to complete the model. To drag a part, click and hold the part, then drag into the space desired. To remove a part, click and hold it, then drag it back to the bottom. Each label may be used only once.





**4** How could the students change the glucose model to show how glucose helps build other materials used in the cell?

- F** attach water molecules to the glucose molecule
- G** remove the oxygen and carbon atoms from the glucose molecule
- H** connect several glucose molecules together into a larger molecule
- J** replace the carbon and oxygen atoms in the glucose molecule with more hydrogen atoms



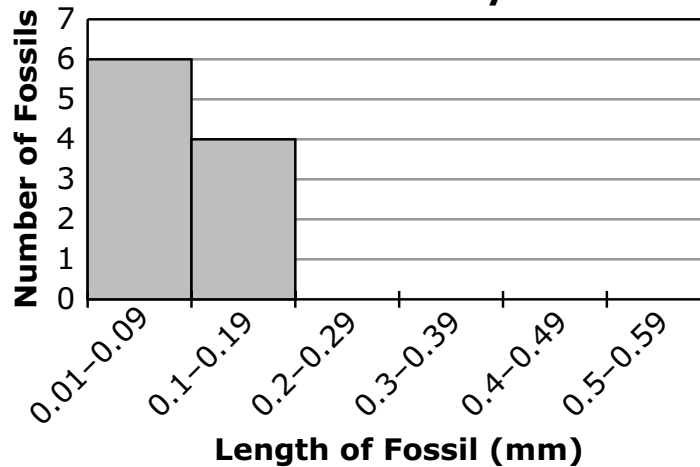
**Study the information. Then answer questions 5 through 7.**

To answer questions about Earth’s history, students looked at rock samples from different layers of the ocean floor. The rock samples contained fossils of very small ocean organisms called forams.

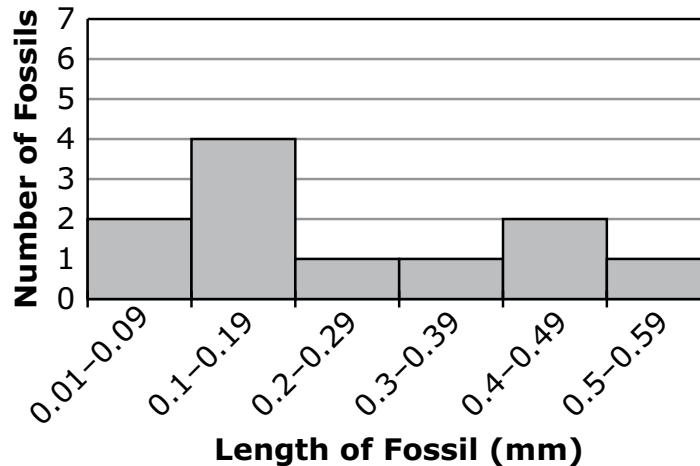
Some of the rock formed during the Cretaceous time period from 145.5 to 65.5 million years ago, before an event called the K-T extinction. The rest of the rock formed during the Tertiary time period from 65.5 to 35.4 million years ago, after the K-T extinction.

In their investigation, the students measured the lengths of the foram fossils in the rock samples. The graphs show the size ranges of the foram fossils in rock samples from each time period.

