Colonel NTI Packet

2024 – 2025

6th Grade

Day 1

Table of Contents

Chapter 1 Extra Practice

Lesson 1.1

Estimate. Then find the quotient. Write the remainder, if any, as a fraction.

1. $27\overline{)89,420}$

2. $452\overline{)17,628}$

3. $19\overline{)1,353}$

Lessons 1.2

Find the prime factorization.

4. 250

5. 420

6. 360

Lesson 1.3

Find the LCM.

7. 12, 18

8. 20, 15

9. 8, 3

Lessons 1.4 and 1.5

Find the GCF.

10. 26 and 36

11. 40 and 32

12. 21 and 35

Solve.

13. Mr. Ramirez teaches dance. He has 18 sixth-grade students and
24 seventh-grade students. He wants to put the students in equal groups.
Each group will have students of only one grade level. How many students
should be in each group? How many of each group will there be?

_____

_____

Lesson 1.6

Estimate. Then **find** the sum or difference.

14. $6.48 - 3.29$

15. $59.58 + 39.6$

16. $21 - 8.42$

17. $0.95 + 3.409 + 16.7$

_____ | _____ | _____ | _____

Lesson 1.7

Estimate. Then find the product.

18. 3.77×7.19

19. 0.71×12.6

20. 9.2×106.45

21. 1.08×0.8

_____ | _____ | _____ | _____

Lessons 1.8 and 1.9

22. Desean spent $80.85 on 3 video games. If
each game was the same price, how much did
Desean pay for each?

23. Ted earned $147.20 working for $9.20 per
hour. How many hours did he work?

_____ | _____

NAME:_____ **DATE:**_____

Read the text and then answer the questions.

Your body needs energy to grow and heal itself. Your body also needs energy to move and think. That energy comes from the food you eat. It also comes from what you drink. How can you tell how much energy you get when you eat and drink? You can look at the calories. Most foods and drinks have labels that tell you how many calories they have. That number tells you how much energy you could get from eating or drinking something. You need the right number of calories every day. That way, your body can stay healthy. But what is the right number? Everyone is different. Most kids need between 1,600 and 2,500 calories every day. Your doctor can help you decide how many calories you should get.

1. ⓎⓃ

2. ⓎⓃ

3. ⓎⓃ

4. ⓎⓃ

5. ⓎⓃ

___ / 5

Total

1. Which title summarizes this text?

(A) All About Calories

(B) Cooking a Great Dinner!

(C) The Earth's Energy

(D) New Food For You to Try

2. Where does your body get energy?

(A) from growing

(B) from healing itself

(C) from food and drinks

(D) from labels

3. When the author claims that people need the *right* number of calories, what can you infer about the meaning of that phrase?

(A) It means that everyone should eat the exact same number of calories.

(B) It means finding the healthy amount for each individual's body.

(C) It means not exceeding 2,500 calories.

(D) It means only consuming certain types of calories.

4. What is a grammatical feature of this sentence: *Your body needs energy to grow and heal itself.*

(A) It has only one noun.

(B) It has a compound predicate.

(C) It has five predicates.

(D) It has four verbs.

5. Which is the tone of this text?

(A) informative

(B) humorous

(C) fearful

(D) sorrowful

NAME: _____ **DATE:** _____

DIRECTIONS Read the text and then answer the questions.

What does your body do with the calories you eat and drink? Your body uses that energy to help you move and think. Your body also uses calories to help you grow. If you do not get enough calories, you do not have much energy. You cannot think as well. You do not grow properly and it is hard for your body to heal properly. Your hair, skin, and nails are not at their healthiest. Your body needs calories for growing, for healing, and for energy. So it is very important to get enough calories. What happens if you get more calories than you need? Your body stores that energy. You use that energy when you are active. If you do not use that energy, you can gain weight. Being overweight is not healthy. So it is important to be active. It is also important not to get more calories than you need.

1. Which is **not** a way that your body uses calories?

Ⓐ thinking

Ⓑ growing

Ⓒ healing

Ⓓ getting rid of energy

2. Which sentence reflects a fact from this text?

Ⓐ Calories are not important.

Ⓑ It is a good idea to eat as much as you can.

Ⓒ It is important to get the right number of calories.

Ⓓ You should not get any calories.

3. Which prefix could be added to *properly* to make its antonym?

Ⓐ pre–

Ⓑ im–

Ⓒ ab–

Ⓓ pro–

4. Which of these words is an adverb?

Ⓐ properly

Ⓑ grow

Ⓒ heal

Ⓓ you

5. Which word is a synonym for *gain*?

Ⓐ lose

Ⓑ increase

Ⓒ notice

Ⓓ calculate

NAME:_____ DATE:_____

Read the text and then answer the questions.

Some foods are higher in calories than other foods. Foods that are high in fat often have more calories than foods that are low in fat. For example, a small serving of french fries has 14.5 grams of fat and 271 calories, but two ounces of turkey has just over 1.5 grams of fat and only 85 calories. Healthy foods such as lean meat, whole grains, fruits, and vegetables are usually low in fat. They are also very good for you. That doesn't mean you can never have french fries or potato chips, but it is a good idea to make sure that most of the calories you eat are healthy calories. Eat plenty of fruits and vegetables and protein, and get most of your calories from these foods. Save high-fat foods, such as candy, potato chips, and fried food, for treats.

1. Ⓨ Ⓝ

2. Ⓨ Ⓝ

3. Ⓨ Ⓝ

4. Ⓨ Ⓝ

5. Ⓨ Ⓝ

___ / 5

Total

1. Which of these is **not** a high-calorie food?

Ⓐ lean meat

Ⓑ cookies

Ⓒ french fries

Ⓓ fried chicken

2. How would a reader use a title such as "Choosing Healthy Foods" to understand more about this text?

Ⓐ The title would hint at the main idea of the text.

Ⓑ The title would be a joke from the author to the reader.

Ⓒ The title would reveal the words that are most common in the text.

Ⓓ The title would describe a picture.

3. What is the definition of *usually*?

Ⓐ never

Ⓑ most of the time

Ⓒ once in a while

Ⓓ every week

4. If the author recommends that readers eat plenty of fruits, vegetables, and protein, what does the word *plenty* tell you?

Ⓐ Eat no vegetables.

Ⓑ Eat a few pieces of fruit.

Ⓒ Eat no fruits, vegetables, or protein.

Ⓓ Eat lots of fruits, vegetables, and protein.

5. What does the phrase *most of* mean?

Ⓐ none of

Ⓑ a few of

Ⓒ the majority of

Ⓓ some of

Learning Content

Name: _____ Date: _____

Directions: Read the text, and answer the questions.

What Is a Cell?

A cell is the smallest unit of life that can reproduce itself independently. All living things are made of cells. An organism with only one cell is unicellular. An organism with many cells is multicellular. Your body is multicellular, composed of trillions of cells.

Each cell is filled with a gel-like material called *cytoplasm*. It includes the nucleus, a structure that contains DNA—the genetic code for all life. Inside the nucleus is the *nucleolus* that produces ribosomes—molecules that make proteins. Another important part of the cell is the mitochondria, where food and oxygen combine to create usable energy. A protective barrier called the cell membrane surrounds each cell, controlling what enters (food) and leaves (waste). A plant cell has a *cell wall* on its outermost part, covering the cell membrane. An animal cell does not have a cell wall.

Plant Cell

nucleolus

nucleus

cytoplasm

mitochondria

cell membrane

ribosomes
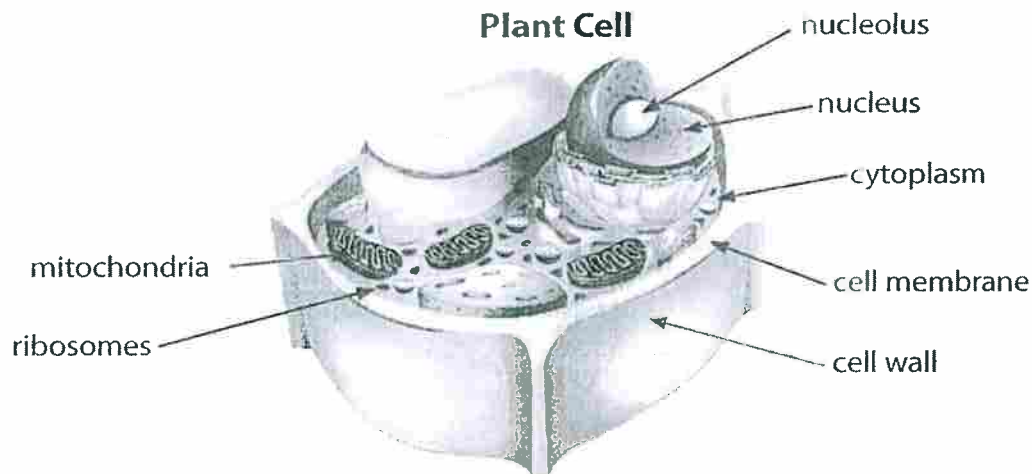
cell wall

1. Which structure is found only in plant cells?

   a. cell wall

   b. nucleus

   c. cytoplasm

   d. ribosome

2. Which part of a cell contains the genetic code for all life?

   a. cytoplasm

   b. nucleus

   c. mitochondria

   d. cell wall

3. Why do you think cells are called "the building blocks of life"?

   _____

   _____

Name:_____ Date:_____

Directions: Read the text, and answer the questions.

Humans have been living on Earth for thousands of years. For most of that time, humans depended mainly on foods found in the wild. Hunting, trapping, and fishing were used to catch animals. Humans searched for plants to eat. They collected plants such as fruits, seeds, and nuts. They also gathered shellfish and insects.

People tended to live in family groups of a few dozen people. They traveled over large areas to find enough food to support their needs. As a result, large villages or towns were rare, because few areas had enough resources to support a large group of people.

1. Why did people live in small groups?
    a. They didn't want to get along with lots of other people.
    b. It was hard to find enough food in one area.
    c. They did not want to build a town.
    d. It was easier to celebrate together.

2. What would be necessary for hunter-gatherers to form a village?
    a. someone who wanted a town
    b. many families with lots of children
    c. houses that were made of the same material
    d. an area with a very rich supply of wild foods

3. Based on the text, what types of food did hunters and gathers search for?
    a. animals and shellfish
    b. plants and insects
    c. fruits, seeds, and nuts
    d. all the above

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6th Grade

Day 2

Table of Contents

Chapter 2 Extra Practice

Lessons 2.1 and 2.2

Write as a decimal. Tell whether the decimal terminates or repeats.

1. $\frac{3}{8}$

2. $\frac{5}{6}$

3. $1\frac{13}{20}$

4. $\frac{5}{9}$

_____

Order from least to greatest.

5. $\frac{2}{3}, \frac{7}{10}, \frac{3}{5}$

6. $\frac{5}{12}, \frac{1}{3}, \frac{1}{4}$

7. $1\frac{1}{5}, 1.15, 1\frac{3}{25}$

_____

Lessons 2.3 and 2.4

Find the product. Simplify before multiplying.

8. $6 \times \frac{2}{3}$

9. $\frac{5}{6} \times \frac{3}{5}$

10. $\frac{8}{9} \times \frac{3}{10}$

11. $3\frac{2}{5} \times 1\frac{2}{3}$

_____

Evaluate using the order of operations.

12. $\left(\frac{8}{9} - \frac{1}{3}\right) \times \frac{2}{3}$

13. $\left(\frac{1}{4} + \frac{2}{7}\right) \times \frac{4}{5}$

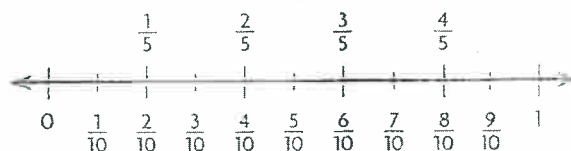14. $\frac{5}{6} \times \left(\frac{3}{10} + \frac{1}{2}\right) - \frac{2}{5}$

_____

Lesson 2.5

Use the model to find the quotient.

15. $\frac{3}{4} \div 6 =$ _____

$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$

16. $\frac{9}{10} \div \frac{2}{5} =$ _____

$$\frac{1}{5} \quad \frac{2}{5} \quad \frac{3}{5} \quad \frac{4}{5}$$

$$0 \quad \frac{1}{10} \quad \frac{2}{10} \quad \frac{3}{10} \quad \frac{4}{10} \quad \frac{5}{10} \quad \frac{6}{10} \quad \frac{7}{10} \quad \frac{8}{10} \quad \frac{9}{10} \quad 1$$

Lessons 2.6 and 2.7

Estimate. Then write the quotient in simplest form.

17. $1 \div \frac{1}{5}$

18. $\frac{5}{9} \div \frac{5}{7}$

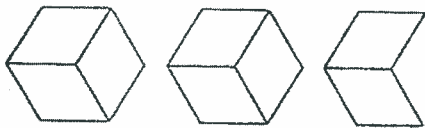19. $\frac{2}{5} \div \frac{7}{10}$
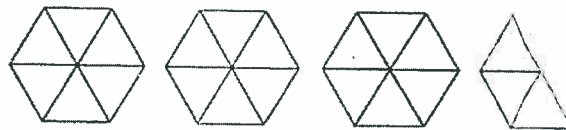
20. $\frac{13}{16} \div \frac{3}{8}$

_____

_____

_____

_____

Lessons 2.8 and 2.9

Use the model to find the quotient.

21. $2\frac{2}{3} \div \frac{1}{3} =$ _____

22. $3\frac{1}{2} \div \frac{1}{6} =$ _____

Estimate. Then write the quotient in simplest form.

23. $1\frac{5}{8} \div 2\frac{1}{2}$

24. $3\frac{3}{5} \div 2\frac{1}{4}$

25. $8 \div 5\frac{1}{3}$

26. $5\frac{4}{9} \div 3\frac{1}{2}$

_____

_____

_____

_____

Lesson 2.10

Solve.

27. Tom ate $\frac{1}{4}$ of a pizza. He divided the leftover pizza into pieces each equal to $\frac{1}{12}$ of the original pizza. After he gave some friends one piece each, $\frac{1}{6}$ of the original pizza remained. How many friends got pizza?

28. Bobcat Park is a rectangular park with an area of $5\frac{1}{5}$ square miles. Its width is $1\frac{19}{20}$ miles. How long is the park?

_____

_____

NAME:_____ DATE:_____

SUPERSIZED

Have you eaten at a fast-food restaurant lately? Many restaurants serve much bigger portions of food than they used to serve. A *portion* is the amount of food that you get when you order. For example, in the 1950s, a portion of french fries was about 2.4 ounces. Today's portion can be as high as 7 ounces or more. In the 1950s, a regular soda was 8 ounces. Today, that size soda is more likely to be 24 ounces.

Why does it matter if portion sizes are bigger now? Isn't that a good thing for customers? Not if you want to eat a healthy diet. Bigger portions have more food in them, and the more food you eat, the more calories your body gets. If you eat a lot of fast food, you are probably getting many more calories than you need, and those calories may not be healthy calories. Here is just one example: A meal with a large burger, fries, and a soda at one major fast-food restaurant has 1,200 calories. That is one-half to three-quarters of the number of calories most kids should eat in one day. That meal has a lot of fat and salt without a lot of the vitamins and minerals that your body needs. So, that meal gives you a lot of calories but not much nutrition.

