Congratulations!

You’re a 5th Grader! Let’s keep your brain growing this summer with these simple steps!


2. Use i-Ready for 45 minutes each week. i-Ready should be available until mid/late July. Students will log-in to i-Ready through Launchpad in the same way they have done during the school year.

3. Complete part of your summer packet each week.

4. Turn this completed packet in on the first day of 5th grade to earn an ice cream or pizza party!

Have a safe and adventurous summer! 😊

Love,
Your 4th Grade Family
Reading
Many people believe that the reason many kids have summer vacation is because in earlier days parents needed kids to help with the farm. However, this is not true. Not much farm work is done during the summer months. Most of the work for farming took place during the spring with planting and fall for harvesting. So then, why most do schools have a big summer break?

In the 1800s, kids went to school all year. However, it was not mandatory that they go. There were no punishments for missing school. During the summer, it would get really hot in the school house because there was no air conditioning yet. Those hot classrooms made it very hard for students to listen. Can you imagine trying to listen when you are hot and sweaty? Schools started to notice kids not coming in on the hottest days.

Another reason for kids not coming during the summer was due to the school year being broken up into two terms. There was a winter term and a summer term. The winter term was about the same time period of most school years today. Almost all children attended this one. Not many kids went to summer term. Even though the classrooms were hot, this was not the only reason most kids skipped summer term. It also had to do with who was teaching. Usually a well-educated adult taught during the winter term. A young teenager was usually the teacher in the summer term. Because of the teacher’s age, many felt that the quality of education was not as good.

The biggest reason that summer vacation began was because of the city kids and their parents. The city was mostly made up of brick buildings and cement. These materials absorbed the heat from the sun very quickly. This made the whole city feel even hotter than being out in the open air of the country. At this time, working
people were getting more and more vacation time from their jobs. To escape the heat, they would pack up and head out for some summer time fun. This happened so often that schools decided it was time to take some action.

A theory by some people helped this decision along. Many people at this time believed that our brain was a muscle. Like any muscle, it needs rest after being worked out. Schools decided that if children were using their brain muscle all school year long, they needed to give it some time to rest.

After looking at all of the reasons why kids were not showing up to school, officials decided that summer would be a time for students and teachers to relax. It allowed families to enjoy time with one another as they escaped the heat. It saved schools money so that they did not have to pay teachers when very few students were in attendance. And it also gave teachers time to prepare for the following year. We can all guess that the kids did not complain about having to take a break in the summer!
1. What is the **MAIN TOPIC** of the text? ____________________________________________

2. What is the **MAIN IDEA** of this text. ____________________________________________

   **MAIN IDEA =**
   
   Topic + What the author says about the topic

   ____________________________________________
   ____________________________________________
   ____________________________________________

3. **Yellow** Color in a **KEY DETAIL** that supports the main idea of the text.
   Explain in your own words how this detail supports the main idea.
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   ____________________________________________
   ____________________________________________

4. **Blue** Color in a **KEY DETAIL** that supports the main idea of the text.
   Explain in your own words how this detail supports the main idea.
   ____________________________________________
   ____________________________________________
   ____________________________________________

5. Write a **SUMMARY** of this text.

   **SUMMARY =**
   
   Main Idea + Supporting Details
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   ____________________________________________
6. How do you think schools save money in modern times by having a summer vacation? Cite the evidence and details in the article that help you answer this question.

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7. In paragraph F, the text says, "We can all guess that the kids did not complain about having to take a break in the summer!" What can you infer about this statement?

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8. Which of these text structures do you think best describes the overall text?

☐ CHRONOLOGY (sequence of events)
☐ COMPARISON (comparing two subjects, events, or ideas)
☐ CAUSE / EFFECT
☐ PROBLEM / SOLUTION

9. Why do you think this is the best way to describe this text?

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10. Describe the overall STRUCTURE of this text.

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Do Mountains Really Grow?

If you have ever looked at a mountain, you know that they are really big and tall. But did you know that they are getting a little bit taller each year? This is because there is something happening deep inside the earth. The secret to the growing mountain lies several miles beneath your feet!

First, to understand what is going on we need to understand the layers of our earth. Our earth is made up of four main layers. The inner most part of the earth is called the inner core, which is the hottest part. If you imagine a hard-boiled egg, it is like the yolk. The outer core is like a barrier between the inner core and the next layer called the mantle. The mantle is like the white part of a hard-boiled egg. The mantle is made up of magma, which is what we call lava when it is still inside the earth. The outer layer of the earth is the part we live on. It is called the crust and is very thin. It is sort of like the egg shell of a hard-boiled egg.

Next, we need to look at the crust. You probably have cracked the shell of a hard-boiled egg before. The surface of the earth, or crust, is very similar to a cracked shell. We call the broken pieces plates. These plates can move and slide around. This does not happen very fast though! As a matter of fact, it happens so slow we do not feel it going on. But what is causing these plates to move?

The magma inside the mantle is very thick and gooey. It is slow moving like thick syrup. The magma moves around inside the mantle because of the heat from
the core of the earth. This happens much like when water boils. You put water in a pot and place the pot on the stove. The heat from the stove warms the water near the bottom. As the water heats up, it begins to rise to the top. That is why you see bubbles start at the bottom and then move up. Magma does the same thing. The magma near the core heats up and slowly begins to rise towards the crust of the earth. And when it does, it pushes against the plates of the earth.

Magma that has moved toward the surface of the earth is very strong. It is so strong that it actually causes the earth’s plates to move. When those plates move around, they sometimes slide past each other, move away from each other, or even crash into each other. The result of these movements creates what we call landforms. Some examples of landforms are valleys, plateaus, volcanoes, and mountains.

Mountains are made by the magma forcing two plates to crash into each other. Each plate folds up like the hood of a car that has crashed into another car. Since the magma inside the mantle does not stop moving, it causes the plates to keep pushing into each other. The result is that the mountains keep getting bigger and bigger.

Even though mountains are getting taller, you won’t be able to notice it. We cannot see mountains getting bigger because it happens so slowly. Most mountains will only grow one or two centimeters each year. However, some mountains have grown as much as a couple of inches in one year.
1. Write a paragraph describing how a mountain can grow bigger and taller. Use the words **FIRST, THEN, NEXT, and FINALLY** in your paragraph.