**Size Distribution of Foram Fossils Found in Tertiary Rock**



**Size Distribution of Foram Fossils Found in Cretaceous Rock**



**5 Which statement is supported by the data in the two graphs?**

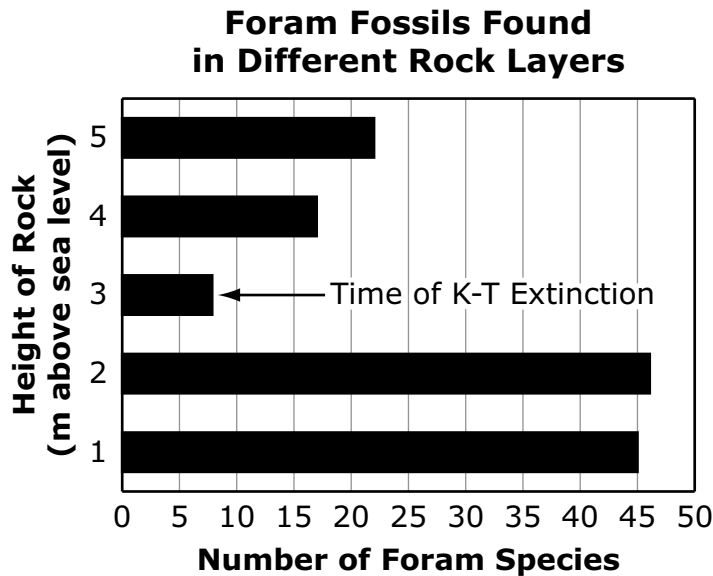
- A** Forams of all sizes had more food sources in the Cretaceous period.
- B** Forams with a larger size had more predators in the Cretaceous period.
- C** Forams with a smaller size had a survival advantage in the Tertiary period.
- D** Forams that were mid-sized had a higher reproductive rate in the Tertiary period.

**6 Based on the information, how are the foram fossils from the two time periods different?**

- F** The Cretaceous fossils are found in more locations than the Tertiary fossils.
- G** The Cretaceous fossils show a greater variety of body size than the Tertiary fossils.
- H** The Cretaceous fossils were more successful than Tertiary fossils at surviving the K-T extinction.
- J** The Cretaceous fossils became more common and the Tertiary fossils disappeared from the fossil record.



- 7 The students also gathered this data about the number of foram species fossils in rock layers at different heights above sea level from the Cretaceous and Tertiary time periods.



**What is the most likely reason for the difference in the number of foram species in the layers from 3 to 5 meters above sea level?**

- A** Individual forams became different species until the time of the K-T extinction.
- B** The number of foram species decreased steadily until the time of the K-T extinction.
- C** The surviving foram species diversified to fill the available habitats after the K-T extinction.
- D** Several foram species moved from other habitats in the world to this location after the K-T extinction.



**Study the information. Then answer questions 8 through 10.**

Students are learning about balanced and unbalanced forces and design an investigation using a water bottle and balls of different masses. Their investigation includes the following steps:

1. Fill one water bottle half way with water and stand it on the floor 50 cm from a starting point.
2. Select three balls of different masses.
3. Roll the balls one at a time from the starting point towards the standing water bottle. Use the same amount of force to roll each ball.
4. Roll each ball until it hits the center of the water bottle.
5. Record the observations of what happens when the ball hits the center of the water bottle.

The table shows the results that the students recorded.

<b>Mass of Ball (g)</b>	<b>Ball Rolled Backwards</b>	<b>Water Bottle Pushed 0-10 cm</b>	<b>Water Bottle Pushed &gt; 10 cm</b>
20	X		
57	X	X	
117			X



8

Students are learning about balanced and unbalanced forces and design an investigation using a water bottle and balls of different masses. Their investigation includes the following steps:

1. Fill one water bottle half way with water and stand it on the floor 50 cm from a starting point.
2. Select three balls of different masses.
3. Roll the balls one at a time from the starting point towards the standing water bottle. Use the same amount of force to roll each ball.
4. Roll each ball until it hits the center of the water bottle.
5. Record the observations of what happens when the ball hits the center of the water bottle.

The table shows the results that the students recorded.

Mass of Ball (g)	Ball Rolled Backwards	Water Bottle Pushed 0-10 cm	Water Bottle Pushed > 10 cm
20	X		
57	X	X	
117			X

**Decide which measurements represent the independent variable, a controlled variable, and/or the dependent variable in the students' investigation.**

Match each measurement in the first column to its correct role in this investigation shown in the second column. To connect a measurement and its role in the investigation, click the measurement and then the role, and a line will automatically be drawn between them. To remove a connection, hold the pointer over the line until it turns red, and then click it. Each role in the second column may match one, more than one, or no measurements in the first column.

