

## Day 11 Assignments

### **Math**

**Day 11:** Complete the worksheet on adding unlike fractions.

### **Language Arts**

**Day 11:** Complete the questions on Theme. This lesson will also be available on Study Island.

### **Social Studies**

**Day 11:** Use the notes for Chapter 3 (Section 1) to complete the quiz.

### **Science**

**Day 11:** Complete the worksheets on Gravity. This assignment will also be available on Study Island.

## Adding unlike fractions (denominators 2-12)

### Grade 6 Fraction Worksheet

Find the sum of the following fractions.

1.  $\frac{4}{5} + \frac{9}{11} =$  \_\_\_\_\_

2.  $\frac{5}{6} + \frac{2}{9} =$  \_\_\_\_\_

3.  $\frac{5}{9} + \frac{3}{8} =$  \_\_\_\_\_

4.  $\frac{2}{12} + \frac{5}{8} =$  \_\_\_\_\_

5.  $\frac{6}{11} + \frac{2}{3} =$  \_\_\_\_\_

6.  $\frac{1}{4} + \frac{7}{10} =$  \_\_\_\_\_

7.  $\frac{5}{6} + \frac{6}{12} =$  \_\_\_\_\_

8.  $\frac{2}{7} + \frac{3}{7} =$  \_\_\_\_\_

9.  $\frac{1}{2} + \frac{2}{6} =$  \_\_\_\_\_

10.  $\frac{1}{3} + \frac{3}{12} =$  \_\_\_\_\_

Day 11

# Theme

## Question 1 .

Day 11

### The Princess and the Cowherd A Chinese Legend

Long ago in China, there lived a princess named Vega and a cowherd named Altair. One day, Vega and Altair met and fell in love, and Altair went to the king to ask if he could marry his beautiful daughter. The king could see they were very much in love, and he said they could marry straightaway.

Vega and Altair were very happy and spent every minute of the day together. Vega no longer sat at her loom weaving every day, and Altair no longer went to the fields. This made the king very angry because all of Altair's cows wandered away and the people no longer received milk, and Vega's loom remained unused and people did not receive warm clothes. So, he sent Altair to live on the far side of the Milky Way. Then, he made the rule that the two may see each other only once a year.

Vega sat at her loom each day, waiting for the time to come when she could see Altair. When the day finally came, she hurried to find a way across the Milky Way, but no matter how hard she tried she could not find a way across. She began to weep bitter tears at the loss of one more day without her true love.

A flock of magpies saw how sad she was and spread their wings to make a bridge across the Milky Way. Vega ran lightly over their wings and into the arms of the waiting Altair. The magpies promised to be there on the same day each year. This is how the stars, Vega and Altair, are now able to meet on the seventh day of the seventh month every year.

What is the theme of the passage?

- A. It is important to obey the orders of one's elders.
- B. True love will find a way through difficulties.
- C. It is foolish to choose love over one's duties.
- D. Love grows between those who do not meet often.

## Question 2 .

**Directions:** Select the correct text in the passage.

Which line **best** illustrates the theme of the poem?

*excerpt from Sympathy*  
by Paul Laurence Dunbar

I know what the caged bird feels, alas!  
When the sun is bright on the upland slopes;  
When the wind stirs soft through the springing grass,  
And the river flows like a stream of glass;

- 5 When the first bird sings and the first bud opes,  
And the faint perfume from its chalice steals—  
I know what the caged bird feels!

- I know why the caged bird beats his wing  
Till its blood is red on the cruel bars;  
10 For he must fly back to his perch and cling  
When he fain would be on the bough a-swing;  
And a pain still throbs in the old, old scars  
And they pulse again with a keener sting—  
I know why he beats his wing!

## Question 3 .

## Investigating Life in Planet Newn

CHARACTERS:

ROB

TARA

SETTING: *Somewhere in outer space. Rob and Tara are floating in a space shuttle. They look out the window and try to balance as they talk.*

ROB: She seems so blue from here.

TARA: Yeah. Round and blue.

ROB: Did you ever imagine you'd be here?

TARA: I dreamed of being in space, but I didn't think I would ever get to do it.

ROB: Yeah. So beautiful. She is beautiful.

TARA: Nothing like her.

ROB: All this vast space out here, and I think of that one ball. It is getting smaller as we move away.

TARA: Why do you think we are so focused on Earth when we are out in outer space? Haven't we finally gotten to see space?

ROB: We have, but we all miss home when we leave it.

What is the **best** way to describe the theme in this drama?

- A. Everyone gets depressed in space for no reason.
- B. People cry in space when they see Earth.
- C. Everyone wants to go to the space and leave home.
- D. People long for home when they are away from it.

## Question 4 .

## The Boy and the Nettle

A boy was playing in the fields when he was stung by a nettle. He ran home to tell his mother what had happened.

"I only touched it lightly," he said, "and the nasty thing stung me!"

"It stung you because you only touched it lightly," his mother told him. "Next time you touch a nettle, grasp it as tightly as you can. Then it won't sting you at all."

*adapted from "The Boy and the Nettle" by Aesop*

Which theme **best** fits this story?

- A. Pride leads to pain.
- B. Face danger boldly.
- C. Play carefully.
- D. Treat plants kindly.

## Question 5 .

### The Field Mouse and Buffalo A Native American Fable

One day as a field mouse was out gathering food to eat on the prairie, a huge buffalo joined him. The buffalo was eating the grass, but the mouse was afraid the buffalo would eat all of the high grass, and he would have nothing in which to hide and protect himself from the owl. This angered the little field mouse, so he challenged the buffalo to fight.

"Fight, Buffalo, fight! I will not let you eat my home!" the mouse cried. But the buffalo just ignored him for he was very small and did not have a loud voice.

Again the mouse challenged the buffalo to fight and the buffalo grew angry. "Listen little mouse, I will crush you easily."

"Just come and try it," the mouse cried. Enraged, the buffalo charged the little mouse, but the mouse leapt up into the buffalo's ear and began to gnaw at him. The buffalo was in great pain, and tried to shake the mouse loose, but he could not. Soon, he fell dead.

The mouse climbed out of the buffalo's ear and claimed the great beast in triumph. "I have slain the mighty buffalo!"

Then along came a fox who said to the mouse, "You have slain a great beast, but you are too small to skin the whole buffalo. You will need my help."

"Very well," said the mouse, "If you help me to skin and dress the buffalo, I will give you some of his meat."

So the fox helped the mouse to skin the buffalo, but the mouse kept most of the share of meat for himself. "But you are small, and I have a wife and children," complained the fox, "why do you not give me more meat?" said the fox.

"Beware, fox, for I am mighty," claimed the mouse, "I might get angry with you, and kill you too!"

And with that, the fox jumped on the mouse and ate him.

What is the **theme** of the story?

- A. If you are proud and selfish, you will lose all in the end.
- B. Do not try to claim victory if you did not put in the effort.
- C. You should not underestimate the hunger of a fox.
- D. The smallest friends can be the biggest friends.

## Question 6 .

*adapted from* **The Three Fish (More Jataka Tales)**  
by Ellen C. Babbitt

Once upon a time three fish lived in a faraway river. They were named Itsy, Bitsy, and Fitsy. One day they left the wild country where no men lived and came down the river to live near a town.

Fitsy said to the other two: "There is danger all about us here because fishermen come to the river here to catch fish with all sorts of nets and lines, so, let us go back again to the wild country where we used to live."

But the other two fish were so lazy and so greedy that they kept putting off going back to the wild country, letting day after day pass.

Then one day, Itsy and Bitsy swam ahead of Fitsy, but they did not notice a fisherman's net straight ahead of them and accidentally rushed right into it. Fitsy saw what happened and thought, "I must save them!"

Swimming around the net, Fitsy splashed around in the water in front of it, appearing to be a fish that had broken through the net and gone up the river. Then, he swam to the back side of the net and splashed about there, appearing to be a fish that had broken through and gone down the river.

The fisherman saw the splashing water and thought the fish had broken through the net, one escaping up river, the other down. So, he pulled in the net by one corner to check if the fish had indeed escaped, but to his dismay this allowed the two fish to escape from the net, and swim quickly away.

"You saved our lives, Fitsy," they said, "and now we are willing to go back to the wild country."

So back they all went to their old home where they lived safely ever after.

What is the theme of the passage?

- A. Be grateful to those who help others.
- B. Postponing important decisions can lead to problems.
- C. Greed leads to one's downfall.
- D. It is better to live in a place that one is familiar with.

## Question 7 .

**Words, Still**

The rivers still dance under the sun,  
even though the glaciers melt.  
The wind still blows,  
And knows the music of the birds  
that hang on to the branches of the tree.  
The poets still write words  
that beautify the world.

What is the **best** way to describe the theme of the poem?

- A. In the midst of the world's suffering, there is still hope.
- B. People should have more appreciation for the world's poets.
- C. Humans have plundered the earth and destroyed nature.
- D. Summers are filled with the relaxing sounds of nature.

## Question 8 .

## The Fox and the Pheasants

One moonlight evening as Master Fox was taking his usual stroll in the woods, he saw a number of delicious Pheasants perched quite out of his reach on a limb of a tall, old tree. The sly Fox soon found a bright patch of moonlight, where the Pheasants could see him clearly; there he raised himself up on his hind legs and began a wild dance. First, he whirled 'round and 'round like a top, and then he hopped up and down, cutting all sorts of bizarre capers. The Pheasants stared giddily. They hardly dared blink for fear of losing him out of their sight a single instant.

Now the Fox made as if to climb a tree, now he fell over and lay still, playing dead, and the next instant he was hopping on all fours, his back in the air, and his bushy tail shaking so that it seemed to throw out silver sparks in the moonlight.

By this time the poor birds' heads were in a whirl. And when the devious Fox began his performance all over again, so dazed did they become that they lost their hold on the limb and fell down one by one to the Fox for him to eat.

*adapted from "The Fox and the Pheasants" by Aesop*

Which theme **best** fits this story?

- A. Too much attention to danger may cause us to fall victim to it.
- B. Acting foolishly creates danger for all who are involved.
- C. A strong mind is as valuable as a strong body.
- D. Good things come to those who take the time to prepare.

## Question 9 .

## Investigating Life in Planet Newn

CHARACTERS:

ROB

TARA

SETTING: *Somewhere in outer space. Rob and Tara are floating in a space shuttle. They look out the window and try to balance as they talk.*

ROB: She seems so blue from here.

TARA: Yeah. Round and blue.

ROB: Did you ever imagine you'd be here?

TARA: I dreamed of being in space, but I didn't think I would ever get to do it.

ROB: Yeah. So beautiful. She is beautiful.

TARA: Nothing like her.

ROB: All this vast space out here, and I think of that one ball. It is getting smaller as we move away.

TARA: Why do you think we are so focused on Earth when we are out in outer space? Haven't we finally gotten to see space?

ROB: We have, but we all miss home when we leave it.

How does the title reflect the theme of the drama?

- A. It tells that the journey is about discovering a planet away from home.
- B. It tells that Rob and Tara will be out in the space for a long time.
- C. It tells that the journey is about finding many homes in the universe.
- D. It tells that the characters will be discovering new things forever.

## Question 10 .

**Enid's Flowers**

by Mary E.Q. Brush

The first robin had come, so had the first bluebird and the first hand-organ man; caterpillars were beginning to crawl along the sunny side of the fence rails and everybody was housecleaning, so it was quite certain that spring was here.

With it, there came to each of the three little Ashley sisters three packets of seeds. A lady friend of their mother had sent them. Every one of them had printed on it, "A Surprise Collection."

When the little, light-brown envelopes were opened, they were found to contain several varieties of seeds. Some were like little, round, brown pills—those were "sweet-peas," Mamma said. Others were very small indeed, like grains of powder, and some were like tiny, grayish-green sticks—somebody said those were verbena seeds; and, well, dear me, there were all kinds and shapes and sizes and grays and browns.

Three neat, round beds were spaded up on the lawn, and Amy, Enid and Ruth raked them over, smoothed and patted the rich soil, and then planted their seeds.

Of course, you know what happened next. There had to be waiting, watching, weeding, and watering. Most of the seeds sprouted and grew, and soon the dark brown earth was covered by green shoots and trailing sprays.

By and by, buds began to appear and tiny bits of color to show, and then how happy the little girls were!

All but Enid. She was pleased, but also a little disappointed.

Now, it so happened, that Ruth's "Surprise Collection" turned out to be pansies, asters, phlox and ragged sailors—all posies of bright pink, purple, and crimson in various shades. Amy's garden plot was gay with marigolds, four-o'clocks, larkspurs, and bachelor's-buttons—all orange and yellow, blue and purple.

But Enid's flowers were nearly all white, and it was truly a surprise, though not a very agreeable one. She had white verbenas, sweet alyssum, candytuft, daisies, and gillyflowers.

Consequently, her flowerbed did not attract as much attention from the passers-by as did the ones of her sisters.

"Anyhow, almost all my posies are sweet-smelling," the little girl said, trying her best to be contented. For, after all, to own flowers, every one of which was fragrant, was a comfort.

Then, there came another comfort—a real "surprise" comfort. Late one evening, after the family had been away all day, attending the Sunday-school picnic, and drove home in the moonlight, what do you suppose they saw as they turned in at the gateway? Why, there on the lawn, was a great circle of white, gleaming like frosted silver.

"Wonder if a sheet has blown off the clothesline," said Grandma.

"Oh, it isn't a sheet—it's my flower bed! It's my dear, darling white posies!"

And, sure enough, the white flowers could be seen in the dark, when all the gay reds and yellows and blues and purples were dim and dull.

Enid felt very happy.

"I like 'surprise collections' you can see at night," she said.

**Directions: Select all the correct answers.**

Which **two** themes are found in this passage?

People need to be happy with what they have.

People should not value beauty in life.

Sisters are the sweetest gift.

Good things can be found in unexpected places.

Family can be a comfort in difficult times.



Day 11

Chapter 3 Section 1 Geography of the Fertile Crescent

The Big Idea

The valleys of the Tigris and Euphrates rivers were the site of the world's first civilizations.

Main Ideas

- The rivers of Southwest Asia supported the growth of civilizations.
- New farming techniques led to the growth of cities.

Main Idea 1:  
The rivers of Southwest Asia supported the growth of civilizations.

- The **Tigris** and **Euphrates** rivers are the most important physical features of the region known as Mesopotamia.
- **Farm** settlements in Mesopotamia eventually developed into **civilizations**.
- The **first civilizations** developed in Mesopotamia.

Land Between Two Rivers

- Mesopotamia means "between the rivers" in Greek.
- Mesopotamia is part of a larger area of rich farmland called the **Fertile Crescent**.

Rise of Civilizations

- **Annual floods** on the **Tigris** and **Euphrates** rivers brought **silt** that made the land great for farming.  
- **Silt**- a mixture of rich soil and tiny rocks.

Main Idea 2:  
New farming techniques led to the growth of cities.

- Farmers used **irrigation** and **canals** as a way to control river flow.

**Irrigation**- Process of bringing water to crops

**Canals**- Cutting the rivers to go in various directions

- Increased amounts of food led to **surpluses**, which meant that fewer people needed to farm.
- As a result, new occupations developed.

Controlling Water

The water levels of the Tigris and Euphrates would rise or fall, depending on the amount of rainfall. **Irrigation** and **canals** helped solve flooding and drought problems.

Farmers also built up the banks of the rivers to hold back the floodwaters.

Day 11

Chapter 3 Section 1 Quiz  
Geography of the Fertile Crescents

1. What are the two rivers in Mesopotamia?
2. What did farm settlements develop into?
3. What does Mesopotamia mean?
4. What are the fertile crescents?
5. What happens every year to the rivers in Mesopotamia?
6. What is silt?
7. What did a surplus of food allow other people to do?
8. What is irrigation?
9. What are canals and what did they do for the people of Mesopotamia?
10. Name 3 ways humans tried to help solve the drought/flood problems with the two rivers of Mesopotamia,

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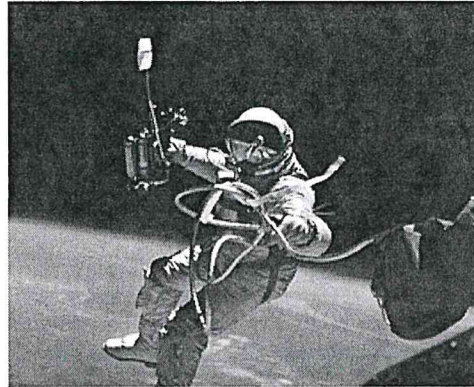
11

# Gravity

## Question 1 .

**Directions:** Select each correct answer. More than one answer may be correct.

An astronaut on a spacewalk accidentally drops a tool, and it floats away.

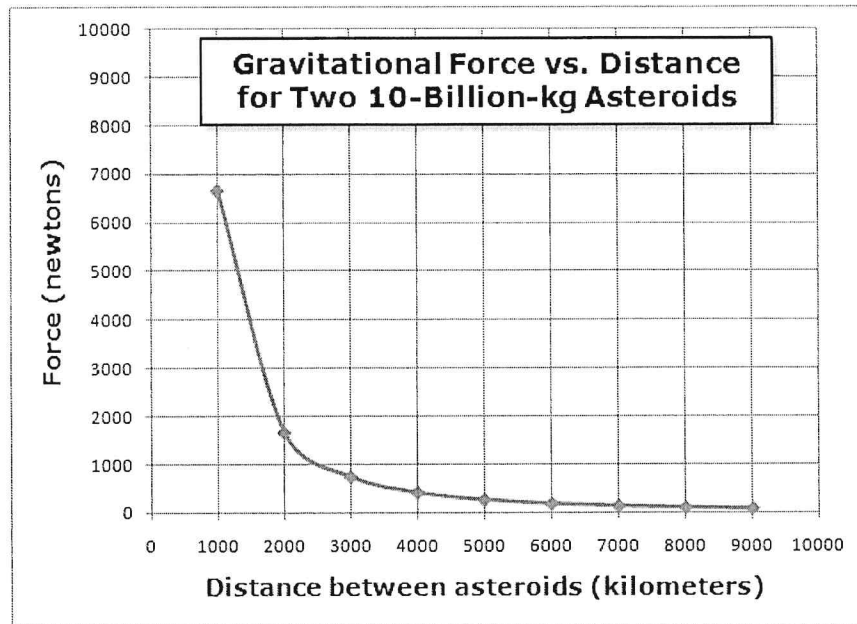


*Image courtesy of NASA*

Which of the following objects is exerting a gravitational force on the floating tool?

- the Earth
- the astronaut
- the Moon
- the Sun

## Question 2 .



The graph above plots gravitational force versus distance for two asteroids of equal mass (10 billion kg). Based on the graph, it can be concluded that the gravitational force between the two asteroids \_\_\_\_\_ as the distance between them \_\_\_\_\_.

- A. increases; increases
- B. remains constant; increases
- C. remains constant; decreases
- D. decreases; increases

## Question 3 .

As the masses of two objects increase, how does the gravitational force between the two bodies change?

- A. The gravitational force begins to repel the objects.
- B. The gravitational force stays the same.
- C. The gravitational force decreases.
- D. The gravitational force increases.

**Question 4 .**

**Directions: Select the correct location in the diagram.**

Four objects are orbiting a star along the same path. The objects are the same distance from the star and have the masses shown below. Which planet is experiencing the weakest gravitational force of attraction toward the star?

**Question 4.**

**Directions: Select each correct answer. More than one answer may be correct.**

Which of the following objects exerts a gravitational force?

- an apple
- the Earth
- a basketball
- the Sun
- the Moon

**Question 5.**

Every object with mass exerts a gravitational force on every other object with mass. The gravitational force between which of the following two objects would be easiest to detect with measuring equipment?

- A. a baseball and a bowling ball
- B. the Moon and the Earth
- C. an electron and a bowling ball
- D. a human and a dog

## Question 6.

Directions: Select the correct letter in the table.

Four weather satellites are orbiting the Earth at a height of 825 kilometers. Some characteristics of the satellites are shown in the table below.

Upon which satellite does the Earth's gravity exert the greatest force?

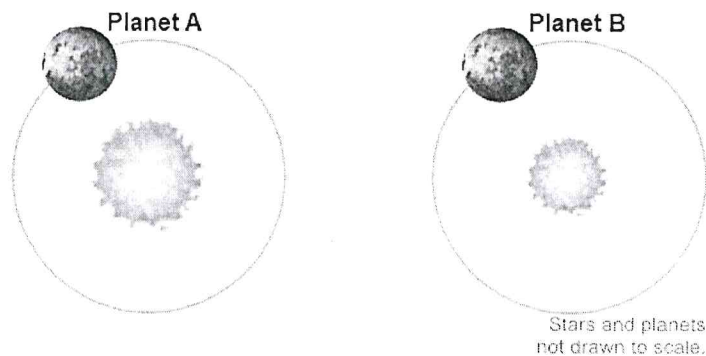
Satellite	Length (m)	Altitude (km)	Mass (kg)
A	5.5	825	692
B	9.8	825	610
C	4.4	825	840
D	5.6	825	903

## Question 7.

According to the law of universal gravitation, any two objects are attracted to each other. The strength of the gravitational force depends on the masses of the objects and their distance from each other.

Many stars have planets around them. If there were no gravity attracting a planet to its star, the planet's motion would carry it away from the star. However, when this motion is balanced by the gravitational attraction to the star, the planet orbits the star.

Two solar systems each have a planet the same distance from the star. The planets have the same mass, but Planet A orbits a more massive star than Planet B.



Which of the following statements is true about the planets?

- A. Planet B is more attracted to its star than Planet A.
- B. Planet B will keep orbiting its star longer than Planet A.
- C. Planet A orbits its star faster than Planet B.
- D. Planet A has a longer year than Planet B.

## Question 8.

The planet Mars has two moons, *Deimos* and *Phobos*. *Phobos* is about 9,000 km from Mars and is about six times more massive than *Deimos*. *Deimos* is about 23,000 km from Mars. Upon which moon does Mars exert a stronger gravitational force?

- A. *Deimos* and *Phobos* equally
- B. *Phobos*
- C. not enough information
- D. *Deimos*

**Question 47 .**

What characteristics of a planet determine the strength of its gravitational force on other objects?

- A. the distance of the planet from the Earth
- B. mass of the planet and its distance from other objects
- C. diameter of the planet and its location in space
- D. the number of moons that the planet has

## Day 12 Assignments

### **Math**

**Day 12:** Complete the worksheets on subtracting unlike fractions.

### **Language Arts**

**Day 12:** Complete the worksheets on Analyzing the Elements of Stories and Drama. This lesson will also be available on Study Island.

### **Social Studies**

**Day 12:** Use the notes over Chapter 4 (Section 1) to complete the quiz.

### **Science**

**Day 12:** Complete the worksheets on Chemical Reactions. This assignment will also be available on Study Island.



## Subtracting unlike fractions

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### Grade 6 Fraction Worksheet

Find the difference.

1.  $\frac{2}{3} - \frac{2}{4} =$  \_\_\_\_\_

2.  $\frac{5}{9} - \frac{2}{5} =$  \_\_\_\_\_

3.  $\frac{1}{2} - \frac{1}{9} =$  \_\_\_\_\_

4.  $\frac{5}{7} - \frac{5}{11} =$  \_\_\_\_\_

5.  $\frac{7}{9} - \frac{2}{3} =$  \_\_\_\_\_

6.  $\frac{1}{2} - \frac{1}{4} =$  \_\_\_\_\_

7.  $\frac{2}{4} - \frac{3}{7} =$  \_\_\_\_\_

8.  $\frac{4}{7} - \frac{6}{12} =$  \_\_\_\_\_

9.  $\frac{2}{4} - \frac{2}{11} =$  \_\_\_\_\_

10.  $\frac{7}{8} - \frac{3}{8} =$  \_\_\_\_\_

# Analyze Elements of Stories and Dramas

## Question 1 .

Day 12

Cassandra's father pulled into a driveway and stopped the car. Cassandra looked up from her cell phone. She had been texting her best friend, Kellie. The text read, "I am sure I will hate it." Cassandra and her parents stepped out of the car and into the blazing Oklahoma sunlight.