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2. **Yellow** Color the sentences in the text that explain **WHY** mountains grow bigger and taller.

3. **Explain** in your own words **WHY** mountains grow bigger and taller.

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4. Describe a **CAUSE** and **EFFECT** for how or why mountains grow bigger or taller.

**CAUSE:**

**EFFECT:**
5. Write three questions where the answer could be found in the text. Then find the answer to your question and color it.

1. ______________________________
   Color the answer to your question
   
   2. ______________________________
   Color the answer to your question
   
   3. ______________________________
   Color the answer to your question

6. Find the underlined word, magma in the text. Use the context clues to explain what this word means. Circle the words in the text that are a clue to the meaning of the word.

7. Which of these text structures do you think best describes the overall text?
   - □ Chronology (sequence of events)
   - □ Comparison (comparing two subjects, events, or ideas)
   - □ Cause / Effect
   - □ Problem / Solution

8. Why do you think this is the best way to describe this text?

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9. Describe the overall structure of this text.

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Oil Spill in the Gulf

The United States has a vast supply of oil and natural gas. This resource can be found deep under the ocean waters of the Gulf of Mexico. Hundreds of oil wells have been drilled in order to access this oil. At each oil well, a pipe carries oil from deep underground. The oil moves through the water and up to a platform that is floating on the ocean surface. Oil is collected at each platform and then shipped to the shore. The oil is then unloaded on shore and processed for us to use for heating homes and powering cars.

On April 20, 2010, a huge accident occurred on an oil platform known as the Deepwater Horizon. The oil platform was 40 miles off the coast of Louisiana. An oil well had just been drilled into the land deep beneath the ocean. Suddenly, some oil and natural gas escaped from the pipe. The fuel rushed to the surface of the water. The oil and gas exploded in a large fireball below the platform. The platform was so damaged that it eventually sank into the ocean. As the platform sank it also pulled down the large pipe that had just been drilled into the ground. Tragically, eleven people died in the accident.

Oil spilled from the broken pipe into the Gulf of Mexico for months before the pipe could be repaired. It was estimated that each day, more than 200,000 gallons of oil gushed out of the damaged well. Eventually, the Deepwater Horizon disaster would become the largest accidental oil spill in the world. The oil spill was also known as the BP oil spill, named after the BP Corporation that was in charge of the drilling project.

Oil is thick liquid and it has a strong odor. The oil leaking from the accident site floated to the surface of the ocean. It spread out for hundreds of miles. Everything that the oil touched was quickly covered with the disgusting dark substance.
The ocean water was filled with lakes of oil. Strong fumes of oil polluted the air above the spill. The oil eventually reached the shoreline. Hundreds of miles of coastline in several states were closed. Oil was covering the beaches. The spill also surged inland polluting coastal wetlands.

The environmental impact of the spill was terrible. Millions of birds and other marine life were threatened because the beaches and wetlands were covered in oil. Birds were covered in oil as they landed on the water to find food. As the birds tried to clean their feathers, they accidentally ate some of the oil. These birds became extremely sick and many of the birds died. Hundreds of volunteers worked to scrub each bird that was found covered in oil. Marine life such as dolphins and turtles were also in danger from the oil spill. Many animals were covered in oil as they swam through the oil or came up to the surface to breathe. The oil pollution also injured the shrimp, crabs, and oysters that lived in the Gulf.

The economic impact of the BP oil spill was also quite high. It was expensive to fix such a big problem. Hotels and restaurants along the beaches suffered because tourists avoided the oily beaches. The fishing industry in several states was harmed as well. In fact, fishing was not allowed in the Gulf for nearly a year after the accident.

Fishing has now resumed in the Gulf waters and tourists have returned to the beaches. The devastating results of the BP oil spill still affect the Gulf region though. The long-term effects of exposure to oil pollution in both humans and wildlife will be studied by scientists for many years.
1. Which of these text structures do you think best describes the overall text?

- [ ] **Chronology** (sequence of events)
- [ ] **Comparison** (comparing two subjects, events, or ideas)
- [ ] **Cause / Effect**
- [ ] **Problem / Solution**

Why do you think this is the best way to describe this text?

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Describe the overall structure of this text.

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2. Read Paragraph B. This paragraph has a cause and effect relationship.

Color the CAUSE

Color the EFFECT

Describe this cause and effect.

CAUSE:

EFFECT:
3. What is the **MAIN TOPIC** of the text? ____________________________________________

4. Write one sentence telling the **MAIN IDEA** of this text.

   **MAIN IDEA =**
   Topic + What the author says about the topic

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5. Write a **SUMMARY** of this text.

   **SUMMARY =**
   Main Idea + Supporting Details

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6. Why did so much oil leak into the ocean during this spill? Cite the evidence and details in the article that help you answer this question.

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7. In paragraph E, the text says, "The spill also surged inland polluting coastal wetlands." What can you **INFERENCE** from this detail?

   **INFERENCE =**
   Educated guess.

   __________________________________________________
   __________________________________________________
How the Potato Conquered the World

Most people know that Christopher Columbus sailed from Spain across the Atlantic Ocean to the Americas. His men were the first Europeans to see the “new world,” the continents of North & South America. They were from the ‘old world’ of Europe, Africa, and Asia. Of course, the new world had millions of Native Americans already living there, but it was new to the Europeans. The people were new, the landscape was new. Many plants and animals were unlike anything they had seen before in the “old world.”

One of those plants was the potato. The potato is a starchy tuber. A tuber is a root plant that grows in the ground and kind of looks like a tube. The potato is a very nutritious plant. It is great for people to eat. It has many vitamins and minerals that humans need. Most importantly, it has a lot of energy. It is also very easy to grow. The potato is very adaptable and can grow in many climates. Potatoes today are grown everywhere in the world - from the rainy climate of Ireland, to the dry and arid regions of mountainous Peru.