Mass of water bottle	Independent Variable
Movement of water bottle	Controlled Variable
Mass of balls	Dependent Variable
Distance of bottle from starting point	



9

Students are learning about balanced and unbalanced forces and design an investigation using a water bottle and balls of different masses. Their investigation includes the following steps:

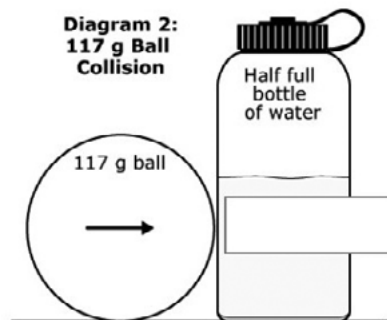
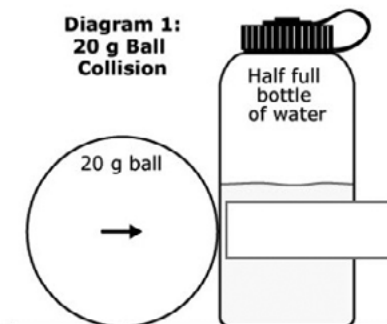
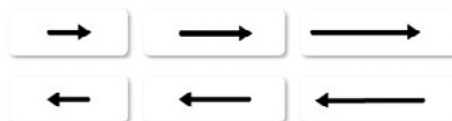
1. Fill one water bottle half way with water and stand it on the floor 50 cm from a starting point.
2. Select three balls of different masses.
3. Roll the balls one at a time from the starting point towards the standing water bottle. Use the same amount of force to roll each ball.
4. Roll each ball until it hits the center of the water bottle.
5. Record the observations of what happens when the ball hits the center of the water bottle.

The table shows the results that the students recorded.

Mass of Ball (g)	Ball Rolled Backwards	Water Bottle Pushed 0-10 cm	Water Bottle Pushed > 10 cm
20	X		
57	X	X	
117			X

Drag the arrows into the boxes to show the reaction force of the bottle at the moment of collision in each diagram.

To place an arrow in a diagram, click and hold the arrow, and then drag it to the desired position. To change an arrow, click and hold it, and then drag it back to the original location. The length of each arrow shows the amount of relative force (longer arrow = greater force). You may use each object once, more than once, or not at all.





**10** Which added step will provide more evidence of how the water bottle mass affects forces in the students' investigation?

- F** Fill the water bottle completely with water.
- G** Roll each ball until it hits the water bottle three times.
- H** Roll the ball toward the water bottle with less force.
- F** Increase the distance the ball rolls toward the water bottle to 100 cm.



**Blank**

# ANSWER KEYS

English Language Arts		
Number	Reporting Category	Item Distractor Rationales
1	Vocabulary	<p>A. As used in paragraph 4, the high school coaches are looking closely at every move the players make on the court, not unfairly judging them.</p> <p><b>B. Correct. The coaches are looking closely at every move the players make on the court as a consideration for future placement on a high school team.</b></p> <p>C. As used in paragraph 4, the high school coaches are looking closely at every move the players make on the court, not loudly criticizing them.</p> <p>D. As used in paragraph 4, the high school coaches are looking closely at every move the players make on the court, not passionately cheering them.</p>
2	Reading/Writing Process	<p>F. This is a detail presented only in paragraph 4.</p> <p>G. This is a detail presented in both paragraphs, but the information about the all-city team is important to include in the summary.</p> <p><b>H. Correct. This sentence provides a summary of details for both paragraphs 3 and 4.</b></p> <p>J. This does include details from both paragraphs but does not provide a summary of the paragraphs.</p>
3	Critical Reading/Writing	<p><b>A. Correct. This sentence introduces the conflict that the narrator and Megan experience.</b></p> <p>B. The theme of the passage is stated in paragraph 18. This sentence does not support the theme of the passage.</p> <p>C. This sentence is not describing Megan or the narrator but the conflict they are experiencing.</p> <p>D. This sentence is not stating or developing a point of view.</p>
4	Critical Reading/Writing	<p>F. This is the role of the narrator when the passage is written in the omniscient third person point of view, not the first person point of view.</p> <p><b>G. Correct. The first-person point of view allows the reader to have an understanding of how the narrator is feeling and what she is thinking as events unfold in the story.</b></p> <p>H. The narrator is an active participant in this story as one of the main characters.</p> <p>J. The narrator is not telling this story as a motive to persuade the reader to think one way or the other.</p>
5	Critical Reading/Writing	<p>A. Sequencing of process and steps occurs in paragraphs 2–6, not paragraphs 7–10.</p> <p>B. A problem and solution structure is not presented in paragraphs 7–10.</p> <p><b>C. Correct. Paragraphs 7–10 detail the effect of pushing different sizes of wire through ice and how it causes the ice to melt or not.</b></p> <p>D. The passage does not make a claim or provide evidence to support a claim about how pressure is used in the activity.</p>