"Well?" said her father. "What do you think?" He waved his hand out toward the house and the trees, toward everything around them. "It's ours, all of it. Nearest neighbor is a quarter mile away."

Cassandra's mother had a smile on her face so large that Cassandra thought her teeth might start falling out like large panes of glass. "Oh, Earl!" she squealed. "It's tremendous!" She clapped her hands delightedly. "What do you think, Cassandra?"

Cassandra shrugged and looked around. She didn't want to move, especially out to the country, and she'd been telling them that for months! There was nothing out here but trees, grass, and bushes. In town, they lived in an apartment with one bedroom above a laundromat. Looking out the window there, Cassandra could see hundreds of people, thousands maybe, running across the street, purchasing things from vendors on the sidewalk, driving and honking. Here, there was nothing, no people, no noise, no action, nothing. At the apartment, she had a dozen friends within walking distance. Who was she going to talk to out here, with the closest neighbor a quarter of a mile away?

She followed her parents into the house. Her father showed them the living room, the dining room, the kitchen, the master bedroom and bath, all empty. Everything was being moved next week. Her mother and father excitedly discussed the possible locations of chairs, sofas, and tables. Finally, her father said, "Why don't you go look for your room?" Cassandra left them chirping happily in the foyer and walked down a long hallway.

At the end of the hall was a closed door, and someone had taped a piece of paper to the door that said, "Cassandra's Room." She pushed open the door and flipped a light switch. For the first time, she had a room, her very own room. The walls were wallpapered to look like wood paneling, and there was a strong, slightly unpleasant odor, as if the previous owners had smoked cigars in the room. She could still hear her parents making decorating plans in the other room.

Cassandra began thinking about the apartment, where her parents slept in the one bedroom and Cassandra slept on the couch. Whenever her parents had friends over, Cassandra had to sleep in her parents' bed and then move out to the couch when the guests finally left. There was no privacy, no quiet. She was happy there, but it was not perfect.

She closed the door and listened carefully. Only the faintest murmur of her parents' voices could be heard. She noticed the lock on the doorknob, and she pressed it until it clicked. Cassandra turned in circles, closing her eyes, and then lowered herself to the carpet and lay back. Yes, she thought, *this was going to be fine. This new house was going to be just fine.*



Why do Cassandra's parents want to move?

- A. They want to be closer to their friends.
- B. They want to be closer to the school.
- C. They want a house with more room.
- D. They want a hometown with less crime.

**Question 2 .**

**Directions: Select the correct text in the passage.**

Which sentence from the passage best shows how Kevin resolves his conflict with the waitress?

**The Angry Lunchtime**

by Tirzah Tyler

"I really wish this place had a lunch buffet," Kevin said while he cleaned his glasses with the restaurant's cloth napkin. "That way, we wouldn't have to spend time waiting for the chefs to cook our food."

"I don't mind waiting," Alex said while he read a menu and scratched his beard.

Kevin put his glasses on and wondered when Alex was going to shave. "You don't mind waiting because you don't care about getting back to the office on time after lunch," he said with a laugh.

Still reading the menu, Alex shrugged his shoulders.

Kevin took a deep breath and began to read the menu. He thought about how his bank account was almost out of money. He had bought Alex's lunch three times in a row, and he hoped that Alex would not expect him to buy his lunch again. "It's your turn, by the way," Kevin said.

"It's my turn for what?"

"To buy lunch for both of us," Kevin said, hoping he did not sound angry.

"I can't," Alex said while he continued to scratch his beard. "Payday isn't until Friday."

Kevin sighed and removed his glasses. "Then why are we here?"

Alex finally stopped scratching his beard and made eye contact with Kevin. "I thought we were here because it is lunchtime; therefore, we will eat lunch."

"I mean, why are we going to eat lunch here if we can't afford it?" Kevin asked. "You take advantage of my generosity all the time!" he exclaimed.

"Are you two ready to order?" a waitress asked.

"Why don't you people have a lunch buffet like all the other restaurants?" Kevin asked harshly.

"OK, I'll come back later," the waitress said before she walked away.

Alex reached over the table and gently placed a hand on Kevin's shoulder. "Hey, man, you didn't have to explode like that," he said.

Kevin sighed and put his glasses back on. "You're right. I'm sorry I yelled at you. I'll apologize to her, too, after she comes back. Sometimes I get crazy when I'm hungry and broke."

Alex reached into his back pocket and removed his wallet. "I have a couple of dollars and some change with me. I know of a burger place down the street that has a dollar menu. I would be happy to buy you lunch today," he said. Then he added with a grin, "I'm planning to shave my beard on payday, in case that was bothering you too."

Blushing, Kevin said, "Thanks, man."

## Question 3 .

**Presidential Run**

by c. safos

Denise and Wilma were running for class president. Denise was the favorite to win. She was the most popular. She had won the year before. She knew every nook and cranny of the school.

Wilma, however, wasn't nearly as popular. She had a group of three close friends, and everyone else was a stranger or an acquaintance. Wilma knew the school though. She knew what the school needed to be great. She was concerned that the school library wasn't as good as it could be. She was worried that the study hall wasn't helping people—that it had become a place for people to get together and hang out instead of study.

The thing that worried her the most was that the school's athletic teams weren't equal. For instance, the school had four sports—soccer, track and field, basketball, and baseball. Each sport had one female team and one male team. The problem was that the girls' soccer team only got a little bit of the money that's given to the sports budget. In fact, the boys' teams used 70 percent of the budget, but the girls' teams only used 30 percent. While the boys' soccer team got new uniforms every year, it had been three years since the girls' soccer team had gotten new uniforms.

Denise didn't see anything wrong with how the money was being spent. She thought that since more people went to see the boys' teams, they should get more money than the girls' teams. Denise was more worried about the prom. She wanted to hold it at a different place this year. She thought if she did, it would make her more popular with the students since she thought all they cared about was the prom. Her other major problem was that the school only had two vending machines. She wanted more. Their rivals from Dalton-Smith High School had 20 vending machines at their school. Denise thought her school, Unger High, could do better, and the students at Dalton would be jealous of the students at Unger.

Election Day finally came. The halls were flooded with banners and bunting. Ribbons and streamers flowed from the ceiling in the cafeteria. The poll lines seemed to go on for miles. Denise thought she had the election in the bag. Many of the students voting wore a "Denise for President" button. Then, Wilma arrived, bringing with her the female student athletes and their votes.

Denise was shocked when she lost the election. She thought she knew what her fellow students wanted, but she only knew what she wanted.

Denise loses the election because she

- A. only cares about having money.
- B. only cares about helping people.
- C. only cares about being popular.
- D. only cares about being right.

## Question 4 .

Cassandra's father pulled into a driveway and stopped the car. Cassandra looked up from her cell phone. She had been texting her best friend, Kellie. The text read, "I am sure I will hate it." Cassandra and her parents stepped out of the car and into the blazing Oklahoma sunlight.

"Well?" said her father. "What do you think?" He waved his hand out toward the house and the trees, toward everything around them. "It's ours, all of it. Nearest neighbor is a quarter mile away."

Cassandra's mother had a smile on her face so large that Cassandra thought her teeth might start falling out like large panes of glass. "Oh, Earl!" she squealed. "It's tremendous!" She clapped her hands delightedly. "What do you think, Cassandra?"

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Why does Cassandra not want to move to the house?

- A. She thinks the house is too large.
- B. She likes sleeping in the living room.
- C. She thinks the country is dangerous.
- D. She likes living close to her friends.

## Question 5 .

*adapted from Heidi*  
by Johanna Spyri

The children in the meantime were ascending slowly in a zigzag way, Peter always knowing where to find all sorts of good grazing places for his goats where they could nibble. Thus they strayed from side to side. The poor little girl had followed the boy only with the greatest effort and she was panting in her heavy clothes. She was so hot and uncomfortable that she only climbed by exerting all her strength. She did not say anything but looked enviously at Peter, who jumped about so easily in his light trousers and bare feet. She envied even more the goats that climbed over bushes, stones, and steep inclines with their slender legs. Suddenly sitting down on the ground the child swiftly took off her shoes and stockings. Getting up, she undid the heavy shawl and the two little dresses. Out she slipped without more ado and stood up in only a light dress. In sheer delight at the relief, she threw up her dimpled arms that were bare up to her short sleeves. To save the trouble of carrying them, her aunt had dressed her in her Sunday clothes over her workday garments, and Heidi arranged her dresses neatly in a heap and joined Peter and the goats. She was now as light-footed as any of them. When Peter, who had not paid much attention, saw her suddenly in her light attire, he grinned. Looking back, he saw the little heap of dresses on the ground and then he grinned yet more, till his mouth seemed to reach from ear to ear; but he said never a word.

The child, feeling free and comfortable, started to converse with Peter, and he had to answer many questions. She asked him how many goats he had, and where he led them, what he did with them when he got there, and so forth.

At last the children reached the summit in front of the hut. When Deta saw the little party of climbers she cried out shrilly: "Heidi, what have you done? What a sight you are! Where are your dresses and your shawl? Are the new shoes that I just bought for you gone, and the new stockings that I made myself? Where are they all, Heidi?"

The child quietly pointed down and said "There."

The aunt followed the direction of her finger and descried<sup>1</sup> a little heap with a small red dot in the middle, which she recognized as the shawl.

"Silly child!" Deta said excitedly. "What does all this mean and why have you taken your things all off?"

"Because I do not need them," said the child, not seeming in the least repentant<sup>2</sup> of her deed.

"How can you be so careless, Heidi? Have you lost your senses?" the aunt went on, in a tone of mingled vexation<sup>3</sup> and reproach<sup>4</sup>. "Who do you think will go way down there to fetch those things up again? It is half-an-hour's walk. Please, Peter, run down and get them. Do not stand and stare at me as if you were glued to the spot."

"I am late already," replied Peter, and stood without moving from the place where, with his hands in his trousers' pockets, he had witnessed the violent outbreak of Heidi's aunt.

"There you are, standing and staring, but that won't get you further," said Deta. "I'll give you this if you go down." With that she held a five-penny-piece under his eyes. That made Peter start and in a great hurry he ran down the straightest path. He arrived again in so short a time that Deta had to praise him and gave him her little coin without delay. He did not often get such a treasure, and therefore his face was beaming and he laughingly dropped the money deep into his pocket.

1. *to catch sight of*

2. *feeling of regret*

3. *in an annoyed state*

4. *disappointment*

Why is Heidi envious of the goats?

- A. The goats get plenty of grass to eat on the way up while Heidi remains hungry.
- B. Peter helps the goats jump over the bushes while Heidi has to mangle by herself.
- C. Peter pays attention to the goats' needs while he completely ignores Heidi.
- D. The goats climb the hill effortlessly with their slender legs while Heidi struggles.

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Which event causes Cassandra to like the house?

- A. She sees that she will have her own room with a lock.
- B. She learns that there are no neighbors nearby.
- C. She hears her parents talk about new furniture.
- D. She becomes friends with a girl in the neighborhood.

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4. disappointment

Why does Heidi throw her dimpled arms up?

- A. She manages to climb the hill easily.
- B. She knows that she has found a solution to her problem.
- C. She feels relieved and free in only her light dress.
- D. She wants Peter to take notice of her.



## Question 8 .

**The Horn Of Plenty**

The King of Greece, whose name was Aeneus, had a daughter called Deianira. She was so beautiful that her fame spread throughout the world, and many princes came to woo her. Among these were two strangers named Hercules and Achelous.

Hercules was huge and broad shouldered, he was dressed in animal skin, and carried in his hand a big club. His untidy and curly hair hung down his neck, and his fierce eyes gleamed from behind his thick eyebrows.

The other stranger was Achelous, god of the Calydonian River. He was slender and graceful, and was dressed in a flowing green cloak. In his hand he carried a staff of plaited reeds, and on his head was a crown of water lilies. His voice was soft and caressing, like the gentle murmur of summer brooks.

"O King Aeneus," said Achelous, standing before the throne, "I am the King of Waters. If you will have me as your son-in-law, I will make the beautiful Deianira queen of my river kingdom."

"King Aeneus," said the mighty Hercules, stepping forward, "Deianira is mine, and I will not give her to this river-god."

"How dare you say that? You are just a human. Look at me; I am Achelous, the powerful King of the Waters! I move with majesty through the rich lands of my wide kingdoms. I make all fields, through which I flow, beautiful with grass and flowers. By my right I own Deianira."

Hercules was confident, and he answered. "If you want Princess Deianira then you must compete with me and win." Hearing this Achelous threw off his cloak and began to prepare for the struggle. Hercules also threw his club aside, and the two men got ready to fight for the princess.

They took their places and fought till Hercules by his strength overcame Achelous and pushed him to the ground. However, Achelous changed himself into a serpent, he twisted his body, and tried to escape. Hercules laughed, and cried out: "Ah, Achelous! Do you think that I fear you, and will let you escape though you have turned into a snake? Achelous struggled hard to escape. He tried another trick. He turned himself into an angry bull, and continued to fight. Hercules then threw his huge arms over the bull, seized his horns, and pulled one of the horns from Achelous' forehead.

The river-god returned to his shape. He roared aloud with rage, and hiding his head in his mantle, ran from the hall and plunged into the waters of his stream.

Then the Goddess of Plenty, and all the Wood-fairies and Water-fairies came forward to greet Hercules, singing and dancing. They took the huge horn of Achelous and heaped it high with the rich and glowing fruits and flowers of autumn. They decorated it with vines and with bunches of grapes, and presented it to Hercules and his beautiful bride Deianira.

And ever since that day the Horn of Plenty has stood for abundance and made people happy at Harvest-Time.

Achelous loses the battle against Hercules because he

- A. is too tired.
- B. uses trickery.
- C. is very proud.
- D. is a river god.

## Question 9 .

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Why are all of the rooms in the house empty?

- A. because the house is being cleaned
- B. because they do not use furniture
- C. because the furniture was stolen
- D. because they have not moved in yet

## Question 10 .

## Working Hard for the Money



Henry swung open the heavy metal door of the warehouse and stepped inside, carrying a large black plastic garbage bag over his shoulder. He walked up to a large desk, where a woman greeted him. "Morning, Henry," she said. "Looks like you got a big bag today, young man!"

Henry smiled, "You bet! Actually, I think this will be my last bag. I should have enough for the ticket after this."

The woman shook her head. "I've never seen anyone your age work so hard to watch an old man play guitar. I will never understand. Go put your bag on the scale."

Henry walked over and dropped his bag onto a large metal scale next to the woman's desk. The cans in the bag crunched and rattled as the bag settled. The weight flashed up on the digital screen, and Henry smiled. "I knew it!" he yelled. "That's all I'm going to need!"

The woman opened a cash register and began counting out Henry's earnings. "Go throw your bag in the recycling bin," she said. "You know, I'm going to miss seeing you around here."

"I'll miss you too," Henry said, "but I sure won't miss digging around in the garbage for cans. It's too much work!"


"Well, you wanted something, and you worked hard until you got it. You should be proud of yourself."

"I am," said Henry, "and when I see G.G. Johnson play tomorrow night, I'm going to know what he means when he sings about working!"

Why does the woman say that Henry should be proud of himself?

- A. because he is always helping other people
- B. because he is the best guitar player she knows
- C. because he has helped save the environment
- D. because he has worked hard to complete a task

Day 12



Geography of Ancient Egypt

Chapter 4, Section 1

**Main Idea 1: Egypt was called the gift of the Nile because the Nile river gave life to the desert**

- ▶ The Nile River brought life to Egypt and allowed it to thrive.
- ▶ Biannual flooding of the Nile made farming possible.

**Features of the Nile**

- ▶ The Nile is the longest river in the world: 4,160 miles.
- ▶ Ancient Egypt included two regions: southern and northern, which were given their names by their relationship to the Nile.
- ▶ At several points, the rough terrain caused cataracts—rapid water movement, to form.
- ▶ The Nile divided into several branches, forming a delta—a triangular area of land made from soil deposited by a river.

**The Floods of the Nile**

- ▶ Little rain fell in the Egyptian desert, but the Nile flooded every year in the summer and fall.
- ▶ The Nile's flooding coated the land around it with a rich silt that made the soil ideal for farming.
- ▶ Without the floods, people could never have farmed in Egypt.

**Main Idea 2: Civilization developed along the Nile after people began farming in this region.**

- ▶ Egypt's location offered another advantage because it had natural barriers that made it hard to invade.

**3 Ways Natural Barriers Protected Egypt**

- ▶ Desert in the west was too big and harsh to cross
- ▶ Mediterranean and Red Sea provided protection from invasion.
- ▶ Cataracts in the Nile made it difficult to invade from the south.

**Nile Valley**

- ▶ Canals were built to carry water to fields.
- ▶ The Nile allowed farmers to raise animals such as cattle and sheep
- ▶ The river also provided many types of fish to eat, and hunters trapped ducks and geese

**Main Idea 3: Strong kings unified all of Egypt**

- ▶ According to tradition, **Menes** rose to power in Upper Egypt and unified the two kingdoms by taking control of Lower Egypt and by marrying a Lower Egyptian princess.
- ▶ Menes was probably Egypt's first **pharaoh**: title used by the rulers of Egypt
- ▶ He also founded Egypt's first **dynasty**: a series of rulers from the same family.

Day 12

**Chapter 4 Section 1**  
**Geography**  
**Quiz**

1. How often did the Nile River flood?
- λ 2. The Tigris and Euphrates Rivers are to Mesopotamia as the \_\_\_\_\_ is to Egypt.
3. What did the floods coat the land with?
4. What are cataracts?
5. What are deltas?
6. Why did the Egyptians build canals?
- γ 7. Explain 2 of the 3 reasons why Egypt was hard to invade.
8. What did Menes do when he rose to power in Egypt?
9. What are Pharaohs?
10. What are Dynasties?

# Chemical Reactions

## Question 1 .



NTI Day  
12

Jayne's science teacher mixed a clear liquid with a blue liquid in a beaker. After a few minutes there was a white solid at the bottom of the beaker. What is most likely true about the white solid?

- A. It will dissolve in water to form a blue solution.
- B. It was secretly added to the beaker by the teacher.
- C. It is an organic compound.
- D. It is a new substance with different properties.

## Question 2 .

Pure sodium metal explodes when it makes contact with water, and chlorine, in its natural state, is a deadly, poisonous gas. When these two chemicals combine, they form a harmless, white powder known as sodium chloride or table salt. Which of the following statements does this information support?

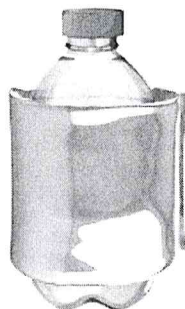
- A. When substances are chemically combined, the properties of the new substances that are formed are often different from the properties of the original substances.
- B. The properties of substances change during chemical reactions but then later go back to their original condition.
- C. Heat must be added in order to change the chemical properties of substances.
- D. When substances are chemically combined, the properties of the new substances that are formed are the same as the properties of the original substances.

**Question 3 .**

**Directions:** Select the correct answer from each drop-down menu.

Ammonium chloride absorbs thermal energy as it dissolves in water.

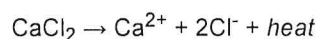
Rodrigo designed an airtight, watertight pouch. He put a carefully measured amount of ammonium chloride in it. He added a measured amount of water to the ammonium chloride, sealed the pouch tightly, and then wrapped the pouch around a small bottle of water.



Rodrigo's device is intended to \_\_\_\_\_ bottled drinks. He can test how well his device works by measuring the total change in temperature of the \_\_\_\_\_. Next, Rodrigo should see if he can use the results of his test to improve the \_\_\_\_\_ of his design.

**Question 4 .**

An engineer is designing a public swimming pool. She knows that the swimming pool will last longer if the liquid in it is a weak solution of calcium chloride. This solution will not erode the pool's sides as rapidly as pure water. However, when calcium chloride is added to the pool and as it dissolves, the water's temperature will rapidly increase according to the following chemical equation.

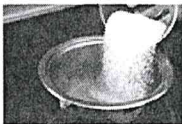





What could the engineer do to reduce the temperature the water reaches when calcium chloride is added to it?

- A. increase the amount of calcium chloride added
- B. add the calcium chloride more slowly
- C. decrease the amount of water in the pool
- D. add the calcium chloride more rapidly

**Question 5 .**

Four preparations involving table sugar (sucrose) are described below. Analyze the sugar preparation processes and the end products.

Sugar Water	Sugar Floss	Sugar Caramel	Rock Sugar
			
<p>Sugar is added to water, and the water is stirred until the sugar is no longer visible.</p>	<p>Sugar is melted and blown with a fan to make thin threads of solid sugar.</p>	<p>Pure sugar is melted and cooked until it changes color and becomes a thick, sticky liquid.</p>	<p>A highly concentrated solution of sugar water is prepared, large sugar crystals are allowed to form slowly, and then dye is added.</p>

Which of the following is evidence that a chemical reaction has taken place in one of the processes?

- A. the slow growth of giant sugar crystals from a highly concentrated sugar-water solution and added dye
- B. the color change that takes place after heat melts and begins to decompose the sugar
- C. the melting and re-solidification of sugar into threads, which are different from sugar's natural cube-shaped crystals
- D. the dissolution of solid sugar in water to form a thin, colorless, odorless liquid

**Question 6 .**

When a small piece of white marble rock is carefully placed in a beaker of hydrochloric acid, bubbles form on the surface of the rock and rise to the top of the liquid.

Which conclusion best fits this observation?

- A. The rock dissolved in the acid by breaking into its smallest pieces.
- B. The rock was changed by the acid into its gaseous form.
- C. The rock reacted with the acid and made a new gaseous substance.
- D. The rock heated the acid until it began to boil.



**Question 7 .**

In atomic theory, new substances are formed when the atoms of other substances are rearranged. In this kind of change, the total number of atoms is conserved.

An example of this is shown in the diagram below. There are six atoms both before and after the arrow.



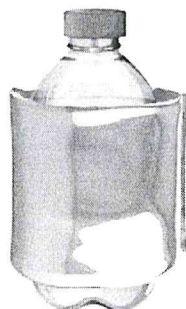
Which statement below is also true of the rearrangement of atoms?

- A. The amount of matter decreases.
- B. The amount of matter is conserved.
- C. The number of substances increases.
- D. The number of substances is conserved.

**Question 8 .**

**Directions: Select each correct answer. More than one answer may be correct.**

Rodrigo is using the design process to make a device that will cool a drink without ice or electricity. His first prototype was simply an airtight, watertight pouch containing 40 g of ammonium chloride ( $\text{NH}_4\text{Cl}$ ). He added 100 mL of water to the ammonium chloride, sealed the pouch tightly, and then wrapped the pouch around a small bottle of water. He tested his prototype by measuring the temperature of the bottle of water over time.



Next, Rodrigo performed the same test with different amounts and different concentrations of the ammonium chloride solution. For each set of measurements, he found the lowest temperature reached by the bottle of water and calculated the total temperature change. The table below summarizes his results.

Maximum Cooling Achieved							
trial	1	2	3	4	5	6	7
grams of $\text{NH}_4\text{Cl}$	30	40	50	50	60	70	80
amount (mL) of water added	100	100	100	150	150	200	200
greatest temperature change ( $-\text{C}$ )	3.6	4.3	4.3	4.8	5.2	5.6	5.8

Finally, Rodrigo held the amount and concentration of the solution constant while trying different amounts of insulation.

Maximum Cooling Achieved				
trial	8	9	10	11
insulation used:	none	towel	blanket	polystyrene foam
greatest temperature change ( $-\text{C}$ )	5.8	8.8	9.3	9.6

Rodrigo wants to find more ways to improve his latest design. Which of the following should he try?

- a more concentrated solution
- a less concentrated solution
- better insulation
- less insulation
- a greater amount of solution
- a lesser amount of solution

**Question 9 .**

Ethanol contains the elements carbon, hydrogen, and oxygen. When ethanol burns, it chemically reacts with oxygen gas.



What elements will be present in the substances that are created when ethanol burns?

- A. the elements cannot be determined
- B. carbon, hydrogen, and oxygen only
- C. carbon and hydrogen only
- D. nitrogen, sulfur, and sodium only

**Question 10 .**

Copper is added to a solution of nitric acid. The solution becomes hot and changes from colorless to dark blue. What is the best explanation for the change in temperature?

