

Lesson 29

Earth Science and Earth Materials

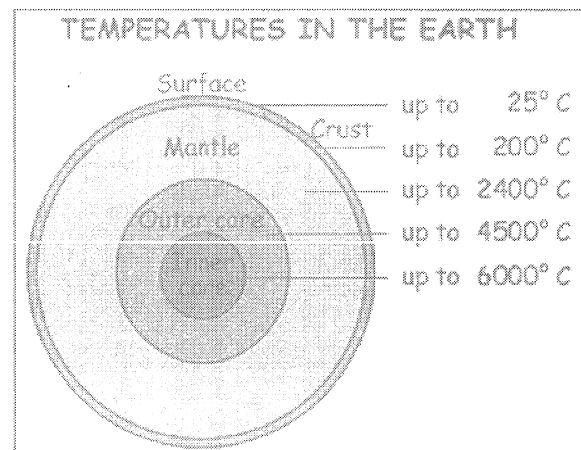
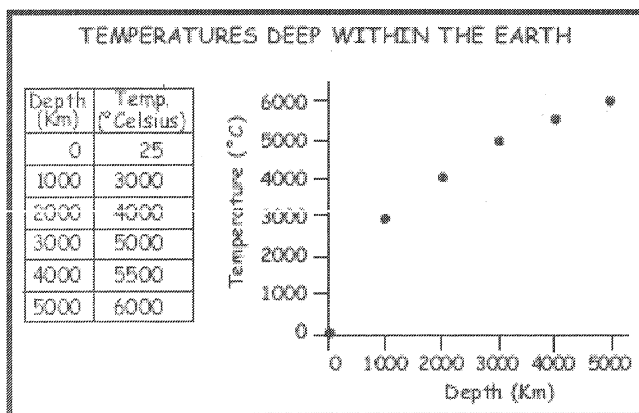
Earth Science is the study of the things in and around the earth, such as rocks, minerals, oceans, the atmosphere, and objects in the sky. The study of weather is called **meteorology**. A **meteorologist** is a scientist who studies the weather. The study of rocks is **geology**, and a **geologist** studies rocks and minerals. The study of oceans is **oceanography**, and a scientist who studies oceans is an **oceanographer**. **Astronomy** is the study of planets, moons, stars, and other objects in the sky. Can you guess what we call a scientist who studies these things?

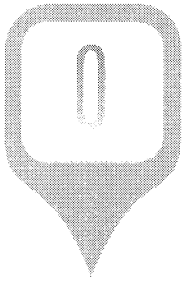
This lesson will focus on the materials that make up the earth. Earth scientists study and describe the earth and its atmosphere. The earth is made up of rocks, minerals, soil, water, and gases.

The materials that make up the earth change over time. These changes are caused by forces. Do you know what changes are produced by the force of large waves on the beach? The shape of the beach changes as beach sand is pushed around by waves. What force moves sand around in the desert? The force of the wind pushes sand around and creates sand dunes. Do you know what force created the Grand Canyon? It was the force of running water.

Many of the changes to the earth's surface come from forces within the earth itself, so we must look at what the earth is made of. The earth is a *sphere* that is about 8,000 miles (13,000 km) in diameter. The surface is solid, hard, and cool. Much of the inside of the earth is liquid metal. But at its center, the earth is solid and extremely hot. The closer to the center of the earth, the higher the temperature. The diagram above shows the name of each layer and its average temperature.

Look at the table below on the left. It contains information about the temperature of the earth. Consider the graph at the right. What does it tell you about the temperature as you travel deeper into the earth?





Lesson 29

Earth Science and Earth Materials

1. A meteorologist is a scientist who studies meteors.
A. True
B. False

Write **#1** next to the sentence that gives the best evidence for your answer.

2. Temperature increases from the center of the earth towards its surface.
A. True
B. False

Write **#2** next to the sentence that gives the best evidence for your answer.

3. The earth is completely solid.
A. True
B. False

Write **#3** next to the sentence that gives the best evidence for your answer.

4. In the following sentence, *sphere* probably means

*The earth is a **sphere** that is about 8,000 miles (13,000 km) in diameter.*

- A. cube
 - B. circle
 - C. ball
 - D. rock
5. Which unit of length is longer, a mile or a kilometer?
A. a mile
B. a kilometer

6. Using the information in the lesson, complete the table below by writing each of the following terms in the correct box.

astronomy, oceanographer, planets/stars, geologist, weather, meteorologist, geology, oceanography

What is studied	Science	Scientist
rocks		
		astronomer
	meteorology	
oceans		

7. For each temperature, write the correct layer of the earth.

A. 2600° -----

B. 2000° -----

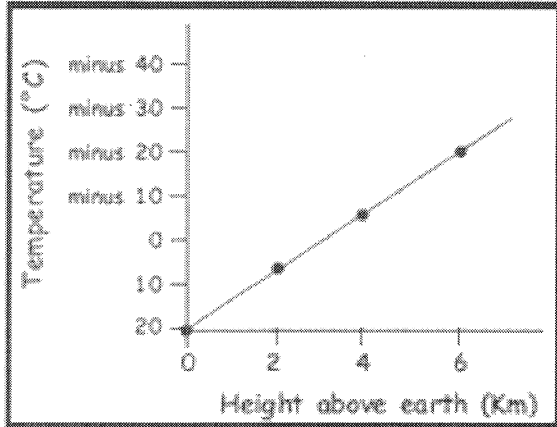
C. 180° -----

D. 5900° -----

E. 20° -----

8. The temperature changes the higher you go above the earth. Use the table and graph below to decide whether the following statements are true or false.