The potato comes from the Andes, the mountain range on the west coast of South America. In countries like Peru and Bolivia people have grown potatoes for thousands of years. The first potato farmers were Native Americans who lived in the Andes Mountains. They probably started planting the potato 10,000 years ago. We don’t know the exact date, but we know it was a long time ago.

To the Europeans, the potato was a strange new plant. They saw that Native Americans were eating it, so they ate it too. We don’t know if Columbus ever ate a potato, but we do know that some Spanish sailors took the potato back to Europe with them. In 1550, potatoes started to be grown in Spain. By 1590, potatoes began to be grown in Britain and Ireland. They were possibly spread there by British pirates who took Spanish ships full of potatoes back to their homeland.

Soon, other Europeans started growing potatoes too. By the early 1600s, there were potato plants all over Europe. Even in modern times, it is a major part of the European diet. In fact, the potato has been a part of European menus for so long that most Europeans assume it has always been there.
Europe wasn’t the only place in the “Old World” that loved the potato. In the 1600s, Spain also traded with China, Japan, and India. Asia had lots of things that Europeans wanted, including spices for their food. Sometime in the 1600s, they brought the potato to Asia. Asians loved the potato for the same reasons Native Americans and Europeans had loved it. It was easy to grow and was full of energy. It also has lots of vitamins and minerals. Soon the potato was planted all over Asia. Today the potato is also a staple crop in most Asian countries.

The British colonists brought the potato to North America in the 1700s. Even though the potato was from South America, they thought it was a European food. It took longer for the potato to reach Africa and Southern Asia. Most of Africa has a tropical climate, where plants grow easily. The fact that the potato grows in many climates was not so important. Africa also already had tuber plants called yams grown in Africa and Southern Asia. Like potatoes, yams are also nutritious with many vitamins and minerals. In the 1800s, potatoes began to be planted in Africa and Southern Asia.

Now the potato is planted everywhere in the world. It has conquered our menus.
1. Describe what **Figure A** shows.

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2. How does **Figure A** help the reader understand the text? If **Figure A** were missing, how would the reader’s understanding of this passage be different?

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3. Describe what **Figure B** shows.

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4. How does **Figure B** help the reader understand the text? If **Figure B** were missing, how would the reader’s understanding of this passage be different?

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5. What is the **MAIN TOPIC** of the text?

6. Write one sentence telling the **MAIN IDEA** of this text.

   **MAIN IDEA =**
   
   Topic + What the author says about the topic

7. Write a **SUMMARY** of this text.

   **SUMMARY =**
   
   Main Idea + Supporting Details

8. Create a **TIMELINE** of events described in the passage.

   ![Timeline](image)

9. **Yellow** Color the sentences in the text that explain **WHY** the potato was such a popular crop to grow in world history.

10. **Explain** in your own words **WHY** the potato was such a popular crop in world history.

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The Honeybee

Earth has more than 25,000 types of bees. They are classified as insects because they have six legs, three body segments, antennae, and an exoskeleton. Bees also have five eyes and two pairs of wings. They are closely related to ants and wasps.

The most famous of all of the bee species is the honeybee. Honeybees are the only living thing that can produce honey. In fact, honeybees are the only insects that make food for humans. Honeybees are also the only bees that make beeswax. Beeswax is used by people for candles, medicine, and make-up.

Honeybees live in a hive. More than 60,000 honeybees can live in a typical beehive. A hive is an organized society. It has three types of honeybees. There are the workers, the drones, and the one queen bee. Each type of honeybee has specific jobs. The worker bees care for the baby bees, keep the hive clean, make beeswax, and make honey. The drones’ job is to mate with the queen so she can produce many eggs. The queen bee’s only job is to lay eggs. She can lay about 200 eggs in one day. This is more than her own bodyweight in eggs. She is often the mother of all the bees in the hive. Yep, she can be the mother of 60,000 bees!

Bees are extremely important to life on Earth because they are vital to plant pollination. Pollination happens when bees and other insects fly from flower to flower. As bees travel around flowers, pollen from one plant is transferred to another plant. The mixing of the pollen is what allows many plants to produce fruits and vegetables. Without pollination, a plant cannot produce any fruits or vegetables. Many types of bees pollinate, but honeybees are responsible for 4/5 of all insect pollination.

Each spring, as the weather warms, bees forage in the gardens and forests around the hive. Honeybees may fly up to four miles from the hive. The bees are
searching for blossoming flowers that are loaded with nectar. Nectar is a form of sugar water that is found deep inside a flower blossom. Bees drink the sweet, sugary nectar as they stop by the flower. They need lots of this nectar to rear their young.

If a honeybee finds a good location of flowering plants, they can share that information with the other bees at the hive. They do this using a special dance, called a waggle dance. The honeybee moves in a figure-eight pattern through a series of waggle dance steps. The waggle dance tells the other honeybees where the flowering plants are in relation to the sun. The dance also tells the other honeybees how far away the flowering plants are located.

Each honeybee actually only produces 1/12 of a teaspoon of honey in its lifetime. In order to produce one pound of honey, bees typically must visit 2 million flowers. Honey can be found in many different flavors. Each flavor depends on which flowering plant the honeybees visited to collect nectar.

The honeybee is the most famous of the bee family. However, a few other bee species include bumblebees and leafcutter bees. Bumblebees are much larger than typical honeybees and are usually gentle if left alone. Bumblebees don't live in hives like honeybees. They live in underground holes usually left behind by mice and other small mammals. Leafcutter bees are hardworking pollinators of flowers. One leafcutter bee can do the job of 20 honeybees. Leafcutter bees cut small perfect circles into the leaves of plants. They carry the leaf circles back to the nest. The small leaf circles are then used by the bees to make tiny cell caverns that can hold the queen bee's eggs.
What Do You Know About Honeybees?

Honeybees start their lives as eggs in winter. The queen bee lays all of the eggs in the hive. There is only one egg in each cell, or section of the honeycomb. Once the eggs hatch, they become small, white, worms called larva. Larva live in the honeycomb and eat as much as they can. The other worker bees feed honey to the larva all day long.

After the larva stage, the honeybees spin themselves a cocoon. This is when they enter the pupa phase. They don’t eat any food during this stage because they ate so much while they were a larva.