**English Language Arts**

Number	Reporting Category	Item Distractor Rationales
6	Critical Reading/Writing	<p>F. This sentence is a fact because it provides information about materials needed for the activity.</p> <p><b>G. Correct. This is an example of an opinion because the next part being described may not be tricky for all persons doing the activity.</b></p> <p>H. This sentence is a fact because it provides information about how pressure affects water.</p> <p>J. This sentence is a fact because it provides information about how pressure affects water.</p>
7	Reading/Writing Process	<p>A. Though some of the information may be surprising to the reader, the selection is mainly about how to do the activity.</p> <p><b>B. Correct. This science activity appears to be fun and easy to do.</b></p> <p>C. Though information is presented about temperature changes, the selection is mainly about how to do the activity.</p> <p>D. The experiment is not about how ice forms, but how pressure melts ice.</p>
8	Research	<p>F. This activity is not something that would have to be done in a classroom, so asking a teacher is not the best way to test the accuracy of the information.</p> <p><b>G. Correct. Hands-on experience with the activity is the best way to test the accuracy of the information.</b></p> <p>H. You could research the information provided about the activity on the internet, but doing it yourself is the best way to test the accuracy of the information.</p> <p>J. You could get additional information from a book, but experiencing the activity is the best way to test the accuracy of the information.</p>
9	Language	<p>A. This format incorrectly contains sentence fragments.</p> <p>B. This format incorrectly has a sentence fragment.</p> <p><b>C. Correct. This format contains a complete sentence, with no fragments or run-ons.</b></p> <p>D. This format incorrectly has two sentence fragments.</p>
10	Language	<p><b>F. Correct. The verb is in the indicative mood because it is just stating a fact.</b></p> <p>G. The imperative mood is a command, but this verb is just stating a fact.</p> <p>H. The conditional mood depends on something else to happen, but this verb is just stating a fact.</p> <p>J. The subjunctive mood is stating a wish or something contrary to fact, but this verb is stating a fact.</p>

## Mathematics

Number	Reporting Category	Item Distractor Rationales
1	Geometry & Measurement	<p>A. The student chose the prism with the greatest single side length.</p> <p>B. The student thought a cube would have a greater volume than a rectangular prism.</p> <p><b>C. Correct. The student demonstrated an ability to determine the volume of rectangular prisms.</b></p> <p>D. The student chose the prism with the greatest width.</p>
2	Data & Probability	<p>F. The student does not know how to read the data displayed on the scatterplot.</p> <p>G. The student saw that the data decreased from the left to the middle.</p> <p>H. The student does not know how to read the data displayed on the scatterplot or confused fewer and more.</p> <p><b>J. Correct. The student demonstrated an ability to interpret data displayed on a scatterplot.</b></p>
3	Algebraic Reasoning	<p>A. The student confused the slope and the <math>y</math>-intercept.</p> <p><b>B. Correct. The student demonstrated an ability to write a linear equation for a real-world problem with one variable.</b></p> <p>C. The student did <math>11d + 6d</math>.</p> <p>D. The student ignored the 11 pages already read.</p>
4	Data & Probability	<p><b>F. Correct. The student demonstrated an ability to explain how outliers affect measures of central tendency.</b></p> <p>G. The student confused median and range.</p> <p>H. The student defined median, but this did not answer the question.</p> <p>J. The student chose an explanation that is not true for this data set, nor did it answer the question.</p>
5	Geometry & Measurement	<p>A. Balance distractor</p> <p>B. The student computed <math>36 - 14</math>.</p> <p><b>C. Correct. The student demonstrated an ability to use the Pythagorean Theorem to solve a problem.</b></p> <p>D. The student computed <math>36 + 14</math>.</p>
6	Number & Operations	<p><b>F. Correct. The student demonstrated an ability to find the square root of a number as between two consecutive positive integers.</b></p> <p>G. Balance distractor</p> <p>H. The student computed <math>185 \div 2</math>.</p> <p>J. The student computed <math>185 \div 2</math> incorrectly.</p>