TEMPERATURE OF THE
ATMOSPHERE ABOVE EARTH

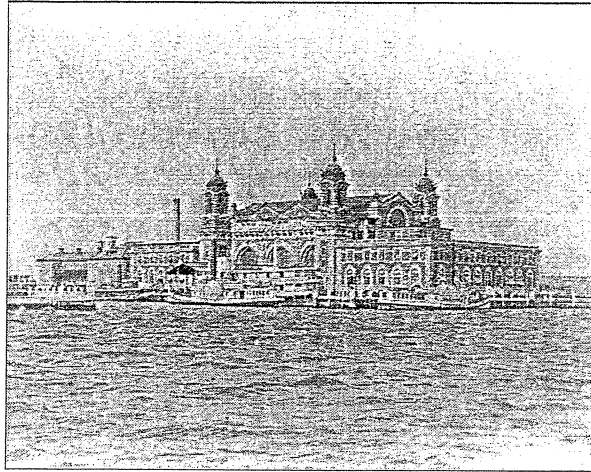


Height (Km)	Temp. (°C)
0	20
2	5
4	minus 5
6	minus 20

- A. Height and temperature are listed in the data table. true false
- B. The distance between numbers on the horizontal (across) axis is 5 km. true false
- C. As you go higher above the earth, the temperature gets lower. true false
- D. Minus 20° is colder than minus 10°. true false
- E. At 1 km above the earth, the temperature is minus 40°. true false

Lost on Ellis Island

by W.M. Akers



To get to Ellis Island, you have to take a boat. From 1892 to 1954, many people came here from across the ocean. Millions of immigrants from Europe and beyond came to America through this tiny little island, where they were processed, checked for disease, and sometimes given a new, more American-sounding name. Stepping onto Ellis Island was the end of a long journey, and the beginning of a new life.

But for Emily Dalton, it was just another day on a family vacation. Emily, her parents, and little brother, Max, had been to New York City before, but they had never visited the museum on Ellis Island. They took a boat there, too-coming not from Europe, but in a little ferry from the southern tip of Manhattan. Emily had wanted to see the Statue of Liberty, but the family outvoted her.

"Think of it this way, Em," said her father. "You can look at the Statue of Liberty on the boat ride over!"

Emily stared at the big green statue as their ferry docked at Ellis Island. More than anything else, she wanted to climb to the top of Lady Liberty and look at New York harbor from high up there. Instead, it was time to visit another museum.

"See you later," she said to the statue as they disembarked. "Maybe next summer."

Emily and her family had been in New York for four days. In that time, they'd done nothing but walk, walk, walk, and visit more museums than she could count. They saw art museums, science museums and history museums. There was even one boring museum all about pieces of paper. Between all the museums and crushing July heat, Emily was nearly asleep on her feet as they walked onto Ellis Island.

The main building on Ellis Island has four big turrets, and looks a little bit like a castle. Inside is a huge main room, the Registry Room, where immigrants once waited in line for permission to enter the country. To the sides are lots of smaller rooms, which hold different exhibits about the island's history.

"Oh wow," Emily said. "Exhibits."

"Emily, if you're going to grump your whole way through this museum," said her mother, before pausing for a few moments. "Well...just don't!"

"Oh my gosh, Dad!" squealed Max. "They have an exhibit all about maps!"

Max loved maps. Emily did not. The thought of spending two hours watching Max coo over 100-year-old maps made Emily fear she would actually fall asleep where she stood.

"You guys go on ahead," she said. "I'm going to poke around in the gift shop."

"Okay," said her dad. "We'll meet you back here at four to take the last ferry back."

"Sounds great."

As Emily's family walked excitedly toward the map room, Emily felt her chest loosen slightly. She loved her parents and brother, but there was such a thing as too much family vacation. Now that she was by herself, Ellis Island didn't feel so bad. She was walking toward the gift shop, thinking about purchasing a new mug, when a machine caught her eye. The sign said "Family Records," and it made something stir inside Emily's brain.

She remembered two Thanksgivings ago, when her grandfather told the story about how he immigrated to the United States as a child. He was only seven years old, but he remembered standing in line in a long room in a building that reminded him of a castle—he said Zamek—back in Poland.

"I wonder if this is the same room!" said Emily, as she began navigating the computer screen on the records machine. Without her family there, she was allowed to feel excited. She typed in her grandfather's name, last name first: Dalton, Stanley.

"No records in the archive match your search," said the machine.

"Darn!" said Emily. She was sure her grandfather had described Ellis Island. "Wait a minute..."

She remembered what her dad had told her about people's names being changed when they got to the island. The American government forced people to take new names, as a way of making them fit in better in their new country. Stanley Dalton wasn't a very Polish-sounding name. That Thanksgiving, her grandfather had told them his given name. Emily bit her knuckle as she tried to remember.

"Stan...Stanislaus...Stanislaus Dombrowski!" A name like that, Emily thought, you don't forget. She typed it in, and there he was! A picture of an old piece of paper came up covered in squiggly handwriting from January 12, 1930. On line 12, Emily found her grandfather: Stanislaus Dombrowski, whose name was changed to Stanley Dalton. He was from Warsaw, it said, and had never been to the United States before. He was seven years old, and in good health. There was information about his parents, too, and his younger sister. Emily read everything she could about the Dombrowski family, and then started searching for other people. She searched for her friends' families, for famous people, and any random name that

came into her head. And many of them had come through this hall.

She was so engrossed that she forgot the time, and was shocked to hear the announcement: "It is four o'clock. The last boat leaves in five minutes."

Emily looked up, and saw that the hall was nearly empty. Her family was nowhere to be seen. She ran down the hall, peering into the exhibit rooms, bathrooms and the coat check.

"Max!" she shouted. "Mom? Dad? Dalton family? Dombrowskis?!"