- A. The chemical reaction between the copper and the nitric acid produces heat.
- B. The increased volume of the solution causes heat to be released.
- C. The blue color absorbs less energy, which causes heat to be released.
- D. The copper and nitric acid repel each other, which produces heat.

## Day 13 Assignments

### **Math**

**Day 13:** Complete the worksheet on solving equations.

### **Language Arts**

**Day 13:** Complete the worksheet on Connotative Meanings in Literature. This lesson will also be available on Study Island.

### **Social Studies**

**Day 13:** Use the notes over Chapter 8 (Section 1) to complete the quiz.

### **Science**

**Day 13:** Complete the worksheets over Thermal Energy and Heat Transfer. This assignment will also be available on Study Island.

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

*Day #13*

### Solve the Equations

1)  $-6k = 30$

6)  $12 = -2 + c$

2)  $2h = -16$

7)  $\frac{s}{5} = -12$

3)  $-4 = \frac{f}{7}$

8)  $-52 = 4n$

4)  $11 = -3 + r$

9)  $-25 = -5z$

5)  $y - 6 = 8$

10)  $6 = d + 3$



# Connotative Meanings in Literature

## Question 1 .

In the living room, the lamp was in pieces. Amber and Paul both stared at what they had done. Amber began to **crumble** because she just didn't know what to do. On the other hand, Paul stood **wide-eyed** and very still. The lamp was broken beyond repair, and it was their mother's favorite lamp.

Paul looked at Amber and said, "I think the best plan is to tell the truth. Mom will know right away what happened just by looking at the pieces. This is no time for **fables**."

Amber weakly nodded her head. She knew that Paul was right; however, she was not looking forward to the punishment. So, with that plan, Amber and Paul sat on the couch watching the seconds tick on by and waiting for their mother.

Day  
13

Read the following sentence from the passage.

'This is no time for **fables**.'

What is the connotation of the word **fables**?

- A. magical
- B. made-up
- C. moral
- D. untruthful

## Question 2 .

Bruno was very **bullheaded**. He did not want to agree with anyone. He always wanted things his own way, and he was not happy if someone argued with him about it.

What does the word **bullheaded** suggest about Bruno in the sentence above?

- A. Bruno was different and unusual.
- B. Bruno was boring and ordinary.
- C. Bruno was funny and polite.
- D. Bruno was difficult and stubborn.

## Question 3 .

The candy store was **bursting at its seams**. There were so many kids crammed into the store that there was barely any room to move.

What does the phrase **bursting at its seams** suggests about the candy store?

- A. The store sold a lot of candy.
- B. The store was very small.
- C. The store liked to sell to kids.
- D. The store was extremely busy.

**Question 4 .**

Ellen stood outside the display window at Bergdorf's. Her eyes were **glistening** as she gazed longingly at the pair of shoes that she saw in the window each day she passed by. The shoes were really amazing with a ribbon and a flower attached to them. Ellen had adored the shoes the first time she had passed the store, but sadly, they cost far too much. No matter how much Ellen pleaded, her mother said that the shoes were **overpriced**. So, Ellen could only stare and swallow her disappointment once again until she saved enough money to finally buy them herself.

Read the following sentence from the passage.

No matter how Ellen would plead with her mother, her mother would say that the shoes were **overpriced**.

What is the connotation of the word **overpriced**?

- A. The shoes are not worth pleading for.
- B. The shoes are unreasonably priced.
- C. The price of the shoes is a good value.
- D. The price of the shoes hung over them.

**Question 5 .**

Which sentence suggests the man is sneaky?

- A. The man slunk across the floor without making a sound.
- B. The man jumped across the floor without making a sound.
- C. The man ran across the floor without making a sound.
- D. The man walked across the floor without making a sound.

**Question 6 .**

The movie was a **snore** because nothing exciting ever happened.

What is the connotation of the word **snore** in the sentence?

- A. The movie was very boring.
- B. The movie was unbelievable.
- C. The movie had tired characters.
- D. The movie had snoring sounds.

**Question 7 .**

Ellen stood outside the display window at Bergdorf's. Her eyes were **glistening** as she gazed longingly at the pair of shoes that she saw in the window each day she passed by. The shoes were really amazing with a ribbon and a flower attached to them. Ellen had adored the shoes the first time she had passed the store, but sadly, they cost far too much. No matter how much Ellen pleaded, her mother said that the shoes were **overpriced**. So, Ellen could only stare and swallow her disappointment once again until she saved enough money to finally buy them herself.

Read the following sentence from the passage.

Her eyes were **glistening** as she looked at the pair of shoes that she looked at every single day.

What is the connotation of the word **glistening**?

- A. Ellen's eyes are filling up with tears.
- B. Ellen's eyes are reflecting sunlight.
- C. Ellen's eyes are covered with glasses.
- D. Ellen's eyes are shiny from the sun.

**Question 8 .**

The words **bustle**, **fuss**, **stir**, and **whirl** all refer to busy activity. Which word has the most negative connotation?

- A. whirl
- B. bustle
- C. stir
- D. fuss

**Question 9 .**

The salesman at the toy store was very slick. He was able to talk Annabeth's parents into buying her a new bike.

What does the word **slick** suggest about the salesman in the sentence above?

- A. He is scary.
- B. He is sneaky.
- C. He is brave.
- D. He is rude.

**Question 10 .**

José **snatched** the ball from his brother's hand and ran off, leaving his brother stunned.

What is the connotation of the word **snatched** in the sentence?

- A. José grabbed the ball very quickly.
- B. José gripped the ball very tightly.
- C. José caught the ball with his hands.
- D. José took the ball to play with it.



Chapter 8 Section 1 Geography and the Early Greeks

The Big Idea

Greece's geography and its nearness to the sea strongly influenced the development of trade and the growth of city-states.

Main Ideas

- Geography helped shape early Greek civilizations.
- Trading cultures developed in the Minoan and Mycenaean civilizations.
- The Greeks created city-states for protection and security.

Main Idea 1:

Geography helped shape early Greek civilizations.

- |  |  |   |
|--|--|---|
| <ul style="list-style-type: none"> <li>• Mountains cover much of Greece, so contact with other villagers was difficult.</li> <li>• People created their own governments and ways of life.</li> <li>• People settled in the flat areas along the coast and in river valleys.</li> </ul> | <ul style="list-style-type: none"> <li>• Because travel was so difficult inland, Greeks turned to the seas on all sides.</li> <li>• They became skilled shipbuilders and sailors.</li> </ul> | <ul style="list-style-type: none"> <li>• The sea became a source of food as well as a way of trading with other communities.</li> <li>• They also exchanged ideas with other cultures.</li> </ul> |
|--|--|---|

Main Idea 2:

Trading cultures developed in the Minoan and Mycenaean civilizations.

Minoans

- They spent much of their time at sea, trading in the Mediterranean.
- Ships carried goods such as wood, olive oil, and pottery all around the eastern Mediterranean.
- They became the victims of a huge volcano that erupted north of Crete.
- They were not considered to be Greek, since they didn't speak Greek.

Mycenaean's

- They were the first people to be considered Greek.
- They lived inland and built fortresses.
- They were more violent in their trade.
- They took over Crete and became the major traders in the eastern Mediterranean.
- They developed colonies in northern Greece and Italy, from which they shipped goods around the Mediterranean and the Black Sea.

Main Idea 3:

The Greeks created city-states for protection and security.

- During the Dark Ages, the Greeks started joining together in small groups for protection.
- These groups set up independent city-states. The Greek word for city-state is polis.
- The creation of city-states marks the beginning of Greece's classical age, an age marked by great achievements.

Life in a City-State

- A city-state was usually built around a strong fortress on top of a high hill called an **acropolis**.
- The town around the acropolis was surrounded by walls for protection. People no longer had to fear raiders.
- Life in the city focused on the marketplace, or **agora**.
- The city-state became the foundation for Greek civilization and gave the Greeks an identity.
- They spread all around the Mediterranean and the Black Sea.

Day 13

**Chapter 8 Section 1**  
**Geography and Ancient Greece**  
**Quiz**

1. What physical feature is located on the inland part of Greece that makes it difficult to communicate with other groups?
2. What surrounds Greece that allows the Greeks to travel?
3. List three ways the Greeks used the sea.
4. What are 3 items the ships carried around that was traded by the Minoans?
5. Why weren't the Minoans considered to be Greek?
6. What was the name of the Greek civilization that became the leading group of traders by taken over the Cretes?
7. What is a polis? (Need to know what a city-state is)
8. What did the Greeks do during the Classical Age
9. What is an acropolis?
10. What is an agora?

**Question 1.**

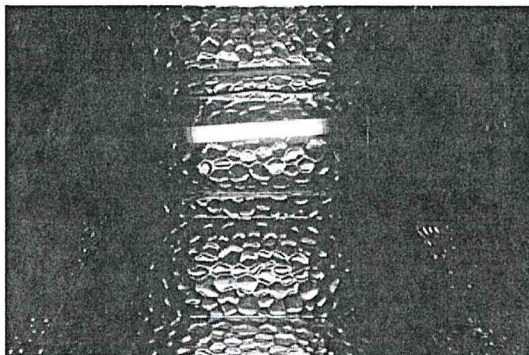
**Directions:** Select the correct entry in the table.

Frying pans are good conductors of heat. A scientist developed four new materials to be used for making frying pans. He made rods of equal mass and length from each material. He tested their heat conductivity by exposing one end of each rod to the same amount of heat over the same duration of time. He measured the temperature change at the other end of the rod. The data he collected is shown in the table below.

Based on the data collected, select the name of the substance that would make the best frying pan.

	Original Temperature	Final Temperature
Material A	20°C	27°C
Material B	20°C	37°C
Material C	20°C	21°C
Material D	20°C	35°C

**Question 2.**



A hot piece of metal is placed in an airtight chamber. The metal radiates heat to the surrounding air. Which of the following would increase the amount of heat the metal radiates to the air?

- A. increasing the amount of air in the chamber
- B. decreasing the metal's temperature
- C. decreasing the amount of air in the chamber
- D. increasing the metal's temperature

**Question 3.**

Felix has three metal bowls that are the same shape and size. Felix fills each bowl to the top with boiling water. The first bowl holds 2.5 liters, the second bowl holds 1.0 liter, and the third bowl holds 0.75 liters.

Which of the following is true about the cooling rates of the boiling water in the metal bowls?

- A. The water in the 1.0 liter bowl will cool the fastest.
- B. The water in the 2.5 liter bowl will cool the slowest.
- C. The water in all three bowls will cool at the same rate.
- D. The water in the 0.75 liter bowl will cool the slowest.

## Question 4.

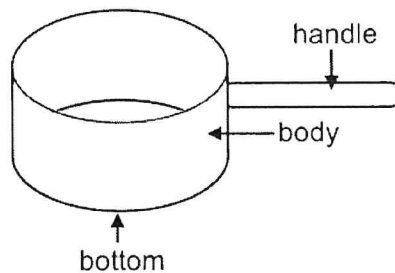
**Directions: Select the correct image.**

Katie wants to boil a pot of water before using it for cooking. She plans to fill the pot halfway to the top and then add heat from a stove. If she wants the water to boil by adding the least amount of heat to it, which pot should she use?

## Question 5.

**Directions: Select the correct answer from each drop-down menu.**

Augustine is designing a cooking pot. A sketch of his design is shown below.



Augustine needs to decide which materials to use.

To make sure his pot cooks food evenly, he should choose a material for the body of the pot that would  heat transfer along the bottom of the pot. To keep from burning his hands, he should choose a material for the handle that would  heat transfer from the body of the pot to its handle. The melting point of  should be high.

**Question 6.**

Container A  
1000 mL  
75°C



Container B  
250 mL  
75°C

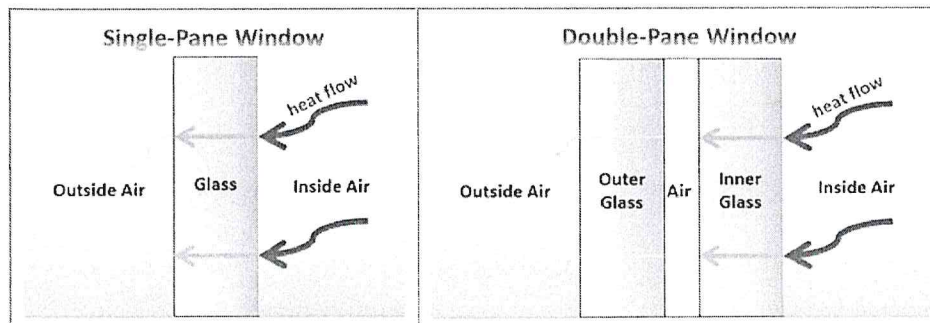
Look at the two containers of water and their starting conditions shown above.

How will the temperatures of the water in the containers compare if an equal amount of heat is absorbed by both containers of water without boiling?

- A. Both water temperatures will increase, but Container B's will increase more.
- B. Both water temperatures will increase, but Container A's will increase more.
- C. Both water temperatures will increase by the same amount.
- D. Both water temperatures will decrease, but Container B's will decrease more.

**Question 7.**

Some windows are made with a single pane of glass. Other windows are made out of two panes that have a tiny pocket of air trapped between them. The two diagrams below show how heat flows from a warm room to the outside air through both types of windows.



How do double-pane windows affect the transfer of heat between the inside and outside air?

- A. They decrease the rate of heat flow to the outside air.
- B. They increase the rate of heat flow to the outside air.
- C. They create a convection current from the inside air to the outside air.
- D. They create a convection current from the outside air to the inside air.

**Question 8.**

Allen wants to make a box to keep foods hot. What material would be best for him to use in his box?

- A. rubber
- B. aluminum foil
- C. glass
- D. stainless steel

## Day 14 Assignments

### **Math**

**Day 14:** Complete the worksheet on Solving Equations.

### **Language Arts**

**Day 14:** Complete the worksheets on Multiple Meaning Words. This assignment will also be available on Study Island.

### **Social Studies**

**Day 14:** Use the notes over Chapter 8 (Section 2) to complete the quiz.

### **Science**

**Day 14:** Complete the worksheets on Engineering Design. This lesson will also be available on Study Island.

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

*Day #14*

## Solve the Equations

Round your answers to the nearest hundredth if needed.

1)  $\frac{v + 29}{-11} = 5$

6)  $-8s + 9 = 4$

2)  $\frac{10 - n}{27} = -28$

7)  $\frac{26 + k}{25} = 18$

3)  $\frac{5}{9}y + 19 = -23$

8)  $\frac{22 + c}{-19} = 28$

4)  $\frac{26 - z}{-9} = -7$

9)  $-7 + 20x = 25$

5)  $\frac{r - 25}{24} = 19$

10)  $-19 + \frac{5}{8}f = -14$





# Multiple Meaning Words

## Question 1 .

Jacob had to read the manual before putting his new bike together.

The word manual in this sentence means

- A. to do by hand.
- B. using human effort.
- C. pertaining to the hands.
- D. set of instructions.

## Question 2 .

The first landing of the Apollo 11 spacecraft on the moon is a signal event in history.

What does signal mean in this sentence?

- A. to communicate
- B. notable or amazing
- C. gesture for attention
- D. loud bell or buzzer

## Question 3 .

The walls of the fortress were not strong enough to block the invading army.

In the sentence above, the word block means

- A. to stop the movement of.
- B. to forget a memory.
- C. a piece of wood or stone.
- D. a length of houses.

## Question 4 .

As soon as it started raining, the kids charged toward the gymnasium to try to stay dry.

Based on its context in the sentence above, what is the meaning of the word charged?

- A. ask a price for goods
- B. moved forward quickly
- C. take control
- D. accuse of doing something wrong

Day 14

## Question 5 .

I told him he needed to season that fish with more herbs.

In the sentence above, the word season means

- A. a period of the year.
- B. a collection of television shows.
- C. to accustom or harden.
- D. to add flavor with spices.

## Question 6 .

**Directions:** Select the correct answer from the drop-down menu.

Read the dictionary entry for the word **depression**.

**depression** /di-'pre-shən, dē-/ *noun*

1. a state of feeling upset or sad
2. a period of low economic activity
3. a hollow space

Which definition of the word correctly completes the sentence?

As the ball hit the ground, it made a \_\_\_\_\_ in the sand.

## Question 7 .

She always seemed to skirt the issue of her bad grades.

What is the best meaning of the underlined word in the sentence above?

- A. a piece of clothing
- B. an outer edge
- C. to avoid
- D. to drive around

## Question 8 .

Because the company was close to bankruptcy, the lost deal was very grave.

What is the meaning of the underlined word in the sentence above?

- A. a stop along a journey
- B. a place of burial
- C. serious
- D. fortunate

**Question 9 .**

Up and down the street, people were peddling different products.

In the sentence above, the word peddling means

- A. carrying for sale.
- B. operating a bicycle.
- C. busying with trifles.
- D. yelling loudly.

**Question 10 .**

The students are ready to present their drama to the class.

Based on its context in the sentence above, what is the meaning of the word present?

- A. give as a gift
- B. happen now
- C. hand out
- D. perform

# Chapter 8

# Day 14 Section 2

8-2

**Main Idea 1:**  
Aristocrats and tyrants ruled early Athens.

- Athens was the city where democracy was born, but it started out as an **oligarchy**- a government in which only a few people hold power.
- A group of rich landowners called **aristocrats** held power.
- As a result of rebels trying to overthrow the aristocrats, harsh laws were created by a man named Draco.
- A man named Solon created a set of laws allowing all free men to be **citizens**- people who had the right to participate in government.
- Peisistratus overthrew the oligarchy, however, and became the ruler of Athens. He was called a **tyrant**-a leader who held power through the use of force. Tyrants were usually good, not harsh, leaders in ancient Greece.

**Main Idea 2:**  
Athens created the world's first democracy.

- A leader named **Cleisthenes** overthrew the aristocracy and established the world's first democracy.
- For this reason, he is considered the father of democracy.

**Democracy under Cleisthenes**

- Under Cleisthenes, all citizens in Athens had the right to participate in the assembly, or gathering of citizens that created the city's laws.
- They needed many citizens to participate and sometimes had to go searching for people to be in the assembly.

**Changes in Athenian Democracy**

- As time passed, citizens got more power, such as serving on juries.
- Athens reached its height under **Pericles**, who encouraged people to take pride in their city.
- He also began to pay people who served in public office or on juries.

**The End of Democracy in Athens**

<ul style="list-style-type: none"><li>• Athens was conquered by the Macedonians and fell under their influence.</li><li>• The king ruled like a dictator. No one could make decisions without his approval.</li></ul>	<ul style="list-style-type: none"><li>• The assembly still met to make laws, but it had to be careful not to upset the king.</li><li>• Eventually, a new king took over and ended Athenian democracy altogether.</li></ul>
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**Main Idea 3:**  
Ancient democracy was different than modern democracy.

<ul style="list-style-type: none"><li>• All citizens in Athens could participate directly in the government, which was called a <b>direct democracy</b>.</li><li>• Each vote counted, and the majority ruled.</li></ul>	<ul style="list-style-type: none"><li>• The United States is too large for direct democracy to work for the whole country.</li><li>• Instead, we have a representative democracy.</li></ul>	<p>In a <b>representative democracy</b>, also called a <b>republic</b>, citizens elect officials to represent them in the government. These officials then make the laws.</p>
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Chapter 8 Section 2  
Government of Athens  
Quiz

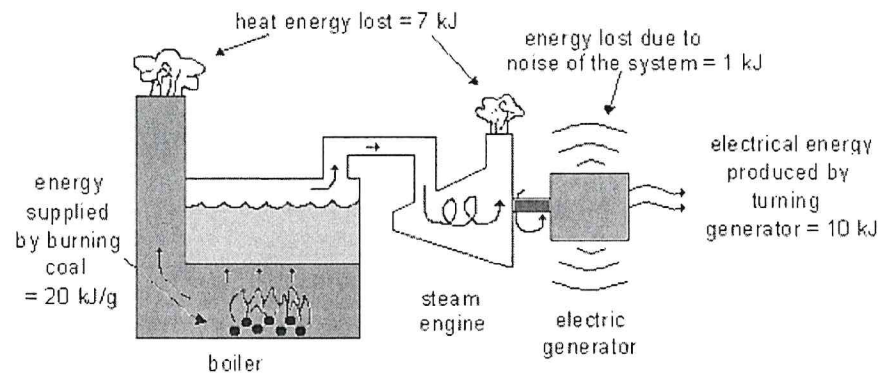
1. What is an oligarchy?
2. What are the rich landowners called?
3. What did it take to be a citizen and what did being a citizen allow the people to do?
4. **Describe** what a tyrant is.
5. Who is the "Father of Democracy" and why did he receive this name?
6. Who is Pericles?
7. What group took over Athens ending the democracy in Athens?
8. What is the difference in a direct democracy and a representative democracy?
9. Who voted on issues in the Athenian democracy?
10. What is another name for a representative democracy?

NTI Day  
14

# Engineering Design

## Question 1 .

The diagram below depicts a coal-fired power plant. The power plant is designed to transform a certain amount of thermal energy (from burning coal) into as much electric energy as possible.

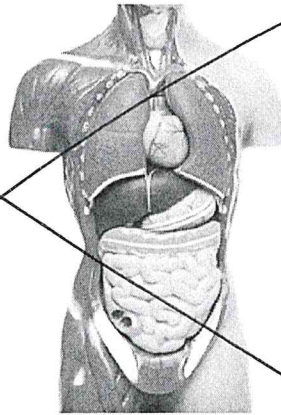


Which of the following would make the system more efficient?

- Decrease the amount of heat leaving through the smoke stack.
- Decrease the amount of electricity produced.
- Increase the amount of coal burned.
- Increase the amount of energy lost in the form of noise.

## Question 2 .

Directions: Select the correct answer from each drop-down menu.



The object shown above is \_\_\_\_\_ that shows the spatial relationship of \_\_\_\_\_ to one another.

**Question 3 .**

**Directions: Select each correct image. More than one image may be correct.**

Three experimental setups are shown below. Which of the devices shown could be used to increase the gravitational potential energy of the toy boat when a downward force is applied?

**Question 4 .**

A group of students were instructed to design a box-shaped container to keep food warm. Each student made their container using wood, plastic, or iron of varying thickness. They placed the same amount and type of food (with an initial temperature of 60°C) in each container. They recorded the temperature of the food after 20 minutes. The details of their designs and the final temperatures of the food in each container are shown in the table below.

Student Name	Initial Temperature of the Food	Material Used	Thickness of the Box	Final Temperature of the Food
David	60°C	Plastic	15 mm	55°C
Emma	60°C	Wood	10 mm	53°C
Rachel	60°C	Iron	10 mm	43°C
Brian	60°C	Plastic	10 mm	50°C
Marie	60°C	Iron	5 mm	39°C
Joe	60°C	Wood	5 mm	48°C

The students plan to use these results in order to create a better container. Which of the following containers would best prevent the transfer of thermal energy?

- A. a wooden container that has a thickness of 15 mm
- B. an iron container that has a thickness of 15 mm
- C. a plastic container that has a thickness of 5 mm
- D. a plastic container that has a thickness of 15 mm

**Question 3.**

Cathy is designing a welding machine that can be used to weld thin sheets of steel. The machine uses electricity to heat a thin piece of wire. When the wire touches a metal surface, it melts. The melted wire can be used to bond two pieces of steel together.