**Mathematics**

<b>Number</b>	<b>Reporting Category</b>	<b>Item Distractor Rationales</b>																																				
7	Geometry & Measurement	<p><b>Sample Distractor Rationales:</b></p> <p><b>Correct</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr> <td style="width: 33%;">length = 6 cm</td> <td style="width: 33%;"></td> <td style="width: 33%;">width = 3.9 cm</td> </tr> <tr> <td>width = 4 cm</td> <td></td> <td>height = 8.4 cm</td> </tr> <tr> <td></td> <td>length = 12 cm</td> <td></td> </tr> <tr> <td></td> <td>height = 15.1 cm</td> <td></td> </tr> </table> <p><b>Incorrect</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr> <td style="width: 33%;">length = 6 cm</td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> <tr> <td>width = 4 cm</td> <td style="text-align: center;">-</td> <td></td> </tr> <tr> <td></td> <td></td> <td>width = 10.5 cm</td> </tr> <tr> <td></td> <td></td> <td>height = 9 cm</td> </tr> </table> <p>The student identified only the dimensions that show an area of 24 cm<sup>2</sup>.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;">length = 6.1 cm</td> <td style="width: 33%;">width = 3.9 cm</td> </tr> <tr> <td></td> <td>height = 2 cm</td> <td>height = 8.4 cm</td> </tr> <tr> <td>length = 7.5 cm</td> <td>length = 12 cm</td> <td>width = 10.5 cm</td> </tr> <tr> <td>width = 3.5 cm</td> <td>height = 15.1 cm</td> <td>height = 9 cm</td> </tr> </table> <p>The student selected all dimensions that included at least one non-whole number.</p>	length = 6 cm		width = 3.9 cm	width = 4 cm		height = 8.4 cm		length = 12 cm			height = 15.1 cm		length = 6 cm			width = 4 cm	-				width = 10.5 cm			height = 9 cm		length = 6.1 cm	width = 3.9 cm		height = 2 cm	height = 8.4 cm	length = 7.5 cm	length = 12 cm	width = 10.5 cm	width = 3.5 cm	height = 15.1 cm	height = 9 cm
length = 6 cm		width = 3.9 cm																																				
width = 4 cm		height = 8.4 cm																																				
	length = 12 cm																																					
	height = 15.1 cm																																					
length = 6 cm																																						
width = 4 cm	-																																					
		width = 10.5 cm																																				
		height = 9 cm																																				
	length = 6.1 cm	width = 3.9 cm																																				
	height = 2 cm	height = 8.4 cm																																				
length = 7.5 cm	length = 12 cm	width = 10.5 cm																																				
width = 3.5 cm	height = 15.1 cm	height = 9 cm																																				
8	Number & Operations	<p><b>Correct</b></p> <p><math>a + b</math> is [always] rational.                      <math>x \cdot y</math> is [sometimes] irrational.  <math>a + x</math> is [never] rational.                      <math>b \cdot x</math> is [always] irrational.</p> <p><b>Incorrect</b></p> <p><math>a + b</math> is [always] rational.                      <math>x \cdot y</math> is [always] irrational.  <math>a + x</math> is [never] rational.                      <math>b \cdot x</math> is [always] irrational.</p> <p>The student thought that whenever an irrational number is involved, the answer must be irrational.</p> <p><math>a + b</math> is [always] rational.                      <math>x \cdot y</math> is [sometimes] irrational.  <math>a + x</math> is [always] rational.                      <math>b \cdot x</math> is [never] irrational.</p> <p>The student confused rational and irrational numbers.</p>																																				