When she realized she was the last person in the hall, she panicked. She ran out of the main entrance and up the ramp to the ferry, getting there just fifteen seconds before it left the island. She found her parents sitting in the front of the boat.

"Hey, Emily," said her mom.

"You left me behind!"

"Oh, baby, I'm so sorry. We thought you were on the upper deck with your brother."

"We were supposed to meet in the great hall at four."

"I think we said we would meet in the boat, dear."

Emily knew her mother was wrong, but she was too tired to argue. Her vacation stress had returned. She slumped into her seat, watching the castle of Ellis Island grow smaller behind her. As Stanislaus Dombrowski had learned nearly 100 years earlier, she realized then that as nice as it is to get to Ellis Island, it's even better to catch the boat to Manhattan.

Name: _____ Date: _____

1. Where does Emily's family visit?

- A. the Statue of Liberty
- B. an art museum
- C. Ellis Island
- D. Staten Island

2. How do Emily's feelings about Ellis Island change in the story?

- A. At first she is bored and then she is excited.
- B. At first she is interested and then she is scared.
- C. At first she is scared and then she is bored.
- D. At first she is excited and then she is bored.

3. Emily is tired of spending time with her family. What evidence from the passage best supports this conclusion?

- A. "Between all the museums and crushing July heat, Emily was nearly asleep on her feet as they walked onto Ellis Island."
- B. "In that time, they'd done nothing but walk, walk, walk, and visit more museums than she could count."
- C. "The thought of spending two hours watching Max coo over 100-year-old maps made Emily fear she would actually fall asleep where she stood."
- D. "She loved her parents and brother, but there was such a thing as too much family vacation."

4. How can Emily best be described?

- A. lonely
- B. independent
- C. fashionable
- D. unintelligent

5. What is this story mostly about?

- A. how Emily learns more about her grandfather at Ellis Island
- B. Emily's family vacation in Manhattan
- C. the differences between Emily and her brother Max
- D. a girl who misses the boat and gets left behind on Ellis Island

6. Read the following sentences:

"She searched for her friends' families, for famous people, and any random name that came into her head. And many of them had come through this hall.

"She was so **engrossed** that she forgot the time, and was shocked to hear the announcement: 'It is four o'clock. The last boat leaves in five minutes.'"

What does "**engrossed**" mean as used in the passage?

- A. uninterested and distant
- B. disgusted by something
- C. absorbed in something
- D. forgetful and silly

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

Immigrants to America were often given new names ____ they would fit in better in their new country.

- A. but
- B. so
- C. like
- D. after

8. Where does Emily want to visit at the beginning of the story?

9. Why are there no records of "Dalton, Stanley" in the archive?

10. Explain how and why Emily's feelings about Ellis Island change in the story.

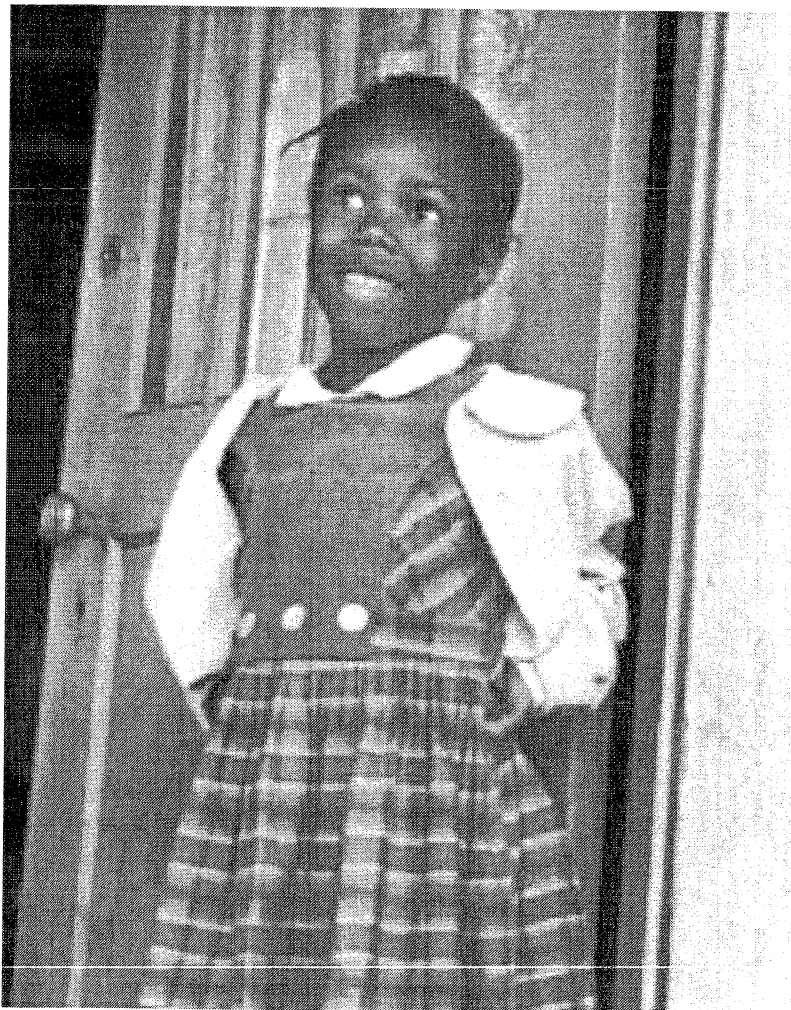
Walking Tall

Day 6

How did Ruby Bridges make history?

Many years ago, a little girl named Ruby Bridges arrived at her new elementary school. The school was in New Orleans, Louisiana.

As she walked toward the school's front doors, an angry crowd of people shouted at her. United States **marshals** walked with her. A marshal is an officer. They were there to protect the first grader. That's because the people didn't want Ruby to go inside. But the 6-year-old walked into the school anyway. As she did, she marched into history books.