You can enjoy fast food sometimes without overeating. Most restaurant menus tell you the number of calories in each item. Look for a food choice with a lower number of calories. Chances are you will find something you like. When you do order fried foods or other high-fat foods, order a small portion. You will still enjoy the taste! Don't eat too quickly—it takes your brain up to twenty minutes to realize that your stomach is full. So eat your food more slowly to give your brain time to catch up. Then, you will feel satisfied with less food. And remember that fast food is best if you have it as a treat once in a while—not every day.

NAME:_____ DATE:_____

Read "Supersized" and then answer the questions.

SCORE

1. Which fact is true about restaurants in the 1950s?

(A) They served bigger portions.

(B) They did not serve soda.

(C) They did not serve french fries.

(D) They served smaller portions.

2. Which is a likely purpose for reading this text?

(A) I want to know how to supersize my own meals at home.

(B) I want to understand why restaurants are getting bigger.

(C) I want to read about the history of farms that grow our food.

(D) I want to learn about healthy portion sizes.

3. What is the author hoping readers will do?

(A) eat a lot of fast food

(B) eat fast food wisely

(C) never eat fast food again

(D) eat as quickly as you can

4. Why are bigger portions a problem?

(A) They have too many calories.

(B) They are too expensive.

(C) They do not taste good.

(D) They do not fit on plates.

5. Since it takes the brain up to twenty minutes to know the stomach is full, which conclusion makes sense?

(A) Meals should not be longer than twenty minutes.

(B) Meals should take only twenty minutes.

(C) Eating slowly prevents you from getting too full.

(D) Brains work slowly.

6. Which is likely the author's opinion?

(A) A healthy diet is important.

(B) Fast food is very good for you.

(C) A healthy diet doesn't matter.

(D) Kids should eat more fast food.

7. It takes Celia thirty minutes to eat lunch, but it takes Lisa fifteen minutes. What can you infer?

(A) Celia will not feel satisfied.

(B) Lisa and Celia are not friends.

(C) Celia will feel satisfied with less food than Lisa will.

(D) Lisa will be very hungry.

8. Which conclusion about people in the 1950s is the most realistic?

(A) They ate more fast food than we do.

(B) They ate less fast food than we do.

(C) They ate the same amount of fast food as we do.

(D) They ate no fast food at all.

1. (Y)(N)

2. (Y)(N)

3. (Y)(N)

4. (Y)(N)

5. (Y)(N)

6. (Y)(N)

7. (Y)(N)

8. (Y)(N)

___ / 8

Total

NAME: _____ **DATE:** _____

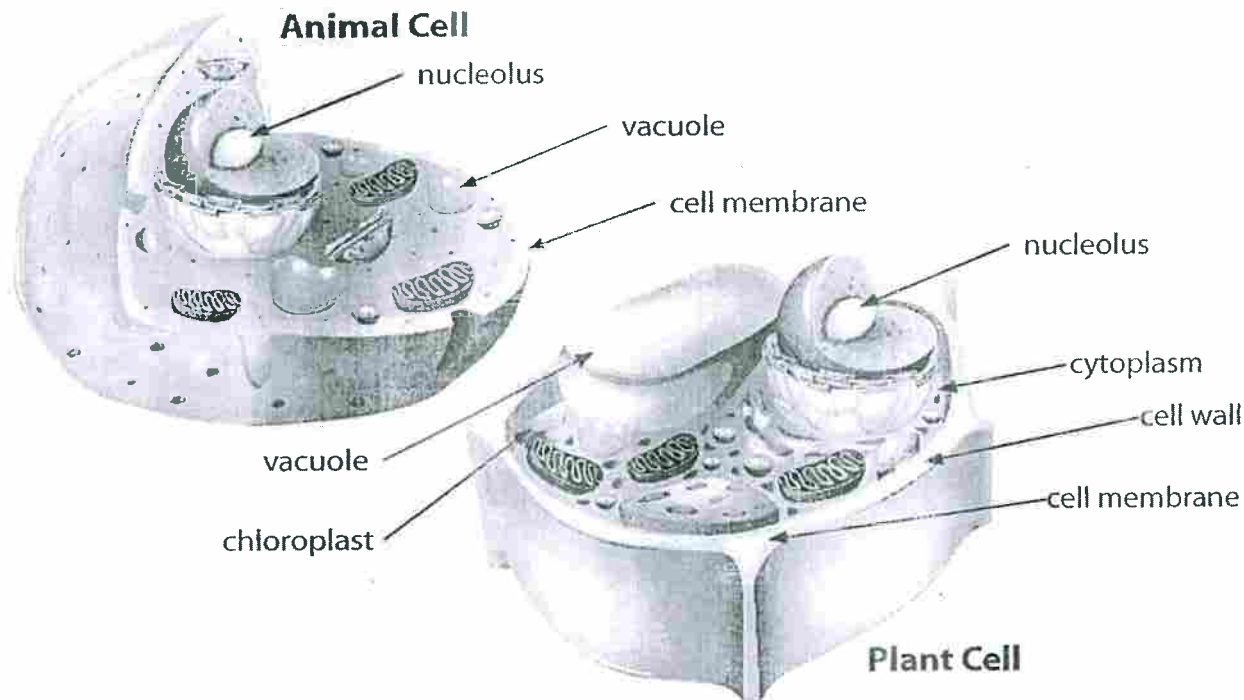**DIRECTIONS** Reread "Supersized." Then, read the prompt and respond on the lines below.

How can you make smart food choices at your favorite fast-food restaurant? Write about what you could do to make smart food choices.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

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_____

Name: _____   Date: _____

Directions: Study the diagrams, and answer the questions.

Analyzing Data

Animal Cell

nucleolus

vacuole

cell membrane

nucleolus

cytoplasm

cell wall

cell membrane

vacuole

chloroplast

Plant Cell

1. What is the oval structure in both plant and animal cells that looks like an egg?

   a. ribosomes

   b. nucleolus

   c. mitochondria

   d. cell membrane

2. What encloses the cell?

   a. nucleus

   b. chloroplast

   c. cell membrane

   d. vacuole

3. List some differences you see between the plant and animal cells in the pictures.

   _____

   _____

Name:_____ **Date:**_____

History

Directions: Read the text, and answer the questions.

Over 14,000 years ago, in the Paleolithic period, humans used tools. They used the tools to hunt animals. They used fire to cook and to preserve meat. Preserving food was a way to prepare for times when food was lacking.

Paleolithic humans made many kinds of stone tools. They made knives, scrapers, arrowheads, and axes. It is also likely that they used softer materials like ivory, bone, and wood. However, these tools made of softer materials have not survived to be examined today.

stone axe

1. Why was fire an important tool for Paleolithic humans?
   a. to signal for others
   b. to scare away animals
   c. to cook and preserve meat
   d. to tell the time of day

2. Look at the image. How can you tell that this stone axe was made by a human?
   a. There are marks where bits of stone were chipped off.
   b. It does not look very sharp.
   c. It looks like something found in nature.
   d. You can see tooth and claw marks.

3. What is one reason Paleolithic people may have made tools with ivory, bone, and wood?
   a. They wanted anyone to be able to make them.
   b. They did not want to waste materials they hunted or collected.
   c. They liked the texture and look of these materials.
   d. They were harder to carve than stone.

Colonel NTI Packet

2024 – 2025

6th Grade

Day 3

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Subject	Assignment
Math	Ch. 3 Extra Practice
Language Arts	Satellites and Gravity
Science	Week 1, Day 3 (Life Science)
Social Studies	Week 1, Day 3 (History)

Name _____

Chapter 3 Extra Practice

Lesson 3.1

Name the integer that represents the situation.

1. lose 3 points   2. 4 questions correct   3. spent $25   4. dropped 8 degrees

_____ _____ _____ _____

Lesson 3.2 and 3.4

Compare the numbers. Write < or >.

5. $7 \bigcirc {}^-9$

6. ${}^-5 \bigcirc {}^-6$

7. $0 \bigcirc {}^-10$
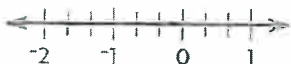
8. $-\frac{1}{2} \bigcirc {}^-0.1$

9. $-\frac{3}{5} \bigcirc -\frac{1}{8}$
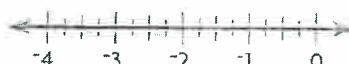
10. $8 \bigcirc {}^-9.25$

Lesson 3.3

Graph the number on the horizontal number line.
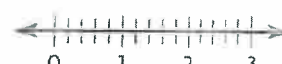
11. $-\frac{2}{3}$

12. $-3\frac{1}{4}$

13. 2.2

Lesson 3.5

Find the absolute value.

14. $|{}^-1|$

15. $\left|\frac{3}{10}\right|$

16. $|{}^-0.28|$

_____ _____ _____

Find the number or numbers that make the statement true.

17. $\left|\right| = 29$

18. $\left|\right| = 5.3$

19. $\left|\right| = 224$

_____ _____ _____

Lesson 3.6

Compare. Write <, >, or =.

20. $^-19$ ◯ $|^-19|$

21. $|^-24|$ ◯ $|24|$

22. $|^-14|$ ◯ $|5|$

23. Yesterday, Jamal scored $^-20$ points on a puzzle. Today he scored more points. Use absolute value to describe today's score as a loss.

Today's score is a loss of _____ than 20 points.

24. The surface of the water in a pool is at an elevation greater than $^-8$ feet. Use absolute value to describe the depth of the surface.

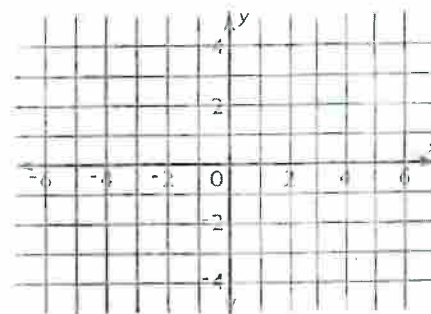The surface is at a depth _____ than 8 feet.

Lesson 3.7

Graph and label the point on the coordinate plane.

25. $A(0, ^-2)$

26. $B\left(2, 3\frac{1}{2}\right)$

27. $C\left(^-4\frac{1}{2}, ^-1\right)$

28. $D(3, ^-2.5)$

Lesson 3.8

Give the reflection of the point across the given axis.

29. $(2, ^-5)$, y-axis

30. $(^-1, 4)$, x-axis

31. $(^-5, 0)$, y-axis

_____

_____

_____

Lesson 3.9

Find the distance between the pair of points.

32. $(7, ^-3)$ and $(1, ^-3)$

33. $(^-3, 1)$ and $(^-3, ^-2)$

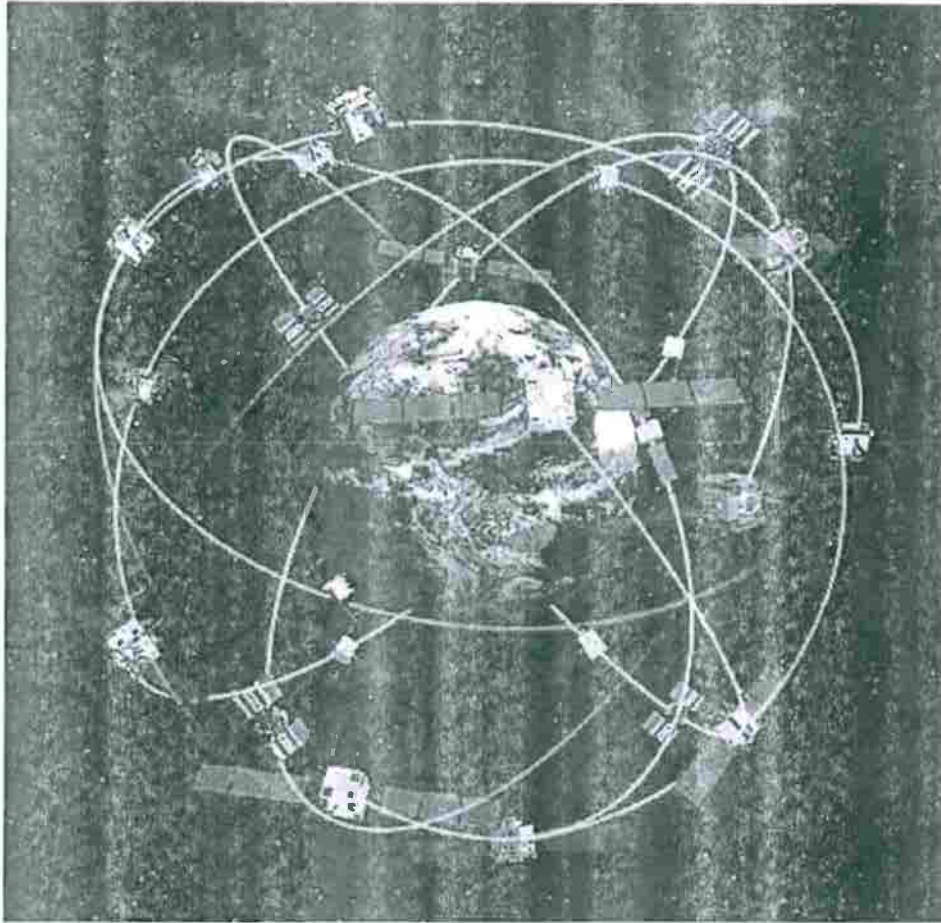34. $(^-2, 8)$ and $(^-7, 8)$

_____

_____

_____

Lesson 3.10

Solve.

35. On a map, the pie shop is located at $(^-4, 5)$. To get from the pie shop to the grocery store, go 3 blocks east and 6 blocks south. What are the coordinates of the grocery store?

36. Lena drew a rectangle with vertices at $(^-1, 1)$, $(^-1, ^-2)$, $(4, 1)$, and $(4, ^-2)$. What is the perimeter of the rectangle?

_____

_____

Satellites and Gravity

You may have heard the story of how Isaac Newton discovered gravity. As the legend goes, Newton was sitting under an apple tree when, all of a sudden, an apple dropped from the tree and fell on his head. This incident made him wonder why the apple fell toward the ground and not in any other direction.

Nowadays, it seems quite silly to think that an apple might fall up, or sideways. That's because now we know that Earth's gravity makes everything fall down, toward the planet's center. Gravity is the reason we are able to stand on the earth. Without it, we would all float off into space!

Gravity is also necessary for the operation of satellites. Usually when people talk about satellites, they are referring to manmade objects that have been sent into orbit. However, the moon is also a satellite! A satellite is any object that revolves around a planet in a circular or elliptical path. The path of a satellite is its orbit.

Manmade satellites have all kinds of important applications. Communications satellites, for instance, are satellites that are sent to orbit the earth for the purpose of sending communication signals or messages. Though we might not think about it when we're on the phone, using the Internet, watching television, or listening to the radio, many satellites help make those activities possible for us to enjoy.

Scientists have used observation satellites. These are satellites that have been specifically designed to monitor the earth. Observation satellites are used to keep track of the weather, detect changes in the environment, and create maps of the earth. They can be very useful for scientists in monitoring natural disasters, global warming, pollution, and other changes to the planet. The military also has spy satellites (very similar to observation satellites) that help them to peek in on other people around the world.

If you're ever in the car and need to find directions to go somewhere, you have probably used the Global Positioning System, also known as GPS. This is a network of 24 satellites that people with a GPS receiver can use to determine their location.