**Mathematics**

Number	Reporting Category	Item Distractor Rationales				
9	Data & Probability	<p><b>Sample Distractor Rationales:</b> Correct</p> <table border="1"> <thead> <tr> <th data-bbox="528 289 954 342">Dependent</th> <th data-bbox="954 289 1366 342">Independent</th> </tr> </thead> <tbody> <tr> <td data-bbox="528 342 954 924">pulling two cards, one at a time, from a deck of playing cards without replacement</td> <td data-bbox="954 342 1366 924">                     one roll of a red number cube;                      one roll of a blue number cube                       pulling one card from a deck of playing cards and rolling a number cube                       pulling one card from a deck of playing cards, replacing it, and pulling a second card                 </td> </tr> </tbody> </table>	Dependent	Independent	pulling two cards, one at a time, from a deck of playing cards without replacement	one roll of a red number cube; one roll of a blue number cube  pulling one card from a deck of playing cards and rolling a number cube  pulling one card from a deck of playing cards, replacing it, and pulling a second card
		Dependent	Independent			
pulling two cards, one at a time, from a deck of playing cards without replacement	one roll of a red number cube; one roll of a blue number cube  pulling one card from a deck of playing cards and rolling a number cube  pulling one card from a deck of playing cards, replacing it, and pulling a second card					
<p><b>Incorrect</b></p> <table border="1"> <thead> <tr> <th data-bbox="528 989 954 1041">Dependent</th> <th data-bbox="954 989 1366 1041">Independent</th> </tr> </thead> <tbody> <tr> <td data-bbox="528 1041 954 1614">                     one roll of a red number cube;                      one roll of a blue number cube                       pulling one card from a deck of playing cards and rolling a number cube                       pulling one card from a deck of playing cards, replacing it, and pulling a second card                 </td> <td data-bbox="954 1041 1366 1614">pulling two cards, one at a time, from a deck of playing cards without replacement</td> </tr> </tbody> </table> <p>The student confused independent and dependent events.</p>	Dependent	Independent	one roll of a red number cube; one roll of a blue number cube  pulling one card from a deck of playing cards and rolling a number cube  pulling one card from a deck of playing cards, replacing it, and pulling a second card	pulling two cards, one at a time, from a deck of playing cards without replacement		
Dependent	Independent					
one roll of a red number cube; one roll of a blue number cube  pulling one card from a deck of playing cards and rolling a number cube  pulling one card from a deck of playing cards, replacing it, and pulling a second card	pulling two cards, one at a time, from a deck of playing cards without replacement					