Bettmann/Corbis

Ruby Bridges started first grade in 1960.

The day was Nov. 14, 1960. On that morning, little Ruby became one of the first African Americans to attend an all-white elementary school in the South.

Before then, the law in many states said that black children could not attend the same schools as white children. People of different races also had to use separate public restrooms. It was called **segregation**. That is when people of different races are kept separate.

U.S. leaders worked to end segregation. They helped bring **civil rights** to all Americans. Those are the rights to be treated equally. A few months before Ruby started school, a federal court ordered an end to school segregation in New Orleans.

By the time Ruby started the second grade, there were no more angry people outside her school. There were other African American students in her class. Today, children of all races go to school together.

Bridges says she was never scared to go to school during the first grade. "I wasn't really afraid," she told *WR News*. "I didn't really know what was going on at the time, and I loved school."

Meet Ruby Bridges

WR News student reporter Kaelin Ray recently asked Ruby Bridges how it feels to make a difference.

Kaelin Ray: What was your first day at the school like?

Ruby Bridges: My first day I spent sitting in the principal's office, so it was very confusing.

KR: How does it feel to know that you are a part of U.S. history?

RB: I'm [very] proud of that fact. My mother was really happy about me being able to attend that school. My father was more concerned about my safety.

Winning the Vote

Imagine if boys made all the rules. That's how it was in 1776, when the United States was founded. Women were not allowed to vote until 1920! This year [2012] is the 92nd anniversary of that important event.



Library of Congress, George Grantham Bain Collection

Thousands of women marched in New York City for the right to vote.

The women's suffrage movement began in the 1800s. Suffrage is the right to vote. To win this right, women held protests and marches. Hundreds of those women were arrested and jailed.

Women's groups across the country are honoring those who fought for this right with special events throughout the year. "Learning how women's actions changed America is important. It encourages us to understand that we can make a better world," said Molly Murphy MacGregor, the president of the National Women's History Project.

Name: _____ Date: _____

Day 6

Use the article "Walking Tall" to answer question 1.

1. On Nov. 14, 1960, who became one of the first African Americans to attend an all-white elementary school in the South?

Use the articles "Winning the Vote" and "Walking Tall" to answer question 2

2. Read this paragraph from the article.

"U.S. leaders worked to end segregation. They helped bring civil rights to all Americans. Those are the rights to be treated equally. A few months before Ruby started school, a federal court ordered an end to school segregation in New Orleans."

Did Ruby Bridges also help bring civil rights to all Americans? Support your answer with evidence from the article.

Use the article "Winning the Vote" to answer questions 3 to 4.

Day 6

3. What did women do to win the right to vote?

4. Women winning the right to vote was an important event.

Support this statement with evidence from the text.

Use the articles "Winning the Vote" and "Walking Tall" to answer question 5

Day 6

5. Read these sentences from the article.

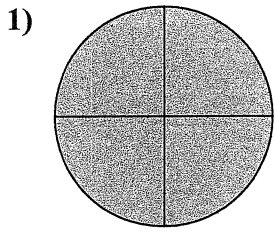
"Learning how women's actions changed America is important. It encourages us to understand that we can make a better world," said Molly Murphy MacGregor, the president of the National Women's History Project."

Compare how Ruby Bridges changed America with how women in the suffrage movement changed America.

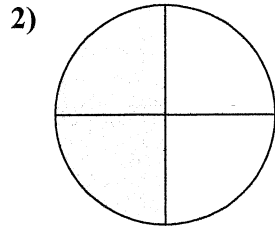


Determine which letter best describes the shaded portion.

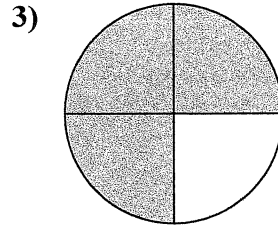
Answers



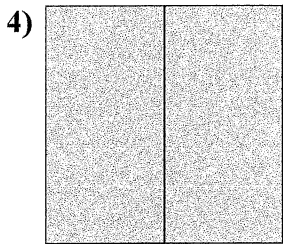
- A. Two Quarters
- B. Four Quarters
- C. One Quarter



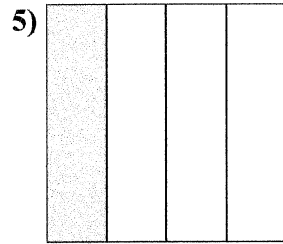
- A. Two Quarters
- B. One Quarter
- C. Three Quarters



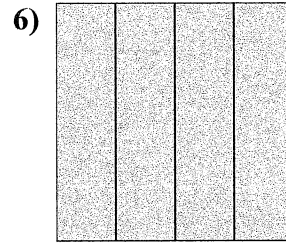
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- B. One Quarter
- C. Three Quarters



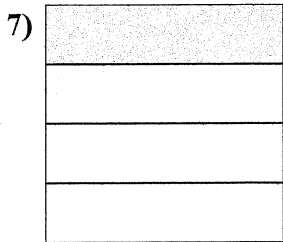
- A. Two Halves
- B. Two Quarters
- C. One Quarter



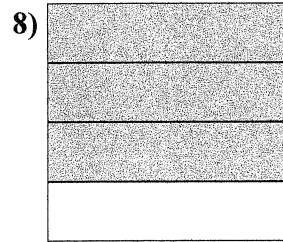
- A. Two Quarters
- B. One Quarter
- C. Three Quarters



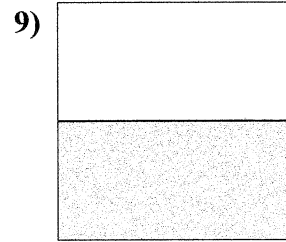
- A. Two Quarters
- B. Four-Fourths
- C. One Quarter