These are the main applications of satellites you may have encountered in your everyday life, but of course there are countless others! Satellites are incredibly useful, but how exactly do they stay in orbit?

It might seem strange that gravity doesn't cause satellites to just fall straight down to Earth, like Newton's apple. Why is that? It turns out that the earth's gravitational pull on an object weakens the farther away it is from the planet's surface. Satellites orbit far above the earth's surface at a set speed. Earth has an "escape velocity," which is the minimum speed necessary for an object to escape the earth's gravity entirely and fly off into outer space. Earth's escape velocity is more than 25,000 miles per hour. Engineers don't build satellites that travel faster than that because they don't want their satellites flying off into space.

Satellites are designed to achieve a balance. They revolve around the earth slowly enough to avoid drifting off into space, but fast enough to avoid getting pulled completely down toward the center of the earth by the force of gravity. At the correct velocity, a satellite is pulled by the earth with just enough force to maintain its orbit. The closer a satellite is to the earth's surface, the faster it needs to go in order to stay in orbit. And satellites have a circular or elliptical orbit because they are constantly being pulled toward the earth's surface, which is curved.

Therefore, gravity is an important part of our daily lives, whether it's keeping our feet firmly planted on the planet's surface, or keeping our satellites in orbit to help us communicate with one another and learn more about the world we live in.

Vocabulary

application

noun

definition: a way of being used.

Electricity has many applications in modern life.

Spanish: aplicación

operation

noun

definition: the act or process of working or running.

The operation of a computer was hard for her to learn.

Spanish: funcionamiento, operación

velocity

noun

definition: rate of speed or motion.

The velocity of the wind is twenty miles per hour.

Spanish: velocidad

forms: velocities

Name: _____ **Date:** _____

1. What is a satellite?

    A. any object affected by Earth's gravitational pull

    B. a manmade object that allows us to communicate or observe our environment

    C. any object that revolves around a planet in a circular or elliptical path

    D. a network of 24 objects in space that help people determine their location

2. What causes satellites to remain in orbit above Earth?

    A. Satellites achieve a balance between gravity and their velocity that keeps them in orbit.

    B. Satellites reach their escape velocity with the help of scientists and engineers.

    C. Satellites have a circular or elliptical orbit.

    D. Gravity pulls satellites sideways around Earth's curved surface.

3. We depend on satellites for many of our communication needs.

What evidence from the text supports this conclusion?

    A. The military has spy satellites to help them peek in on other people around the world.

    B. Satellites allow us to use the phone, Internet, television, and radio.

    C. Earth's gravitational pull on an object weakens the farther away it is from the planet's surface.

    D. Isaac Newton discovered gravity when an apple fell on his head.

4. Read this sentence from the text.

"Observation satellites are used to keep track of the weather . . . . [and] can be very useful for scientists in monitoring natural disasters, global warming, [and] pollution."

Based on this evidence, what conclusion can be made?

    A. Satellites cause a large amount of pollution.

    B. Scientists spend lots of money to build and repair satellites.

    C. Satellites can help us be aware of potential dangers.

    D. Scientists believe satellites can help us change weather patterns.

5. What is the main idea of this text?

    A. Satellites allow us to communicate easily and learn more about the world we live in.

    B. Earth's gravity allows us to use satellites for communication and observation.

    C. Isaac Newton's discovery of gravity has revolutionized the way we think.

    D. Earth's escape velocity is more than 25,000 miles per hour.

6. Read these sentences from the text.

"Manmade satellites have all kinds of important applications. Communications satellites, for instance, are satellites that are sent to orbit the Earth for the purpose of sending communication signals or messages."

As used in the text, what does the word "applications" mean?

    A. lessons

    B. problems

    C. mysteries

    D. uses

7. Choose the answer that best completes the sentence.

Scientists depend on satellites for many things, _____ information about global warming and pollution.

    A. otherwise

    B. therefore

    C. instead

    D. including

8. What is "escape velocity"?

_____

_____

_____

9. How do engineers keep satellites in orbit around the Earth?

_____

_____

_____

10. Gravity helps us watch television, talk on the phone, and use the Internet.

Explain whether this statement is true or false.

Support your answer with evidence from the text.

_____

_____

_____

Developing Questions

Name: _____ **Date:** _____

Directions: Read the text, and answer the questions.

> In science class, when you observe a cell under a microscope, look for clues to help you discover whether it is a plant cell or an animal cell. Notice that a plant cell is more rigid in structure because of its cell wall. It is shaped more like a rectangle. Because an animal cell does not have a cell wall, it is less rigid and has a rounder shape.
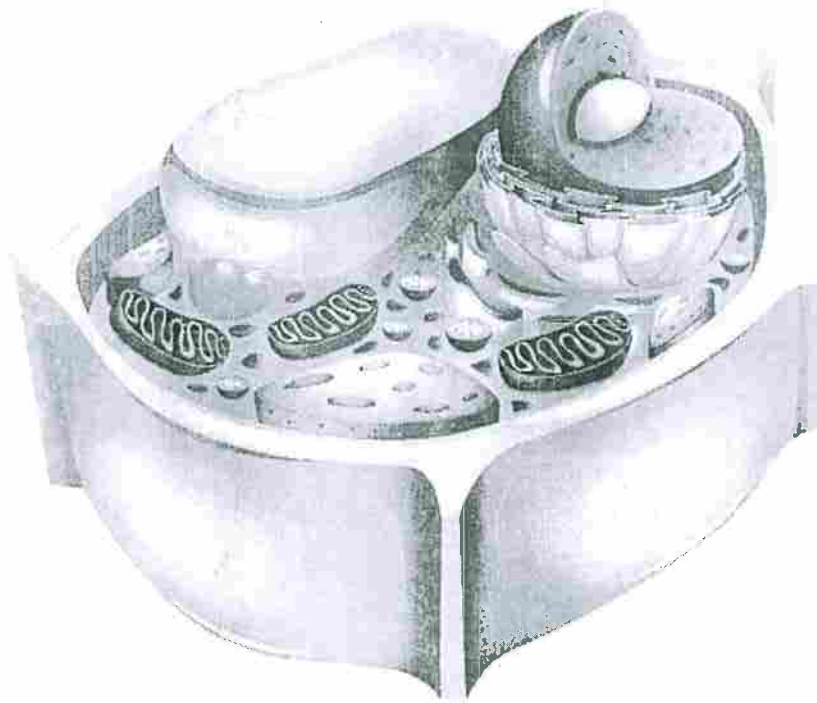
1. What does the wall at the edges of the cell tell you?

    a. It is a plant cell.   **b.** It is an animal cell.

    c. The cell is strong.   **d.** The cell is waterproof.

2. What does the nucleus of the cell hold?

    a. It holds water.   **b.** It holds DNA information.

    c. It holds the cell wall.   **d.** It holds the cell membrane.

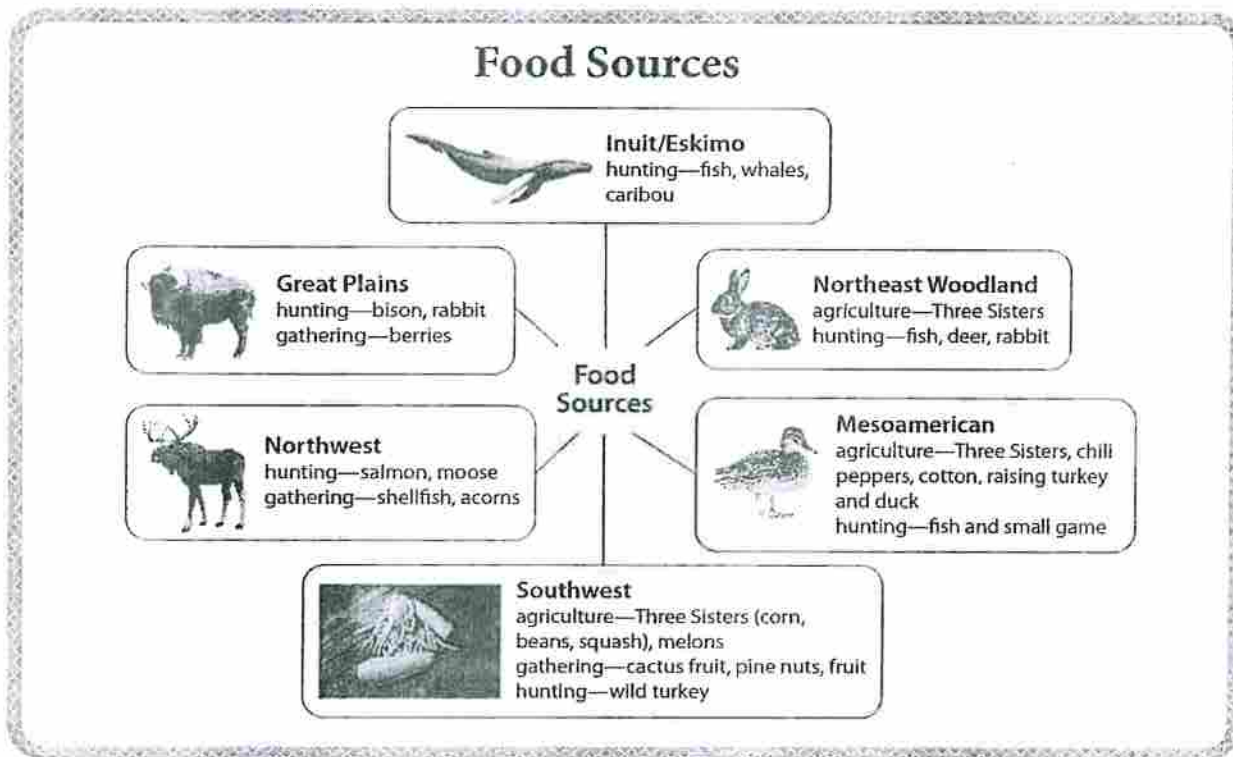3. Based on what you have learned about cells, write a question.

    _____

    _____

Name: _____ **Date:** _____

Directions: Look at the graphic, and answer the questions.

Food Sources

Inuit/Eskimo
hunting—fish, whales, caribou

Great Plains
hunting—bison, rabbit
gathering—berries

Northeast Woodland
agriculture—Three Sisters
hunting—fish, deer, rabbit

Food Sources

Northwest
hunting—salmon, moose
gathering—shellfish, acorns

Mesoamerican
agriculture—Three Sisters, chili peppers, cotton, raising turkey and duck
hunting—fish and small game

Southwest
agriculture—Three Sisters (corn, beans, squash), melons
gathering—cactus fruit, pine nuts, fruit
hunting—wild turkey

1. Why do you think the Inuit/Eskimo depend mainly on hunted food sources?
   a. They preferred the taste of food from the sea.
   b. Few edible plants grow in the cold Arctic.
   c. They liked hunting.
   d. The summers were very long.

2. How did raising animals help people get enough meat?
   a. People had the types of meat they liked.
   b. People didn't have to feed the animals.
   c. People did not have to hunt for the animals.
   d. The animals were bigger.

3. People in the Northwest built large communities, even though they did not grow a lot of food. What can you infer about the amount of food found in the wild in that region?

_____

_____

_____

Colonel NTI Packet

2024 – 2025

6th Grade

Day 4

Table of Contents

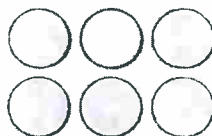| Subject	Assignment
Math	Ch. 4 Extra Practice
Language Arts	Matter Is Everywhere!
Science	Week 1, Day 4 (Life Science)
Social Studies	Week 1, Day 4 (History)

Chapter 4 Extra Practice

Lessons 4.1 and 4.2

Write the ratio of white counters to gray counters in two different ways.

1.

2.

3.

_____ _____ _____

Lesson 4.3

Write two equivalent ratios.

4.

1		
3		

5.

5		
6		

6.

8		
5		

Determine whether the ratios are equivalent.

7. $\frac{3}{4}$ and $\frac{6}{7}$

8. $\frac{12}{5}$ and $\frac{36}{15}$

9. $\frac{24}{54}$ and $\frac{4}{9}$

_____ _____ _____

Lesson 4.4

Solve.

10. The table shows the number of free throws that several people attempted when playing basketball. Which two people have equivalent ratios of successes to attempts? Explain how you know.

_____

_____

_____

_____

Free Throws Attempted and Made	
Person	Successes
Corey	3 out of 5
Tess	8 out of 10
Rodney	6 out of 10
Cherie	6 out of 8

Lesson 4.5

Use equivalent ratios to find the unknown value.

11. $\dfrac{16}{} = \dfrac{4}{5}$

12. $\dfrac{7}{10} = \dfrac{}{30}$

13. $\dfrac{}{18} = \dfrac{8}{3}$

14. $\dfrac{25}{4} = \dfrac{75}{}$

_____   _____   _____   _____

Lesson 4.6

Write the rate as a fraction. Then find the unit rate.

15. A jar containing 14 ounces of jelly costs $3.22.

16. The mass of 4 bananas is 512 grams.

_____   _____

Lesson 4.7

Use equivalent ratios to solve.

17. Ms. Brown biked 35 miles in 2.5 hours. How many miles could she bike in 3 hours at the same rate?

18. There are 180 calories in 4 cheese-flavored rice cakes. Pete eats 3 rice cakes. How many calories does he consume?
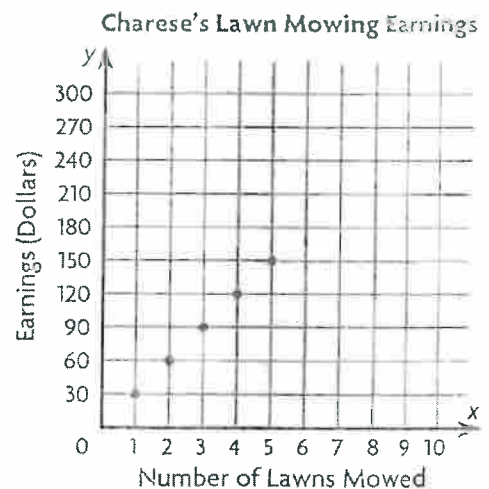
_____   _____

Lesson 4.8

The graph shows the money that Charese earns mowing lawns. Use the graph for 19 and 20.
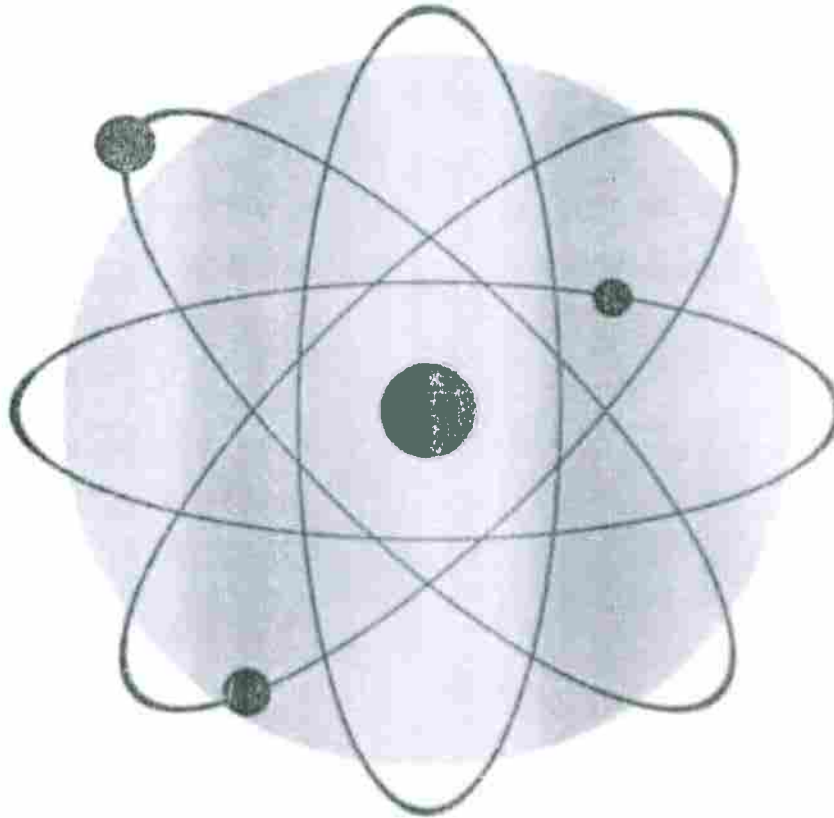
19. Complete the table of equivalent ratios.