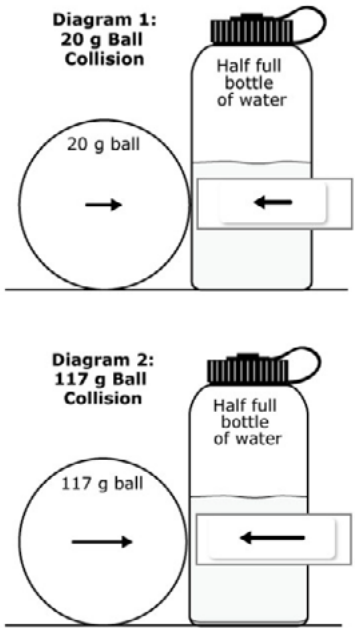


**Science**

Number	Reporting Category	Item Distractor Rationales								
1	Life Science	<p>A. The student may think that mass is lost to release energy.</p> <p><b>B. Correct. Atoms are conserved during the reaction.</b></p> <p>C. The student may think that mass is converted to energy and mass is replaced from an external source.</p> <p>D. The student may think that mass is added from an external source.</p>								
2	Life Science	<p><b>F. Correct. Chemical energy is stored in the oxygen and food molecules.</b></p> <p>G. The student may think that carbon dioxide is a reactant of cellular respiration.</p> <p>H. The student may think that sunlight is used in cellular respiration.</p> <p>J. The student may think that the formation of glucose releases energy.</p>								
3	Life Science	<p><b>Scoring Rubric</b></p> <table border="1"> <thead> <tr> <th data-bbox="571 627 660 674">Score</th> <th data-bbox="660 627 1458 674">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="571 674 660 720"><b>2</b></td> <td data-bbox="660 674 1458 720">for placing all three components correctly</td> </tr> <tr> <td data-bbox="571 720 660 827"><b>1</b></td> <td data-bbox="660 720 1458 827">The response explains or attempts to explain why the speaker of the poem can be described as helpful, but the supporting details may lack specificity or the explanation is not supported by the text.</td> </tr> <tr> <td data-bbox="571 827 660 873"><b>0</b></td> <td data-bbox="660 827 1458 873">if no correct answers are placed</td> </tr> </tbody> </table> <p><b>Blank</b></p> <p><b>Distractor Rationale</b></p> <p>Correct. Food molecules are combined with oxygen molecules to produce water and carbon dioxide molecules while releasing energy.</p> <p>The student may think that sunlight is an input in the process of cellular respiration.</p> <p>The student may think that oxygen molecules will also be a product since they appear at the beginning.</p> <p>The student may not understand the inputs and outputs of cellular respiration.</p> <p><b>Training Notes:</b></p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 20px;"> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; margin: 0 auto 10px auto;">oxygen molecules</div> <div style="font-size: 24px; margin: 0 auto 10px auto;">+</div> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; margin: 0 auto 10px auto;">food molecules</div> </div> <div style="font-size: 36px; margin-right: 10px;">➔</div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; margin: 0 auto 10px auto;">water molecules</div> <div style="font-size: 24px; margin: 0 auto 10px auto;">+</div> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; margin: 0 auto 10px auto;">carbon dioxide molecules</div> <div style="font-size: 24px; margin: 0 auto 10px auto;">+</div> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; margin: 0 auto 10px auto;">chemical energy</div> </div> </div> <div style="margin-left: 20px;"> <p>Score 2: A=4, B=2, C=1 A=4, B=1, C=2</p> <p>Score 1: A=4, B=2, C=3 A=4, B=2, C=5 A=4, B=2, C=blank A=4, B=3, C=1 A=4, B=5, C=1 A=4, B=blank, C=1 A=3, B=2, C=1 A=5, B=2, C=1 A=blank, B=2, C=1</p> <p>A=4, B=1, C=3 A=4, B=1, C=5 A=4, B=1, C=blank A=4, B=3, C=2 A=4, B=5, C=2 A=4, B=blank, C=2 A=3, B=1, C=2 A=5, B=1, C=2 A=blank, B=1, C=2</p> </div>	Score	Description	<b>2</b>	for placing all three components correctly	<b>1</b>	The response explains or attempts to explain why the speaker of the poem can be described as helpful, but the supporting details may lack specificity or the explanation is not supported by the text.	<b>0</b>	if no correct answers are placed
Score	Description									
<b>2</b>	for placing all three components correctly									
<b>1</b>	The response explains or attempts to explain why the speaker of the poem can be described as helpful, but the supporting details may lack specificity or the explanation is not supported by the text.									
<b>0</b>	if no correct answers are placed									

Science		
Number	Reporting Category	Item Distractor Rationales
4	Life Science	<p>F. To build other materials, more glucose molecules are needed, not just water molecules.</p> <p>G. This is a decomposition process, not a synthesis process.</p> <p><b>H. Correct. Glucose is the building block molecule for more complex carbohydrates.</b></p> <p>J. To build more complex carbohydrates, more glucose molecules are needed, not just hydrogen atoms.</p>
5	Life Science	<p>A. The student may think that the greater variety of Cretaceous forams indicates that were more food sources.</p> <p>B. The student may think that the greater variety of Cretaceous forams indicates that were more predators.</p> <p><b>C. Correct. The average foram size decreased in the Tertiary period which indicates that smaller size was an advantage.</b></p> <p>D. The student may read the Cretaceous graph and may think the data reflects reproductive rates.</p>
6	Life Science	<p>F. The student may think that the different rocks come from different locations.</p> <p><b>G. Correct. The Tertiary graph shows sizes only from 0.01–0.19 mm, while the Cretaceous graphs shows sizes from 0.01–0.59 mm.</b></p> <p>H. The student may be confused regarding the timing of the K-T extinction.</p> <p>J. The student may think that the zero values in the graph indicate that the fossils disappeared.</p>
7	Life Science	<p>A. The student may think that individuals become different species.</p> <p>B. The student may think that moving down from the surface is going forward in time rather than in reverse.</p> <p><b>C. Correct. The number of species increases from layer 3-5 indicating that diversification occurred.</b></p> <p>D. The student may think that migration is the most likely explanation.</p>
8	Physical Sciences	<b>Scoring Rubric</b>
		<b>Score</b>   <b>Description</b>
		<b>2</b>   Two points for four correct matches.
		<b>1</b>   One point for two or three correct matches.
		<b>0</b>   Zero points for one or zero correct matches.
		<b>Blank</b>
		<p><b>Sample Response</b></p> <p>Mass of water bottle → Independent Variable</p> <p>Movement of water bottle → Controlled Variable</p> <p>Mass of balls → Dependent Variable</p> <p>Distance of bottle from starting point → Controlled Variable</p>