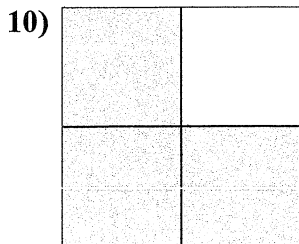
- A. Two Quarters
- B. One-Fourth
- C. Three Quarters



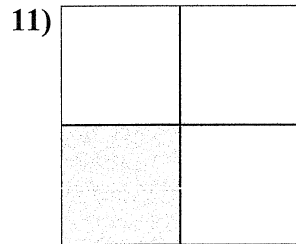
- A. Two Quarters
- B. Three-Fourths
- C. One Quarter



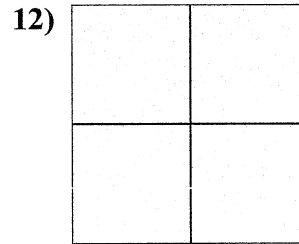
- A. One Quarter
- B. Three Quarters
- C. One Half



- A. One Quarter
- B. Three-Fourths
- C. Two Quarters



- A. Three Quarters
- B. Two Quarters
- C. One Quarter

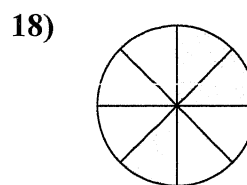
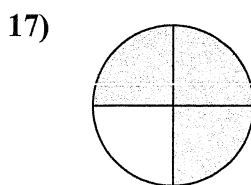
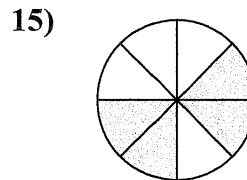
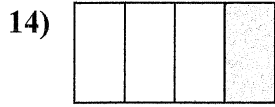
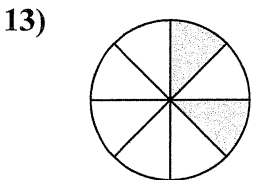
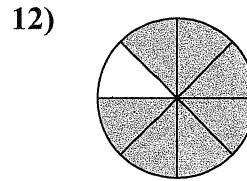
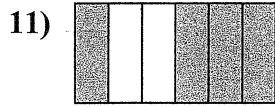
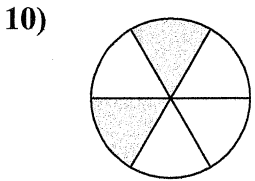
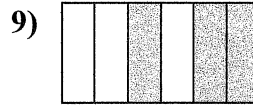
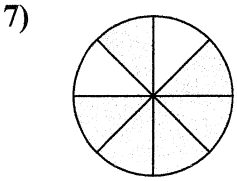
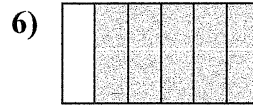
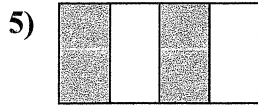
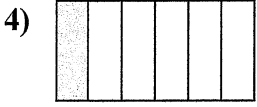
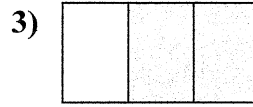
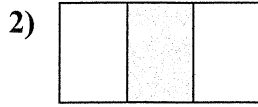
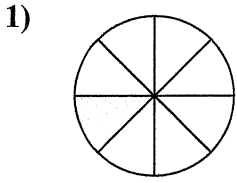


- A. Four Quarters
- B. One Quarter
- C. Two Quarters

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____



Write the shaded amount as a fraction of the whole amount.



Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

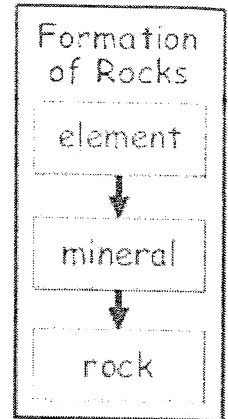
17. _____

18. _____

Lesson 30

Earth Materials and Their Uses

The earth is made up of a variety of materials, such as rocks, minerals, and metals. People can use these resources in many ways—but first, they have to get them.



We get many earth materials by digging into the earth's crust. The **earth's crust** is a thin layer of solid rock that makes up the earth's outer layer. It is about 20 miles (32 km) thick.

Rock is made of one or more minerals stuck together. **Minerals** are solid, nonliving substances found in the earth's crust. A mineral is made of one or more elements. For example, limestone is a mineral made up of calcium, carbon, and oxygen. An **element** is a basic substance made of only one kind of matter.

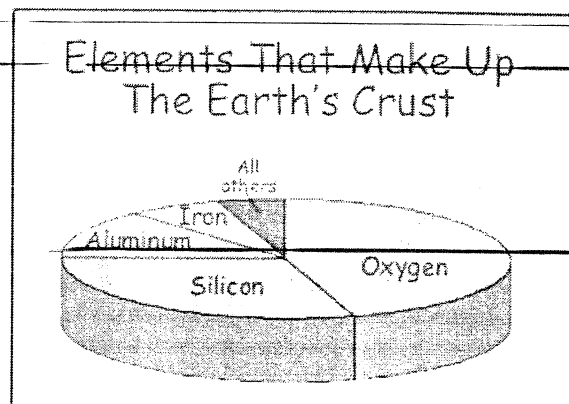
People use rocks to build things, such as stone walls. Rocks are also used to make other building materials, such as concrete.

Minerals have many uses. For example, table salt is used to make food taste better. Minerals such as diamonds and gemstones are used to make jewelry. Because they are so hard, diamonds are also used in drills or cutting machines. Coins are often made from *pure* materials such as gold and silver. Each of these metals is made of a single element. Can you give two examples of metals used to build things like bridges and automobiles?