While they are in their cocoon, their body starts to go through many changes. They grow legs and wings and start to look like a bee. The other bees in the hive protect the pupa by creating a safe capped pupal cell. The other bees know when the pupa is ready to come out so they crack open the pupal cell. The honeybee is now ready to come out of the cocoon.

When the honeybee comes out of the cocoon, it is now an adult. Its body is now large, thick, and fuzzy. Most adult honeybees have black and yellow stripes. However, honeybees can also be bright green or very fuzzy and all black. For the rest of their lives, they will work in groups called colonies with a queen bee as their boss.
The queen bee is the boss of the whole hive. She directs the worker bees. She also controls how the bees act by making sure they do what they need to do. The queen bee lays all of the eggs. Sometimes she can lay as many as 2,000 eggs in one day!

There are three ways for a honeybee to become the special queen bee. Since the queen bee can lay up to 2,000 eggs a day, space in the hive can get tight. If it gets too crowded, the worker bees can swarm, or fly frantically, in the hive. As a result, the queen leaves with half of her workers to create a new colony and hive. The other half of her workers stay with a new queen. Another way the queen bee can be replaced is when she is no longer laying as many eggs. This may be because she is getting too old. When this happens, the worker bees start her replacement, or supersedure. The aging queen is killed after the supersedure process. A third scenario is when the queen bee dies suddenly. The worker bees quickly choose several larvae that are in the proper age range and begin to condition them to become queens. The only difference between a honeybee worker and a queen bee is the food they were fed while growing. Possible queens are fed royal jelly for their entire lives. Regular worker bees are only fed royal jelly during the first two days of the larval stage.

Sadly, honeybee populations have been declining in the past few years and now we have fewer. Some people think this is because their habitats are being affected by human beings. This is unfortunate because without bees helping with pollination, many plants will not flower or produce food. This is important for humans because we need fruits and vegetables to eat. About 1/3 of U.S. crops depend on honeybees for pollination. Honeybees are very important to humans!
1. After reading both articles, write a paragraph about the importance of the queen bee in the hive. Include information from both articles as well as at least one fact from each article. Color the information or facts from the articles that you used in your writing.

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2. After reading both articles, write a paragraph about why bees are important for humans. Include information from both articles as well as at least one fact from each article. Color the information or facts from the articles that you used in your writing.

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______________________________________________________________________________________
1. Write three **QUESTIONS** where the answer could be found in the text. Then find the answer to your question and color it.

   1. ____________________________________________________________________
      Color the answer to your question **[Green]**

   2. ____________________________________________________________________
      Color the answer to your question **[Orange]**

   3. ____________________________________________________________________
      Color the answer to your question **[Pink]**

2. **EXPLAIN** in your own words how bees can communicate with each other.

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3. Read Paragraph D. This paragraph has a cause and effect relationship. **DESCRIBE** this cause and effect.

   **CAUSE:**
   __________________________________________________________
   __________________________________________________________
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   **EFFECT:**
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   __________________________________________________________
¿RESPOND¿ #3 b  

What Do You Know About Honeybees  

NOTE: The questions on this page all refer to What Do You Know About Honeybees Passage  

1. **Describe** three ways a queen bee is chosen. Cite the evidence and details in the article that help you answer this question.  

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2. Describe what **Figure A** shows. How does it help the reader understand the text?  

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3. What information does **Figure B** give you that you cannot get from reading the text?  

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4. Find the underlined word, **cell** in the text. Use the **context clues** to explain what this word means.  
   Circle the words in the text that are a clue to the meaning of the word.  

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5. Find the underlined word, **supersede** in the text. Use the **context clues** to explain what this word means.  
   Circle the words in the text that are a clue to the meaning of the word.  

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Jumping Tigers

Julie Jones made an art of running on any surface—concrete, dust, grass, dirt, leaves, rocks, pebbles, or gravel. Julie Jones ran her tail off. She had legs that kicked out and in, out and in. Once they started moving, they could not be stopped. She ran faster, longer, and harder than anyone she knew.

That is, until Molly came into town. Molly was a free-runner. While Julie Jones was the definition of running, Molly was the definition of moving fast. She could run very well, even fast, but once she found a wall, a car, a tree, a light post, a mailbox, or a truck full of smelly socks, Molly could hop on top. She would use her strong thighs and jump up onto anything. From there, she could go anywhere. She could run.

Julie Jones was known for her Zeus-like honesty. She lived her life for fairness and always striving for justice. As a runner, she ran because she loved it. Molly, however, used her powers in other ways. She was fast, sometimes too fast. Because of this, she would take things without asking. From street vendors, to hotel guests, to going into people’s wallets, she would steal and run away. She did not need the stuff, she just liked taking it.

One time Julie Jones was walking to the store to get her father a carton of eggs. It was unusual for her to be walking, since she ran so fast. She was listening to her iPod, with her headphones in. It was right about to get to the good part of the song, when suddenly her headphones ripped out of her ears. She looked around and saw a bolt of neon green to her right. She turned and saw the neon green bolt jump up the wall.

There was a girl who was running up a wall. Then she jumped from street lamp to street lamp, and then onto the roof of the next building. She was bolting toward the forest. It was on.

Julie Jones took off running after her. She knew the town like the back of her hand. She didn’t run towards where this neon green girl was running. Instead, she went around the building, knowing it would let out on the other side. As she turned the last corner, she saw the neon green girl. She ran up to her, and as she did, Molly, the neon green girl, took off running.

The girls chased each other through streets and alleys. The chase got serious.
when the neon shirt ran inside an empty building. Julie could hear fast footsteps running up the staircase all the way to the roof of the building. Julie Jones was tired from all the running and climbing. She started to feel sweat bead on her forehead. When she reached the door to the roof, she knew the chase was over. Julie Jones slowly opened the rooftop door and looked right at Molly. Julie knew she felt tired, but she was clearly not as tired as Molly.

“Just give me back my iPod,” said Julie Jones. Molly began to walk backwards into the corner. She looked off the edge of the building. They were right by the sea. There was a pipe that went all the way down to the ground. Just then, she jumped off the building, and onto the pipe. Using her legs and her hands, she climbed all the way down. Julie Jones booked it down the stairs. She was a hurricane of feet.