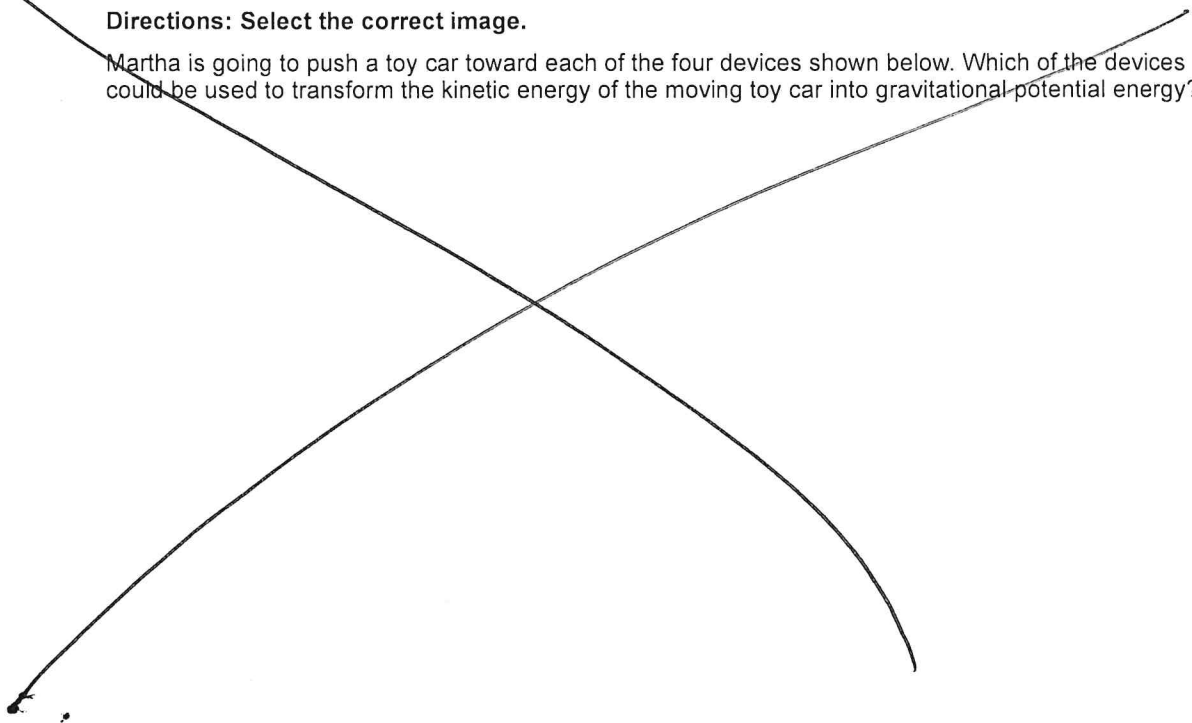
One problem Cathy has with her machine is that oxygen mixes with the melted wire, causing it to rust quickly. Which of the following is the best way for Cathy to fix this design problem?

- A. Use a piece of cloth string instead of a piece of wire.
- B. Remove all oxygen from inside the building.
- C. Shield the wire from oxygen.
- D. Make the steel from wood.

**Question 6 .**

**Directions: Select the correct image.**

Martha is going to push a toy car toward each of the four devices shown below. Which of the devices could be used to transform the kinetic energy of the moving toy car into gravitational potential energy?





**Question 4.**

Science and technology often develop simultaneously. That is, scientific discoveries often lead to the development of new technology, and technological devices allow new scientific discoveries to be made.

What technological design allowed scientists to determine differences in the internal structures of plant and animal cells?

- A. barometers
- B. microscopes
- C. seismographs
- D. telescopes

**Question 5.**

Cancer is a disease in which abnormal cells divide at an uncontrollable rate. Over time, many different techniques have been used in an attempt to answer the following scientific question, "How can cancerous tumors be killed in a way that causes the least amount of damage to the patient's normal tissues and cells?"

- In 1600 BC, Egyptians tried to kill tumors using a "fire drill."
- In the 1000s, Persian doctors tried to kill tumors using chemicals, such as arsenic. Over time, new chemicals have been synthesized, and this technique is still being used in cancer treatment today.
- In the 1700s, European doctors tried to surgically remove tumors, but this technique did not become effective until later when antiseptics and anesthesia were invented. The invention of laser technology and surgery in the 1900s also greatly improved the effectiveness of this form of treatment.
- In the late 1800s and early 1900s, French doctors began using radiation therapy. This technique, which is also still being used today, has been improved with the invention of CT and MRI scanners and better particle accelerators which help doctors to more clearly identify the location of tumors and focus the radiation on the tumor itself rather than on adjacent tissue.

The above example shows how

- A. certain scientific questions can be answered through the invention of new technological designs.
- B. it is impossible to answer any scientific questions.
- C. all scientific questions can only be answered through controlled scientific experiments.
- D. all of these

## Question 6.

The students in Mrs. Peterson's class each designed a simple electric motor using a permanent magnet and an electromagnet made up of a coil of wire wrapped around an iron core. Each motor was connected to the same voltage source, and the number of turns the motor made in 5 seconds was counted. The table below describes each student's motor.

Electric Motor Designs

Student Name	Number of Turns in Electromagnet's Wire Coil	Material of Wire Coil	Thickness of Wire Used in Coil	Rate at Which the Motor Spins
Lupe	15	copper	0.4 mm	17 turns in 5 seconds
Sanjay	5	aluminum	0.4 mm	4 turns in 5 seconds
Oliver	5	copper	1.2 mm	21 turns in 5 seconds
Rebekah	15	aluminum	1.2 mm	11 turns in 5 seconds
Felipe	15	aluminum	0.4 mm	7 turns in 5 seconds

Based on the data collected, the students are going to design a new motor that incorporates the best parts of each individual motor. Which of the following would most likely have the fastest rate of rotation?

- A. a motor made with 1.2 mm aluminum wire wrapped 5 times around the iron core
- B. a motor made with 0.4 mm aluminum wire wrapped 15 times around the iron core
- C. a motor made with 0.4 mm copper wire wrapped 5 times around the iron core
- D. a motor made with 1.2 mm copper wire wrapped 15 times around the iron core

## Question 7.

What do engineers use to test their designs of new technologies?

- A. reference materials
- B. pie charts
- C. models
- D. polls

## Day 15 Assignments

### **Math**

**Day 15:** Complete the worksheet Simplifying Algebraic Expressions.

### **Language Arts**

**Day 15:** Complete the worksheets Figurative Meanings in Informational Texts. This assignment will also be available on Study Island.

### **Social Studies**

**Day 15:** Use the notes over Chapter 8 (Section 3) to complete the quiz.

### **Science**

**Day 15:** Complete the worksheets over Organism Reproduction & Growth. This assignment will also be available on Study Island.

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

*Day # 15*

### Simplifying Algebraic Expressions

1)  $-9(5x - 7) + 6$

6)  $-4(-3c - 9)$

2)  $4y - y$

7)  $-3(7q + 5) - 4q$

3)  $9x - 6x + 8$

8)  $6z - 4 - 9z - 7$

4)  $7 - 4x + 5 + 9x$

9)  $5 + 7h - 2h$

5)  $h + 9h$

10)  $-4(3 - 2d)$



Day 15

Day 15

# Figurative Meanings in Informational Texts

## Question 1 .

### Ponce de León Inlet Lighthouse

The Ponce De León Inlet Lighthouse is located in Ponce Inlet, Florida, a small town near the sea. Situated directly on the east coast of Florida, Mosquito Inlet, as it is affectionately called, is a functioning lighthouse and museum open to the public. The lighthouse is littered with archaeological artifacts, like England's Stonehenge, that date back to the 14th century.

One of the best adventurous tales ever to be born out of an experience near Ponce (Mosquito) Inlet is the short story "The Open Boat" by Stephen Crane. In the story, Crane describes his experience at sea: "At the top of another wave the correspondent did as he was bid, and this time his eyes chanced on a small, still thing on the edge of the swaying horizon . . . It would took an anxious eye to find a lighthouse so tiny."

Crane had been traveling undercover as a correspondent for the *New York Press*. He traveled under the pseudonym "Samuel Carleton," on a steam tug named the *Commodore*. The *Commodore* set sail from Jacksonville, Florida, on December 31, 1896. The steam tug was loaded with arms, ammunition, and supplies, bound for Cuba. The ship encountered trouble. The passengers' famous rescue was not performed by a person but by the lighthouse and its burning light.

Lighthouses at the time were often manned by keepers who had the responsibility of keeping kerosene oil lights burning. These keepers were unable to leave their posts, like Queen's Guards in front of Buckingham Palace. Unfortunately, keepers were often required to remain at their posts and look on as ships hoped for rescue.

Today, much has changed, and the lighthouses that are speckled throughout coastal cities are unmanned. Lighthouses now have Fresnel lenses that emit steady, fixed lights, which rotate and flash like strobe lights. Many of these lighthouses are open to the public, but some remain as simple fixtures of historical significance throughout the United States.

Read the sentence from paragraph 5.

Lighthouses now have Fresnel lenses that emit steady, fixed lights, which rotate and flash like strobe lights.

Based on the context, which **two** words **best** describe what kind of light strobe lights create?

- foggy
- intense
- white
- soft
- bright

## Question 2 .

The crusts left in sandwich bags are valuable gems when it comes to composting. Composting is a way to quickly recycle organic material, including some types of leftover food, and turn it into a nutrient-rich fertilizer for gardens. And, just as important, it also reduces the amount of trash that goes into landfills.

Based on the context, what does the metaphor "The crusts left in sandwich bags are valuable gems" suggest?

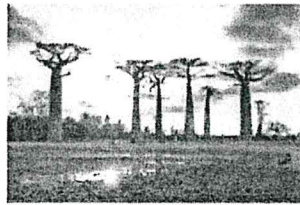
- A. Composting turns old, leftover food into valuable jewels.
- B. The crusts should not be thrown out because they can be used for composting.
- C. Composting should only be used to recycle important food items like bread products.
- D. The crusts left in sandwich bags should be thrown out.

**Question 3 .**

The ocean is divided into five layers, or zones. Beginning in the second zone, light gradually ceases to exist as the water gets deeper, like a shade being pulled down on a window. Yet, even with this lack of light, the sea animals have adapted to their surroundings. For example, the eyes on fish living in the second layer, or the Mesopelagic Zone, tend to be larger and directed upward to help them see outlines of other sea animals in their search for food.

Based on the context, what does the phrase "like a shade being pulled down on a window" suggest?

- A. Light gradually increases as the water gets deeper in the ocean.
- B. The amount of light in the different zones of the ocean depends on how much light is let in from the window at the top zone.
- C. The light from above disappears little by little as the water gets deeper.
- D. There is a shade on the second layer of the ocean that blocks the light from above and makes it difficult for fish to see.

**Question 4 .**

**Madagascar**

Madagascar is an exceptional island country in the Indian Ocean. It is located just off the coast of Africa and has a population of about 23 million people. The island of Madagascar broke away from Africa 165 million years ago, and its isolation makes much of its plant and animal life unique to the island. Madagascar is the fourth largest island in the world and is known for its incredibly distinctive ecosystem, a complex community of plants and animals.

Several of the original animals that reside on Madagascar are extinct, such as giant flightless birds and dwarf hippos, but there remains a bounty of exceptional wildlife throughout the island. For example, the lemur is only found in the wild on the island of Madagascar, and about half of the world's chameleon species are also found on Madagascar. Madagascar has the third largest coral reef in the world, teeming with extraordinary wildlife.

It's not just the animal life that makes the island so special; it is also home to an abundance of plants. More than 10,000 species of plants have been identified on the island. However, due to the island's growing population of people, several of the plant species are endangered. Many of the plants, like the Madagascar Periwinkle, are known for their herbal remedies and healing properties; others, like the Baobab Tree, are seen as sacred.

Many of the plants and animals found on the island are as colorful as a rainbow, and truly create a lush, vibrant country. From its inception to its incredible animal and plant life, Madagascar remains one of the planet's special treasures.

Based on the context, what does the phrase "Madagascar remains one of the planet's special treasures" in the last paragraph mean?

- A. Madagascar is a rare and precious place on planet Earth.
- B. Madagascar is the fourth largest island in the world
- C. Madagascar used to be buried, but was uncovered a few years ago.
- D. Madagascar is known for its large amounts of diamonds.

**Question 5 .**

The Venus flytrap, smiling dishonestly, anxiously awaits its next meal, which might be an unsuspecting fly.

What does the personification in the sentence suggest about the Venus flytrap?

- A. Its human features will help it catch flies for its next meal.
- B. It is smiling because it knows dinner is on the way.
- C. It is anxious like a hungry person waiting for food.
- D. It lures its prey in with a smile that seems inviting but is not.

**Question 6 .**

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What does the phrase "as colorful as a rainbow" in the last paragraph suggest about the plants and animals on Madagascar?

- A. Madagascar is most popular for the healing powers of the Baobab Tree.
- B. Madagascar is mostly green and locals wish there were other bright colors.
- C. The plants and animals on Madagascar come in many different colors.
- D. Due to large amounts of rain, rainbows can always be seen on Madagascar.

**Question 7 .**

Which **two** words or phrases **best** help the reader understand the meaning of the word artifacts?

**Ponce de León Inlet Lighthouse**

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**Question 8 .**

The Grand Canyon, which is one of the world's largest canyons and more than a mile deep, is a bottomless pit.

Based on the context, how does the phrase "is a bottomless pit" emphasize the features of the Grand Canyon?

- A. It suggests that the canyon is rocky.
- B. It tells exactly what the canyon looks like inside.
- C. It points out the canyon's great depth.
- D. It states that the canyon's depth is not known.



**Question 9 .**

People should take information from some websites with a grain of salt because many of them do not contain accurate information.

Based on the context, what does "take information from some websites with a grain of salt" mean in the sentence?

- A. Websites are never accurate.
- B. Websites about salt contain information that cannot be trusted.
- C. People should not look up websites about grains of salt.
- D. Not all websites can be trusted.

**Question 10 .**

Freshly made meringue cookies from bakeries look like soft, billowy clouds on a plate.

Why are the cookies compared to clouds in the sentence?

- A. to show that they are small clouds
- B. to show that they are really called cloud cookies
- C. to show that they taste like clouds
- D. to show that they are white and fluffy like clouds

## Chapter 8 Section 3 Greek Mythology and Literature

### The Big Idea

The ancient Greeks created great myths and works of literature that influence the way we speak and write today.

### Main Ideas

- The Greeks created myths to explain the world.
- Ancient Greek literature provides some of the world's greatest poems and stories.
- Greek literature lives on and influences our world even today.

### Main Idea 1:

The Greeks created myths to explain the world.

- Instead of scientific explanations, the Greeks used **mythology** to explain things.
- **Mythology** - a body of stories about gods and heroes that try to explain how the world works.
- They believed gods caused things like volcanic eruptions and the changing seasons.
- To keep the gods happy, they built great temples.

## Heroes in Mythology

- Many Greek myths told about the adventures of great heroes.
- Some heroes were real, while others were not.
- Some of the major heroes were Theseus, Jason, and Hercules.
  - Theseus traveled to Crete and killed the minotaur, a half-human, half-bull monster.
  - Jason sailed across the seas in search of great treasure.
  - Hercules was the most famous hero. He fought many monsters and performed nearly impossible tasks.

### Main Idea 2:

Ancient Greek literature provides some of the world's greatest

- Among the earliest Greek writings are two epic poems, the *Iliad* and the *Odyssey* by **Homer**.
- The *Iliad* tells the story of the last years of the Trojan War.
- The *Odyssey* describes the challenges that Odysseus faced on his way home from the war.
- These poems were central to the education system and influenced later writing as well.

## Lyric Poetry and Fables

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>• Some poems were set to music.</li> <li>• The writers of these poems were called lyric poets, after their instrument, the lyre.</li> </ul> | <ul style="list-style-type: none"> <li>• The most famous lyric poet was a woman named <b>Sappho</b>.</li> <li>• They spoke of love and relationships with her friends and family.</li> </ul> | <ul style="list-style-type: none"> <li>• Other Greeks told short stories that taught the reader lessons about life or gave advice on how to live. These stories were called <b>fables</b>.</li> <li>• <b>Aesop</b> is famous for fables such as "The Tortoise and the Hare" and "The Boy Who Cried Wolf."</li> </ul> |
|--|--|--|

### Main Idea 3:

Greek literature lives on and influences our world even today

- The most obvious way we see the influence of the Greeks is in our **language**.
- Many English words and expressions come from **mythology**, such as "odyssey" and "titanic."
- Greek myths have inspired artists and writers for centuries.
- **Moviemakers** have borrowed some of these stories.
- Mythological references are also common among names of **sports teams**.

Day 15

**Chapter 8 Section 3**  
**Greek Mythology and Literature**

1. What did the Greeks use to explain things?
2. What does mythology mean?
3. Who was the “main Greek God?”
4. What type of religion were the Greeks?
5. Name three of the Greek heroes. Tell what each of them did.
6. Who is Homer? What two poems did he write?
7. How did the Greeks use the two poems?
8. What was the purpose of the fables that many Greeks told?
9. Who is Aesop?
10. List 3 ways we use Greek Mythology and Literature today.

NTI Day  
15

# Organism Reproduction & Growth

## Question 1 .

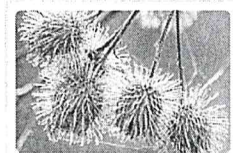
**Directions:** Drag the tiles to the correct boxes to complete the pairs.

Many plants have specialized structures that allow them to spread their seeds over a wide area. Examples of three different structures are shown in the images below. Match each method of seed dispersal to the plant structure that makes it possible.

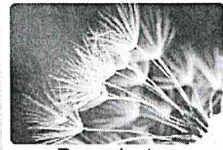
eaten and excreted as waste in a new location

uplifted and carried by wind to a new location

tangled in animal fur and carried to a new location



Burs



Parachutes



Fruits



## Question 2 .

**Directions:** Select ALL the correct answers.

Which of the following could be evidence that an organism's growth is influenced by the organism's environment?

Two different kinds of grass are grown in neighboring yards. One yard has to be mowed much more often than the other.

The average height of an oak tree in northern Texas is much less than the average height of the same kind of oak tree in northern Indiana.

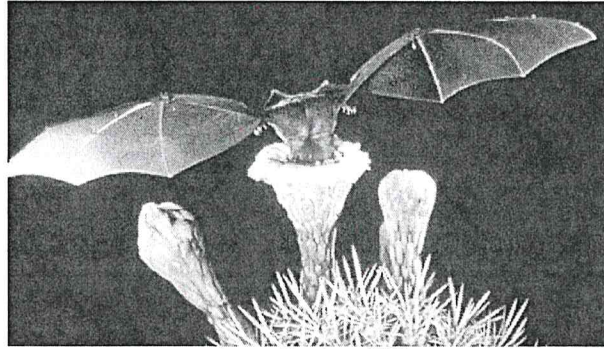
Plants grow taller and more quickly when given the right amount of light and water.

A breed of cattle can be made larger by breeding together only the largest cows and bulls.

**Question 3 .**

**Directions: Select each correct answer. More than one answer may be correct.**

The photograph below shows a lesser long-nosed bat, a mammal that is active only at night, feeding from the flower of a saguaro cactus. The lesser long-nosed bat is considered a pollinator because it carries pollen from flower to flower as it feeds on nectar.



*Image Courtesy NPS*

Five characteristics of the saguaro cactus are listed below. Which of these characteristics is likely to make the saguaro cactus specially adapted for pollination by the lesser long-nosed bat?

- The saguaro's flowers are typically located high off the ground.
- The saguaro cactus has a waxy coating to prevent water loss.
- The saguaro cactus is found only in the Sonoran desert.
- The saguaro's flowers produce a sweet nectar.
- The saguaro's flowers open at night and close during the day.

**Question 4 .**

A scientist did an investigation on the growth of koi fish. He selected forty newly hatched koi from the same clutch of eggs. He separated the koi into four groups and placed each group in a different sized pond. None of the ponds had any predators that would eat the koi fish. The amount of food available to the koi and the water quality of each pond differed based on the size of the pond. Larger ponds had more food available and better water quality as the fish grew.

After 15 months, the scientist measured the length of each koi fish. Using these measurements, he came up with an average koi size for each pond.

**Effect of Pond Size on Koi Fish Growth**

Size of Pond	Average Length of Koi
500 gallons	18.2 centimeters
1000 gallons	25.6 centimeters
2500 gallons	30.8 centimeters
5000 gallons	35.3 centimeters

Based on the scientist's results, which of the following is true?

- A. Koi fish grow fastest in ponds with poor water quality.
- B. The growth of koi fish is affected by the environment of the fish.
- C. Koi fish grow fastest in ponds with a high population density.
- D. The growth of koi fish is determined entirely by genetics.

**Question 5 .**

For a school science experiment, Sam took three jars of equal sizes and filled them with equal amounts of nutrient-rich soil. From a bag of mustard seeds, he sowed 10 seeds in Jar A, 20 seeds in Jar B, and 40 seeds in Jar C. All three jars were given the same amount of water and exposed to the same amount of sunlight daily.

The growth of the mustard plants was monitored for three weeks, and the following measurements were recorded at the end of each week.

	JAR A	JAR B	JAR C
<b>Week 1</b>	4 cm	3.2 cm	3 cm
<b>Week 2</b>	8.5 cm	6.6 cm	5.8 cm
<b>Week 3</b>	14 cm	10.2 cm	8.6 cm

What can Sam conclude from the recorded data?

- A. The growth rate of mustard plants is affected by the number of seeds planted in a particular area.
- B. The growth rate of mustard plants remains constant as the plants grow from seeds.
- C. The growth rate of mustard plants is controlled completely by the seeds' genes.
- D. The growth rate of mustard plants does not depend on the environment in which the seeds are grown.

**Question 6 .**

Female African elephants live in family groups that can include many adult members. Large predators will often try to isolate one elephant from the rest of the herd because it is easier for the predator to fight and kill a single elephant.

When offspring are young, they typically travel in the middle of a herd, positioned among multiple adult elephants.

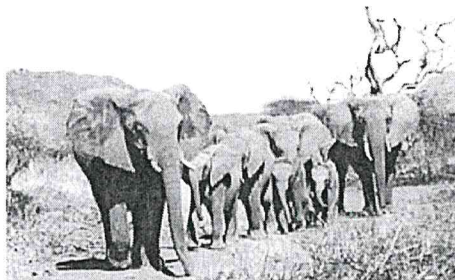


Image courtesy of US Fish & Wildlife Service

Which of the following is most likely the result of adult elephants positioning their young in the middle of the herd?

- A. This behavior ensures that younger elephants are killed first by predators.
- B. This behavior helps adult elephants protect their offspring from predators.
- C. This behavior attracts the attention of predators from far away.
- D. This behavior helps adult elephants protect themselves from predators.

**Question 7 .**

Malnutrition occurs when what someone needs to eat is very different from what they actually eat. The usual way of measuring malnutrition is to look at three different ratios:

- how tall someone is compared to how much they weigh
- how tall someone is for their age
- how much someone weighs for their age

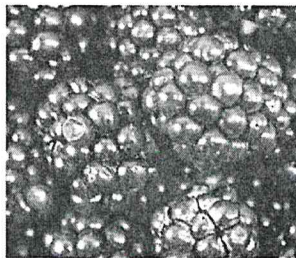
A malnourished person is usually too thin compared to their height and is neither tall enough nor heavy enough for their age. If they are given enough food, they may gain weight rapidly until their height/weight ratio becomes a healthy one.

If Radhika does not get enough food for the first five years of her life, how would that malnourishment most likely affect her growth?

- A.** She will grow up to be shorter than she otherwise would have been.
- B.** She will grow more slowly than she otherwise would have, but she will reach the same height.
- C.** She will always be too thin for her height.
- D.** She will stop growing at a later age than she otherwise would have.

**Question 8 .**

Blackberry plants have small hard seeds that are covered by a thick, fleshy fruit.



Many kinds of animals eat blackberries. Which of the following will most likely happen to the seeds of a blackberry plant after the fruit is eaten by an animal?

- A.** The seeds will begin to grow inside the intestine of the animal.
- B.** The seeds will be deposited in the animal's waste so that they can grow into a new blackberry plant.
- C.** The seeds will be ruined by the animal and will no longer be able to grow into a new blackberry plant.
- D.** The seeds will change shape and become a new species of plant.