Earnings ($)				
Lawns	1	2	3	4

20. What does the point (1, 30) represent?

_____

_____

Charese's Lawn Mowing Earnings

Matter Is Everywhere!

by ReadWorks

Everything around us is made of matter-your clothes, the trees, even the water you drink! We divide matter into four major categories, which are called the four states of matter: liquid, gaseous, solid, and plasma. However, we will focus on the first three. Whatever the state of matter may be, all matter is made of tiny particles called atoms. These particles are too tiny to see with the naked eye; they're even too small to see with a regular microscope. If you line up a million atoms next to each other, they will be as thick as a single piece of human hair. So, we can only look at atoms through very powerful tools, one of them being the "scanning tunneling" microscope.

How Do We Know?

We can easily see liquids and solids around us, but most gases aren't visible. We can't see the air around us, but it is still made of atoms that constantly move around freely in space. How can we tell?

Take a balloon, for example. When we pump air into a balloon, it visibly inflates. That means that gaseous matter is filling the balloon and taking up space. The more air we blow into the balloon, the bigger it gets. Therefore, we can observe the way gas moves around space. In the same way, inflatable pool toys also fill

with air so that they can float on water. When we fill the plastic shells with air, the toys take shape. Since air is less dense than water, the pool toys can rest on the water without sinking. And then we can enjoy a sunny day while floating in a pool!

Moving Atoms

Atoms are constantly moving. However, atoms move at different speeds within different states of matter. Atoms move more slowly when they are more densely packed. Atoms in solids are usually tightly packed and have less space to move around freely. This means that atoms in most solids move more slowly than atoms in most liquids. The atoms in gas usually move the fastest. Since the atoms usually move more freely in liquids and gases, they can undergo a process called diffusion. (Solids can diffuse as well, although it's a much longer process.) Diffusion is the movement of particles from a higher concentration to a lower concentration. That's why, when you spray perfume in a corner of a room, you will eventually smell it on the other side of the room. The atoms from the perfume diffuse through the air. Because of this diffusion, the perfume scent is spread.

Identification

We can identify materials according to a variety of properties. Scientists have determined several different measurements to help label materials. Some examples are temperature, hardness, color and length. Usually, these are used to measure solids, like rocks and minerals. However, temperature can be used to measure liquids as well. When geologists study rocks, they often use the Mohs scale of mineral hardness. This scale allows us to characterize the scratch resistance of various minerals. A diamond is described as hard because it is extremely difficult to scratch. Scientists can measure hardness with the Mohs scale and compare minerals to other minerals.

Scientists always use various methods to group materials together-that way, it's easier to study and compare them. That's another reason why we differentiate between liquids, gases, solids and plasmas!

Vocabulary

identify

verb

definition: When you identify something, you name or prove what something is. When you identify a person, you say or prove who that person is.

When you travel, you need a passport to identify yourself.

She identified him as the man who had robbed the store.

He is good at identifying types of trees.

Spanish: identificar

forms: identified, identifies, identifying

matter

noun

definition: Matter is anything that can be seen, touched, or measured. Water, rocks, and air are made up of matter.

Water is a kind of matter called a liquid. Rocks are a solid kind of matter, and air is made of gases, which are also matter. You can't see the gases in air, but air is matter because you can measure it. When you fill a balloon with air, you know that matter is going into the balloon because the balloon gets bigger.

Spanish: materia

state

noun

definition: the condition of a person or thing.

The old house was in a bad state.

Spanish: estado

Name: _____ Date: _____

1. What is everything around us made of?

    A. liquids

    B. matter

    C. plasma

    D. gas

2. Why does the author describe the balloon and inflatable pool toys filling up with air?

    A. in order to explain that it is impossible to observe the way gas moves around space

    B. in order to explain that air is not made of atoms that take up space

    C. in order to explain that air is made of atoms that take up space even though air is invisible

    D. in order to prove that these are fun objects to inflate

3. Usually, atoms move slower in solids than they do in liquids. Which evidence from the passage best supports this statement?

    A. Solids, liquids, and gases can all undergo the process of diffusion.

    B. Diffusion is the movement of particles from a higher concentration to a lower concentration.

    C. The atoms in gas move the fastest.

    D. Atoms in solids are often more tightly packed than atoms in liquids, and have less space to move around freely.

4. Imagine you sprayed perfume in the corner of a room. Based on the passage, what is the concentration of perfume particles like in that corner, compared to in the rest of the room?

    A. That corner has no concentration of perfume particles.

    B. That corner has the same concentration of perfume particles as the rest of the room.

    C. That corner has a lower concentration of perfume particles than the other corners of the room.

    D. That corner has a higher concentration of perfume particles than the other corners of the room.

5. What is this passage mainly about?

    A. matter and the properties it has in certain states

    B. the process of diffusion

    C. the different measurement scientists use to label materials

    D. the inflation of balloons and pool toys

6. Read the following sentences from the passage: "Whatever the state of matter may be, all matter is made of tiny particles called atoms. These particles are too tiny to see with the naked eye; they're even too small to see with a regular microscope. If you line up a million atoms next to each other, they will be as thick as a single piece of human hair."

The author uses the example of **"a single piece of human hair"** to illustrate

    A. how atoms can be seen with a regular microscope

    B. how tiny atoms actually are

    C. how hairy atoms actually are

    D. how much they look like hair

7. Choose the answer that best completes the sentence below.

Scientists group materials together _____ it is easier to compare and study them that way.

    A. however

    B. but

    C. although

    D. because

8. Explain why atoms move at different speeds depending on whether they are in liquids or solids.

_____

_____

_____

9. What is diffusion?

_____

_____

_____

**10.** Explain whether smoke filling up a room is diffusion or not.

_____

_____

_____

Name: _____ Date: _____

Directions: Read the text, and answer the questions.

While using a microscope to look at a slide, you determine that what you see under the microscope is a plant cell. Your teacher asks you to explain why you think it is a plant cell, and not an animal cell. How can you convince your teacher this is a plant cell?

Planning Solutions
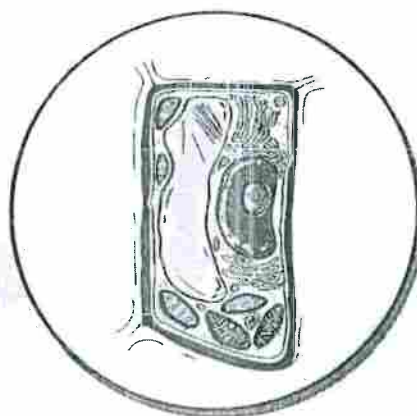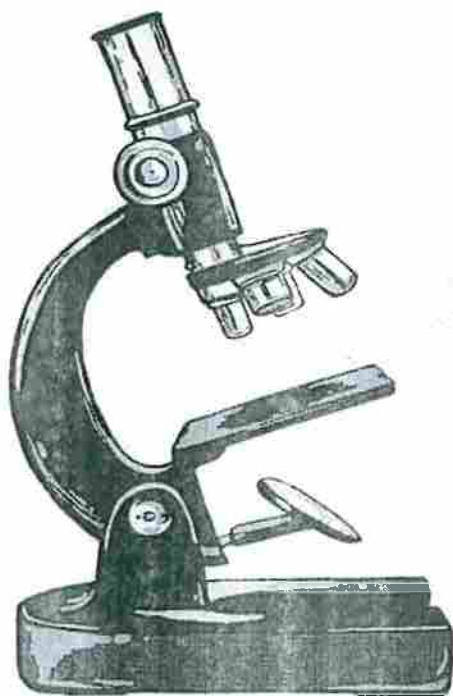
1. You can show your teacher _____.

   a. the cell wall

   b. the cell membrane

   c. the nucleolus

   d. the cytoplasm

2. You can also point out the general shape of the cell, which is _____.

   a. large

   b. rectangular

   c. thin

   d. round

3. How are animal cells and plant cells shaped differently?

   _____

   _____

Name:_____ **Date:**_____

History

Directions: Read the chart, and answer the questions.

Types of Goods	
Society	**Goods**
hunter-gatherers—have to move from place to place to find food	simple tools portable shelter clothing
agricultural societies—can stay in one place for several or many years	permanent shelters pottery, cooking, and storage materials clothing stored food simple toys fields for planting domesticated animals
modern societies	permanent shelters cars clothing toys technology food from stores

1. Hunter-gatherers had only a few goods. Why was this important for them?
   a. They needed to be able to travel long distances.
   b. They preferred to hunt rather than to make things.
   c. They did not want to be robbed.
   d. There were no places to buy or trade for goods.

2. Why did agricultural societies have more goods?

   _____

   _____

   _____

   _____

3. What could you learn about the importance of goods from a hunter-gatherer?

   _____

   _____

   _____

   _____

Colonel NTI Packet

2024 – 2025

6th Grade

Day 5

Table of Contents

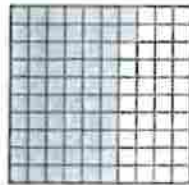| Subject	Assignment
Math	Ch. 5 Extra Practice
Language Arts	Week 2, Day 1
	Week 2, Day 2
	Week 2, Day 3
Science	Week 1, Day 5 (Life Science)
Social Studies	Week 1, Day 5 (History)

Chapter 5 Extra Practice

Lesson 5.1
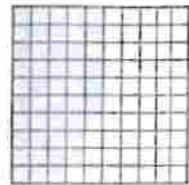
Write a ratio and a percent to represent the shaded part.
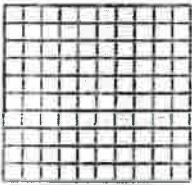
1.
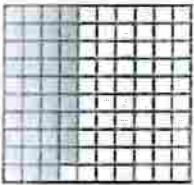
2.

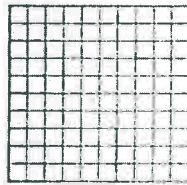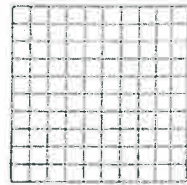3.

_____   _____   _____

Model the percent.

4. 23%

5. 80%

6. 56%

Lesson 5.2

Write the percent as a fraction and as a decimal.

7. 19%

8. 3%

9. 102%

10. 0.5%

Lesson 5.3

Write the fraction or decimal as a percent.

11. 0.08

12. 0.4

13. $\frac{2}{5}$

14. $\frac{19}{20}$

_____ _____ _____ _____

Lessons 5.4 and 5.5

Find the percent of the quantity.

15. 40% of 50

16. 2% of 250

17. 75% of 1,800

18. 120% of 40

_____ _____ _____ _____

19. A cafeteria sold 80 frozen yogurts on Monday, and 55% of these were peach yogurt. How many peach yogurts were sold on Monday?

20. Jamal has 1,240 songs on his MP3 player, and 40% of the songs are rock songs. How many of the songs are NOT rock songs?

_____ _____

21. Rianda bought 32 apples. She set aside 25% to eat and divided the rest equally among 6 pies. How many apples are in each pie?

22. The math class has a set of 40 calculators, and 85% of the calculators have working batteries. How many calculators need new batteries?

_____ _____

Lesson 5.6

Find the unknown value.

23. 63 is 90% of ?

24. 648 is 54% of ?

25. 27 is 50% of ?

26. 6 is 3% of ?

_____ _____ _____ _____

NAME:_____ DATE:_____

Read the text and then answer the questions.

SCORE

Brooke had been in her school's library for half an hour, looking unsuccessfully for some information for a project. She was nearly ready to give up in frustration when she spotted the school's librarian. "Mrs. Jordan," Brooke pleaded, "can I please have some help finding some things?"

"I'll certainly do my best, Brooke. What is it that you need?" Mrs. Jordan asked.

"I need good resources for my project on ancient Assyria, but there's not much here."

"I'm sorry you're not finding what you need." Mrs. Jordan said with some embarrassment. "I wish we had more material on ancient Assyria, but we just don't have the funding we need for all the books we would like to have."

Mrs. Jordan helped Brooke as best she could, but Brooke couldn't help thinking the school ought to hold a **fund-raiser** for more library materials.

1. Ⓨ Ⓝ

2. Ⓨ Ⓝ

3. Ⓨ Ⓝ

4. Ⓨ Ⓝ

5. Ⓨ Ⓝ

___ / 5
Total

1. What is Brooke's problem?

Ⓐ Mrs. Jordan is angry with her.

Ⓑ She does not like being in the library.

Ⓒ She can't find the material she needs.

Ⓓ She has lost a library book.

2. How does the text explain why the library does **not** have the material it needs?

Ⓐ The material is hard to find.

Ⓑ There is not enough funding.

Ⓒ Mrs. Jordan does not like the material.

Ⓓ The library is too small.

3. Which two words are synonyms?

Ⓐ *resources* and *project*

Ⓑ *material* and *ancient*

Ⓒ *project* and *library*

Ⓓ *funding* and *money*

4. What does the prefix *un–* in the word *unsuccessfully* tell the reader about Brooke's search?

Ⓐ She finds everything she needs.

Ⓑ She is successful.

Ⓒ She is not successful.

Ⓓ She is afraid to ask for help.

5. Which word is used to describe what a group holds in order to raise money?

Ⓐ fund-raiser

Ⓑ library

Ⓒ material

Ⓓ project

NAME:_____ DATE:_____

DIRECTIONS Read the text and then answer the questions.

Brooke was working on a project about ancient Assyria. She had looked in her school's library for material, but there wasn't very much. So she had to go to the public library. Brooke got what she needed at the public library, but she kept thinking that the school's library should have more resources. Mrs. Jordan, the librarian, told Brooke that the library didn't have the funding it needed. That was why there wasn't enough material. So Brooke decided to ask if there could be a fund-raiser to get more library books and materials. She talked to Mrs. Archer, who was head of the school's booster club. Mrs. Archer thought a library fund-raiser was a terrific idea. She and Brooke talked about what to do for a fund-raiser and finally they hit on the perfect idea—a block party where everyone would bring food and a small donation.