Molly thought running to the beach might work in her favor. She started to run toward the beach, hoping she could hide under the pier. The second she hit the sand, she felt her speed slow down. Julie Jones finally got to the street and saw Molly stuck in the sand. She smiled. She knew exactly how to run on the sand. You have to run into the sand, not on top of it.

Again, fast like Hermes, she whipped her fast legs into the sand and before long she caught up to Molly. Molly was still running, getting short of breath, and when she looked left she saw Julie Jones, running easily right next to her. It was over, thought Molly. She slowed to a stop and then sat down on the ground. Julie Jones sat next to her. They were both tired.

Molly took the iPod out of her jacket pocket, and handed it to Julie Jones. She didn’t say a word. She just looked out at the sea.

“My name is Julie Jones, and I’m the fastest.”
1. What is the **Theme** of this text? ________________________________

2. Describe the **Theme** of the text.

_______________________________________________________________________________________
_______________________________________________________________________________________
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3. Color in a **Detail or Sentence** that helps you identify the theme. Explain in your own words how this detail supports the theme.

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4. Color in a **Detail or Sentence** that helps you identify the theme. Explain in your own words how this detail supports the theme.

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5. Write a **Summary** of this text.

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6. **CHARACTER CLOSE UP:** Use details from the text to describe **JULIE JONES**

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7. **CHARACTER CLOSE UP:** Use details from the text to describe **MOLLY**

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8. What can you **INFER** about the ending when the text says, “She didn’t say a word. She just looked out at the sea.”

**INFER**

What the text says + your background knowledge

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9. Find the underlined word, **Zeus** in the text. Explain what this word means. **Circle** any words in the text that are a clue to the meaning of the word.

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10. Find the underlined word, **Hermes** in the text. Explain what this word means. **Circle** any words in the text that are a clue to the meaning of the word.

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My family and I go on vacation every summer. We always drove our tan station wagon on our trips. My parents would sit in the front. My little sister, Kelly, and I, would sit in the back, letting the hot wind hit our faces from the open windows. The car would be full of potato chips, soda, fruit, sun block, and music. We always have so much fun on these trips. Two summer’s ago, we went to the Grand Canyon. This past summer, we went to Disneyland and we were very excited. There was one thing that could spoil the trip, though, and that was the fact that Kelly was afraid to get on rides because she was scared of heights.

I know this because one summer we went to a water park. When Kelly got to the top of the water slide, she froze. A long line of kids waited while she stood there frozen with fear. She cried her eyes out while Mom walked her down, away from the angry eyes of the other kids. My parents really wanted her to get over her fear, though, and hoped she could do so at Disneyland, the “happiest place on Earth.”

After a beautiful drive that lasted two days, we reached our destination. Dad and Kelly hopped out of the car and ran towards the front gates. It was a perfect day outside with plenty of sunshine. Kelly and I had eaten a tiny breakfast, so when we saw all of the food stands, we couldn’t help but tug our parents towards them. We scarfed down egg sandwiches and bagels. After our stomachs were full, our family went to see some of the live shows. We enjoyed watching the Disney characters dancing and singing some of our favorite songs.

By the time we finished watching a second show, we were ready to find an arcade. I loved playing games. We found one near the Matterhorn, one of Disneyland’s roller coasters. While we played in the arcade, our parents went shopping.

One of the games I played was a water game, where I had to shoot water
into the mouth of a clown in order to make the balloon pop on its head. A stuffed bear with a large grin was one of the possible prizes.

Kelly tugged at my sleeve, “Please win one for me, Thomas!” She loved stuffed bears, but she was way too little to win one herself. The thing is, I liked the stuffed bears too, and I wanted to keep them for myself.

“You will have to win one yourself Kelly,” I said. There was a part of me that was a bit greedy because I knew there was no way she could win since she was barely able to see over the counter.

While I was trying the game a third time, my parents came back. I still had not won the bear for Kelly. Kelly was really disappointed. Our parents thought getting on a ride might cheer her up. Our whole family, even Kelly, thought this sounded like a great idea. My parents and I secretly pretended like going on a ride was totally normal. We didn’t want to make it a big deal so that maybe Kelly would forget about her fear.

Since we were right by the Matterhorn, a roller coaster that went through a mountain, we decided to try it first. As soon as we got to the front of the line, Kelly froze with fear, much like she had at the water slide. We feared it would happen. Right then, I thought of something that might get her on the ride.

“If we go on the ride together Kelly, I promise to go and win you a bear as soon as it is over,” I said.

Kelly smiled and got on the ride. Sitting next to me, she screamed her little lungs out during the whole ride! My parents and I yelled and laughed too. When we got off the ride, I kept my word and took my sister back to the game. On my first try, I was able to win the bear for her. From that day on, Kelly was not scared of rides or heights anymore.
1. What is the **Theme** of this text? ____________________________________________

2. Describe the **Theme** of the text.

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3. Color in a **DETAIL OR SENTENCE** that helps you identify the theme. Explain in your own words how this detail supports the theme.

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4. Color in a **DETAIL OR SENTENCE** that helps you identify the theme. Explain in your own words how this detail supports the theme.

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5. Write a **SUMMARY** of this text.

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6. **CHARACTER CLOSE UP**: Use details from the text to describe **KELLY**

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7. How did **KELLY** change in this story? Refer to details in the text in your response.

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8. **CHARACTER CLOSE UP**: Use details from the text to describe **THOMAS**

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9. **MAIN EVENT CLOSE UP**: Use details from the text to describe the **MAIN EVENT**.

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10. From what point of view is this story written? ____________________________

    I know this because ________________________________________________________________

    ____________________________

    (Circle) some details in the text that show you the point of view from which this story was written.
Faith in Fate

Once a month, Miller stopped by the corner store and bought a lottery ticket. He would neatly fold the ticket into four even squares and tuck it in his wallet, right by the picture of his grandmother. He would then walk home, sipping his soda and would repeat the numbers with every step. “14, 8, 34, 6, 9, 12, 19, 84,” he muttered, as he rounded the corner to his street.