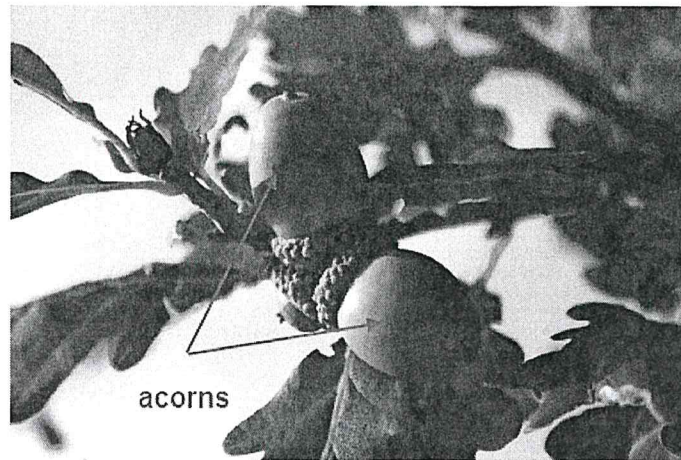
**Question 9 .**

Fish eggs are a source of food for many ocean animals. Which of the following are fish most likely to do to ensure that some eggs survive long enough to hatch?

- A.** They lay hundreds of eggs.
- B.** They stop laying eggs.
- C.** They start laying larger eggs.
- D.** They lay one egg each season.

**Question 10 .**

Oaks are dominant trees in some temperate deciduous forests. The seeds of oak trees are enclosed within fruits called *acorns*. Squirrels and other forest animals often bury acorns to save them for the winter, but do not end up eating all of them.



How do the activities of squirrels affect oak trees?

- A. By removing acorns, their behavior causes harm to the trees.
- B. They help the trees reproduce more successfully.
- C. They make it more difficult for the tree to reproduce.
- D. They cause the trees to produce acorns during the winter.



## Day 16 Assignments

### **Math**

**Day 16:** Complete the worksheet over Simplifying Algebraic Expressions.

### **Language Arts**

**Day 16:** Complete the worksheets on Context Clues in Informational Texts. This assignment will also be available on Study Island.

### **Social Studies**

**Day 16:** Use the notes over Chapter 3 (Sections 2 and 3) to complete the quiz.

### **Science**

**Day 16:** Complete the worksheets on Energy. This assignment will also be available on Flocabulary.

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

*Day 16*

---

**Simplifying Algebraic Expressions**

1)  $-13 - 16(12k + 11)$

6)  $-12(15 + 14s)$

2)  $-12(-16 - 18z)$

7)  $18(-17z + 12) - 11$

3)  $10g - 18(-16 + 12g)$

8)  $14n + 19(-18n - 10)$

4)  $17(-13x + 16)$

9)  $14(-17 + 15m) - 10$

5)  $-18(13 + 14s)$

10)  $13(-17h + 19)$



# Context Clues in Informational Texts

## Question 1 .

Alfred Nobel invented dynamite. He was, however, a pacifist who felt bad about the destructive power that he created. He established the Nobel Prize as an award for outstanding achievement in physics, chemistry, medicine, peace, literature, and economics.

Looking at the context, what is the definition of pacifist?

- A. a cruel, violent person
- B. a very famous scientist
- C. an inventor of explosives
- D. a person against violence

## Question 2 .

Among the things that the Internet has changed is the newspaper. Fifteen years ago, traditional newspapers could be found on most people's desks. Who knew that the popularity of broadsheets like the *New York Times* was about to flatline?

Fifteen years ago, those broadsheets did not have to compete with countless free Internet news sources. Even if there were such sources, readers probably wouldn't have used them. They had grown used to getting information from their daily newspapers.

The same cannot be said for those who've entered the workforce in the last fifteen years. They have grown used to getting information from the Internet. Those who do read newspapers rarely read the broadsheets that their parents favor. They are more likely to pick up a free alternative newspaper in a coffee shop than pay for a daily newspaper. A daily newspaper seems practically prehistoric.



However, alternative newspapers have gained and lost popularity for as long as there have been newspapers. Some newspaper publishers see the current popularity of nontraditional news sources as part of the same trend. Others see the popularity of nontraditional news sources as the end of broadsheets. Both sides will discuss their ideas this week in Chicago. There, they will convene at a meeting for newspaper publishers.

Read the following sentence from the passage.

Who knew that the popularity of broadsheets like the *New York Times* was about to flatline?

What does the word flatline mean?

- A. to grow
- B. to move forward
- C. to start over
- D. to end

**Question 3 .****Hometown Hero**  
by Alana Williamson

Larry Holmes used his boxing dream to improve his life and the lives of those around him. He was born in 1949 and grew up in the small town of Easton, Pennsylvania. He often got in trouble for fighting when he was young. At age 13, Holmes quit school to help earn money for his large family.

At age 19, Holmes decided to start a career in boxing. He soon became a sparring partner to Joe Frazier and Muhammad Ali. These famous boxers paid Holmes so that they could gently practice their boxing moves on him before their big fights. Holmes became famous when he won a heavyweight boxing title at the age of 22.

Holmes continued to train hard and became one of the most successful boxers of all time. His fierce left jab was his best move. Holmes used this quick move to win many fights over several years. In 1980, Muhammad Ali tried to take Holmes' heavyweight title. Holmes beat his former boss and many other challengers. In fact, he fought 48 matches in a row without losing a single one.

Holmes tried to put the money that he earned from boxing to good use. For him, that meant helping his hometown. Starting with his first boxing paycheck, Holmes spent money improving Easton. His businesses provided jobs to hundreds of his neighbors. For all of his community efforts, his old high school awarded him an honorary diploma.

**Directions: Select all the correct answers.**

Which **two** phases from the passage help the reader understand the meaning of the word honorary?

- first boxing paycheck
- awarded him
- heavyweight champion
- his community efforts
- fought 48 matches

**Question 4 .**

Invasive plants and animals are harmful to natural environments because they compete for the same food, water, and shelter used by the native species.

In the sentence, what is the meaning of compete?

- A. to battle or challenge
- B. to share or help
- C. to lose or give in
- D. to win or conquer

## Question 5 .

**Save the Planet**

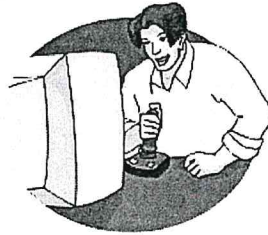
Over the past few years, the depletion<sup>1</sup> of the ozone layer has become a major concern. The ozone layer is a belt of ozone gas that is situated above the troposphere—a layer in our atmosphere. The ozone layer is very useful as it acts as a barrier between the Earth and the Sun. It stops the Sun's harmful ultraviolet B (UVB) rays from reaching the Earth. One of the primary reasons for the continuous ozone depletion is the excessive use of chlorofluorocarbon (CFC) gases. Chlorofluorocarbon gases are usually used in air conditioners, refrigerators, and various sprays used by companies that produce pesticides. The chemical elements from these gases react with the oxygen in the atmosphere and rip the ozone molecules apart. This creates holes in the ozone layer, which let the Sun's harmful UVB rays reach the surface of the Earth. These UVB rays affect humans and their health, causing various skin diseases. Along with human life, the UVB rays also affect the environment and other living organisms. Even the soil loses its minerals and becomes arid. If the ozone depletion is not checked, many animals and plants might be on the brink of dying out completely.

1. reduce to a great extent

In the passage, what is the meaning of the word brink?

- A. tip
- B. center
- C. line
- D. rate

## Question 6 .



The video game was supposed to be a diversion. I was just going to play for a few minutes. You know, waste a little time. Instead, I played for hours. When I say "hours," I'm not just exaggerating the amount of time I spent playing. I spent so much time playing it that, over my Thanksgiving break, I slept only four hours and missed Thanksgiving dinner. I did, however, beat the game. When it was over, my accomplishment had earned me little more than a headache and a bad case of insomnia. I felt foolish, so I immediately started playing another game.

Read the following sentence from the passage.

The video game was supposed to be a diversion.

What does the word diversion mean?

- A. distraction
- B. lifestyle
- C. contest
- D. disguise

**Question 7 .**

Built toward the end of the sixteenth century, Globe was the most popular theater of the time. William Shakespeare's association with the Globe Theater added to its popularity. It was just as well that this huge theater could accommodate the multitudes because the use of special effects attracted many curious people, both young and old.

What is the meaning of the word multitudes in the passage?

- A. large number of people
- B. limited number of things
- C. limited number of people
- D. large number of things

**Question 8 .**

Students in science classes sometimes test the buoyancy of different objects to see if they will stay above the water.

In the sentence, what is the definition of buoyancy?

- A. cause of sinking
- B. boat shape
- C. ability to float
- D. extra weight

**Question 9 .**

**Directions: Select the correct text in the passage.**

Which **two** words and/or phrases help the reader understand the meaning of the word dispatched?

**Roaches to the Rescue**

Scientists have found a way to use a cockroach as a rescue worker. Scientists insert wires into a roach's antennae and into its rear sensors, which are called cerci. The scientists also attach a wireless control system to the roach's back. Then the scientists use electrical pulses to steer the roach. A microphone, a camera, or any type of small sensor can be attached to the roach. The roach can then be dispatched into hard-to-reach areas. For example, the roach could be sent into disaster sites. The equipment on the traveling roach could detect signs of life from survivors. The person controlling the roach can use the information to guide human rescue workers to the trapped victims.

## Question 10 .

**Save the Planet**

Over the past few years, the depletion<sup>1</sup> of the ozone layer has become a major concern. The ozone layer is a belt of ozone gas that is situated above the troposphere—a layer in our atmosphere. The ozone layer is very useful as it acts as a barrier between the Earth and the Sun. It stops the Sun's harmful ultraviolet B (UVB) rays from reaching the Earth. One of the primary reasons for the continuous ozone depletion is the excessive use of chlorofluorocarbon (CFC) gases. Chlorofluorocarbon gases are usually used in air conditioners, refrigerators, and various sprays used by companies that produce pesticides. The chemical elements from these gases react with the oxygen in the atmosphere and rip the ozone molecules apart. This creates holes in the ozone layer, which let the Sun's harmful UVB rays reach the surface of the Earth. These UVB rays affect humans and their health, causing various skin diseases. Along with human life, the UVB rays also affect the environment and other living organisms. Even the soil loses its minerals and becomes arid. If the ozone depletion is not checked, many animals and plants might be on the brink of dying out completely.

1. reduce to a great extent

In the passage, what is the meaning of the word arid?

- A. watery and colorless
- B. lumpy and moist
- C. fertile and firm
- D. dry and moistureless

### Chapter 3 Section 2 The Rise of Sumer

#### The Big Idea

The Sumerians developed the first civilization in Mesopotamia.

#### Main Ideas

- The Sumerians created the world's first advanced society.
- Religion played a major role in Sumerian society.

#### Main Idea 1: The Sumerians created the world's first advanced society.

- Created basic political units called **city-states**
- Had strong armies
- Built walled cities for protection

#### City-States

- **City State**- a city and all the countryside surrounding it
- The amount of countryside in each city-state depended on its military strength.

#### Main Idea 2: Religion played a major role in Sumerian society.

- Sumerian **polytheism** was the basis for all Sumerian society.
  - **Polytheism**- the worship of many gods.
- Gods had enormous powers.

#### Sumerian Social Order

- **Social Order**: the division of society by rank or class
- Kings were at the top of the order because they claimed to be chosen to rule by the gods.
- **Social order**
  - Kings
  - Priests
  - Skilled craftspeople, merchants, and traders
  - Large working class of farmers and laborers
  - Slaves



Day 16

### Chapter 3 Section 3 Sumerian Achievements

#### The Big Idea

The Sumerians made many advances that helped their society develop.

#### Main Ideas

- The Sumerians invented the world's first writing system.
- Advances and inventions changed Sumerian lives.
- Many types of art developed in Sumer.

### Main Idea 1: The Sumerians invented the world's first writing system.

- The cuneiform system involved the use of sharp tools called styluses.
- Cuneiform- World's first ever writing system created by the Sumerians
- The Sumerians first used cuneiform to keep business records.
- The Sumerians wrote on clay tablets with a stylus.
- Scribes- Kept track of items people traded and wrote down government records

### Main Idea 2: Advances and inventions changed Sumerian lives.

- Development of the wheel
  - Used for carts and wagons
  - Potter's wheel
- The plow increased farm production
- Invented the first Calendar.

### Main Idea 3: Many types of art developed in Sumer.

#### Architecture

- Rulers lived in large palaces.
- Most Sumerians lived in houses with many rooms around a small courtyard.
- First Multi Story Houses.
- Mud bricks were the houses' main building blocks.
- Ziggurat- A pyramid-shaped temple tower that was used to honor the Gods.

**Chapter 3 Section 2 and 3**  
**Quiz**

1. Who developed the first ever civilization? Where did they develop the civilization at?
2. What did a city-state consist of? What determined the size of the city-states?
3. What is Polytheism?
4. What is a Social Order? Why are the kings on top of the social order?
5. What is cuneiform and who invented cuneiform?
6. What did the Sumerians use cuneiform for?
7. What were the scribes responsible for?
8. List 3 inventions of the Sumerians. Briefly explain how each of the inventions helped the Sumerians life.
9. What are ziggurats?
10. What did most Sumerians live in?

Name \_\_\_\_\_

Date \_\_\_\_\_

# Energy

NTI Day  
16

Use the text to answer each question below.

1. Energy is the ability to do work, and to do work means to move something. Every time you or any of your cells move (which is all the time), you are using energy. Humans get all of our energy from eating things. Plants get their energy from the sun. In fact, nearly all the energy on our planet comes from the sun.

Because the sun is a giant fusion reactor, it constantly bombards Earth with energy, which is transferred, stored and used in many ways. Energy conversion is the transfer of energy from one form to another. For example, chemical energy is stored in the cells of green plants through a process called photosynthesis. This chemical energy started as solar energy, which was converted through a chemical process. The light energy breaks down the chemical bonds in carbon dioxide molecules and converts them to oxygen and carbohydrates (molecules of hydrogen and carbon). When you eat something, the muscles in your body use this stored chemical energy from the sun by splitting the carbohydrate molecules to gain their stored, potential energy.

Most of the energy on Earth comes from

- |                    |                   |
|--------------------|-------------------|
| A. chemicals.      | B. the sun.       |
| C. photosynthesis. | D. carbohydrates. |

2. According to the law of conservation of energy, energy can't be created or destroyed, just used and converted into different forms. The amount of energy in a system does not change. For example, when a creature dies, the chemical energy in its muscles and blood becomes nutrients that feed the earth. But we are not able to use all of the energy we receive. For example, some energy is wasted as friction between the moving parts of machines; some energy may be converted into thermal energy and radiated into the air, which we can't use. Today, we are faced with the problem of finding the best sources of energy for us to use with the least amount of waste.

We divide our energy resources into two categories: renewable and nonrenewable. Nonrenewable energy resources are those that we can't easily replace. For example, that chemical energy from plants stored as petroleum, natural gas or coal is called fossil fuels. As their name implies, fossil fuels took millions of years to produce; they're nonrenewable because we can't wait millions of years to produce more.

It is important to be careful when using nonrenewable resources because

- |   |  |
|---|--|
| A. there is a limited supply of them and we can't make any more.            | B. harnessing their energy is a very dangerous process.                            |
| C. they are more likely to produce excess thermal energy that we can't use. | D. there is a possibility of finding dinosaur bones in petroleum or coal deposits. |

3. Renewable energy resources are those that can be replaced in a short time. Solar energy and wind energy, for instance, are renewed constantly by the sun and wind. Solar energy can be collected in large panels called solar cells, which collect sunlight and convert it into electrical or thermal energy. Wind energy is caused by the uneven heating of the Earth's surface. The kinetic power of wind can be used to turn windmills, which can then be used to generate electricity.

Water energy is really a form of gravitational potential energy collected by storing water in a reservoir behind a dam. As the water falls through pipe, its potential energy is converted into kinetic energy and used to turn a turbine. The turbine produces a stream of electrons or electrical energy called hydroelectric power.

Geothermal energy is energy that comes from the heat found inside Earth's crust. Like the sun, nuclear reactions deep inside the Earth generate thermal energy. Where it can be found close to the surface of the crust, geothermal energy is almost unlimited; however, it is only found at thin points in the crust, in areas prone to volcanoes and earthquakes.

Which of the following describes geothermal energy in use?

- |   |   |
|---|---|
| A. A drought in recent years has lowered the amount of hydroelectric power produced by the Hoover Dam.                              | B. The wide open land and strong gusts of the Greater Accra region in Ghana make it a perfect location for multiple turbines.                           |
| C. Iceland is situated on top of multiple volcanoes and harnesses this natural power to heat the roads and sidewalks in the winter. | D. Innovators are working to create panels to replace asphalt on highways, so roadways can generate energy from the sun even as cars burn fossil fuels. |

4. We call energy that is moving or can do work for us mechanical energy. This energy is either doing work or has the potential to do work, which brings us to the two types of mechanical energy: kinetic and potential. The energy of an object in motion is kinetic energy; the energy of an object that has potential to move is potential energy. The amount of kinetic energy an object has depends on its mass and its speed.

Imagine a truck, a baseball and a spitball flying toward you. The baseball and the spitball may be traveling at about the same speed, but since the baseball has more mass, it has more kinetic energy. If it hits you it will hurt, while the spitball will simply go splat. The truck has far more mass and kinetic energy than the baseball and spitball combined.

Potential energy is stored energy. An object has potential energy if it's able to move and thus capable of doing work. A stretched rubber band has potential energy, as does a gymnast standing on a balance beam and a water balloon held out a window.

Which of these objects has kinetic energy?

- |   |                                  |
|---|----------------------------------|
| A. a skateboard rolling up a ramp         | B. a car parked on top of a hill |
| C. a dish placed near the edge of a table | D. a rollercoaster not in use    |

5. Chemical energy is the energy stored in the chemical bonds that hold molecules together. It's a form of potential energy, and can be used when these chemical bonds are altered. Consider your digestive system. After a meal, chemicals are released in your body to break down the molecular bonds in the food you ate. This releases the chemical energy that was stored in the food, thus powering your muscles, warming your body and allowing you to move. Chemical energy stored in wood can be converted to thermal energy by burning the wood.

We feel thermal energy as heat. Because the particles that make up all matter are constantly in motion, they always have kinetic energy. Thermal energy is the amount of kinetic energy or movement in the particles, atoms and molecules of an object. The faster those particles are moving, the more kinetic energy the object has and the warmer it will feel. For example, the water in a cup of hot coffee has more thermal energy than the same cup of coffee after it has cooled.

How do we get energy from the food we eat?

- |  |   |
|--|---|
| A. The constantly moving molecules in food give us kinetic energy. | B. Breaking the molecular bonds in the food releases stored chemical energy.      |
| C. Eating hot food transfers thermal energy to our bodies.         | D. The chemical energy stored in the food is transferred to us as thermal energy. |

6. Sound energy is caused when an object, such as a guitar string or a bell, vibrates. This energy is transferred to the air, causing the air to vibrate. Finally, the air transfers the energy to our eardrum, causing it to vibrate. Our brain transfers the vibrations of the eardrum into nerve impulses that tell your brain that you hear the sound.

Light energy is produced by the vibration of electrically charged particles called photons. Photons travel extremely fast (300 million meters per second!) but have no mass. Unlike sound energy, which needs air to vibrate, light energy can travel through a vacuum. This is why we can see objects like stars or planets that are in outer space.

Electrical energy is the energy of moving electrons, those negatively charged subatomic particles. By causing electrons to move through a wire, we can use them to do work.

Light energy comes from

- |                         |               |
|-------------------------|---------------|
| A. nerve impulses.      | B. electrons. |
| C. an object vibrating. | D. photons.   |

7. Nuclear energy comes from either nuclear fission or nuclear fusion. In nuclear fission, the nucleus of a large atom, such as uranium, is split apart, which can occur from shooting neutrons at the nuclei. When a nucleus splits, it releases a great deal of energy and shoots its own neutrons out. These neutrons in turn may hit more nuclei until a chain reaction is formed, splitting more and more atoms. If left unchecked, the result is a nuclear explosion, which releases tremendous amounts of energy, much of it thermal, and destroys everything nearby. If the process is controlled, then the amount of thermal energy that's released can be harnessed and used to do work. In a nuclear power plant, for example, the thermal energy that's produced is used to boil water, which in turn is used to turn electric turbines and produce electricity.

Nuclear fusion produces even more energy than nuclear fission. Instead of breaking down large atoms, in nuclear fusion, two small hydrogen atoms are fused together to form a larger helium atom. This releases tremendous amounts of energy, which can be measured by Einstein's  $E = mc^2$  equation. Nuclear fusion produces most of the sun's and other stars' energy.

What is the difference between nuclear fission and nuclear fusion?

- A. Nuclear fusion explodes the nucleus of an atom, while nuclear fission harnesses the atom's kinetic energy.
- B. Nuclear fission splits an atom apart, while nuclear fusion fuses two atoms together.
- C. Nuclear fission creates electrical energy, while nuclear fusion creates chemical energy.
- D. Nuclear fusion splits hydrogen atoms apart, while nuclear fission fuses uranium atoms together.

8. When Einstein came up with  $E = mc^2$ , (which means Energy = Mass the Speed of Light squared) he proved that energy and mass, which most people thought of as two totally separate things, were actually the same. Matter, including the nuclei of atoms, is made up of particles held together by forms of energy. Based on Einstein's formula, scientists realized that a little bit of mass could equal a whole lot of energy. As he and other scientists learned more about the physics of the atom over the next 30 years, they discovered that they could release huge amounts of energy by breaking apart the bonds that hold the nuclei of atoms together. But since nuclear fission only dissolves the bonds holding together the nucleus of an atom, it only destroys a very small amount of matter. What's leftover is what we call "nuclear waste."

If all the matter in your body were to be annihilated, an insane amount of energy would be released. If you weigh 150 pounds, for example, the energy released would be 6.1 quintillion joules of energy. A quintillion is a billion billion! That's the same amount of energy in 48 billion gallons of gas, and it's all stored within your atoms.

Nuclear waste is

- A. the energy from nuclear fission that is converted to thermal energy.
- B. the bonds that hold the nuclei of atoms together.
- C. what remains after nuclear fission dissolves the nuclei of atoms.
- D. the amount of matter destroyed during a nuclear reaction.

## Day 17 Assignments

### **Math**

**Day 17:** Complete the worksheet on Radius and Diameter.

### **Language Arts**

**Day 17:** Complete the worksheets on Style and Tone. This assignment will also be available on Study Island.

### **Social Studies**

**Day 17:** Use the notes over Chapter 3 (Section 4) to complete the quiz.

### **Science**

**Day 17:** Complete the worksheets on Energy (continued from Day 16). This assignment will also be available on Flocabulary.

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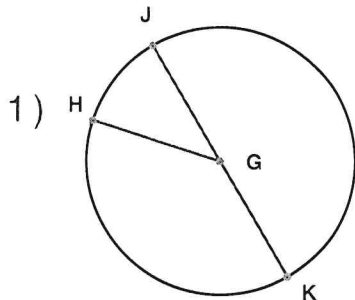
Score : \_\_\_\_\_

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*Day # 17*

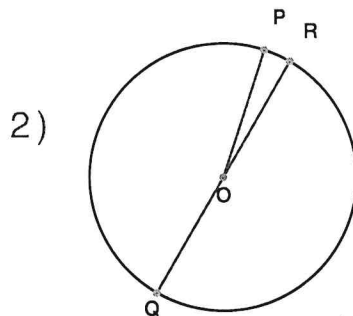
Identify the elements for each problem.