People also use the earth as a source of energy. For example, the inside of the earth is so hot that its heat can be used to boil water. Boiling water makes steam. Steam is a force that can be used to produce electricity. The energy in hot water can also be used to heat homes. Some of the earth's minerals are also used as a source of energy. For example, radioactive elements like uranium are used to produce nuclear energy. Fossil fuels like fuel oil and coal also come from the earth.

The water that covers most of the surface of the earth is another natural resource. We use the oceans in transporting goods and people by boat. If necessary, we can remove the salt to make drinking water. We can even use the motion of ocean waves to produce electricity.

The circle graph below shows the major elements that make up the earth's crust. About how much of the earth's crust is made up of oxygen?



Lesson 30

Earth Materials and Their Uses

1. Diamonds are used in drills to make them more attractive.
A. True
B. False

Write #1 next to the sentence that gives the best evidence for your answer.

2. An element can be broken down into compounds.
A. True
B. False

Write #2 next to the sentence that gives the best evidence for your answer.

3. The motion of ocean waves produces a force.
A. True
B. False

Write #3 next to the sentence that gives the best evidence for your answer.

4. In the following sentence, *pure* probably means

*Coins are often made from **pure** materials such as gold and silver.*

- A. unmixed
B. mixed
C. dirty
D. valuable
5. Sodium chloride is a mineral made up of two elements, sodium and chlorine. Therefore, sodium chloride is

-
- A. an element
B. an atom
C. a compound
D. a rock

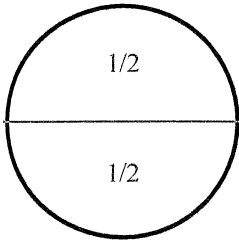
6. The metal copper is made up of only one kind of matter. Therefore, copper is
- A. an element
 - B. an atom
 - C. a compound
 - D. a rock
7. Which element is there most of in the earth's crust?
- A. silicon
 - B. iron
 - C. aluminum
 - D. oxygen
8. Which element is there less of, iron or aluminum?
- A. iron
 - B. aluminum
9. The earth's crust has over 90 elements. Why do you think the pie chart in the lesson shows only a few of these?
- A. Because the other elements aren't important.
 - B. Because you can't sense the other elements.
 - C. Because some of the pieces of the chart would be too small to see.
 - D. None of the above
10. Complete the flow chart below to show what makes up a rock, starting with its most complex part to its simplest, by writing the terms below in the correct box.



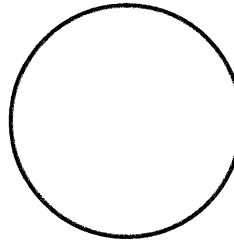


Partition and label each shape.

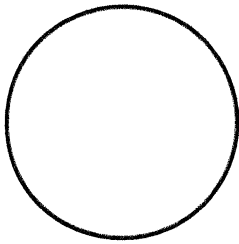
Ex) Split the shape into 2 equal parts and label each part.



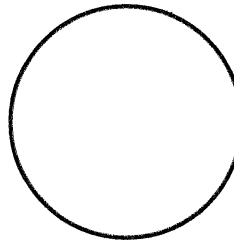
1) Split the shape into 8 equal parts and label each part.



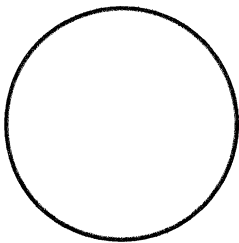
2) Split the shape into 4 equal parts and label each part.



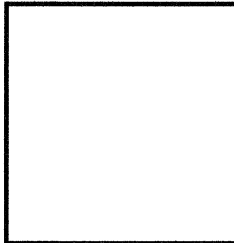
3) Split the shape into 3 equal parts and label each part.



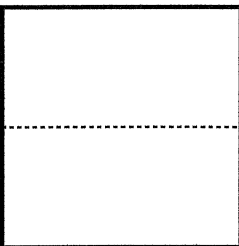
4) Split the shape into 6 equal parts and label each part.



5) Split the shape into 6 equal parts and label each part.



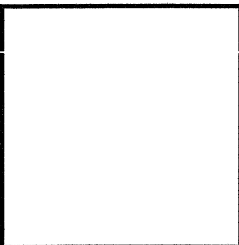
6) Split the shape into 8 equal parts and label each part.



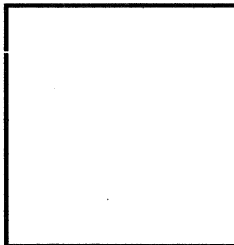
7) Split the shape into 4 equal parts and label each part.



8) Split the shape into 2 equal parts and label each part.



9) Split the shape into 3 equal parts and label each part.





Determine if the fractions shown is the same as 0, $\frac{1}{2}$ or 1.