Inside Miller’s house, everything was just as he liked it. All the pictures of his family lined the halls of his house in the order that they were taken. His living room was sparse with only one small couch, one lamp, one table, one antique radio and one television. Miller had clustered all of these items into one corner of the room, leaving the rest empty. He did not feel like he needed to fill this emptiness. He enjoyed the feeling of space. He liked it that way and didn’t want it to change.

His purchase of the lottery ticket, however, tempted fate. If he won, which he never did, he knew that his life would fill up with all sorts of people claiming to be old family. The empty corners of his house would soon be cluttered with gifts and furniture and numerous other things that he didn’t need. His grandmother always told him that by keeping still he was teasing the fates of past, present, and future. The myth was that there were three women who controlled every human’s lifeline and that they kept their destiny, whatever that may be, on track.

Miller’s grandmother had ingrained in him this belief. This led him to believe that every single thing that happened to him, either good or bad, was because of fate. To keep himself from always doing what these mythical women decided for him, he bought his lottery ticket and waited to hear the result.

There was a knock at the door. When Miller opened it, there was no face, only brown grocery bags.

“Could you take one of these please,” came a voice from behind the bags. “My arms are about to buckle. I brought you lots of vegetables today. You need to eat
better and these super healthy for you," said Lisa. She was his niece and she was the only one who didn’t think that he was crazy. She delivered his groceries every week.

“Did you get another lottery ticket?” Lisa asked.

“Yep,” said Miller as he placed cans of green beans in the pantry.

“You know, three million people enter into the lottery,” said Lisa. She folded up the bags and placed them neatly under the sink.

“I let fate decide if I win or not,” Miller said. “Not that I care if I win, mind you.”

Lisa laughed and hugged her uncle. She left him with one last thought before she headed out the door and back to her busy life: “Everyone cares, Uncle, that’s why they buy the ticket.”

A week later, Miller turned on his old television and found the channel where the lottery would be shown. There is a lot of lead up to the actual drawing of the numbers: people talk about how much money is in the pot, past winners are interviewed, evaluations of sales numbers are shown. It was the third week without a winner, which always creates a pseudo excitement for the hosts. Miller knows they don’t care about the lottery, probably because they can’t enter it themselves.

When the numbers were about to be drawn out of the big globe, Miller pulled out his ticket. He smoothed the paper on the table and sat back. It is a ritual he has done many times. It is his way of telling the fates, “Go ahead and have them pick my numbers.” But tonight, as the light on the screen illuminated the number balls, he heard Lisa’s voice in his head. He tried to push it aside and focus on the TV, but he couldn’t. Did he really want the money? The announcers called numbers 14 and 8. Was he tricking himself into thinking that he had made the choice to buy the ticket and not the fates? The numbers 34 and 6 were the next to be picked. What would he do if he got the money? The next two numbers were 9 and 12. Just before the final numbers were announced, Miller turned off the TV and ripped up his ticket.
Use the text to find and explain the meaning of the following words and phrases.

Step 1: Underline the text that helps you understand the meaning
Step 2: Explain the meaning in your own words.

What does it mean?

SPARSE is...

Now use the word SPARSE in a sentence:

FATE is...

Now use the word FATE in a sentence:

INGRAINED is...

Now use the word INGRAINED in a sentence:

PEUDO is...

Now use the word PSEUDO in a sentence:

ILLUMINATED is...

Now use the word ILLUMINATED in a sentence:
1. **CHARACTER CLOSE UP: Miller**

Use details from the text to describe this character.

Color his **FEELINGS, THOUGHTS or WORDS** in the text. Describe below.

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2. Is this a character you like or connect to? Why or why not? Use evidence from the text to support your response.

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3. The text says, “Miller turned off the TV and ripped up his ticket.” Why do you think he did that? Refer to the details found in the text in your response.

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4. Write a **SUMMARY** of this text.

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The Marshmallow

Maxi May was the best marshmallow shooter in her class. For some reason, every time she picked up the plastic tube shooter, it was like watching a champion. She had such poise. She had such precision. She would plant her feet, right foot behind the left. Her toes were always facing the target. She had her left eye closed. Then she would take the marshmallow, stick out her tiny tongue, and lick the white cylinder. This may have been the secret, but no one knew for sure. She would load the marshmallow into the tube, hold the tube to the target and KaWOP! Right in the bulls eye.

The moment she loaded the marshmallow, it was like a bolt of lightning. She would snap back and pop out the marshmallow with great speed. Most kids in her class couldn't even hold the point steady on the target. One boy, Ralph, always, ALWAYS shot himself before he could even pick up his marshmallow shooter.

At this school, marshmallow shooting wasn't just sport. It was a way of life. Every winter, the 2nd graders would learn the art of marshmallow shooting. Every spring, the 3rd graders would practice their marshmallowing, and every June, the 4th grade class would have a marshmallow shooting contest. Maxi was finally in 4th grade.

While most people loved Maxi May and her marshmallow magic, one of the kids was not happy. Franny Gee was a sour pus. She was not good at marshmallow shooting. Instead, she loved eating the marshmallows. One time, Franny Gee came to class early and ate all the marshmallows before the class could practice. Everyone got mad. Another time, Franny Gee told Maxi May that she couldn't wear her yellow shirt that day because it was Tuesday. So Maxi shot a marshmallow straight into Franny's mouth. Franny ate the marshmallow, but was not happy about it. She swore revenge.

Maxi May only had one person to really compete with. That was Harold Gold. Harold was a nice boy, with a bald head, and big glasses, he had very, very long arms. They seemed to dangle at his sides like a caveman. Harold was also a good shot. His long arms made it easy for him to reach the target, and to pump the tube. Maxi and Harold were really good friends. This made Franny even more frazzled. Maxi and Harold often competed in practice. They would bet each other about shots they could make. "I bet you can't shoot it out the window," he told Maxi. And she did shoot it out the window.

"I bet you can't hit the bull eye," she chided him, and he did.
“Anything you can do I can do better,” he said.