1. Ⓨ Ⓝ

2. Ⓨ Ⓝ

3. Ⓨ Ⓝ

4. Ⓨ Ⓝ

5. Ⓨ Ⓝ

___ / 5
Total

1. Who is Mrs. Jordan?

- Ⓐ Brooke's teacher
- Ⓑ the librarian
- Ⓒ the head of the booster club
- Ⓓ none of the above

2. How do Brooke and Mrs. Archer plan to solve the library's funding problem?

- Ⓐ a block party fund-raiser
- Ⓑ a bigger library
- Ⓒ a trip to the public library
- Ⓓ a new booster club

3. Which word is a synonym for *donation*?

- Ⓐ discussion
- Ⓑ library
- Ⓒ party
- Ⓓ contribution

4. What is an example of a proper noun?

- Ⓐ Assyria
- Ⓑ Mrs. Jordan
- Ⓒ Brooke
- Ⓓ all of the above

5. Which word is an antonym of *public*?

- Ⓐ library
- Ⓑ large
- Ⓒ private
- Ⓓ terrific

NAME: _____ DATE: _____

Read the text and then answer the questions.

SCORE

1. Ⓨ Ⓝ

2. Ⓨ Ⓝ

3. Ⓨ Ⓝ

4. Ⓨ Ⓝ

5. Ⓨ Ⓝ

___ / 5

Total

Don't Miss the Fabulous Blowout Block Party Potluck!

Do you enjoy eating delicious homemade food? Do you like to play games, watch movies, and spend time with your friends? Then, you want to be there for the amazing Blowout Block Party Potluck! The Block Party Potluck will be held at Mason Street School on Saturday, September 17, from 1:00 p.m. until 5:00 p.m. Bring a potluck dish to share, and sample some of the finest cooking in town! There will be music, movies, games, and prizes, too! Don't miss out on this spectacular event!

Get your tickets now: Adult tickets are $5.00, and student tickets are $4.00.

All proceeds from ticket sales will benefit the Mason Street School library, so get ready to have a great time and help the library, too!

1. Which information is **not** provided in this flyer?

- Ⓐ the date of the block party
- Ⓑ the time and place of the block party
- Ⓒ the price of the tickets
- Ⓓ titles of the movies that will be shown

2. Why is a flyer helpful for a reader?

- Ⓐ It is small.
- Ⓑ It is colorful.
- Ⓒ It includes the most important facts.
- Ⓓ It only includes pictures.

3. Which word is a synonym for *sample*?

- Ⓐ taste
- Ⓑ cook
- Ⓒ attend
- Ⓓ ticket

4. What does the adjective *delicious* tell you about the food?

- Ⓐ It is hard to find.
- Ⓑ It is expensive.
- Ⓒ It tastes very good.
- Ⓓ It is easy to make.

5. Which word is **not** a compound word?

- Ⓐ blowout
- Ⓑ potluck
- Ⓒ homemade
- Ⓓ spectacular

Communicating Results

Name: _____ Date: _____

Directions: Study the diagram, and answer the questions.

cell membrane
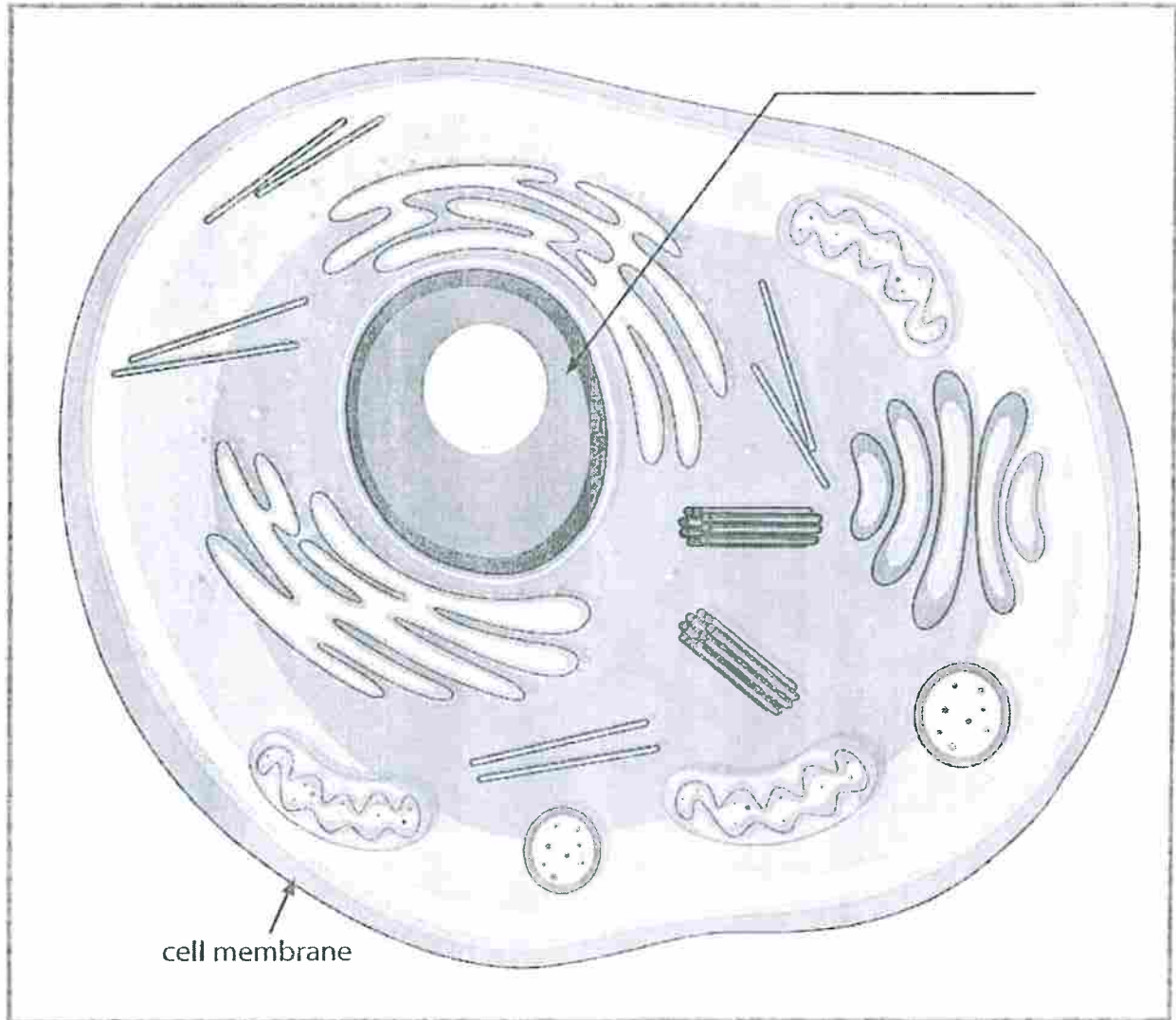
1. On the diagram, write the word "nucleus" on the line that is pointing to the nucleus.

2. Does the diagram represent a plant cell or an animal cell?

_____

3. How do you know?

_____

_____

_____

Name: _____ **Date:** _____

Directions: Study the image, and complete the task.

Scientists have learned a lot about ancient peoples by looking at their paintings on the walls of caves.

1. Draw a "wall painting" that shows something important about your life.

2. Compare your life with the life of the person who created the cave painting above.

_____

_____

_____

_____

Colonel NTI Packet

2024 – 2025

6th Grade

Day 6

Table of Contents

Subject	Assignment
Math	Practice Test pgs. 23 - 24
Language Arts	Week 2 Days 4 – 5 (Story)
	Week 2, Day 4
	Week 2, Day 5
Science	Week 2, Day 1 (Life Science)
Social Studies	Week 2, Day 1 (Civics)

1. A flag pole is located at point 0 on a map of Orange Avenue. Other points of interest on Orange Avenue are indicated by their distances, in miles, to the right of the flag pole (positive numbers) or to the left of the flag pole (negative numbers). Graph and label each location on the number line.

Name	Location
School	0.4
Post Office	1.8
Library	⁻1
Fire Station	⁻1.3
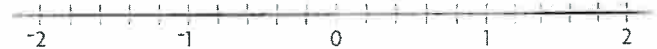
2. Select the numbers that are between ⁻1 and ⁻2. Mark all that apply.

A $\frac{-4}{5}$

B $1\frac{2}{3}$

C   ⁻1.3

D $⁻1\frac{1}{4}$

E $⁻2\frac{1}{10}$

3. Choose the number that makes the statement correct.

On a number line, $⁻3\frac{5}{8}$ is between ⁻3 and
⁻3
0
⁻2
⁻4
.

GO ON

Name _____

4. Select the numbers that are between ⁻1 and 1. Mark all that apply.

Ⓐ $-\frac{4}{5}$

Ⓑ ⁻0.9

Ⓒ $1\frac{1}{4}$

Ⓓ $⁻1\frac{1}{10}$

5. Choose the number that makes the statement correct.

On a number line, $1\frac{7}{8}$ is between 1 and

⁻1

0

$⁺\frac{7}{8}$

⁺2

6. A thermometer shows a temperature of ⁻4.5°C. A nearby thermometer shows a temperature of ⁻3.5°C. Explain how absolute value can be used to decide which temperature is warmer.

NAME: _____ DATE: _____

THE BLOWOUT BLOCK PARTY

Brooke was concerned because the library at her school needed more books and other materials. But Mrs. Jordan, the librarian, told Brooke that there wasn't enough funding for new materials. So Brooke decided to ask if the school could have a fund-raiser for the library. She talked to Mrs. Archer, the head of the booster club, and they settled on a block party potluck. Each person would be asked to buy a ticket and bring a dish to share as the price of admission. The money from the ticket sales would be given to the library to buy new materials.

Brooke worked with her friends and Mrs. Archer, and together they created flyers and got tickets printed. Mrs. Archer arranged for the party to be held at the school and got permission to use some of the rooms. One room would be used to show movies. There was even going to be popcorn. There would be games outside, with prizes for the winners. There would also be long tables set up outside for the food and drinks. Mrs. Archer knew someone who played in a local band, so there would be music at the party, too.

Once everything was planned, the next step was to publicize the party and let everyone know about it. Brooke and her friends passed out the flyers, posted a notice about the party on the school's website, and called everyone they knew. They posted notices in the local newspaper, too, and called some of the radio stations to ask them to help spread the word.

Brooke was really hoping that the party would be a success. It certainly seemed that it would be. It was a beautiful day. The party was to begin at one o'clock, but when Brooke got to the school at twelve-thirty, there were already people waiting! She knew then that her idea had worked.

The fund-raising party raised hundreds of dollars for the library. Before long, the school was able to buy many new books and computer programs. Now, Brooke and the other students would have more resources, and it was all because of a party!

NAME:_____ DATE:_____

Read "The Blowout Block Party" and then answer the questions.

SCORE

1. Which is a good word to describe Brooke?

- (A) fearful
- (B) organized
- (C) selfish
- (D) athletic

2. Which word in this text would help a reader understand the relevant definition of *band*?

- (A) programs
- (B) music
- (C) tables
- (D) books

3. What do you think might happen if it rained during the party?

- (A) Brooke would not play in the band.
- (B) The money would not be given to the library.
- (C) The party would be held outside.
- (D) People would go inside and have the party there.

4. Which statement reflects a purpose for reading this text?

- (A) I want to learn how to cook for my friends.
- (B) I want to find out why someone would throw a blowout block party.
- (C) I want to see a map of a block party.
- (D) I want to know where my own block party is in my neighborhood.

5. How does Brooke likely feel, given that her idea worked so well?

- (A) proud
- (B) jealous
- (C) fearful
- (D) curious

6. What do you think Mrs. Jordan's opinion is about the fund-raiser?

- (A) She probably thinks the fund-raiser is not a good idea.
- (B) She is probably happy that money was raised for the library.
- (C) She is probably angry about the fund-raiser.
- (D) She is probably afraid to get new materials for the library.

7. What indicates that the party will be a success?

- (A) It rains on the day of the party.
- (B) People stay up all night the night before the party.
- (C) A few students go to the party.
- (D) When Brooke gets to the school, there are already people there.

8. Which is a theme in this text?

- (A) determination
- (B) dishonesty
- (C) discrimination
- (D) conceitedness

1. Ⓨ Ⓝ
2. Ⓨ Ⓝ
3. Ⓨ Ⓝ
4. Ⓨ Ⓝ
5. Ⓨ Ⓝ
6. Ⓨ Ⓝ
7. Ⓨ Ⓝ
8. Ⓨ Ⓝ

___ / 8
Total

NAME: _____ **DATE:** _____

DIRECTIONS Reread "The Blowout Block Party." Then, read the prompt and respond on the lines below.

What kind of fund-raiser would you plan for your school? Write about what you would do for your fund-raiser, and where the money would go.
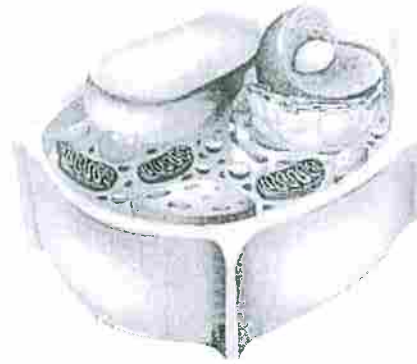
_____

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Name: _____ **Date:** _____

Directions: Read the text, and answer the questions.

Organelles Within the Cells

The interior of a cell is organized into compartments called *organelles*. Plant cells and animal cells have many of the same kinds of organelles. They also have organelles that are different. Plants have organelles called chloroplasts that animal cells do not have. Chloroplasts contain a pigment called chlorophyll. It captures the sun's energy to transform water and carbon dioxide into sugar, to feed the plant. This process is called photosynthesis.

1. Organelles called chloroplasts provide food for the plant by using the sun's energy. What is this process called?

   a. mitochondria

   b. mutation

   c. photosynthesis

   d. glucose

2. The cells of plants and animals _____.

   a. have all identical organelles

   b. have all different organelles

   c. have some of the same organelles, and some organelles that are different

   d. have organelles that change the organism from plant to animal

3. Why do you think animals do not need chloroplasts and chlorophyll in their cells?

   _____

   _____

   _____

   _____

Name: _____   Date: _____

Civics

Directions: Read the text, and circle the best answer for each question.

> The ancient Greeks were well known for developing new ideas. In ancient Greece, Athens was an important city. It was here that democracy was first created to govern the people. Democracy would become one of the most important influences on modern governments.
>
> At that time, Greece was made up of city-states. These were city areas with surrounding land. Each one had its own government and ruler(s).
>
> In these city-states, there were three main types of government:
> - democracy: rule by the people
> - monarchy: rule by a king or a tyrant
> - oligarchy: rule by a small powerful group

1. Based on the text, why did Athens become important?
   a. It was where a monarchy first ruled.
   b. It was where government was first created.
   c. It was where city-states were first developed.
   d. It was where democracy was first developed.

2. What were city-states?
   a. They were large areas of land with many cities.
   b. They included one city with surrounding land governed by its own ruler(s).
   c. They included one large city area governed by many rulers.
   d. They were made up of cities with one government and ruler(s).