1) $\frac{8}{8}$

2) $\frac{0}{7}$

3) $\frac{0}{8}$

4) $\frac{6}{12}$

5) $\frac{5}{10}$

6) $\frac{3}{3}$

7) $\frac{0}{6}$

8) $\frac{0}{4}$

9) $\frac{9}{18}$

10) $\frac{0}{2}$

11) $\frac{3}{6}$

12) $\frac{0}{9}$

13) $\frac{0}{5}$

14) $\frac{4}{4}$

15) $\frac{5}{5}$

16) $\frac{7}{7}$

17) $\frac{4}{8}$

18) $\frac{6}{6}$

19) $\frac{2}{2}$

20) $\frac{2}{4}$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____



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Answers

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2. _____

3. _____

4. _____

5. _____

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7. _____

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9. _____

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13. _____

14. _____

15. _____

16. _____

17. _____

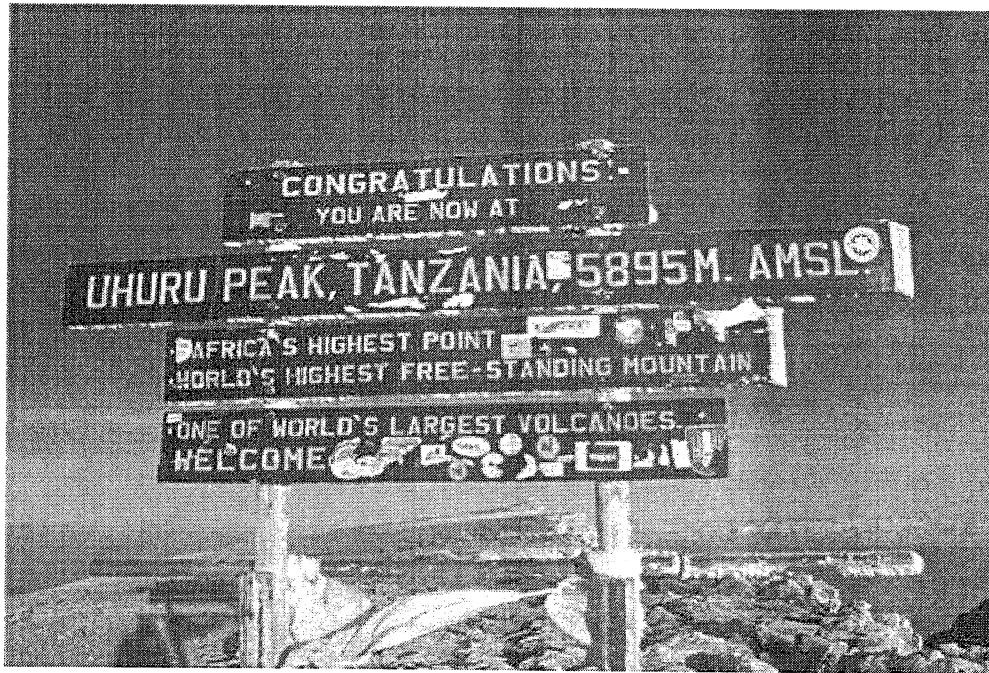
18. _____

19. _____

20. _____

Standing on the Roof of Africa

by ReadWorks



The first thing Natalie Ingle did when she reached the Uhuru Peak on Mount Kilimanjaro was cry. It had been a hard and tiring trek up the mountain. After eight long days on the trail, she was both mentally and physically exhausted. She posed for a few photos in the thin air and looked around her. She watched the sun rise over the glaciers below and shivered as she tried to put the lens on her camera to take more pictures. She had just reached the summit of the highest mountain in Africa, and the tallest free-standing mountain in the world.

Mount Kilimanjaro is located in Tanzania, a country on the east coast of Africa, and it stands over 19,000 feet above sea level. It is a volcanic mountain with three volcanic cones: Kibo, Mawenzi, and Shira. Mawenzi and Shira are extinct volcanoes, while Kibo, the tallest cone, is dormant. This means that the volcano could erupt again. However, the last eruption took place more than 150,000 years ago.

Natalie, who is a freelance photographer, decided to climb Mount Kilimanjaro for a simple reason: she wanted to raise money to help victims of domestic abuse in both the United States and Tanzania. She joined a team of five other women, and together they raised \$10,000 toward this cause. In addition to asking her friends and family to donate to the fund, she held a fundraiser at her apartment in Brooklyn. She sold several photographs and even

offered to shave her head if people donated \$1,000. Fortunately for her hair, she didn't reach this goal, and in the pictures of her standing on the summit, her ponytail is tucked beneath a wool hat.

Natalie is a runner, so to train for her hike up the mountain, she signed up for two half-marathons to keep herself motivated. "I also tried to teach myself to drink lots more water regularly," she says. In higher altitudes, dehydration is more likely to occur because water vapor is lost from the lungs at a higher rate. Also, because climbers lose a lot of sweat from hiking many hours each day, it's important that they hydrate frequently to prevent illnesses related to dehydration.

People climbing Mount Kilimanjaro and other high peaks also face the risk of developing altitude sickness. Altitude sickness may occur in heights above 8,000 feet and is a reaction to high altitudes. In higher altitudes, the amount of oxygen available decreases. This makes it harder to function mentally and physically. In very extreme cases, altitude sickness can be fatal. Some symptoms include headaches, dizziness, nausea, and weakness. To avoid getting altitude sickness, it is important to ascend the mountain very slowly to give your body time to get used to the decreased amount of oxygen available.

Natalie says that she seems "to have been the luckiest one out of our team." She explains that although "we all came from sea-level homes, I've spent more time off-and-on in the mountains." And she was lucky. Most of the other women on her team had stomachaches and headaches throughout the trek. One of her teammates vomited when she reached the top. But Natalie only experienced a headache when she reached the summit-over 10,000 feet higher than when most altitude-related symptoms begin to occur.