On the afternoon before the Marshmallow contest, Franny walked home with Harold. “Harold!” she said, running up to him with a sneaky smile, “Did you hear what Maxi said about you? She told Mrs. Candy that she knows that she’s going to win because your arms are too long. Then she told someone else that you’re only good at marshmallow shooting because of your big glasses.

Harold didn’t know what to think. Maxi was his friend. She never said anything about his glasses, or his arms. Harold was hurt. He didn’t know what to say.

“Harold, if you want… I know how we can get her back.” They continued to walk and talk. They soon began to plot a revenge against Maxi. The next morning, Franny came in early to class. She took a look at the official tube shooters that would be used in the game. She took a water bottle from her backpack and poured it into Maxi’s shooter. “This should slow down Maxi’s marshmallows,” she cackled.

The rest of the children poured in, and before long, the games began. Since Maxi was the class champion, she got to go first. She licked the marshmallow like she always did, and when she shot, a soggy slug of a marshmallow came out and whacked the edge of the target. A terrible miss.

The whole crowd gasped. Was it really what they could imagine? Had Maxi lost her touch? Harold looked at Franny. She was smiling. He was guilty. Maxi was mortified. She didn’t know what had happened. She gave Harold a look, like she wanted to cry, but couldn’t.

“Wait!” he yelled. “This isn’t right. This was a trick. Franny and I tampered with the tube shooter. She poured water into the tube to make it soggy, and I kept quiet.” Everyone was silent. “Maxi, Franny said you thought my arms were too long, and that my glasses were dumb. I don’t know if you said those things, and I hope you didn’t, but it doesn’t mean you deserve what we gave you,” said Harold, and stepped towards Maxi. “So here,” he said and gave Maxi the shooter. “I want you to take the shot you deserve.”

Franny ran out of the room, and Maxi took the tube shooter. “I don’t know where you heard that Harold, but your glasses and arms are just fine with me,” she said. Then, she licked and loaded a marshmallow, and whacked the bulls eye. KaWOP!

“But now you know, anything you can do, I can do better!” Maxi said smiling.
The Coolest Kid

It was a fine day in America. Any day would be with a field trip to the Statue of Liberty. The Ridgefield school was making their annual field trip to the Statue on Ellis Island. It was a sunny day and the students were all excited, except for Tommy.

Earlier in the week, Tommy, Alex, and Cyril were playing basketball at recess. Alex took a shot and missed. “Hey, have you guys heard about what last year’s class did on the field trip?” asked Alex.

Cyril grabbed the ball and got the rebound. “Oh yea, that was so cool. I hear that it is tradition for the cool kids to do it,” said Cyril as he shot the basketball. “When we do it, we’re going to be the cool kids next year.”

Cyril missed and Tommy grabbed the rebound.

“What are you two talking about?” asked Tommy. Alex and Cyril both looked at Tommy and laughed.

Alex explained, “Every year, the coolest kids wait until the tour guides at the Statue of Liberty walk away, and they climb out on top of the statue of Liberty’s head. The really, REALLY cool kids will jump up on top and scream ‘Ridgefield Rules’.”

“I’m gonna be the really, REALLY cool kid,” said Cyril. Alex grabbed the basketball and threw it at Cyril.

“No you’re not, cause I’m going to beat you to it,” said Alex. Tommy didn’t say anything. “What about you Tommy?”

Tommy looked at both of them. “Well, yea, of course, we’re gonna be the coolest kids in the whole school.”

Tommy wasn’t ready to be that cool, however. He was the tallest kid in the class, but afraid of heights. He also thought that climbing out on top of the Statue of Liberty was the dumbest thing he’d ever heard. He didn’t say anything cause he didn’t want to lose his friends, but he was terrified. He was thinking of how they could get kicked out of the Statue of Liberty, maybe even kicked out of Ridgefield, or even fall and die.
"The Statue was a gift from France, and is 305 feet tall from the ground to the torch," said the tour guide. "This Island used to be called Bedloe Island." The class was climbing the stairs and almost to the top.

"I can't wait to climb on top," said Alex. He poked Tommy. "You better not chicken out Tommy, or we can’t be friends next year."

Tommy was even more scared now. The class got to the top and everyone got a chance to view the New York City skyline from the head of the Statue. It was a beautiful sight. Everyone in the class was amazed. Tommy wasn’t, though. He couldn’t stop thinking about Alex and Cyril and their plan. The class started to head downstairs. Soon it was just Alex and Cyril and Tommy.

"Let’s do this," said Alex. He reached up and jumped onto the window sill. Cyril started to do the same. "Tommy, come on," Alex barked. Tommy was petrified.

Tommy didn’t move. He took a step back. "I can’t guys," said Tommy. "This is dangerous. I’m going back." Tommy started to walk down the stairs.

"Remember Tommy, this means we’re not friends," said Alex.

Tommy ran down the stairs. He felt good for the first time all field trip. He quickly skipped past the class, and straight up the tour guide. He interrupted the guide and said, "two of my friends just climbed on top of the statue's head. They think it will make them cool, but I think they might fall. Can you help me?"

The tour guide just looked for a moment. "Oh no! Where are they?" Suddenly everyone turned. There was a terrible scream that came from the top. The tour guide sprinted up the stairs. Tommy followed close behind them.

When they got to the top they were shocked. Cyril was climbing in. "Help! Help! We need some help!" The tour guide moved him aside and looked outside the window. Out on the spikes, Alex was crying. His pants had gotten caught on one of the spikes and he was holding on for dear life. The tour guide quickly grabbed Alex by the hand, and with Tommy, he hoisted him in.

Tommy never said anything to them. He just let them wallow in how foolish they were, and they still remained friends. Tommy, by all accounts, was the coolest kid in the class the next year.
The Marshmallow

What is the **Theme** of this text?

Describe the **Theme** of the text.

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Describe how the theme or main elements of both texts is **SIMILAR**.

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The Coolest Kid

What is the **Theme** of this text?

Describe the **Theme** of the text.

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Describe how the theme or main elements of both texts is **DIFFERENT**.

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___________________________________________________________________________________
1. **CHARACTER CLOSE UP: Maxi May**
   Use details from the text to describe this character.