3. There were three types of government in city-states. What was one of these?
   a. democracy, where government was ruled by a small powerful group
   b. oligarchy, where government was ruled by the people
   c. democracy, where government was ruled by the people
   d. monarchy, where government was ruled by a small powerful group

Colonel NTI Packet

2024 – 2025

6th Grade
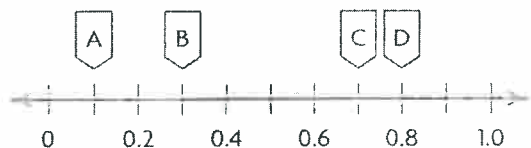
Day 7

Table of Contents

Subject	Assignment
Math	Practice Test pgs. 27 - 28
Language Arts	Plate Tectonics
Science	Week 2, Day 2 (Life Science)
Social Studies	Week 2, Day 2 (Civics)

1. Which point on the number line represents $\frac{4}{5}$?

A   Point A

B   Point B

C   Point C

D   Point D

2. Choose the word that makes the statement correct.

positive

If both the x- and y-coordinates are   negative   , the point is
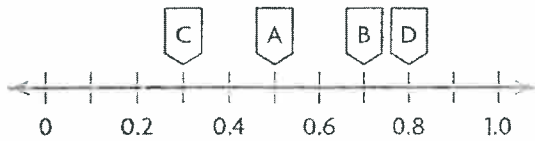
equal

always to the left of the y-axis and below the x-axis.

3. Explain how to graph points $A(^-3, 0)$, $B(0, 0)$, and $C(0, ^-3)$ on the coordinate plane. Then, explain how to graph point D so that $ABCD$ is a square.

GO ON

Name _____

4. Write the decimal and fraction in simplest form represented by each point.


```
      C      A       B  D
  +--+--+--+--+--+--+--+--+--+--+-->
  0    0.2   0.4   0.6   0.8   1.0
```

Point A   Point B

Point C   Point D

5. Write the values in order from least to greatest.

$\frac{1}{3}$ 0.45   0.39 $\frac{2}{5}$

6. Select the statements that are correct. Mark all that apply.

A   Point A (2, ⁻1) is to the right of the y-axis and below the x-axis.

B   Point B (⁻5, 2) is to the left of the y-axis and below the x-axis.
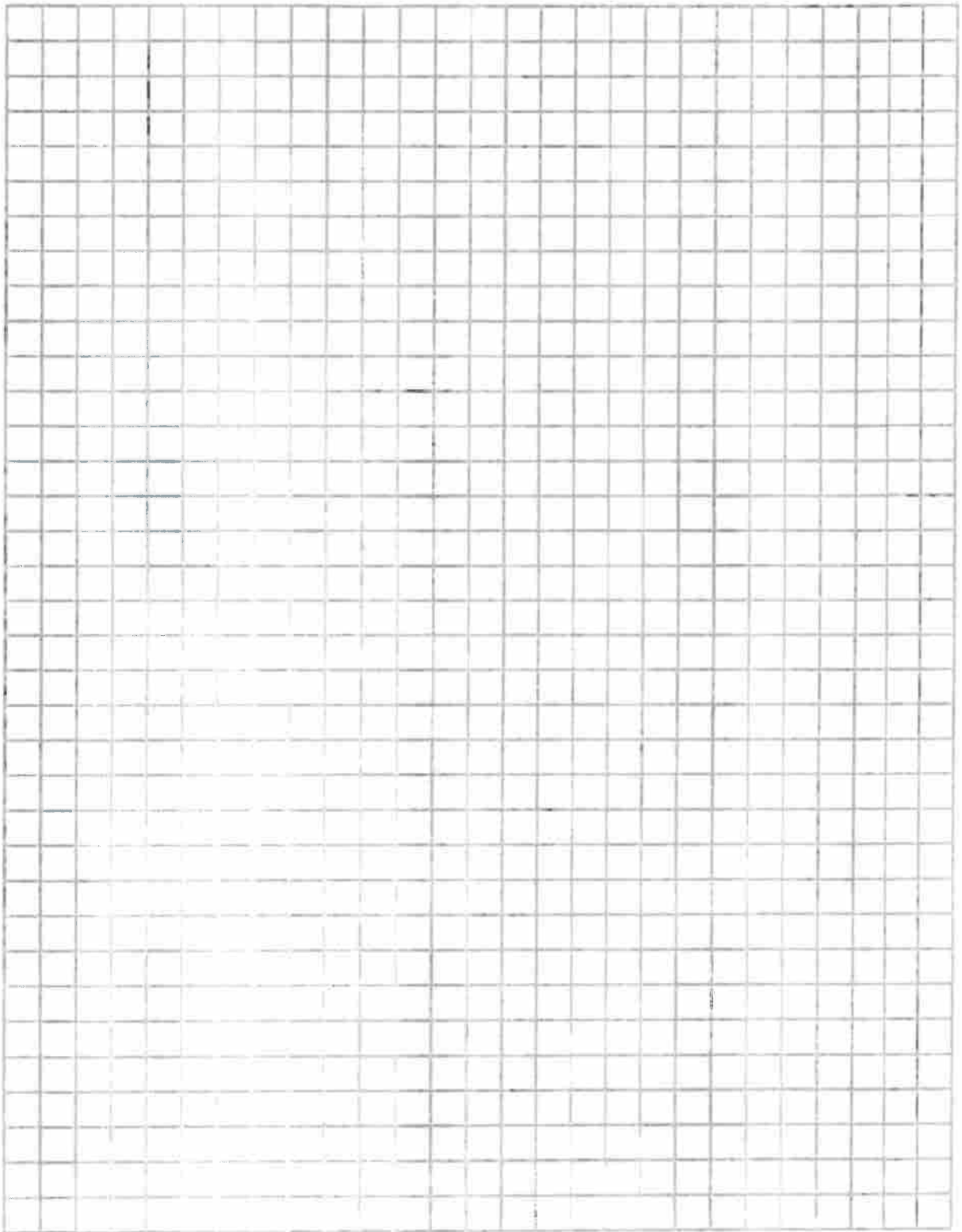
C   Point C (3, 2) is to the right of the y-axis and above the x-axis.

D   Point D (⁻2, ⁻1) is to the left of the y-axis and below the x-axis.
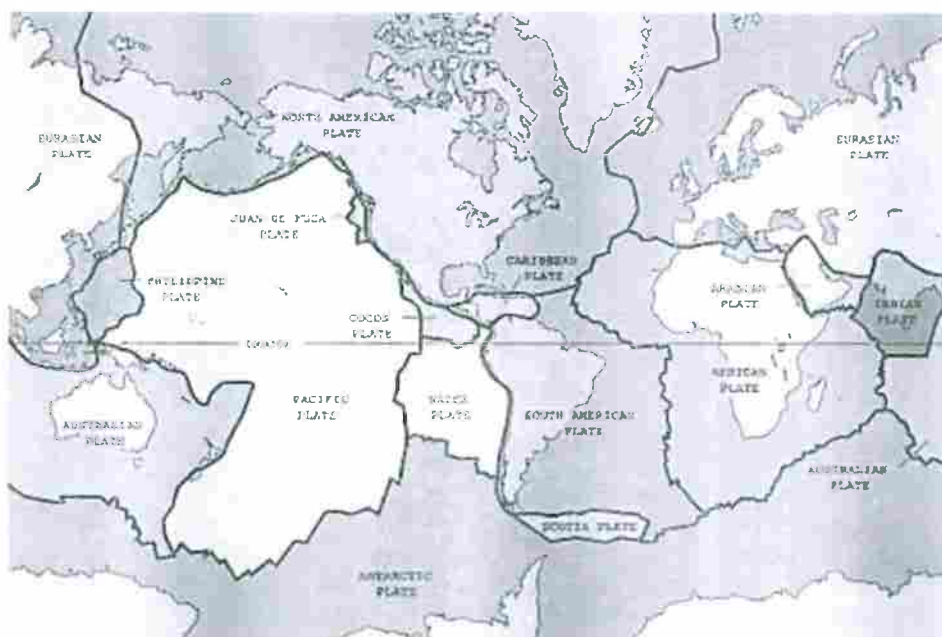
7. For numbers 7a–7b, compare. Choose <, >, or =.

7a. 0.25 $\begin{array}{c}<\\>\\=\end{array}$ $\frac{1}{4}$ 7b. $1\frac{1}{5}$ $\begin{array}{c}<\\>\\=\end{array}$ 1.5

Plate Tectonics

As solid as the earth may seem, there are always parts of its crust that are moving at an incredibly slow rate. Since the 1940s and 1950s, steady advancement in technology has allowed geologists to better understand the movement of the earth's plates and how these plates work.

The surface of the earth is made up of several crustal plates. Think of a massive puzzle. Instead of little cardboard cutouts, the puzzle pieces are gigantic slabs of rock that cover the earth. This "puzzle" sits right on top of the mantle's fluid and extremely hot layer, which is made up of several elements, the most prevalent being oxygen, silicon, and magnesium. The crust is divided into two types: oceanic crust and continental crust. As you can guess, the oceanic crust is composed of the pieces that cover the ocean floor, and the continental crust forms our continents.

Oceanic Crust

You may think that the ocean floor is stationary, meaning it doesn't move. However, that's not the case at all. The ocean floor is always moving, though at a very slow rate. In the past, geologists have mapped the ocean floor. By doing so, they discovered a large mountain range that lies underwater in between continents. This mountain range is called the *mid-oceanic ridge.*

As we learned before, the mantle is found directly underneath crustal plates. Since the mantle is made of very hot material, we find "convection currents" within this layer of the earth. Hot material at the deepest part of the mantle rises, then cools once it reaches the surface, then sinks back into the mantle, only to be reheated and rise again, repeating the cycle. Convection currents in the mantle cause the oceanic ridges to rise and form mountains. This is where many scientists say new crust is being generated. The hot magma from the mantle rises up between tectonic plates and spreads outward. So, as this happens, the earth's crust moves very slowly, carrying the continents with it. How slowly? Scientists measure the "spreading rate" in units of millimeters per year, with the faster rates

measuring about 80 to 120 millimeters per year.

Types of Boundaries

Convergent boundaries are points at which tectonic plates move into one another. This can result in the formation of mountain ranges (like the Himalayas) as continental plates push against one another. Or it can result in something called subduction, where one plate rises over another as they collide, and the other sinks underneath. This also can form a mountain range, just in a different process. The plate that slowly slips underneath the other plate then melts in the mantle.

Divergent boundaries, on the other hand, are boundaries at which plates are pushed away from one another. These occur both in the ocean and on land. In the ocean, hot magma from within the earth rises out from deep-sea trenches where the plates are pushed farther away from each other. On land, plates are pulled apart as part of a chain reaction beginning with the movements happening in the ocean. The Great Rift Valley in Africa is an example of this. If the plates continue to be pulled apart there, eastern Africa can split from the continent to form a new landmass. But that won't take place for millions of years since the process happens so slowly.

The last type is a transform boundary, one that involves plates sliding against each other. The San Andreas Fault in California is an example of this. The motion of tectonic plates sliding against one another can sometimes cause earthquakes, some quite large and devastating. Transform boundaries are also called strike-slip faults due to the motion they make. This type of relatively fast plate movement that causes earthquakes is the only one we can really feel. Since the other plate shifts are so slow and gradual, we don't feel them.

Pangaea

Scientists have discovered that our continents were not always the same shape or in the locations they are in now. Our continents have changed and drifted closer together or farther apart over the course of billions of years. The most recent time when all the continents were part of the same landmass happened about 300 million years ago. Scientists have named this huge landmass Pangaea, calling it a "super-continent." It existed when dinosaurs roamed our planet. Seventy million years later, Pangaea started to shift apart. When this happened, it broke into two pieces: Laurasia and Gondwana. Laurasia later broke up into Eurasia and North America, while Gondwana separated into Australia, South America, Africa, and Antarctica to make our earth look like it does today. And since our continents are still drifting, it is very possible that we will have another super-continent hundreds of millions of years from now.

What information supports all of this? If you look closely at a map of the earth, you can kind of see where the continents possibly used to fit together. South America looks like it could slide right into Africa and the two would fit together. So scientists began to speculate. But it wasn't enough to assume our continents were once a single landmass just because they look like they could fit together. Therefore, scientists began looking at fossils on different continents. They found similar fossils on Australia and southern Asia. They also found that there were very similar types of rock on the western coast of Africa and the eastern coast of South America. The support lay in the fossils of the animals and plants on the different continents. We can only wonder what the earth will look like in another hundred million years!

Vocabulary

boundary

noun

definition: something that marks the edge or limit.

The fence is the boundary of our neighbor's property.

Spanish: límite, frontera

forms: boundaries

generate

verb

definition: to bring into being or to produce.

The human body generates heat.

Spanish: generar

forms: generated, generates, generating

landmass

noun

definition: a very large area of land on the earth, such as a continent or a large part of a continent.

North America and South America are two landmasses connected by the land bridge of Central America.

Spanish: masa de tierra

Name: _____ **Date:** _____

1. What are the two types of crust on the earth's surface?

    A. continental and silicon

    B. transform and oceanic

    C. oceanic and continental

    D. divergent and convergent

2. What does the author compare the earth's surface to?

    A. dinner plates

    B. a massive puzzle

    C. the ocean

    D. an earthquake

3. Crustal movements can be dangerous to humans.

    What evidence from the text supports this conclusion?

    A. Plate movement at transform boundaries can sometimes cause earthquakes, some quite large and devastating.

    B. Plate movement at convergent boundaries can result in the formation of mountain ranges like the Himalayas.

    C. The spreading rate of some continents can reach 120 millimeters per year.

    D. As solid as the earth may seem, there are always parts of its crust moving at incredibly slow rates.

4. Crustal movements in one location can affect locations far away.

    What evidence from the text supports this conclusion?

    A. Steady advancement in technology has allowed geologists to better understand plate tectonics.

    B. The mantle is made up of elements like oxygen, silicon, and magnesium.

    C. Geologists mapped the ocean floor and discovered the mid-oceanic ridge.

    D. Divergent boundaries in the ocean create a chain reaction that pulls plates apart on land.

5. What is the main idea of this text?

    A. Pangaea was a "super-continent" that existed about 300 million years ago.

    B. Plate tectonics cause the earth's surface to shift and change in various ways.

    C. Scientists discovered similar fossil types and rock types on different continents.

    D. Crustal movements create convergent, divergent, and transform boundaries.

6. Read this sentence from the text.

"As you can guess, the oceanic crust is composed of the pieces that cover the ocean floor, and the continental crust forms our continents."

As used in the text, what does the word "composed" mean?

    A. studied

    B. divided

    C. made up

    D. shifted

7. Choose the answer that best completes the sentence.

The continents are slowly but constantly changing in location. _____, the continents used to form a single landmass called Pangaea but gradually drifted apart.

    A. For example

    B. Currently

    C. Including

    D. Above all

8. What are convection currents?

_____

_____

_____

9. How do convection currents help form underwater mountains?

_____

_____

_____

10. Explain two ways in which changes on the earth's surface are connected to changes below the earth's surface.

Support your answer with evidence from the text.

_____

_____

_____

Name: _____ **Date:** _____

Analyzing Data

Directions: Study the chart of cellular functions, and answer the questions.

What Do Cells Do?			
Cell Part	**Function**	**Present in Animal Cells**	**Present in Plant Cells**
nucleus	controls all activities, contains genetic material	X	X
nucleolus	in nucleus; makes ribosomes	X	X
cell membrane	allows substances to pass in and out of the cell	X	X
cell wall	tough barrier that supports the cell		X
mitochondria	energy center	X	X
chloroplasts	contain chlorophyll needed for photosynthesis		X
ribosomes	makes proteins	X	X
vacuole	stores food, nutrients, and sap (salts and sugars)	X	X

1. What structures are found only in plant cells?

   a. ribosomes and cell walls   b. mitochrondria and cell walls

   c. cell walls and chloroplasts   d. nucleus and chloroplasts

2. What part provides energy for the cell?

   a. mitochondria   b. ribosomes

   c. chloroplasts   d. nucleus

3. How are plant and animal cells similar?

   _____

   _____

Name: _____ **Date:** _____

Directions: Read the text, and circle the best answer for each question.