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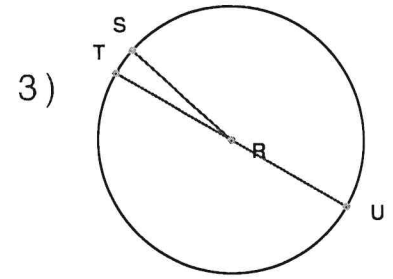
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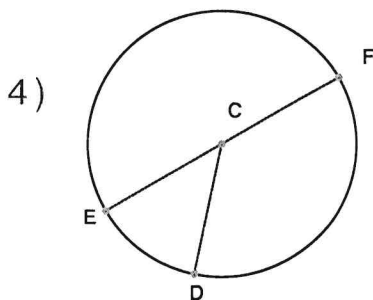
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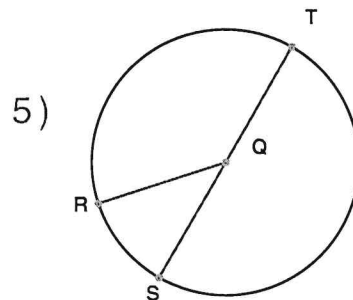
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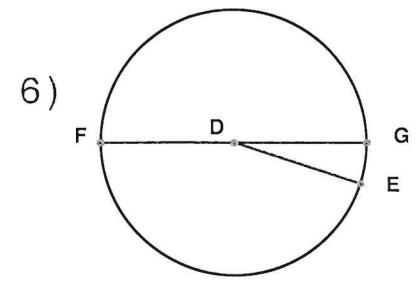
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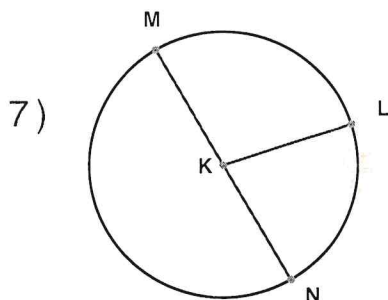
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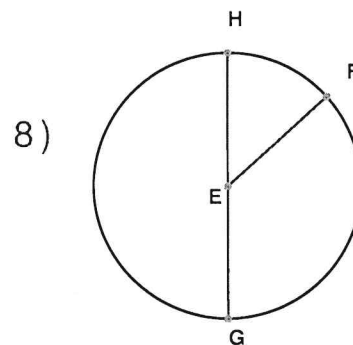
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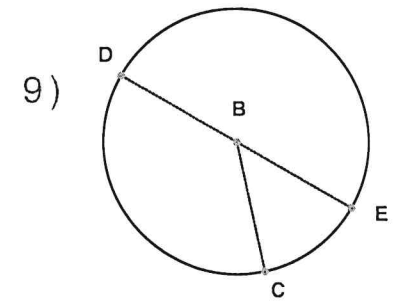
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Diameter: \_\_\_\_\_



Circle: \_\_\_\_\_

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Diameter: \_\_\_\_\_





# Style and Tone

## Question 1 .

1. Sociologists suggest that bicycles cultivated a thriving community among rural workers.
2. A bicycle is fun, isn't it little boys and girls?
3. The bicycle's earliest known forebears were called velocipedes.
4. A bike can be a great way to get around, but you must be smart and safe when riding one.

17

Which of these has language appropriate for addressing a sixth-grade class on bicycle safety?

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

## Question 2 .

Read the sentence from a newspaper article.

The student interns have successfully contributed to the leadership team's ability to effectively identify major areas of economic growth and development in the city's designated urban development center.

Which sentence could be added to **best** fit the style of this sentence?

- A. The interns were chosen to help the city because they were struggling to identify their needs and help the community be supportive.
- B. The pool to select intern candidates was filled with some really tough competition, but thankfully, the best were chosen to advise the city and their initiatives.
- C. The interns joined the staff in the spring to support the revitalization of youth programs that have kind of gone underfunded for a while.
- D. Each intern gives a new perspective to the meaning of economic growth and development and, therefore, deserves a significant amount of recognition.

**Question 3 .****The Beatles**

When people hear the name "The Beatles" most people think of co-lead singer, John Lennon. However, the role of Paul McCartney is often overlooked.

John Lennon and Paul McCartney were in many bands together before the forming of the Beatles. In 1962, along with Ringo Starr and George Harrison, they formed the rock group known as The Beatles. They rocked out like nobody's business. The group featured a modern rock that was new and popular during the period with John and Paul composing and doing the leads on most of the songs. At that time, they were the coolest band on the planet. They were backed by George on rhythm and bass guitar and Ringo on drums. George and Ringo also assisted on backing vocals.

When they first began playing, the main influence inside the band was John Lennon, who had an ability to compose songs at a moment's notice with an inspiration that others missed. He pushed the members of the band during their touring years and was able to achieve the best possible results from the group. Lennon was the man! However, McCartney was also a strong force in the group since Lennon many times asked for McCartney's advice about ideas for songs. McCartney wrote many of the group's biggest hit songs, and often, he didn't even ask for songwriting credit. His songs made people rock their socks off.

After the breakup, McCartney launched a moderately successful solo career. He has released many recordings both in the United States and abroad. He's written so many songs, it would knock you out. One recent accomplishment was the classical composition, *Liverpool Oratorio*, which is no small feat considering that McCartney never learned to read music.

Frank has written a formal essay about the Beatles that he was assigned for his music class.

What would be a better way to write the following sentence to make the language more appropriate for the assignment?

*They rocked out like nobody's business.*

- A. This is the best sentence to use.
- B. They had the hottest beats.
- C. Most people were impressed with their sound.
- D. They were rocking and rolling and doing their thing.

**Question 4 .**

(1) Gary Paulsen is my favorite author in the whole, entire world! (2) His books are cool because they have kids like me. (3) Sometimes, Paulsen's books scare the living daylights out of me, though. (4) Paulsen's books are based on his own experiences in the Alaskan wilderness.

Which sentence in this paragraph is appropriate for a school paper?

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

**Question 5 .**

- Amanda is trying to convince her classmates to see a new movie.
- Miguel is writing a personal letter to his grandmother and grandfather.
- Fatima is making a computer slide show presentation for science class.
- Harry is teaching his new teammate, Davis, how to throw a fastball.

Which student should use the **most** formal language, including correct grammar, for their project?

- A. Miguel
- B. Amanda
- C. Fatima
- D. Harry

**Question 6 .**

Read the sentence from a newspaper article.

The North Valley basketball team scored 22 points at the regional conference and beat their rivals, the Sterling Blue Lagoon's.

Which sentence could be added to **best** fit the style of this sentence?

- A. The rival team was astounded at how remarkably well their long-time rivals played at the conference.
- B. The North Valley girls' basketball team really hopes to learn some of the plays that they boys' team.
- C. The win for North Valley came after the boys' endured 6 day a week practices, sometimes twice a day.
- D. The team's win comes after two undefeated seasons, as they advance to the finals for a shot at the state championship.

## Question 7 .

**The Storm**

Sandra nervously looked outside the window. In the last hour, the storm had become so strong that big plants were being uprooted from the front yard.

The lights began to flicker and suddenly, there was complete darkness inside the house. Sandra began to feel cold. She could barely see a thing, but somehow, she managed to find a flashlight and switched it on. She was all by herself and the noise of the heavy storm was getting louder.

Earlier, she had called her friend Jacob and asked him to come over, but now, she was hoping he had not risked coming out in this storm. Due to a lack of signal on her cellphone, Sandra was now unable to contact Jacob or any other authority for assistance.

Suddenly, she felt her chair shake. When she looked up and saw that the plates and spoons on the table were moving as well, she wondered what was going on.

Which sentence **best** concludes the passage with a similar tone and style?

- A. Sandra felt confused about why things were shaking inside her house, but decided to sit still and ignore it.
- B. Sandra wondered if Jacob would make it safely to her house before the storm got any heavier.
- C. Seeing the plates and spoons, Sandra suddenly realized that she had forgotten about dinner.
- D. When the realization hit her that the whole house was shaking, Sandra began to panic.

## Question 8 .

1. a presentation to the school's parent-teacher organization requesting money for field trips
2. a presentation to your classmates on your favorite hobbies
3. a phone conversation with your buddy about your baseball game
4. a conversation at the lunch table about your social studies project

Which one of these requires the most formal presentation, including correct grammar and language usage?

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

## Question 9 .

**The Beatles**

When people hear the name "The Beatles" most people think of co-lead singer, John Lennon. However, the role of Paul McCartney is often overlooked.

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What would be a better way to write the following sentence to make the language more appropriate for the assignment?

*His songs made people rock their socks off.*

- A. This is the best sentence to use.
- B. His songs rocked out way more than Lennon's.
- C. His songs were just as popular and became hits.
- D. His songs were the coolest of the cool in the band.

## Question 10 .

You have just called your friend José to see if he can come over and play baseball in the empty field behind your house. José's mother answers the phone, and after hearing your request, she says, "I'm sorry, but José is a little under the weather this afternoon."

What did José's mom mean?

- A. José isn't feeling well.
- B. José will be right over.
- C. José is grounded and can't play.
- D. José has a cold from being out in the rain.

Chapter 3 Section 4 Later Peoples of the Fertile Crescent

The Big Idea

After the Sumerians, many cultures ruled parts of the Fertile Crescent.

Main Ideas

- The Babylonians conquered Mesopotamia and created a code of law.
- Invasions of Mesopotamia changed the region's culture.
- The Phoenicians built a trading society in the eastern Mediterranean region.

Sargon

Sargon- Akkadian ruler who had the first permanent army

Defeated all the city-states of Sumer

When his army conquered northern Mesopotamia, he established the world's first empire.

Empire: land with different territories and peoples under a single rule

Main Idea 1: The Babylonians conquered Mesopotamia and created a code of law.

- Hammurabi was Babylon's king.
- **Monarch**- Ruler of a kingdom or empire
- During his rule, Babylon became the most important city in Mesopotamia.
- **Hammurabi's Code**- a set of 282 laws he created that dealt with almost every part of daily life. It was called the "Code of Laws"

Hammurabi's Code

- Specific crimes brought specific penalties.
- Social class was taken into account. It was a greater crime to injure a rich man than a poor one.
- It was unique not only because of how thorough it was, but also because he wrote it down for all to see.
- Believed in an "**Eye for an Eye**"

Main Idea 2: Invasions of Mesopotamia changed the region's culture.

- Armies battled for control of fertile land.
- Different peoples ruled Mesopotamia.
  - Hittites
  - Assyrians
  - Chaldeans
- Each group affected the culture of the region.

The Hittites

The Hittites were the first to master ironworking, so they made the strongest weapons of the time.

They used the chariot-a wheeled, horse-drawn cart, which allowed them to move quickly around the battlefield.

### The Assyrians

- The Assyrians had a strong army that used chariots and iron weapons.
- Created the first Library called the Library of Ninevah
- Assyrian kings ruled their empire through local leaders who each governed a small area.

### The Chaldeans

- **Nebuchadnezzar** rebuilt Babylon into a beautiful city that had the famous Hanging Gardens.
- They admired the Sumerian culture, studied their language, and built temples to Sumerian gods.
- Babylon became a center for astronomy.

### Main Idea 3: The Phoenicians built a trading society in the eastern Mediterranean region.

Resources	Expansion of Trade	First Alphabet
<ul style="list-style-type: none"><li>• Prized <u>Cedar</u> trees for <u>timber</u></li><li>• <u>Purple Dye</u>- Used for coloring of clothing</li><li>• Accessed the <u>sea</u> for trade</li><li>• Built great harbors</li></ul>	<ul style="list-style-type: none"><li>• Sailed ships around the <u>Mediterranean Sea</u></li><li>• Founded several new colonies along the trade routes</li><li>• Became wealthy</li></ul>	<ul style="list-style-type: none"><li>• Recorded their activities</li><li>• Made writing much easier for everyone</li><li>• Is the basis for the English language</li></ul>

**Chapter 3 Section 4**  
**Later people of the fertile crescents**  
**Quiz**

1. What group influenced every group that followed them in the fertile crescents?
2. Who was the Akkadian ruler?
3. What is an Empire?
4. What is a monarch? Who was the Monarch in Babylon?
5. What did Hammurabi's codes believe in?
6. Who was the first group to master ironwork and chariots on the battlefield?
7. What group created the first library and what was it called?
8. Who was the king of the Chaldeans who rebuilt Babylon and built the famous hanging gardens?
9. How did the Phoenicians become wealthy? What did the Phoenicians create to make writing easier?
10. Where did the Phoenicians develop their trading routes at?



Name \_\_\_\_\_

Date \_\_\_\_\_

# Energy

Read each question and circle the correct answer.

NTI Day  
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1. Grass and plants get energy from

- A. the sun.
- B. eating food.
- C. windmills.
- D. electrons.

2. Energy that comes from the heat inside the Earth is called \_\_\_\_\_ energy.

- A. solar
- B. geothermal
- C. kinetic
- D. potential

3. Potential energy is

- A. energy that can be destroyed.
- B. energy that can be created.
- C. energy from electrons.
- D. energy that's stored.

4. A baseball that is moving through the air has \_\_\_\_\_ energy.

- A. potential
- B. kinetic

5. True or False: Energy can be created.

- A. True
- B. False

6. A bow and arrow that was just pulled back but not yet released has \_\_\_\_\_ energy.

- A. potential
- B. electrical
- C. geothermal
- D. nuclear

7. Which of the following releases chemical energy?

- A. throwing a basketball
- B. a skier on top of a mountain
- C. playing a song through headphones
- D. burning wood

8. When you're wearing a big sweater, what kind of energy is keeping you warm?

- A. chemical energy
- B. thermal energy
- C. sound energy
- D. kinetic energy

9. Nuclear energy could come from

- A. kicking a soccer ball.
- B. heat inside the Earth.
- C. splitting atoms apart.
- D. solar panels.

10. When you eat plants like lettuce, the energy that you get originally came from

- A. a windmill.
- B. nuclear fusion.
- C. the sun.
- D. a cow.

## Day 18 Assignments

### **Math**

**Day 18:** Complete the worksheet on Radius, Diameter, Circumference and Area of a circle.

### **Language Arts**

**Day 18:** Complete the questions over Argumentative Craft. This lesson will also be available on Study Island.

### **Social Studies**

**Day 18:** Use the notes over Chapter 4 (Sections 2 and 3) to complete the quiz.

### **Science**

**Day 18:** Complete the worksheets over Living Systems. This lesson will also be available on Study Island.

Name : \_\_\_\_\_

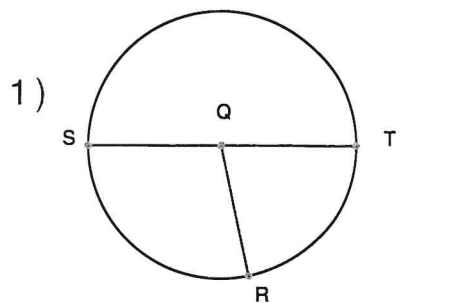
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Teacher : \_\_\_\_\_

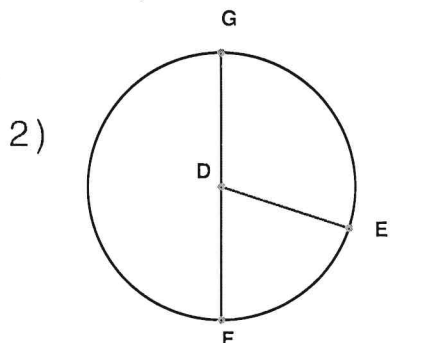
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*Day # 10*

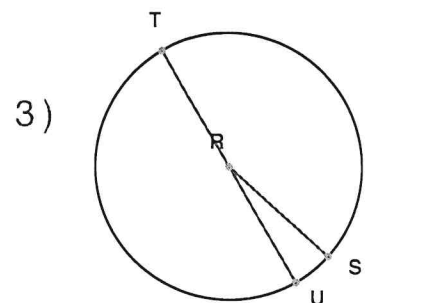
Solve the missing elements for each problem. Use 3.14 for  $\pi$ .



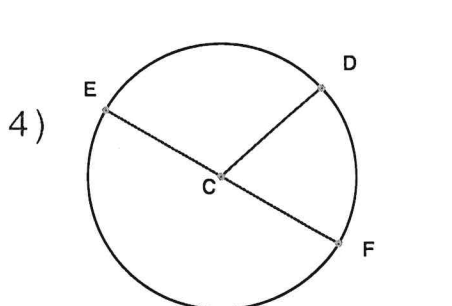
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Circumference: \_\_\_\_\_  
Area: \_\_\_\_\_



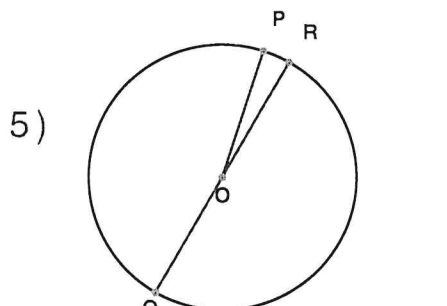
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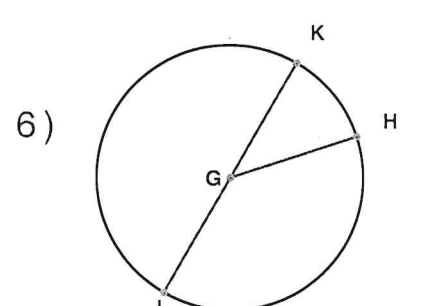
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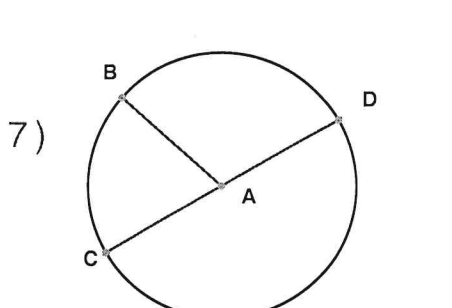
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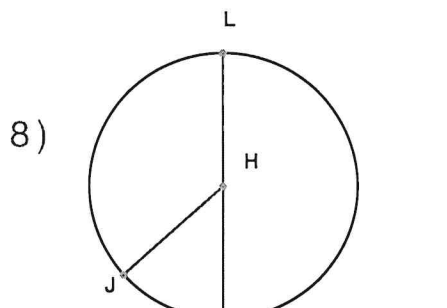
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Area: \_\_\_\_\_



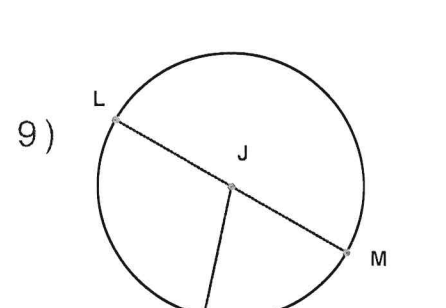
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Area: \_\_\_\_\_



Radius: 4 inches  
Diameter: \_\_\_\_\_  
Circumference: \_\_\_\_\_  
Area: \_\_\_\_\_



Radius: \_\_\_\_\_  
Diameter: 20 inches  
Circumference: \_\_\_\_\_  
Area: \_\_\_\_\_



Radius: \_\_\_\_\_  
Diameter: 4 inches  
Circumference: \_\_\_\_\_  
Area: \_\_\_\_\_

# Argumentative Craft

## Question 1 .

### Coconut Oil is Healthy

For years, people have used coconut oil for many things. Some people say that coconut oil is unhealthy because it has a high amount of saturated fat. However, others say that the health benefits of coconut oil outweigh any of its risks. Studies show that coconut oil has been known to help alleviate the symptoms of diabetes, Alzheimer's disease, and a wide variety of other diseases. Coconut oil also helps to regulate blood pressure and blood sugar. \_\_\_\_\_, coconut oil moisturizes skin and strengthens hair. Considering the benefits, people should at least consider using coconut oil.

Which transition **best** fits in the blank?

- A. Therefore
- B. To sum up
- C. Furthermore
- D. For example

## Question 2 .

### Students and Technology

Many people, especially those of the older generation, think that technology is a vice. But for most people today, a life without technology can be difficult. In fact, technology benefits people of all ages, and students in particular. Using modern instruments has helped students to know more about everything.

Students can get their work done soon if they have laptops. Typing notes on a laptop or tablet is usually quicker than writing them down by hand. Completing work for which one has to find things has become easier and simpler. All one has to do is type the necessary details into a search engine, and all the information becomes available in seconds. Students will then have time for things such as learning to paint, dance, and sing.

Students today are smarter and more intelligent because of modern inventions and technology. Kids aged seven or eight now know all about the Sun, the Moon, and the stars, as everything they need to know is on the laptop. In this way, technology is definitely beneficial to students.

Read the sentence from the passage.

Completing work for which one has to find things has become easier and simpler.

How could the reason be revised to include content-specific vocabulary?

- A. Completing difficult work has become easier and simpler.
- B. Completing work given by teachers has become easier and simpler.
- C. Completing research-based projects has become easier and simpler.
- D. Completing school work has become easier and simpler.

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## Question 3 .

## Too Much Noise

Many years ago, people used to go to public libraries only to study or read books, newspapers, etc. Libraries had reputations for being quiet places where people were not allowed to be noisy. Today, however, people do more than just study or read at libraries. \_\_\_\_\_, people go to libraries in order to use the Internet. Sometimes, people go to libraries to spend time with their friends. Various clubs meet regularly at libraries. As a result, public libraries have become too noisy. This fact is unfortunate because the noise can be distracting to people who need a quiet place to study or read. People who visit a public library should respect everyone around them. When you visit a library, try to enjoy the experience, but do so quietly.

Which of the following transitions **best** fits in the blank?

- A. Nevertheless
- B. In summary
- C. Obviously
- D. For example

## Question 4 .

## Students and Technology

Many people, especially those of the older generation, think that technology is a vice. But for most people today, a life without technology can be difficult. In fact, technology benefits people of all ages, and students in particular. Using modern instruments has helped students to know more about everything.

Students can get their work done soon if they have laptops. Typing notes on a laptop or tablet is usually quicker than writing them down by hand. Completing work for which one has to find things has become easier and simpler. All one has to do is type the necessary details into a search engine, and all the information becomes available in seconds. Students will then have time for things such as learning to paint, dance, and sing.

Students today are smarter and more intelligent because of modern inventions and technology. Kids aged seven or eight now know all about the Sun, the Moon, and the stars, as everything they need to know is on the laptop. In this way, technology is definitely beneficial to students.

Read the sentence from the passage.

Students will then have time for things such as learning to paint, dance, and sing.

How could the reason be revised to include more precise language or content-specific vocabulary?

- A. Students can thus spend time on things they enjoy doing.
- B. Students will then have more time to pursue their hobbies.
- C. Students will have more fun painting, dancing, and singing.
- D. Students can join painting, dancing, and singing classes.

## Question 5 .

Zion needs to write a persuasive paper. He first decides to brainstorm about some topics he might choose. Which topic would be a good topic because it requires Zion to give opinions rather than facts?

- A. the best neighborhood restaurants
- B. the history of county courthouse
- C. volunteer opportunities in the city
- D. recycling's effects on our town

**Question 6 .****Students and Technology**

Many people, especially those of the older generation, think that technology is a vice. But for most people today, a life without technology can be difficult. In fact, technology benefits people of all ages, and students in particular. Using modern instruments has helped students to know more about everything.

Students can get their work done soon if they have laptops. Typing notes on a laptop or tablet is usually quicker than writing them down by hand. Completing work for which one has to find things has become easier and simpler. All one has to do is type the necessary details into a search engine, and all the information becomes available in seconds. Students will then have time for things such as learning to paint, dance, and sing.

Students today are smarter and more intelligent because of modern inventions and technology. Kids aged seven or eight now know all about the Sun, the Moon, and the stars, as everything they need to know is on the laptop. In this way, technology is definitely beneficial to students.

Read the sentence from the passage.

Using modern instruments has helped students to know more about everything.

How could the introductory claim be revised to include more precise language or content-specific vocabulary?

- A. Using modern devices such as laptops and tablets has helped students to expand their knowledge.
- B. Students have knowledge because all the modern instruments are easily available to them today.
- C. Using instruments like books, cell phones, and the Internet makes students intelligent.
- D. Students are intelligent as they know how to use technology and modern devices.

## Question 7 .

## Solar Energy

Solar energy is a renewable resource that can be used to replace many of the non-renewable power sources that are currently used today, such as oil and natural gas. Oil and natural gas will run out and solar energy won't. Not only is there plenty of solar energy, there are several other benefits to converting. Solar energy can be accessed anywhere because, if the sun is shining, electricity is being generated. And even though the sun does not shine at night, scientists are working on a solution to store energy for nighttime usage. Another positive is solar energy doesn't make as much pollution as other energy sources and that's good for the environment.

Despite all the positive aspects of solar energy, there are some drawbacks to using this renewable energy source. As stated earlier, solar energy works wonderfully when the sun is shining. But the sun doesn't always shine, and that makes it hard to get solar energy. Overcast days and dark nights prevent the sun from providing power to the solar panels. Scientists are working on better methods for storing solar energy; however, currently it is difficult to generate and store power without direct sunlight. Another factor that may prevent the use of solar energy is the power output provided by the panels. At this time, solar energy is effective when used in small amounts, but it is not effective when generating electricity in large quantities.