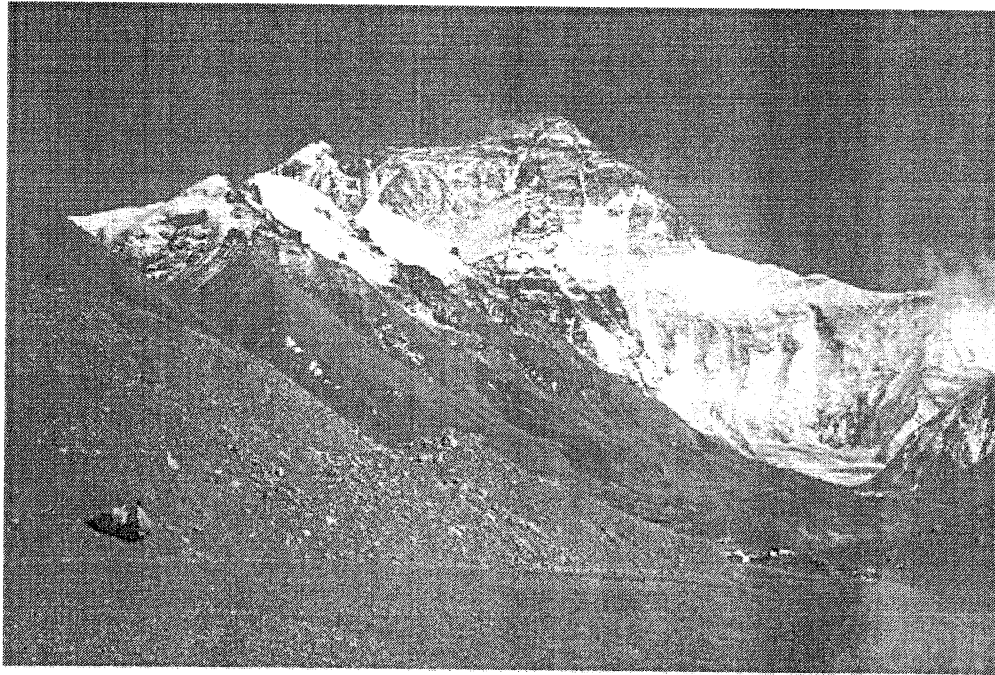
She was never scared on the trek, even though "one of the most dangerous parts involved using all four limbs to climb a nearly vertical cliff they call the Barranco Wall." For her, the most memorable part of the climb was the unforgettable landscapes. She trekked through rainforests and across deserts and glaciers. And, she says, "one of the most stunning things I've ever seen in my life was at sunset on day two. An ocean of clouds stretched out below us, slowly streaming over the peak of a shorter mountain nearby. It looked exactly like a white, slow-motion waterfall."

But it wasn't just the climb or the fact that she stood atop the "Roof of Africa" that Natalie loved about her time in Tanzania. She returned knowing that her climb would help those in need.

Day 7

Going Up a Mountain

by ReadWorks



Mount Everest is the tallest mountain in the world. It is located in the country of Nepal. It is 8,848 meters tall. This means it is just over five-and-a-half miles in height. Until 1953, nobody had successfully climbed Mount Everest, though many had tried.

Mount Everest has steep slopes. Many climbers have slipped and fallen to their deaths. The mountain is very windy. Parts of it are covered with snow. Many mountaineers would get caught in snowstorms and be unable to climb.

The mountain is rocky. Sometimes, during snowstorms, rocks would tumble down the slopes of the mountain. Any climbers trying to go up the mountain might be risking their lives. There is also very little oxygen atop Mount Everest. This is because the oxygen in the air reduces as we go higher. This means that it is difficult for climbers to breathe. The climbers usually take oxygen in cylinders to breathe. If they do take oxygen tanks, they have to carry extra weight on their backs. This slows them down.

In 1953, a New Zealand-based climber, Edmund Hillary, and a Nepalese climber, Tenzing Norgay, climbed Mount Everest for the first time. They both took photographs on the peak. They then buried some sweets on the peak, as a gesture to celebrate their climb. But they could not stay for long, because it was windy and snowy. They soon came down.

Later, many people asked Edmund Hillary and Tenzing Norgay which of them had reached the peak first. They both said it was a team effort; it didn't matter because they had gone together.

After Edmund Hillary and Tenzing Norgay, many other climbers went up the mountain. In 1975, Junko Tabei became the first woman to climb Mount Everest.

In 1980, Reinhold Messner became the first man to climb the mountain alone. Until then, climbers had always gone up the mountain in teams. The team members would help fix ropes, set up camps, and make food. But Reinhold Messner went alone to the top.

Reinhold Messner was a great climber. Back in 1978, he had climbed Everest without carrying any extra oxygen. He'd said that it was "man against the mountain."

In recent years, many have climbed Mount Everest. As of 2010, 3,142 people had climbed the mountain. Many climbers fly to the city of Kathmandu in Nepal. In Kathmandu, many see the Royal Palace. They can buy Everest-themed T-shirts, books, and CDs.

Once climbers are settled in Kathmandu, they meet Sherpas. The Sherpas are locals who have grown up in the mountains near Mount Everest. Many Sherpas are experts at climbing, and they act as guides for climbers. The Sherpas also carry equipment, such as bags, ropes, and tents.

As of 2013, the equipment for climbing Mount Everest cost almost \$8,000. The climbers may also buy oxygen cylinders, which can cost about \$3,000. Once the climbers have all their luggage, they go to a location called Base Camp. From Base Camp, they climb up Mount Everest.

Name: _____

Date: Day 7

Use the article "Standing on the Roof of Africa" to answer questions 1 to 2.

1. Describe altitude sickness. Include three or more details from the article in your answer.

2. Altitude sickness is one danger facing people who climb Mount Kilimanjaro. What other dangers do people climbing Mount Kilimanjaro face? Support your answer with information from the article.

Use the article "Going Up a Mountain" to answer questions 3 to 5.

Day 7

3. What word does the author use to describe the slopes of Mount Everest?

4. The slopes of Mount Everest are dangerous for climbers. Support this statement with evidence from the article.

5. What dangers do people climbing Mount Everest face besides slopes that rise sharply into the air? Support your answer with information from the article.

Use the articles "Going Up a Mountain" and "Standing on the Roof of Africa" to answer questions 6 to 7.

6. Compare the dangers facing people who climb Mount Kilimanjaro to the dangers facing people who climb Mount Everest.

7. Which mountain is more difficult to climb, Mount Kilimanjaro or Mount Everest? Support your answer with information from both articles.