In the year 507 BC, the ruler of Athens was named Cleisthenes. He invented a government system called *demokrata*. This meant "rule by the people." It was the first form of democracy.

In this system, the citizens voted on everything. Only men who had military training were considered to be citizens, and only citizens could vote.

There were officials to help manage the government. They were chosen by a lottery so that all people had an equal chance of winning. It did not matter if they were wealthy or not. Only a few jobs were held by leaders who were voted for, such as army generals.
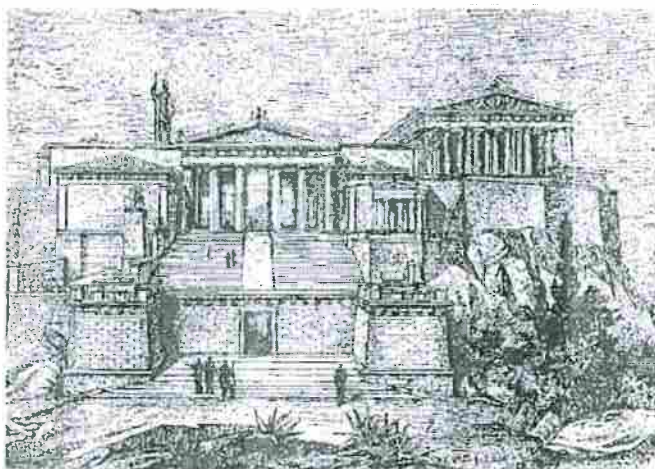
ancient Athens

1. What type of government was a *demokrata*?
   a. one where citizens voted for elected representatives in the government
   b. one that was ruled by the people, and citizens voted
   c. one that was ruled by a tyrant, and citizens did not vote
   d. one that was ruled by a king, and citizens did not vote

2. How were the citizens of ancient Athens different from the citizens of our country?
   a. Citizens of ancient Athens were all the adults, but not the children.
   b. Citizens of ancient Athens were all the adults and the children.
   c. Citizens of ancient Athens were all adult men with military training.
   d. Citizens of ancient Athens were men and women with military training.

3. How did government officials come into their jobs?
   a. They were elected by the citizens.
   b. They applied for their jobs.
   c. They paid with their wealth.
   d. They were selected by a lottery.

Colonel NTI Packet

2024 – 2025

6th Grade

Day 8

Table of Contents

Practice Test

6.NS.C.7a
*Apply and extend previous
understandings of numbers to the
system of rational numbers.*

Name _____

1. The low weekday temperatures for a city are shown.

Low Temperatures

Day	Low Temperature (°F)
Monday	⁻5
Tuesday	⁻3
Wednesday	2
Thursday	⁻7
Friday	3

Part A

Using the information in the table, order the temperatures from lowest to highest.

Part B

Explain how to use a vertical number line to determine the order.

2. Choose $<$, $>$, or $=$.

2a. 0.25 $\begin{array}{c}<\\>\\=\end{array}$ $\dfrac{3}{4}$

2c. $2\dfrac{7}{8}$ $\begin{array}{c}<\\>\\=\end{array}$ 2.875

2b. $\dfrac{1}{3}$ $\begin{array}{c}<\\>\\=\end{array}$ 0.325

2d. $\dfrac{-3}{4}$ $\begin{array}{c}<\\>\\=\end{array}$ $\dfrac{-1}{2}$

GO ON

Name _____

3. Compare $-\frac{2}{3}$ and $-\frac{5}{9}$. Use words and numbers to explain your answer.

4. Choose $<$, $>$, or $=$.

4a. $-\frac{3}{5}$ $\begin{array}{c} < \\ > \\ = \end{array}$ $-\frac{4}{5}$

4b. $-\frac{2}{5}$ $\begin{array}{c} < \\ > \\ = \end{array}$ $-\frac{3}{4}$

4c. -6.5 $\begin{array}{c} < \\ > \\ = \end{array}$ -4.2

4d. -2.4 $\begin{array}{c} < \\ > \\ = \end{array}$ -3.7

5. Compare $\frac{-1}{5}$ and -0.9. Which number is greater? Use numbers and words to explain your answer.

Cracking Up

Splitting Up

A new ocean will one day separate Africa.

A group of nomads got a shock several years ago in a desert in Ethiopia. A series of earthquakes rattled the ground one night, making a deafening noise. The next morning, the nomads discovered that a 3-foot cliff had risen from the ground behind them.

C. Ebinger/University of Rochester

A scientist inspects one of many fissures, or narrow cracks, that opened during a series of earthquakes in Ethiopia several years ago.

The event wasn't just any earthquake. It was one step in a geological process that is slowly building a new ocean in eastern Africa.

Spreading Apart

Earth's shell is made up of enormous pieces that fit together like those in a jigsaw puzzle. Called tectonic plates, the pieces are moving very slowly. Some plates are crashing together. Some are pulling apart. In the long course of Earth's history, the movements of plates have created mountains, oceans, and continents.

In eastern Africa, two large tectonic plates-the African Plate and the Arabian Plate-are pulling away from each other. "There's true plate spreading going on there," Cindy Ebinger, an Earth scientist at the University of Rochester in New York, told *ScienceSpin*.

That's not all. As the two plates pull apart, the African Plate is splitting into two pieces. One tectonic plate is becoming two plates.

Joe LeMonnier

An ocean will one day fill the Great Rift Valley, where Africa is pulling apart.

Recently, that tectonic activity has gotten dramatic. In 2005, the cracking of the African Plate triggered a volcanic eruption in Ethiopia. That was followed by a series of earthquakes-the same ones the nomads felt. The earthquakes occurred as magma (liquid rock) rose from deep within Earth, splitting the ground wide open. A series of crevices, some as wide as 10 feet, opened along a 35-mile stretch of desert in Ethiopia. Since then, the cracks have continued to grow.

A Natural Lab

Africa's tectonic activity has been going on for 30 million years. The spreading and cracking is what formed the Red Sea, as well as a deep depression known as the Great Rift Valley. The rift runs south from the bottom of the Red Sea through eastern Africa.

As the two sides of the rift valley pull even farther apart, the entire area will someday fall below sea level. Eventually, water from the Red Sea will rush in to fill the rift, spawning a new body of water. A million years from now-possibly sooner-the Great Rift Valley will lie at the bottom of an ocean that divides Africa in two.

Vocabulary

depression

noun

definition: a low spot or hollow.

My bike rode roughly over a depression in the road.

Spanish: depresión

tectonic

adjective

definition: of or pertaining to changes in the earth's crust.

Geologists are interested in the movement of tectonic plates.

geological

adjective

definition: of or pertaining to the makeup of the earth or to its history.

For me, the most interesting geological structures are caves and canyons.

The government is conducting a new geological survey of the area.

Name: _____ **Date:** _____

1. According to the text, what created mountains, oceans, and continents in Earth's history?

    A. a series of earthquakes

    B. plates crashing together

    C. plates pulling apart

    D. the movements of plates

2. Based on the sequence of the geological process described in the text, when will the Great Rift Valley fill with water?

    A. after 30 million years

    B. after the area falls below sea level

    C. after the area is flooded by rain

    D. never

3. Read this paragraph from the text.

    > A group of nomads got a shock several years ago in a desert in Ethiopia. A series of earthquakes rattled the ground one night, making a deafening noise. The next morning, the nomads discovered that a 3-foot cliff had risen from the ground behind them.

    What can you conclude about earthquakes based on this information?

    A. Earthquakes are always strong enough to create cracks or cliffs in the earth that weren't there before.

    B. Earthquakes can sometimes cause disruptions so big in earth that they form new cliffs.

    C. Earthquakes typically only happen in the desert, so they rarely impact people in any serious way.

    D. When an earthquake occurs, it takes several days for a new cliff to appear.

4. Based on the text, how often are new oceans created?

    A. whenever an earthquake happens

    B. every year

    C. very often, because tectonic plates move fast

    D. not often, because it takes millions of years

5. What is this text mostly about?

    A. tectonic plates creating a new African ocean

    B. how nomads live in Ethiopia

    C. continents and how they are created

    D. how tectonic plates move under the ocean

6. Read this sentence from the text.

A series of **crevices**, some as wide as 10 feet, opened along a 35-mile stretch of desert in Ethiopia.

As used in the sentence, what are **crevices**?

    A. liquid magma from volcanic eruptions

    B. shaking during earthquakes

    C. large cracks in the ground

    D. open spaces in the desert

7. Choose the word that best completes the sentence.

One day the Great Rift Valley will become an ocean, _____ it falls below sea level.

    A. after

    B. finally

    C. although

    D. before

8. According to the text, what are two ways tectonic plates move?

_____

_____

_____

9. Why don't we usually feel it when tectonic plates are crashing together and pulling apart? Use evidence from the text to support your answer.

_____

_____

_____

Name: _____   **Date:** _____

Directions: Read the text, and answer the questions.

Water is essential for plants to live. If you place a white carnation into a glass of water, and then add blue food coloring to the water, the white carnation will begin to turn blue, through the process of *osmosis*. When water molecules distribute themselves evenly within a space (such as a stem, and flowers and leaves) this is called osmosis. It is the way that all parts of a plant receive water.
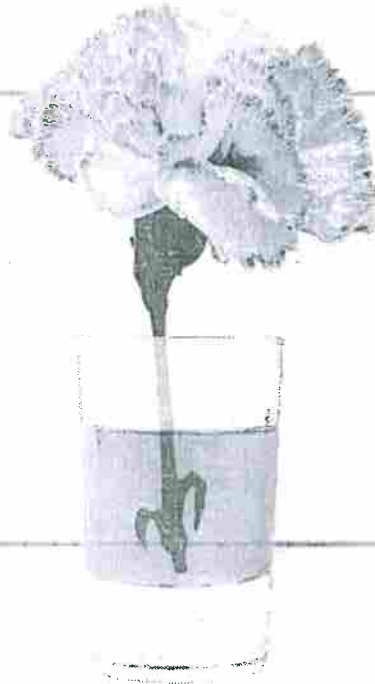
1. Without osmosis, what do you think might happen to a plant's leaves and flowers and stems?

   a. They might like having no water.

   b. They might die.

   c. They might grow.

   d. none of the above

2. What is a good definition of osmosis?

   a. The movement of water to evenly distribute itself.

   b. The leakage of water into plant parts and other living things.

   c. It is similar to photosynthesis.

   d. It is the process of a flower changing color.

3. Write a question about the process of osmosis, based on what you have learned.

   _____

   _____

   _____

   _____

Name: _____ Date: _____

Civics

Directions: Look at the web, and answer the questions.

Facts about Democracy (*Demokrata*) in Ancient Athens

The government was made up of:
- the Assembly, or the citizens who could vote.
- the Council of 500, or the people who got their jobs by lottery. They stayed in their jobs for one year.
- the Courts, or the judges and juries.

Demokrata lasted for about 200 years in ancient Athens, but it would impact the future.

There were about 250,000 people living in ancient Athens. About 150,000 of them were enslaved. Only about 40,000 people were citizens who could vote.

Parthenon temple on the Acropolis in Athens

1. What groups made up the *demokrata*?
   a. the executive, legislative, and judicial
   b. the monarch, the Senate, and the House of Commons
   c. the Senate, the House of Representatives, and the Supreme Court
   d. the Assembly, the Council of 500, and the Courts

2. What proportion of all the people living in ancient Athens could vote?
   a. All the people could vote on laws.
   b. About one half of the people could vote on laws.
   c. Only a small group of all people could vote on laws.
   d. Most of the people could vote on laws.

3. Democracy lasted only about two centuries in ancient Athens, but it would influence later governments. Describe which Americans can vote in our system of government.

   _____

   _____

Colonel NTI Packet

2024 – 2025

6th Grade

Day 9

Table of Contents

Subject	Assignment
Math	Practice Test pgs. 31 - 32
Language Arts	Week 3, Day 1
	Week 3, Day 2
	Week 3, Day 3
Science	Week 2, Day 4 (Life Science)
Social Studies	Week 2, Day 4 (Civics)

Name _____

1. Golf scores compared to par are shown.

   Part A

   Using the information in the table, order the scores from lowest to highest.

   Part B

   Explain how to use a horizontal number line to determine the order.

   Golf Scores

Player	Score
Alex	$^-4$
Bart	$^-1$
Cal	3
Deon	$^-2$

2. Four friends played a new game and Vance kept score.

   When the game was finished, Vance wrote the scores in order from lowest to highest. Is Vance correct? Use words and numbers to explain why or why not. If Vance is incorrect, what is the correct order?

Player	Score
Lou	25
Mary	$^-20$
Nina	$^-30$
Otto	15

   $^-30, {}^-20, 15, 25$

GO ON

Name _____

3. Choose <, >, or =.

3a. 1.75 meters $\begin{matrix}<\\>\\=\end{matrix}$ $1\frac{3}{4}$ meters

3c. $3\frac{7}{8}$ k $\begin{matrix}<\\>\\=\end{matrix}$ 3.375 k

3b. $\frac{-2}{3}$ point $\begin{matrix}<\\>\\=\end{matrix}$ ⁻0.667 point

3d. $\frac{-3}{8}$ ft $\begin{matrix}<\\>\\=\end{matrix}$ $\frac{-1}{2}$ ft

4. Jasmine recorded the low temperatures for 3 cities.

City	Temperature (°F)
A	6
B	⁻4
C	2

Draw a dot on the number line to represent the low temperature of each city. Write the letter of the city above the dot.

5. Travis made a list of his town's lowest recorded temperatures in March. He wrote the temperatures in order from coldest to warmest. Is Travis correct or incorrect? Explain your answer.

Date	Temperature (°F)
March 2	5
March 9	⁻2
March 17	⁻9
March 21	3

⁻2, 3, 5, ⁻9

NAME:_____ DATE:_____

Read the text and then answer the questions.

If you watch television, you have probably seen **advertisements**. In fact, the average kid sees 20,000 televised ads every year! And that doesn't include the ads that you see on the Internet and in magazines. Why are they there, and how do they get there? The basic purpose of ads is to get you to buy products or services. Companies know that people watch television, and they want people to watch their ads. They also know that it can be very expensive to make TV shows. So they find out which TV shows are the most popular shows. Then, companies pay the people who make those TV shows to show their ads. The people who make TV shows then use that money to pay for making the shows.

1. (Y)(N)

2. (Y)(N)

3. (Y)(N)

4. (Y)(N)

5. (Y)(N)

1. What is the main purpose of advertisements?

(A) to be on television

(B) to get you to buy products or services

(C) to be on the Internet

(D) to pay for TV shows

2. Which statement is **not** true?

(A) Companies want people to watch their ads.

(B) The people who make TV shows use the money from ads to make their shows.

(C) Most kids do not see many ads.

(D) Companies know that it can be expensive to make TV shows.