Read the sentence from the passage.

But the sun doesn't always shine, and that makes it hard to get solar energy.

How could the claim be revised to include more precise language or domain-specific vocabulary?

- A. When the sun isn't shining it is hard to make solar energy.
- B. However, solar energy is difficult to produce when there is no sun shining to help.
- C. However, the sun is not always shining, which makes it difficult to produce solar energy.
- D. When the sun is not shining, solar energy is hard to make.

## Question 8 .



What does this advertisement assume?

- A. Women like to pamper themselves.
- B. Women never say no to shoe shopping.
- C. Women need to look tall to feel confident.
- D. Women like to shop during a sale.



## Question 9 .

**Should Students Receive Letter Grades?**

Many schools today are reassessing whether to continue giving students letter grades or to move to a standards-based method of reporting student progress. In class, students are taught standards, or certain skills that students should know or be able to do, and these standards are what they should master. They also get tested on the standards. However, students receive letter grades on their report cards, and these letter grades represent how well a student has mastered the standards based on scores on homework, tests, quizzes, and classwork. However, these assignments may be different from class to class and school to school. Teachers may give grades differently, so grading this way isn't really equal. Reporting students' progress and success based on whether they have mastered the standards prevents inconsistencies in scoring. Since teachers are teaching standards, it makes the most sense to report whether students have mastered what the teacher has taught.

One thing that's bad about standards-based reporting is parents are used to getting letter grades for their children. Parents would need to receive a clear explanation of what the standards mean and how the new reporting method is used. However, once everyone is used to this new method of reporting, it will provide a more accurate way of reporting student progress.

Read the sentence from the passage.

One thing that's bad about standards-based reporting is parents are used to getting letter grades for their children.

How could this detail be revised to include more precise language?

- A. Standards-based reporting may be bad because parents aren't accustomed to it.
- B. Parents aren't used to standards-based reporting because they are used to receiving grades for their children.
- C. One thing that may be a problem is that parents aren't used to standards-based reporting.
- D. Parents are used to receiving letter grades for their children, so standards-based reporting may be confusing at first.

**Question 10 .****Teacher Cell Phones**

Schools and school districts have addressed the issue of students having and using cell phones in school. However, very few have enforced guidelines about whether teachers should have access to their personal cell phones in class. While there is an argument to be made for both sides, similarly to students, teacher cell phone use can be a distraction for the class. If a teacher's cell phone goes off in the middle of class, this interrupts what everyone is doing. How can the teacher teach and students learn when they are paying attention to the teacher's cell phone? Some schools provide teachers with a telephone in the classroom, which they can use to contact parents or the office in the case of an emergency. Therefore, in those cases, the teacher has no need for a cell phone for school purposes.

On the other hand, some teachers have families. The teachers that have families may need access to a cell phone in case of an emergency. Schools should put a procedure in place for teachers who may need to be reached in case of an emergency. Schools and school districts should put guidelines in place to make sure there are as few interruptions as possible. That way, both teachers and students have clear guidelines and expectations for cell phone use during school hours.

Read the sentence from the passage.

On the other hand, some teachers have families.

How could this claim be revised to include more precise language?

- A. While there are reasons cell phones should be removed from the classroom, teachers have valid reasons for needing access to a phone.
- B. There may be good reasons for teachers to have cell phones in the classroom, but there are also reasons not to have a phone as well.
- C. Just because cell phones may cause disruptions in the classroom does not mean that teachers shouldn't have phones.
- D. Teachers may need to have access to phones; for example, they may need to talk to their family.

### Chapter 4 Section 2 The Old Kingdom

#### The Big Idea

Egyptian government and religion were closely connected during the Old Kingdom.

#### Main Ideas

- In early Egyptian society, pharaohs ruled as gods and were at the top of the social structure.
- Religion shaped Egyptian life.
- The pyramids of Egypt were built as tombs for the pharaohs.

### Main Idea 1: In early Egyptian society, pharaohs ruled as gods and were at the top of the social structure.

- The **Old Kingdom** was a period in which the Egyptians developed a system based on the belief that the pharaoh was both a king and a god.
- As the population grew, social classes appeared.
- Egypt began to trade goods with its neighbors.

### Egyptian Society

#### • Social classes

- Pharaohs ruled Egypt as gods.
- Many **nobles**- people from rich and powerful families, were officials and priests who helped run the government.
- Scribes and craftspeople wrote and produced goods.
- Farmers, servants, and slaves made up most of Egyptian society.

### Main Idea 2: Religion shaped Egyptian life.

The Egyptians had gods for nearly everything, including the sun, the sky, and the earth. These gods would often mix human and animal forms.  
**Polytheism**- Belief in 2 or more Gods

Egyptian religion focused on the **afterlife**- life after death. They believed that when a person died, his or her **ka**- soul left the body and became a spirit.

They developed embalming to preserve bodies and keep the link between the body and the spirit.  
**Mummies**- Specially treated bodies wrapped in cloth

### Main Idea 3: The pyramids of Egypt were built as tombs for the pharaohs.

**Pyramids**- huge stone tombs with four triangular sides that meet in a point on the top.

Pyramids displayed amazing **engineering** - the application of scientific knowledge for practical purposes.

The size and shape of the pyramids showed the importance of pharaohs. They were the people's link to the gods, so the Egyptians wanted their spirits to be happy.

**Chapter 4 Section 3 The Middle and New Kingdoms**

**The Big Idea**

During the Middle and New Kingdoms, order and greatness were restored in Egypt.

**Main Ideas**

- The Middle Kingdom was a period of stable government between periods of disorder.
- In the New Kingdom, Egyptian trade and military power reached their peak, but Egypt's greatness did not last.

**Main Idea 1:**

**The Middle Kingdom was a period of stable government between periods of disorder.**

Egypt fell into disorder around 1750 BC. A group called the Hyksos invaded and ruled the region for 200 years.

The Egyptians fought back, and *Ahmose of Thebes* declared himself king and drove the Hyksos out of Egypt, beginning the New Kingdom.

**Main Idea 2:**

**In the New Kingdom, Egyptian trade and military power reached their peak, but Egypt's greatness did not last.**

- Egypt took over vast lands and was the leading military power in the area.

**Growth and Effects of Trade**

- **Queen Hatshepsut (first female ruler)** encouraged trade and used the profits to support the arts and architecture.
- Led by **Ramses the Great**, Egypt fought invaders for many years, leaving their empire diminished.

**Chapter 4 Section 2 and 3 Quiz**

1. What did they base their beliefs on during the Old Kingdom?
2. Who were the nobles?
3. What type of religion did Egyptians believe in?
4. What did religion focus on?
5. What is it called when they specially treat bodies by wrapping them in cloth?
6. What are pyramids?
7. What did the size and shape of the pyramids show?
8. What was the name of the group that invaded Egypt in 1750 BC?
9. What began the New Kingdom?
10. What happened to the power of the Egyptians during the New Kingdom?
11. Who is Queen Hatshepsut?
12. What did Egypt have to do during the reign of Ramses the Great?

# Living Systems

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## Question 1 .

The job of the human heart is to circulate blood through all of the body's arteries, capillaries, and veins. The job of the human lungs is to supply the small amount of blood in them with oxygen.

The interaction of these two parts of the human body results in a system that

- A. removes old blood from the body.
- B. turns the protein in blood into food energy for the digestive system.
- C. breaks down food energy, and turns it into heat.
- D. circulates oxygen-filled blood throughout the body.

## Question 2 .

How does the digestive system interact with the circulatory system?

- A. Nutrients taken in and broken down by the digestive system are carried to various parts of the body by the circulatory system.
- B. Messages sent as electrical impulses from the digestive system are transported throughout the body by the circulatory system.
- C. Oxygen and carbon dioxide are exchanged by organs in the digestive system, and the gases are carried to the rest of the body by the circulatory system.
- D. Nutrients and gases are absorbed by organs in the circulatory system. Then, they are transported to all parts of the body by organs in the digestive system.

## Question 3 .

**Directions: Drag each label to the correct location on the diagram.**

Multicellular organisms exhibit a hierarchy of cellular organization. The diagram below shows four levels of cellular organization, organized from the simplest level to the most complex level. Use the labels to identify the level of organization represented by each image.

tissue

organ system






cell

organ

**Question 4 .**

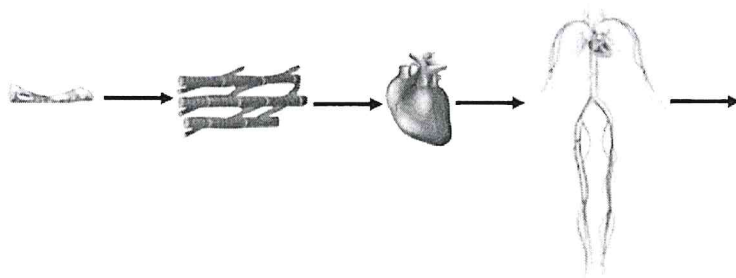
**Directions: Drag each tile to the correct box.**

All animals are multicellular. The cells that make up multicellular organisms are organized in specific ways to perform specialized functions. Five different levels of cellular organization for a sheep are shown below. Place the levels in order from the most complex level to the simplest level.

 tissue	 whole organism	 organ	 cell	 organ system
→	→	→	→	

**Question 5 .**

The human body is organized in a hierarchical arrangement, as shown below.



What structure is represented by the first image in the above series?

- A. organ system
- B. cell
- C. tissue
- D. organ

**Question 6 .**

What body systems are related to taking in nutrients and expelling them from the body?

- A. endocrine and excretory
- B. digestive and excretory
- C. nervous and circulatory
- D. digestive and circulatory

**Question 7 .**

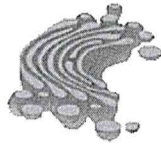
**Directions:** Drag the correct image to its location on the diagram.

Structures within the human body are organized into different levels based on their complexity.

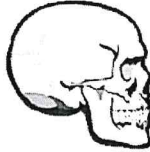
Which picture should replace the question mark on the diagram below?



Cell



Organelle



Skull

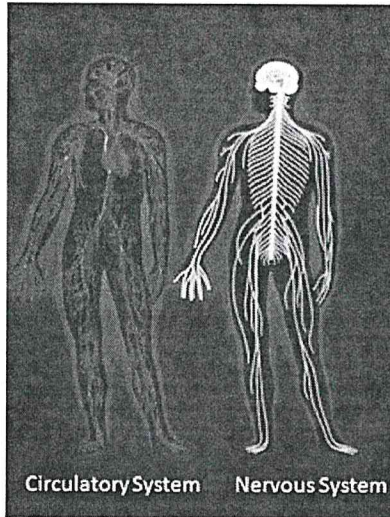


Joint



**Question 8 .**

The body's nervous system is made up of the brain, the spinal cord, the retina, and many other nerves. The circulatory system is made up of the heart, arteries, veins, and capillaries.



The nervous system tells the heart when to beat, and the circulatory system supplies nerve cells with blood.

Which of the following best describes the relationship between the nervous system and the circulatory system?

- A. The circulatory system and the nervous system depend on each other.
- B. The nervous system is a subsystem of the circulatory system.
- C. The circulatory system is a subsystem of the nervous system.
- D. The nervous system and the circulatory system do not affect each other.

**Question 9 .**

A person touches a hot surface with his hand and his hand springs back. Which two systems are operating?

- A. musculoskeletal system and endocrine system
- B. nervous system and cardiovascular system
- C. cardiovascular system and endocrine system
- D. nervous system and musculoskeletal system

**Question 10 .**

What are the most basic building blocks of all organisms?

- A. cells
- B. blood
- C. organs
- D. tissue

## Day 19 Assignments

### **Math**

**Day 19:** Complete the worksheet on Common Percent Tables.

### **Language Arts**

**Day 19:** Complete the worksheets over Connotative Meanings in Informational Texts. This lesson will also be available on Study Island.

### **Social Studies**

**Day 19:** Use the notes over Chapter 9 (Section 1) to complete the quiz.

### **Science**

**Day 19:** Complete the worksheets over Gravity. This assignment will also be available on Flocabulary.

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

*Day #19*

### Common Percent Table

Fraction	Decimal	Percent
$\frac{1}{20}$		5 %
	0.1	10 %
$\frac{1}{8}$		$12\frac{1}{2}$ %
$\frac{1}{5}$	0.2	
$\frac{1}{4}$	0.25	
$\frac{3}{10}$		30 %
$\frac{1}{3}$		$33\frac{1}{3}$ %
$\frac{3}{8}$	0.375	
	0.4	40 %
$\frac{1}{2}$	0.5	
$\frac{3}{5}$		60 %
$\frac{5}{8}$		$62\frac{1}{2}$ %
$\frac{2}{3}$		$66\frac{2}{3}$ %
$\frac{7}{10}$		70 %
	0.75	75 %
$\frac{4}{5}$	0.8	
	0.9	90 %



# Connotative Meanings in Informational Texts

## Question 1 .

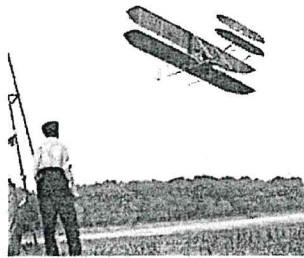
Read the sentences. Then, answer the question.

Growing community gardens on vacant, or empty, plots of land within crowded cities was an ingenious idea that started in Detroit, Michigan, in the 1890s and continues across America today. The first gardens were planted to help feed unemployed people and provide their families with a perpetual flow of fruit and vegetables.

Based on the sentences, what does the word ingenious emphasize?

- A. the success of the gardens
- B. the people's feelings about the gardens
- C. the amount of food grown in the gardens
- D. the failure of the gardens

## Question 2 .



The First Flight

The Wright brothers, Orville and Wilbur, began their flight experiment in 1896. Owners of a bicycle shop in Dayton, Ohio, they were determined to design a form of transportation for the sky. They were both iron-willed, wanting to see their dream become a reality. In 1902, Orville Wright piloted the first glider airplane 20 feet above the beach; the flight lasted 12 seconds and carried him 120 feet. Wilbur and Orville conducted over 700 flights of their glider airplane. Their record was a 59-second flight that carried them 852 feet.

After years of perfecting their glider flight, the Wright brothers were ready to move on to powered flights. Automobile manufacturers were not able to design an engine that was both light enough and powerful enough. The Wright brothers were not going to let this complication halt their progress, so with hard work and innovation, Orville and Wilbur designed and built their own engine. Nearly a year after they successfully tested their glider plane, the Wright brothers were ready to see if their creativity and determination worked.

Even though they contacted several newspapers regarding their first test flight using their powered engine, only one briefly mentioned it because most people were doubtful and thought the Wright brothers were insane for even trying. To the public's surprise and amazement, in December of 1903, the Wright brothers took to the sky and forever changed history.

Based on the context of the passage, what does the word doubtful suggest about the public?

- A. The public was excited about the Wright Brothers' experiment.
- B. The public was uncertain about the success of the Wright Brothers.
- C. The public was jealous that the Wright Brothers were getting so much attention.
- D. The public was emotional that the Wright Brothers were changing history.

**Question 3 .****Tornadoes**

Tornadoes, also called twisters, are born during a thunderstorm. They are funnels of spinning air that can create winds up to 250 miles per hour. The United States has thousands of tornadoes each year, but a particular hot spot, referred to as Tornado Alley, includes South Dakota, Nebraska, Kansas, Oklahoma, northern Texas, and eastern Colorado. Tornado Alley is where some of the most severe and destructive tornadoes occur.

Tornadoes form when there are changes in a wind's speed and direction resulting in a spinning storm cell. Once rising air starts moving up through a thundercloud, a tornado is born. The spinning funnels are only visible because of large amounts of dust and debris that get sucked up through the center of the funnel. Tornadoes are also characterized by a dark, greenish sky, large hail, and a train-like roar.

Tornadoes often occur during the late afternoon in the spring. The spring moisture and heat seem to create the perfect atmosphere for a twister. Once a twister touches the ground, it may continue to spin for as little as a few seconds or as long as a couple of hours. Most tornadoes do not travel more than six miles before dissipating or breaking apart.

Meteorologists use several extremely helpful tools to predict and detect tornadoes. Tools such as Doppler radar, satellites, weather balloons, and computer modeling help by monitoring the skies and detecting tornado activity. Valiant tornado researchers are continuously risking their lives by racing to place scientific sensors in tornadoes' paths. These sensors collect data that will ultimately lead to better predictions and storm warnings.

Based on the context of the passage, what does the word destructive suggest about many of the tornadoes in Tornado Alley?

- A. Many of the tornadoes aren't fully formed and never touch the ground.
- B. Many of the tornadoes are small and only last a few minutes.
- C. Many of the tornadoes are useful by creating escape routes through the fields.
- D. Many of the tornadoes are dangerous and cause a lot of damage.

**Question 4 .**

Read the sentences. Then, answer the question.

The steel and granite materials used to build New York's Brooklyn Bridge more than 130 years ago have proven durable since the bridge is still in use today. However, when people became wary about whether the bridge was stable when it first opened, P.T. Barnum, founder of the Barnum and Bailey Circus, showed how safe it was by parading his 21 elephants across it, led by the circus's main elephant, Jumbo.

In the first sentence, the word durable suggests that

- A. steel and granite are materials that last a long time.
- B. steel and granite should be used to build new bridges.
- C. steel and granite have been around a long time.
- D. steel and granite can weaken over time.

## Question 5 .



### The Cotton-top Tamarin

The cotton-top tamarin is a type of small monkey. Tamarins are divided into three groups consisting of "hair-faced," "mottled-faced," and "bare-faced." The cotton-top tamarin is a part of the bare-faced group. They are usually grayish-brown or reddish-brown in color with white stomachs, limbs, and a fan of fluffy, white hair on top of their heads.

The cotton-top tamarin's small stature makes it defenseless against many predators such as snakes and wildcats. The average cotton-top tamarin is nine inches long and weighs only 15 ounces, which is less than one pound! Cotton-top tamarins spend most of their day running, bounding, and leaping from tree branch to tree branch. They have claw-like nails that resemble a squirrel's rather than flat nails like primates and humans have. These claw-like nails help the tamarin cling to trees while running and leaping.

Cotton-top tamarins live for about 13 years and are one of three different tamarin species found in the Amazon Rainforest. They prefer the humid, tropical forest and are found mostly in the different layers of the trees.

Sometimes tamarins can be found foraging for food on the forest floor. Tamarins eat insects, fruit nectar, and even small reptiles and amphibians. Studies have shown that they enjoy following routines that consist of foraging for food, resting, and traveling. They sleep in groups and always have one observant tamarin who bravely stays awake and sounds the alarm if danger approaches. These small monkeys are social, unique, and fun to learn about.

Based on the context of the passage, what does the word defenseless suggest about tamarins?

- A. Tamarins are unprotected and can be attacked easily.
- B. Tamarins are large and impossible to catch.
- C. Tamarins are sheltered and well protected.
- D. Tamarins are ferocious and scare many other animals.

## Question 6 .

### Napoleon Bonaparte

In Europe, people thought of Napoleon Bonaparte as an aggressive bully. Many people also considered him a sly leader that wanted to rise through the ranks of French political power at any cost. Napoleon intended to improve the French empire. After the French Revolution, Napoleon became the lone leader of the army. In 1804, he made himself Emperor of France. Napoleon led the French army in battles in Austria, Italy, and Egypt. He wanted to conquer the world!

Based on the context of the passage, what does the word sly suggest about Napoleon Bonaparte?

- A. He obtained military power by disobeying his commanders.
- B. He used his intelligence to defeat the foreign enemies of France.
- C. He defended himself by hiding from dangerous situations.
- D. He deceived people in order to gain control of the government.

## Question 7 .

## Arts Education

While many people appreciate art, the sad reality is that arts education is rapidly disappearing around the country. With limited budgets and increased pressure to perform well on standardized tests, many schools have decreased their funding for arts education. To let this trend continue would be unfortunate. Arts education is important because it increases a student's enjoyment of school, leads to success in other areas, and provides essential skills for the future. Attending art class may be the one thing a student looks forward to all day. For many students who struggle in other areas, art class may be their time to shine. Art class can increase self-esteem, which enhances a student's overall well-being. It also offers everyone a chance to express themselves and therefore improves emotional health. Having art class can also help increase attendance by increasing a student's interest in school as a whole.

Art classes promote important skills that transfer to a variety of areas. Studies show that schools that emphasize arts education also have high scores in other subjects. While some may think arts education is only for students who want to become artists, the reality is that it is important for all students' futures. In the new economy, critical thinking, creativity, and innovation are precisely the skills employees need to compete. Art classes promote these skills through their emphasis on communication, interpretation, and collaboration.

Art classes also provide an important time for students to learn about people different from them. Through the creative and interpretive process, students get the opportunity to share their own cultural experience and also learn about the experiences of others. Whether it be through a drama, painting, or musical performance, students learn to look at the world in a variety of ways. This makes them better equipped to work with a variety of different people in the future. It also improves their ability to navigate their daily lives.

**Directions: Select the correct answer from the drop-down menu.**

Read the following sentence from the passage.

It also improves their ability to navigate their daily lives.

The connotation of the word navigate is

## Question 8 .

## Sir Humphrey Davy

Sir Humphrey Davy was an English chemist. He is known for contributing to the discoveries of chlorine and iodine, and for the invention of Davy's lamp, which proved to be very useful to miners. As a child, Davy was bright, intelligent, and curious. He would always come up with new rhymes at family gatherings. Later, he composed verses in Latin and English, and his friends would request him to write prose and letters with which they could impress others. Although timid in behavior, Davy was a gifted storyteller.

When Davy was a little older, he met Davies Gilbert, who played a key role in shaping Davy's professional career in the field of science. Davy started experimenting on different gases and chemicals. In 1800, he published his book *Researches, Chemical and Philosophical*. In 1808, Davy discovered the five elements barium, calcium, boron, strontium, and magnesium. This discovery brought him a lot of fame and made him a celebrity overnight. The fame and recognition made him haughty. People began to criticize him and gossiped about him. Although Davy's way of dressing was rustic, he was ambitious and wanted to be a part of the elite London crowd. This led to him being ridiculed by the usually well-dressed people, but Davy was immune to their reactions and remained focused on his work.

Based on the context of the passage, what does the word rustic suggest about Sir Humphrey Davy?

- A. He dressed in heavy, durable, thick garments.
- B. He wore only formal clothes at all occasions.
- C. He dressed in inelegant and outdated clothes.
- D. He wore clothes that made him look taller.

**Question 9 .**

Which sentence suggests that a person is extremely passionate about achieving a goal?

- A. A person who is serious about achieving a goal works toward it with joy.
- B. A person who is serious about achieving a goal works toward it impatiently.
- C. A person who is serious about achieving a goal works toward it calmly.
- D. A person who is serious about achieving a goal works toward it with fervor.

**Question 10 .**

Read the sentence. Then, answer the question.

Cheetahs are one of the most agile cats, capable of jumping 15 feet high and running at speeds of 60 miles per hour.

Based on the sentence, what does the word agile suggest about cheetahs?

- A. They move swiftly.
- B. They are clumsy.
- C. They move gracefully.
- D. They are active.



**Chapter 9 Section 1 Greece and Persia**

**The Big Idea**

Over time the Persians came to rule a great empire which eventually brought them into conflict with the Greeks.

**Main Ideas**

- Persia became an empire under Cyrus the Great.
- The Persian Empire grew stronger under Darius I.
- The Persians fought Greece twice in the Persian Wars.

**Main Idea 1:**

**Persia became an empire under Cyrus the Great.**

- Cyrus the Great won independence for Persia from the Medes, marking the beginning of the Persian Empire.
- Cyrus conquered many people but let them keep their own customs.

**The Persian Army**

The Persian Army contained 2 things:

1. Immortals- soldiers chosen for their bravery and skill.
2. Cavalry- unit of soldiers who ride horses

The army was strong because of

2 things:

1. Well Organized
2. Loyal

**Main Idea 2:**

**The Persian Empire grew stronger under Darius I.**

- Persia went into a time of weakness and unorganized.
- A young prince named Darius I claimed the throne and restored order in Persia.