**Science**

Number	Reporting Category	Item Distractor Rationales								
9	Physical Sciences	<p><b>Scoring Rubric</b></p>								
		<table border="1"> <thead> <tr> <th data-bbox="564 258 660 310">Score</th> <th data-bbox="660 258 1468 310">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="564 310 660 363">2</td> <td data-bbox="660 310 1468 363">2 points for two correct pairs of force indicators</td> </tr> <tr> <td data-bbox="564 363 660 415">1</td> <td data-bbox="660 363 1468 415">1 point for one correct pair of force indicators</td> </tr> <tr> <td data-bbox="564 415 660 468">0</td> <td data-bbox="660 415 1468 468">0 points for two, one, or zero correct force indicators that do not constitute at least one correct pair</td> </tr> </tbody> </table>	Score	Description	2	2 points for two correct pairs of force indicators	1	1 point for one correct pair of force indicators	0	0 points for two, one, or zero correct force indicators that do not constitute at least one correct pair
		Score	Description							
		2	2 points for two correct pairs of force indicators							
		1	1 point for one correct pair of force indicators							
0	0 points for two, one, or zero correct force indicators that do not constitute at least one correct pair									
<p><b>Blank</b></p>										
<p><b>Sample Response</b></p>  <p><b>Diagram 1: 20 g Ball Collision</b></p> <p><b>Diagram 2: 117 g Ball Collision</b></p>										
10	Physical Sciences	<p>F. Correct. Adding more water to the water bottle will increase the mass of the water bottle.</p> <p>G. The student may think that hitting the bottle more times will increase the mass of the bottle.</p> <p>H. The student may think that rolling the ball with less force will affect the water bottle mass.</p> <p>J. The student may think that increasing the distance the ball rolls toward the water bottle will affect the water bottle mass.</p>								

**Blank**

**Blank**





# ANSWER SHEET

USE NO.2 PENCIL ONLY 

## ENGLISH LANGUAGE ARTS

- 1 (A) (B) (C) (D)
- 2 (F) (G) (H) (J)
- 3 (A) (B) (C) (D)
- 4 (F) (G) (H) (J)
- 5 (A) (B) (C) (D)
- 6 (F) (G) (H) (J)
- 7 (A) (B) (C) (D)
- 8 (F) (G) (H) (J)
- 9 (A) (B) (C) (D)
- 10 (F) (G) (H) (J)



## MATHEMATICS

- 1 (A) (B) (C) (D)
- 2 (F) (G) (H) (J)
- 3 (A) (B) (C) (D)
- 4 (F) (G) (H) (J)
- 5 (A) (B) (C) (D)
- 6 (F) (G) (H) (J)
- 7 TEI
- 8 TEI
- 9 TEI
- 10 TEI



## SCIENCE

- 1 (A) (B) (C) (D)
- 2 (F) (G) (H) (J)
- 3 TEI
- 4 (F) (G) (H) (J)
- 5 (A) (B) (C) (D)
- 6 (F) (G) (H) (J)
- 7 (A) (B) (C) (D)
- 8 TEI
- 9 TEI
- 10 (F) (G) (H) (J)