3. Which is the definition of *average* in this text?

(A) typical

(B) largest

(C) smallest

(D) unusual

4. Which word has the same root word as the noun *products*?

(A) prefabricate

(B) pore

(C) prompt

(D) produce

5. Which word has the same meaning as *purpose*?

(A) work

(B) history

(C) picture

(D) reason

_____ / 5
Total

NAME: _____ **DATE:** _____

SCORE

1. Ⓨ Ⓝ

2. Ⓨ Ⓝ

3. Ⓨ Ⓝ

4. Ⓨ Ⓝ

5. Ⓨ Ⓝ

___ / 5
Total

DIRECTIONS Read the text and then answer the questions.

Companies want their ads to bring them lots of customers. So they pay the people who make TV shows to put their ads on the shows. But creating ads and paying the people who make TV shows is expensive. So companies want to be certain they choose shows that are popular with their target market. A *target market* is the group of people a company thinks will be most likely to buy its product or service. For instance, suppose a company makes snacks for kids. Kids like you are that company's target market. Now, suppose that company creates a new snack and makes an ad for the new product. The company wants to be sure that its target market sees the ad, so it carefully selects TV shows that kids like you watch. Those are the shows the company uses for its ads.

1. What is this text about?

Ⓐ how to make a good ad

Ⓑ how to make a TV show

Ⓒ how companies choose where to put their ads

Ⓓ snacks for kids

2. Which title would help a reader understand the main idea?

Ⓐ Watching TV

Ⓑ Ads for Dollars

Ⓒ Money Talks

Ⓓ Targeted Advertisements

3. Which two words are synonyms?

Ⓐ *new* and *snack*

Ⓑ *certain* and *carefully*

Ⓒ *make* and *create*

Ⓓ *product* and *service*

4. Which sentence below uses the word *target* as an adjective?

Ⓐ The teacher wanted to *target* counting as an important skill.

Ⓑ I see the *target* across the field.

Ⓒ The soldier hit his *target*.

Ⓓ Our *target* date for moving is September 1st.

5. When the author claims that a company is *certain* of something, what does that mean?

Ⓐ The company is sure.

Ⓑ The company is confused.

Ⓒ The company is careful.

Ⓓ The company is busy.

NAME:_____ DATE:_____

Read the text and then answer the questions.

Companies want to be sure that their target markets see their ads. So they carefully select shows that are popular with their target markets. But how do they know which shows to choose? Companies often use information they get from Nielsen Media Research. That is a company that collects information on what people watch on TV. Some people keep Nielsen TV diaries where they write down what they watch. Some people use Nielsen People Meters. People Meters are placed on all televisions in a participant's home to keep track of all the shows watched in the household. Nielsen Media Research gathers information on how many people watch each TV show. It also gathers information on the kinds of people who watch each show. That information helps companies decide where to place their ads.

1. Ⓨ Ⓝ

2. Ⓨ Ⓝ

3. Ⓨ Ⓝ

4. Ⓨ Ⓝ

5. Ⓨ Ⓝ

___ / 5
Total

1. How do companies know which shows are popular with their target markets?

Ⓐ They often use information from Nielsen Media Research.

Ⓑ They try to guess which shows are popular.

Ⓒ They talk to people to ask which shows they watch.

Ⓓ They do not know which shows are popular.

2. What is Nielsen Media Research?

Ⓐ a company that creates TV shows

Ⓑ a company that makes and sells TV sets

Ⓒ a company that gathers information on what people watch on TV

Ⓓ a company that sells products and services on TV

3. Which word is a synonym for *gathers*?

Ⓐ discards

Ⓑ collects

Ⓒ shows

Ⓓ asks

4. What does the verb *place* mean in the following sentence: *That information helps companies decide where to place their ads.*

Ⓐ finish

Ⓑ locate

Ⓒ invest

Ⓓ put

5. Which word has a meaning similar to *select*?

Ⓐ carefully

Ⓑ choose

Ⓒ place

Ⓓ keep

Planning Solutions

Name: _____ **Date:** _____

Directions: Read the text, and answer the questions.
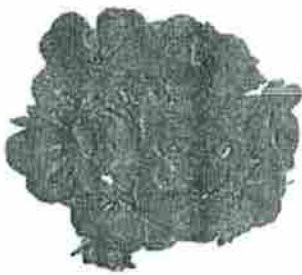
After your experiment with the white carnation, you want to see if other types of flowers can absorb color through osmosis. You have a red geranium, a white rose, a yellow daisy, and a purple iris. You want to see if you can turn any of them blue.

1. What could you do to control the results of the experiment?

   a. Put each flower in a separate vase with water only, for 24 hours, before you add food coloring, to see what happens (as a control).

   b. Add the same amount of blue food coloring to all vases, at the same time.

   c. Write in your lab journal exactly what you did and the results you saw.

   d. all of the above

2. How would you test celery if you wanted to see the results of osmosis?

   a. Use four stalks of celery instead of four flowers, and do exactly what you did with the carnations.

   b. Change the food coloring to another color.

   c. Keep the celery in the water for twice as long as you kept the carnations in water.

   d. Use four stalks of celery in water with no food coloring.

3. What do you think might happen if you put a freshly cut stalk of celery in a glass of water with red food coloring for 24 hours?

   _____

   _____

   _____

Name:_____ **Date:**_____

Directions: Read the chart, and answer the questions.

Evolution of Democracy					
Ancient Athens	Early to Mid-1600s—arrival of Colonists in America	Late 1600s	150 Years Later	The American Revolution	The Constitution
The government created a type of democracy. It would one day inspire Americans.	The first colonists in America came from England. It was governed by a monarchy.	John Locke wrote about the right to life, liberty, and property. He believed the people should have the right to rebel against their government if the government took the people's rights away.	The colonists were overtaxed, and their rights were not protected. They wanted a new government. They felt they had the experience to run their government separate from the king's rule.	The American people fought for independence. They won the right to separate from the monarchy of Britain. They wrote the Constitution and created a new government to allow more freedom for citizens.	The Constitution stands for freedom and democracy. It has lasted longer than any other document of its kind. It is based on the democracy of ancient places and the writings of people such as John Locke.

1. John Locke wrote about people's rights. Which of these did they include?

    a. the right to a fair and speedy trial

    b. the right to bear arms to protect oneself

    c. the rights to life and liberty

    d. the rights to education and travel

2. Why did the people of America fight in a revolution?

    _____

    _____

    _____

3. Other beliefs influenced the Constitution. What were they? Which of these were included in the Constitution?

    _____

    _____

    _____

Colonel NTI Packet

2024 – 2025

6th Grade

Day 10

Table of Contents

Subject	Assignment
Math	Practice Test pgs. 33 - 34
Language Arts	Week 3, Days 4 – 5 Story Week 3, Day 4 Week 3, Day 5
Science	Week 2, Day 5 (Life Science)
Social Studies	Week 2, Day 5 (Civics)

Practice Test

6.NS.C.7c
Apply and extend previous
understandings of numbers to the system of
rational numbers.

1. Jeandre said |3| equals |⁻3|. Is Jeandre correct? Draw a number line and explain your answer.

2. Tyler writes the following statements to describe the same event:

   1. I added $4\frac{1}{2}$ milliliters of tank cleaner to my fishtank.

   2. I had to use $4\frac{1}{2}$ milliliters of my remaining tank cleaner in order to clean my fishtank.

   For Sentence 1, he graphs $4\frac{1}{2}$ on the number line.

   For Sentence 2, he graphs $^-4\frac{1}{2}$ on the number line.
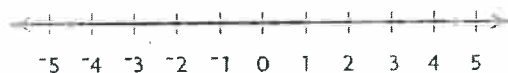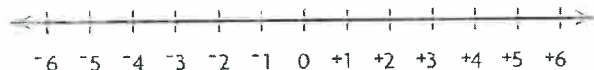

   Can both points represent the event? Explain.

3. Graph 2 and ⁻2 on the number line.

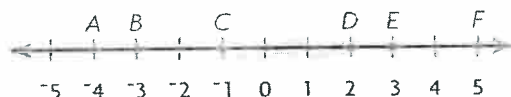   Keisha says that 2 and ⁻2 do not have the same absolute value. Is Keisha correct? Explain why or why not.
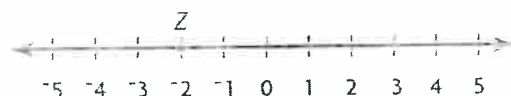
GO ON

4. Graph 6 and ⁻6 on the number line.

Wilson says both 6 and ⁻6 have an absolute value of 6. Is Wilson correct? Use the number line and words to explain why or why not.

5. Which point on the number line has an absolute value of 3? Mark all that apply.

A A

B B

C D

D E

6. What is the absolute value of Point Z on the number line?

A ⁻2

B 0

C 1

D 2

NAME:_____ **DATE:**_____

COMMERCIAL BREAK

Advertisements are everywhere. Every time you watch a TV show, use the Internet, or read a magazine, you see them. Some ads are funny, some are beautiful, and some are action-packed. But all of them have one important purpose: to get you to buy a product or service. Ads can be useful. For instance, that is how stores let you know when they are having sales. Ads also let you know about new products or services. Without ads, you might not know about those things. Ads are important for companies, too—that's how they reach customers.

When you see an ad, it is important to remember why it is there. The company that made the ad wants you to buy that product or service. The ad is made so that when you see it, you will want to buy. For example, ads for restaurants are designed to make you feel hungry for the food in the ad. Ads for clothes are designed so that you will want to buy those clothes. Ads for cell phones and music players are designed so that you will believe you are missing out if you don't have those things. It is important to think carefully and make up your own mind before you buy. Don't buy something just because an ad says that you should.

How do companies create ads that get people to buy things? They start with a product or service they want to sell. Then, they figure out what special thing that product or service has that will make people want to buy it. It might be a low price, a particular taste, or something else. Then, companies design ads that tell people about that special thing. The ads use color, sound, and other things to get people's attention. When the ads are finished, some companies show them to a group of people and get their opinions. If people like what they see, those companies use the ads they created. If people don't like what they see, the ads are changed.

NAME:_____ **DATE:**_____

Read "Commercial Break" and then answer the questions.

SCORE

1. What do the title and photograph indicate about this text?

- (A) It describes how to set up a TV.
- (B) It describes TV ads.
- (C) It is about moving to a new place.
- (D) It explains things to do outdoors.

2. Which is **not** a way in which ads can be useful?

- (A) Companies use ads to find out what people want to buy.
- (B) Companies use ads to reach their customers.
- (C) Ads publicize sales.
- (D) Ads introduce new products and services.

3. What is likely the author's opinion?

- (A) Companies use ads poorly.
- (B) Ads are important, and you should believe what they say.
- (C) There should be no ads.
- (D) Ads are important tools, but it is important to make up your own mind.

4. What can you infer when you see an ad for a new style of jeans?

- (A) Everyone should wear jeans.
- (B) Those jeans are the best jeans.
- (C) You really need new jeans.
- (D) The company wants you to buy their jeans.

5. Before they create an ad, companies

- (A) show it to people to get their opinions.
- (B) tell people about a product or service.
- (C) create a product or service to sell.
- (D) change the ad if people don't like it.

6. Which sentence reflects an opinion?

- (A) The company that made the ad wants you to buy that product or service.
- (B) Without ads, you might not know about those things.
- (C) Some ads are funny, some are beautiful, and some are action-packed.
- (D) The ads use color, sound, and other things to get people's attention.

7. Which of these summarizes the second paragraph?

- (A) Ads can make you hungry.
- (B) Companies design ads that make you want to buy things.
- (C) Ads are designed to make you want to buy a new pair of jeans.
- (D) Ads keep you from missing out.

8. What might a restaurant's ad share?

- (A) how good the food tastes
- (B) where you can find shoes
- (C) how many people they employ
- (D) how to make the restaurant's food

1. (Y)(N)

2. (Y)(N)

3. (Y)(N)

4. (Y)(N)

5. (Y)(N)

6. (Y)(N)

7. (Y)(N)

8. (Y)(N)

___ / 8
Total

NAME: _____ **DATE:** _____

DIRECTIONS Reread "Commercial Break." Then, read the prompt and respond on the lines below.

What kinds of ads get your attention? Why? Describe the kinds of ads you notice most.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

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_____

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_____

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_____

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_____

Name: _____   **Date:** _____

Directions: Read the text, and study the data. Title the graph, and create a graph that shows the length of time it took for each color to be absorbed. Then, answer the questions.

Assume that you did the carnation experiment with five different food colorings. You have tested to see which food coloring is absorbed into the carnations most quickly. Your results are shown to the right.
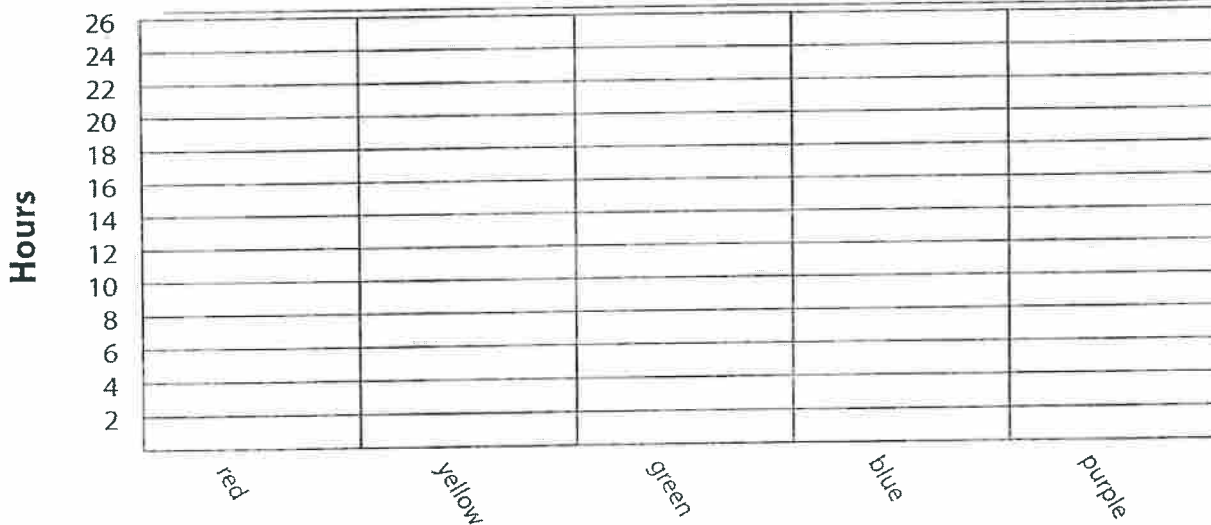
Red: 12 hours

Yellow: 24 hours

Green: 6 hours

Blue: 3 hours

Purple: 9 hours

Hours

26
24
22
20
18
16
14
12
10
8
6
4
2

red   yellow   green   blue   purple

1. Which color was absorbed **most quickly**?

   _____

2. Which color was absorbed **most slowly**?

   _____

3. Which color took 9 hours to absorb?

   _____

Civics

Name: _____ **Date:** _____

Directions: Read the text. Then, tell what you know about two of the following topics.

> The first ideas that would lead to democracy began long ago. Over many years, different people added their thoughts to improve this system.

1. Early democracy in ancient Athens:

_____
_____
_____
_____
_____

Ancient Athens

2. Before democracy in the American colonies:

_____
_____
_____
_____
_____

King of Britain

3. Early ideas that had an impact on the Constitution:

_____
_____
_____
_____
_____

John Locke