**Persian Society**

- Darius organized the empire into 20 provinces, each led by a governor called a satrap.
- Two things Darius did as leader:
  1. He built many roads that connected various parts of the empire.
  2. He also built a new capital, called Persepolis.

**Main Idea 3:**

**The Persians fought Greece twice in the Persian Wars.**

- Darius was angry that the Greeks had aided a revolt against the Persians, so he invaded Greece in a series of battles known as the Persian Wars.
- Greece won these battles because it had better weapons and more clever leaders.

**Chapter 9 Section 1**  
**Greece and Persia**  
**Quiz**

1. Who was the leader of Persia who won independence marking the beginning of the Persian Empire? *Cyrus*
2. What did Cyrus allow people he conquered to do?
3. What are Immortals?
4. What does it mean when Cyrus sent in the Calvary?
5. Name 2 ways that made the Persian Army strong.
6. Who is Darius I?
7. What is a Satrap?
8. Name 2 things Darius did while in power.
9. Why did Darius invade Greece?
10. What did the battles between Greece and Persia become known as?
11. Why was Greece able to win the battles?

Name \_\_\_\_\_

Date \_\_\_\_\_

NTI Day  
19

# Gravity

Use the text to answer each question below.

1. Why do objects fall to the ground instead of flying off into space? How do we stick to the Earth instead of flying off into space? It's because of gravity. Gravity is a force that pulls objects together. Earth's gravity pulls everything downward. Without it, everything on our planet would just float away. Everything in the universe has gravity: the sun, moon, stars, buildings, apples and you!

Gravity is responsible for

- |   |  |
|---|--|
| A. keeping everything grounded on Earth.    | B. making tall skyscrapers safe.         |
| C. planes not being able to fly into space. | D. showing us the stars on a dark night. |

2. The Earth's gravity is very important to our lives, but so is the gravity of the sun and the moon. The moon's gravity pulls on the ocean and makes the tides rise and fall. The sun's gravity pulls on the Earth and makes sure our planet doesn't go flying out into space. The sun's gravity keeps all the planets spinning around it, and the Earth's gravity keeps the moon close by.

Which of the following best describes how the moon and Earth affect one another?

- |  |   |
|--|---|
| A. The moon's gravity keeps Earth in place, and the Earth's gravity affects the tides on the moon. | B. The moon's gravity keeps the Earth close by, and the Earth's gravity changes the moon's orbit. |
| C. The moon's gravity creates tides on Earth, and the Earth's gravity keeps the moon in place.     | D. The moon's gravity creates earthquakes, and the Earth's gravity creates moonquakes.            |

3. You might not be able to dunk a basketball on Earth, but you probably could on the moon. Why? There is less gravity on the moon, so you can jump higher. And when you drop something, it falls more slowly. Even star basketball player LeBron James couldn't dunk on Jupiter though. The gravity there is so strong, he'd hardly be able to jump at all. That's because Jupiter is bigger and heavier than the Earth and the moon. It has more mass. It's also way too hot for humans to survive on Jupiter, and we couldn't breathe the air!

Which of the following best describes the relationship between Jupiter and Earth?

- |   |   |
|---|---|
| A. Jupiter and Earth share the same moon.     | B. The Earth has more mass than Jupiter.    |
| C. Both Jupiter and Earth are home to humans. | D. Jupiter has stronger gravity than Earth. |

4. What is mass? It's the amount of matter in something. And since all things are made up of matter, all things have mass. But some things have greater mass than others. The sun has more mass than Jupiter, which has more mass than the Earth, which has more mass than the moon, which has more mass than a cruise ship, which has more mass than you. Objects with greater mass have a stronger force of gravity.

Of these objects, which has the strongest force of gravity?

- A. Neptune
- B. a skyscraper
- C. the sun
- D. an airplane

5. In 1687, Sir Isaac Newton came up with his theory about gravity. It depends on two things, mass and distance. You probably already know that distance is the amount of space between two things. It's how far apart they are. And now you know that mass is how much matter is in an object, or in other words how heavy something is. Objects with more mass (heavier objects) have more gravity. And the closer you are to a massive object (like a planet) the stronger its force of gravity is. If a spaceship got too close to the sun, it would probably get sucked in and not be able to escape. The closer you are, the stronger the gravity.

How much gravity a thing has depends on

- A. weight and time
- B. temperature and distance
- C. mass and speed
- D. mass and distance

6. A basketball has mass but the Earth's mass is much greater. So when you throw a basketball in the air, Earth's gravity pulls it down. That's why the basketball falls toward the ground. If you threw the basketball on the moon, it would go a lot farther. If you threw it in space, it would go on forever, or at least until it flew past something with a lot of gravity to pull it in.

If you were to throw a basketball on a planet with \_\_\_\_\_ mass than Earth, the ball would travel a(n) \_\_\_\_\_ distance.

- A. less, longer
- B. less, shorter
- C. more, longer
- D. more, equal

## Day 20 Assignments

### **Math**

**Day 20:** Complete the worksheet on Percentage Calculations.

### **Language Arts**

**Day 20:** Complete the worksheets on Inferences in Literature. This assignment will also be available on Study Island.

### **Social Studies**

**Day 20:** Use the notes over Chapter 9 (Section 2) to complete the quiz.

### **Science**

**Day 20:** Complete the worksheets over Motion. This assignment will also be available on Flocabulary.

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

Percentage Calculations

*Day #20*

Round your answer to two decimal places.

1 )  $77 \div 91 = \underline{\quad} \%$

6 )  $42 \div 0.82 = \underline{\quad}$

2 )  $0.18 \times 76 = \underline{\quad}$

7 )  $76\% \times 92 = \underline{\quad}$

3 )  $56 \div 41\% = \underline{\quad}$

8 )  $27 \div 0.81 = \underline{\quad}$

4 )  $0.23 \times 58 = \underline{\quad}$

9 )  $96 \div 69\% = \underline{\quad}$

5 )  $26 \div 77 = \underline{\quad} \%$

10 )  $4\% \times 82 = \underline{\quad}$



Day 30  
20

# Inferences in Literature

## Question 1 .

"Jenny, is this how I factor this out?"

Jenny leaned over Anya's shoulder and frowned. "Not quite. Remember when you multiply two negative numbers together, you get a positive."

"Oh yeah! Thanks, Jen!"

Jenny usually had to help her friends with their homework. The two girls were close friends. Jenny didn't have a lot of friends, but the few ones she did have stuck to her like glue. "So when is your mom going to let you have the keys, Anya?" Jenny asked.

"Ugh, probably never. I passed my test, but my mom loves that car. She'll never trust me with it," Anya said, "But what about you? How are you doing behind the wheel?"

Jenny looked up from her work and stared out into the school parking lot. Other teens she knew were already driving, Anya included, but Jenny was younger than most of the kids in her grade. She still had to wait months before she could take her driving test. She sighed. "I'm doing ok. My dad makes me learn in this old clunker. It's got a clutch and everything." Jenny rolled her eyes. "He says if I can drive a standard, I can drive anything."

"Don't worry, Jen, you'll ace that test. You'll be driving in no time," Anya smiled.

"I hope so. Come on, here's our bus," Jenny threw her books into her bag and stood up.

What can you infer from these sentences?

Jenny rolled her eyes. "He says if I can drive a standard, I can drive anything?"

- A. Jenny resents how her father is teaching her to drive.
- B. Jenny's father doesn't want to spoil her with a new car.
- C. Standard transmissions are better than automatic transmissions.
- D. Jenny's father wants her to be prepared for life's challenges.

## Question 2 .

**The Right Dog**

Roy looked in each cage at the shelter. Then, he went back to the start and looked at each one again. He felt like this was the most important decision he would ever make. Today, he would pick out his own dog.

It took a long time to get his parents to agree to get a dog. Roy told them that he was more responsible now that he was in middle school. He got everything ready for a dog at his house. He used his own money to buy some food and made a doggie bed out of a box and some old towels. Now, Roy just needed the perfect dog.

Roy kneeled down in front of a small beagle. The dog's head drooped a little, and it looked at Roy with sad eyes.

The animal control officer saw Roy trying to pet the beagle. "He may look a little sad right now," Officer Kody said, "but that dog's got a playful streak that will come out when you get him out of here. I'll tell you what, why don't I let him out so that you can play with him."

Roy's face brightened, and he stepped back so Officer Kody could open the cage. As soon as the cage cracked open a couple inches, the beagle pushed its way out and began running around the room. Officer Kody tried to go after the beagle, but it was too fast. It slipped behind cabinets, toppled the trash can, and jumped at the other dogs still in the cages. It even managed to get behind Officer Kody and jumped on the back of his legs. Roy felt like his face would burst from laughing so hard.

"Come here, boy," Roy said as he slapped his knee.

The beagle stopped running for a second when it heard Roy calling. A big, goofy grin came on its face as it headed for the boy. It jumped on Roy's chest, knocking him backwards. A big, wet tongue began licking his face. Roy giggled as he tried to get the dog to stop.

"Here's the leash, kiddo," Officer Kody said. "Good job getting him to come to you."

Roy was able to get the leash around the dog's neck. The duo ran around outside, and Roy knew this was the fun-loving dog that he had to take home.

He went to find his mom, who was waiting in the main office. "Did you find one that you like?" she asked.

"Yep. I think I'll name him Kody."

In the story, Officer Kody claims, "that dog's got a playful streak that will come out when you get him out of here." Which statement from the story supports this claim?

- A. "It slipped behind cabinets, toppled the trash can, and jumped at the other dogs still in the cages."
- B. "Then, he went back to the start and looked at each one again."
- C. "He used his own money to buy some food and made a doggie bed out of a box and some old towels."
- D. "The dog's head drooped a little, and it looked at Roy with sad eyes."





## Question 4 .

**Break a Leg**  
by J. Blue Spicer

Mimi was nervous. She had always been given the starring role in plays and skits in class, but now she was the star of the yearly high school musical as a freshman. Though she knew most of the stage crew, considering they were friends from middle school, the rest of the cast consisted of upperclassmen. Ever since she won the biggest part in tryouts, she noticed they were giving her the cold shoulder.

The night of the first show came, and Mimi was fantastic. The crowd got lost in the fact that they were watching a high school musical, until something went wrong during a set change. Mitchell, a junior who was head of the stage crew, had tripped over a prop left near the stage and tumbled into the orchestra pit. The crowd gasped, and the high schoolers froze just as the scene had ended, but Mimi was quick on her feet. She improvised a line, got the crowd and the cast to laugh, and she even jumped into the pit to help Mitchell as best as she could.

After the show, Mimi's only concern was Mitchell. She found him sitting among the juniors and seniors backstage. "How is your leg?"

"It's been better, but I don't think I'll miss a show," Mitchell said blankly. As Mimi told him goodbye and wished him well, she felt some pats on her shoulder and heard a few claps. She smiled and knew the show was going to be better tomorrow.

**Directions: Select ALL the correct answers.**

Based on the passage, what **two** things can the reader infer about Mimi?

Mimi worries that her starring role will separate her from the musical's older cast and crew.

Mimi is more concerned with how her friends view her than the other members of the cast.

Mimi becomes upset at Mitchell for trying to ruin the show when he falls into the orchestra pit.

Mimi is more concerned about Mitchell's ability to work on the show than his hurt leg.

Mimi is able to remain calm and think of solutions quickly during unexpected situations on stage.

## Question 5 .

"Jenny, is this how I factor this out?"

Jenny leaned over Anya's shoulder and frowned. "Not quite. Remember when you multiply two negative numbers together, you get a positive."

"Oh yeah! Thanks, Jen!"

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"Don't worry, Jen, you'll ace that test. You'll be driving in no time," Anya smiled.

"I hope so. Come on, here's our bus," Jenny threw her books into her bag and stood up.

What can be inferred about Jenny from this passage?

- A. Jenny is smart and does well in school.
- B. Jenny is unpopular among other teens.
- C. Jenny does not get along with her father.
- D. Jenny is a worse driver than Anya.



## Question 7 .

**The Right Dog**

Roy looked in each cage at the shelter. Then, he went back to the start and looked at each one again. He felt like this was the most important decision he would ever make. Today, he would pick out his own dog.

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He went to find his mom, who was waiting in the main office. "Did you find one that you like?" she asked.

"Yep. I think I'll name him Kody."

Which sentence **best** supports the idea that the beagle likes Roy?

- A. "It took a long time to get his parents to agree to get a dog."
- B. "Roy felt like his face would burst from laughing so hard."
- C. "The animal control officer saw Roy trying to pet the beagle."
- D. "A big, goofy grin came on its face as it headed for the boy."

**Question 8 .**

Nathaniel and Jessenia were looking up and down a tall shelf of books in the school library, trying to find something, anything, that looked interesting. They were not having much luck. "Why do they make us come in here? There's never anything good," Nathaniel complained.

"No kidding," agreed Jessenia. "There's no such thing as a good book."

The new librarian, a tall gentleman, must have heard them because he called out, "Whoa!" and rushed over to them. "No good books? When I was your age, my dad told me, 'If you don't like reading, it's just because you haven't found the right book yet.' Let's see what we can find for you two. What about you, little man? What's your favorite thing to do?"

"Tae Kwon Do!" Nathaniel yelled. "I take self-defense classes three days a week!"

"Then check this out," the librarian said as he pulled a book from a nearby shelf. "This is a story about a young ninja in Japan who had to protect his ruler while another was attacking the kingdom. Sounds right up your alley!" He handed the book to Nathaniel, who turned it over and began reading the summary on the book's back cover. "And you, little lady?" he said, turning to Jessenia. "What are you into?"

"I dunno. I guess I kind of like magic," she told him.

"Magic! Well, then, I've got one for you!" He reached into a nearby shelf and pulled down another book. "This is a biography about Harry Houdini. He was a great magician who could escape from anything, including being handcuffed and being buried alive!" He handed her the book.

"Thanks, I guess," she said. "Well, Nathaniel, I guess we should get back to class."

"I guess so," he replied. "Thanks, sir. I'm actually kind of excited about reading this book."

"You're welcome," said the librarian. "But you have to promise me you will read at least the first twenty pages. If you don't like these books by then, you can bring them back and tell me I was wrong."

"We promise," said Jessenia. "But those twenty pages better be good!"

Which statement about Jessenia and Nathaniel does the story support?

- A. They have never before found books that they enjoyed.
- B. They think there are good books but have never found any.
- C. They think the librarian will be able to find some good books.
- D. They have enjoyed some books but do not enjoy most.

## Question 9 .

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"We promise," said Jessenia. "But those twenty pages better be good!"

What does the passage suggest about the librarian?

- A. The librarian believes that people should read books based upon their interests.
- B. The librarian believes that students should enjoy every book they read.
- C. The librarian believes that finding good books is very difficult to do.
- D. The librarian believes that people have to read many books to find a good one.

## Question 10 .

"Jenny, is this how I factor this out?"

Jenny leaned over Anya's shoulder and frowned. "Not quite. Remember when you multiply two negative numbers together, you get a positive."

"Oh yeah! Thanks, Jen!"

Jenny usually had to help her friends with their homework. The two girls were close friends. Jenny didn't have a lot of friends, but the few ones she did have stuck to her like glue. "So when is your mom going to let you have the keys, Anya?" Jenny asked.

"Ugh, probably never. I passed my test, but my mom loves that car. She'll never trust me with it," Anya said, "But what about you? How are you doing behind the wheel?"

Jenny looked up from her work and stared out into the school parking lot. Other teens she knew were already driving, Anya included, but Jenny was younger than most of the kids in her grade. She still had to wait months before she could take her driving test. She sighed. "I'm doing ok. My dad makes me learn in this old clunker. It's got a clutch and everything." Jenny rolled her eyes. "He says if I can drive a standard, I can drive anything."

"Don't worry, Jen, you'll ace that test. You'll be driving in no time," Anya smiled.

"I hope so. Come on, here's our bus," Jenny threw her books into her bag and stood up.

According to the selection, which statement about Jenny is **most likely** true?

- A. She does not care about her dad's feelings.
- B. She is a loyal friend and daughter.
- C. She is easily frustrated and impatient.
- D. She is frustrated with Anya's poor skills.

**Chapter 9 Section 2 Sparta and Athens**

**The Big Idea**

The two most powerful city-states in Greece, Sparta and Athens, had very different cultures and became bitter enemies in the 400s BC.

**Main Ideas**

- The Spartans built a military society to provide security and protection.
- The Athenians admired the mind and the arts in addition to physical abilities.
- Sparta and Athens fought over who should have power and influence in Greece.

**Main Idea 1:**

**The Spartans built a military society to provide security and protection.**

- Daily life in Sparta was dominated by the army, and boys were trained from an early age to be soldiers.
  - Spartan men reached full citizenship at age 30 and could then move back home, but they stayed in the army until they turned 60.
- Courage, strength, self-discipline, and obedience were the most important qualities to have.
- Because men were often at war, women had more rights than other Greek women.
  - They ran the household and owned property.
  - They also received physical training and sometimes competed with men in sporting events.

**Government**

- Sparta was officially ruled by two kings who jointly led the army, but elected officials actually had more power than the kings.
- These officials handled dealings between Sparta and other city-states.
- Sparta's government was set up to control the city's helots, or slaves.

**Main Idea 2:**

**The Athenians admired the mind and the arts in addition to physical abilities.**

**Boys and Men in Athens**

- Sparta's main rival in Greece was Athens.
- They devote two years to the army.
- They learned to read, write, count, and sing.
- Wealthy boys continued their education with a private tutor.
- Boys from poor families usually became farmers.

**Girls and Women in Athens**

- Unlike boys, girls received almost no education, because men did not think they needed to be educated.
- Athenian women had fewer rights than women in many other city-states.

**Main Idea 3:**

**Sparta and Athens fought over who should have power and influence in Greece.**

- Sparta and Athens worked together to win the Persian Wars.
- After the Persian Wars, city-states joined an alliance, which historians call the Delian League.
  - "Alliance" means they agreed to work together.
- Sparta formed its own alliance, called the Peloponnesian League.

**The Peloponnesian War**

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Sparta declared war on Athens, starting the Peloponnesian War.</li> <li>• The war lasted for ten years before they decided to call a truce.</li> </ul> | <ul style="list-style-type: none"> <li>• The war started up once more when Athens tried to expand its empire. The Spartans won.</li> <li>• With the defeat of Athens, Sparta became the most powerful city-state in Greece.</li> </ul> | <ul style="list-style-type: none"> <li>• Other city-states started to resent Sparta, leading to a period of war.</li> <li>• Control of Greece shifted from one city-state to another for years.</li> </ul> |
|---|--|--|

**Chapter 9 Section 2**  
**Sparta and Athens**  
**Quiz**

1. What are the 2 most powerful city-states in Greece?
2. How long (how old) did a person have to stay in the Spartan army?
3. What are 4 qualities a Spartan soldier must have?
4. What did the women do while the men were at war?
5. What are helots?
6. Compare the Spartan men/boys with the Athenian men/boys.
7. Compare the Spartan women/girls with the Athenian women/girls.
8. What is an alliance?
9. What was the name of the league the Spartans joined? What was the name of the league the Athenians joined?
10. What happened in Greece after Sparta won the Peloponnesian War?



Name \_\_\_\_\_

Date \_\_\_\_\_

# Motion

NTI Day  
20

Use the text to answer each question below.

1. Work occurs whenever something is moved and an object is put into motion. The motion of an object is described with three things: position, direction and speed. Forces come into play with work because they push and pull objects. All forces have size and direction. Some, like the pull of gravity toward a black hole, are immense, while others, like the push of an ant on a breadcrumb, are very small.

Work is possible because all objects have mechanical energy, including potential (energy based on position) and kinetic (energy of motion) energy. Mechanical energy is transferred from one object to another by pushing or pulling it. How fast these objects move depends on the position they began in and how much force was applied to them.

Which of the following is an example of a situation where work occurs?

- |  |                                       |
|--|---------------------------------------|
| A. a glass of water sitting on the counter | B. a leaf resting on a rock           |
| C. a student sitting at a desk             | D. a baseball soaring through the air |

2. The position of an object is its location relative to a second or background object, which becomes the reference point. We describe positions using terms like on top of, next to, to the right of or just north of.

An object's motion is measured by its speed and direction from the reference point. Since no objects are truly "still" or completely motionless, motion is always relative to some other, usually larger, object or reference point.

Which of the following is an example of an object's position?

- |               |                 |
|---------------|-----------------|
| A. over there | B. on the table |
| C. right here | D. somewhere    |

- 3.** Speed is the rate at which an object moves relative to its reference point. Average speed is the total distance divided by the total time. We use average speed because the speed of an object may vary over time. Common measures of speed include miles per hour, meters per second or kilometers per minute. If you drive at a speed limit of 65 miles per hour, it means that in one hour you will have traveled 65 miles from the reference point of where you began.

Because the speed at which an object travels varies over time,

- |  |   |
|--|---|
| A. it is impossible to calculate any type of speed measurement.          | B. distance is considered the more important measurement. |
| C. average speed is used, which is total distance divided by total time. | D. time is considered the more important measurement.     |

- 4.** Velocity is the speed at which an object moves in a specific direction. It's measured in meters per second, minute or hour in a particular direction—like miles per hour going north, kilometers per minute west or meters per second up. Velocity tells us both the speed and direction we are traveling.

Acceleration is a change in velocity. It's measured by subtracting the object's starting velocity from the final velocity, divided by the time this change in velocity took. We usually think of acceleration as speeding up, but it can also mean slowing down. We call this negative acceleration or deceleration.

If a car was driving 45 miles per hour northeast, and is now driving 30 miles per hour north,

- |   |   |
|---|---|
| A. the car's velocity decelerated.        | B. the car's velocity accelerated.              |
| C. the car's velocity remained unchanged. | D. the car's acceleration is 30 miles per hour. |

- 5.** Friction is a force that works against motion between two surfaces that are touching. Sometimes this is because two surfaces are rough and don't slide easily. If a surface isn't smooth, there's sliding friction, which is influenced by the mass of the moving object and the smoothness of the surface it's moving on.

Rolling friction is usually less than sliding friction, which is why it's easier to move heavy furniture on a hand truck. Rolling friction happens when we use wheels.

Fluid friction makes it difficult to move through liquids like water. It's also the friction caused by air on the outside of a moving vehicle. You can feel fluid friction on your face when you run against the wind.

Which of the following best describes how friction affects motion?

- |  |  |
|--|--|
| A. Friction makes motion between two touching surfaces much easier.        | B. Sliding friction makes running on a windy day much harder on your body. |
| C. Rolling friction makes moving through liquids feel like very hard work. | D. Friction makes motion between two touching surfaces more difficult.     |

6. A machine is a device that helps make our work easier. Machines don't change the amount of work needed to do a job, but they can change the size, direction or amount of the force doing the work. They can also change the kind of friction two objects are creating. This change, called mechanical advantage, redirects the force in a way to make the work easier for us. Simple machines include levers, inclined planes, wedges, screws and wheels and axles—all of them help us out by changing the direction, amount or speed of force or the distance needed to do work.

According to the passage, which of the following is an example of a simple machine that makes our work easier?

- A. a lawnmower used to cut the grass
- B. a laptop computer that fits easily in a backpack
- C. a pulley that lifts an elevator off the ground
- D. a remote control for the television
7. Sir Isaac Newton's laws govern force and motion. The First Law of Motion says that an object at rest stays at rest unless acted upon by an outside force. In addition, an object in motion remains in motion at a constant speed, in a straight line, unless acted upon by an outside force.

Newton's Second Law of Motion says that the acceleration of an object depends on the object's mass and the amount of force applied. The greater the force, the more it will change the object's motion.

Newton's Third Law of Motion says that whenever you exert a force on an object, that object exerts an equal and opposite force on you. Or, for every action there is an equal and opposite reaction. For example, when you jump off the ground, there is a downward push of your legs into the ground as well as the upward push of your body into the air.

Which of these provides the best evidence for Newton's First Law of Motion?

- A. While sitting in a chair, you exert force on the chair, and the chair exerts the same amount of force back on you.
- B. A basketball sitting on the basketball court doesn't move until something pushes it.
- C. You push a full shopping cart and an empty shopping cart. The empty shopping cart goes much faster than the full one.
- D. You push your little brother on the swings, and he goes higher the harder you push him.