   Color her **FEELINGS, THOUGHTS, or WORDS** in the text. Describe below.

2. Is Maxi May a character you like or connect to? Why or why not? Use evidence from the text to support your response.

3. **MAIN EVENT CLOSE UP:** Use details from the text to describe the main event in this story.

4. Write a **SUMMARY** of this story.
1. **CHARACTER CLOSE UP: Tommy**
   Use details from the text to describe this character.

   Color his **FEELINGS, THOUGHTS, or WORDS** in the text. Describe below.

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2. Is Tommy a character you like or connect to? Why or why not? Use evidence from the text to support your response.

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3. **MAIN EVENT CLOSE UP:** Use details from the text to describe the main event in this story.

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4. Write a **SUMMARY** of this story.

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Writing
Directions:

The following passages are about the sinking of the Titanic. Write an informative essay in which you explain how the Titanic sank, even though it was believed to be “unsinkable.” Use information from the sources to support your essay.

Manage your time carefully so that you can:

- Read the passages;
- Plan your response;
- Write your response;
- Revise and edit your response

Be sure to include:

- An introduction;
- Support for your controlling idea using information from the passages;
- A conclusion that is related to your controlling idea

Your writing should be in the form of a well-organized, multi paragraph essay.
The Unsinkable Ship

After two years of construction, weighing in at a total of 52,310 tons, the British passenger ship the *Titanic* was finally launched on May 31, 1911. The ship was built by the White Star Line company, a leading cruise maker at the time, and was advertised as being “unsinkable” in design. An excerpt from Shipbuilder magazine (1911) writes about the different compartments under the ship, designed to close off if water somehow got on board. It claimed:

“*Each door is held in the open position by a suitable friction clutch, which can be instantly released by means of a powerful electro-magnet controlled from the captain’s bridge, so that in the event of accident, or at any time when it may be considered advisable, the captain can, by simply moving an electric switch, instantly close the doors throughout and make the vessel practically unsinkable.*”

The Titanic was designed to stay afloat even with four of its watertight compartments being flooded, and passengers and crew alike had absolute faith that the steel-ship was positively unsinkable.

Unfortunately for both passengers and crew, this claim was only a myth.
On April 15, 1912, the Titanic sank only 4 hours after accidentally striking an iceberg. On its maiden (1st) voyage, the $7.5 million Titanic was reduced to nothing but a pile of rubble at the bottom of the Atlantic Ocean.

People around the world were shocked! With so many claims referring to the safety of the ship, no one could possibly understand what had happened. But scientists, with the help of many survivors’ stories, have helped us piece together what went wrong on that chilly, April morning. Even now, over 100 years later, we find ourselves fascinated with the tale of the “Unsinkable Ship,” and still spend countless hours learning and researching this tragic, yet alluring tale.

On the left: An excerpt from an advertisement by the cruise company claiming that the Titanic and its sister ship the Olympic were “wonderful vessels designed to be unsinkable.” We know now that these statements were not true.

On the Right: A newspaper for the Olympic and Titanic ships advertise the safety and luxurious nature of the two cruises. Dates for their maiden voyages appear, with no one expecting the ship leaving on April 13th would sink only two days into its trip to the Americas.
Warning’s Unheeded

How do you sink an unsinkable ship? A combination of poor navigation, bad weather, and warning’s that went unheeded.

Climate

One of the greatest factors to consider in the sinking of the Titanic was the weather. Sources claim that during that year in particular, the world was experiencing climate conditions that led to an increase number of icebergs. Moreover, based on the positions of the moon and Earth, the tides were favorable for an unusually high tide; an event that would have caused even more icebergs to be in the area or ocean where the Titanic first encountered it’s large adversary. While the conditions were not enough to cause the sinking of the ship alone, the climate and corresponding large blocks of ice in the water were the first of many steps in the recipe for disaster.

Human Error

While it is unfair to place blame on any one individual for what happened, there is significant evidence pointing towards human negligence as a contributing factor. Negligence is when something is not taken care of or paid attention to. During its maiden voyage, the captain and crew was warned many times about the unusually large and prolific icebergs in the area. The Titanic had received multiple warnings over the radio about these icebergs, but many of these messages were never passed on to the ship’s captain. Along with ignoring these crucial warnings prior to the accident, construction teams also ignored warnings concerning the boat’s emergency exit options. The Titanic was not equipped with enough lifeboats to
save all of its passengers in case of an emergency; leaving many stranded when the ship went down.

**Ship Malfunctions**
Just before impact occurred, one of the first officers on board the ship telegraphed the engine room telling them to put the ship’s engines in reverse. He had hoped this would help the boat avoid the iceberg, or at least mitigate (lessen) the damage. Unfortunately, putting the ship in reverse was a fatal mistake, because the crew could not steer the ship as easily with the engine going in reverse. It’s an ironic fact that had the crew not tried to slow the ship down, they may have been able to turn fast enough to avoid impact.

Regardless of this maneuver, however, was the fact that the ship was designed in a manner that was not strong enough to withstand the impact the ship faced when hitting the iceberg. Scientists went back and looked into the materials used to build the boat and found that even though the sides of the boat were constructed with high-quality, durable steel, the iron-rivets that held these pieces together were cheap, and low-grade. It was these low-grade rivets that ripped apart during the collision and allowed for water to penetrate into 6 of the water-lock compartments; sinking the “unsinkable” ship in only 4 hours.
Interviewing a Survivor

Below are several quotes from individuals who survived the sinking of the Titanic. They tell their versions of what they heard and saw that fateful April morning.

“I was on the whale deck in the bow calling the watch that was to relieve when the ice first came aboard. The collision opened the seams below the water-line but did not even scratch the paint above the line. I know that because I was one of those who helped to make an examination over the side with a lantern. I went down into the engine-room at 12:40am. We even made coffee, so there was not much thought of danger. An hour later I was still working at the light engines. I heard the chief engineer tell one of his subordinates that number six bulkhead had given way. At that time things began to look bad... I was told to go up and see how things were, and made my way up a dummy funnel to the bridge deck. By that time all the boats had left the ship, yet everyone in the engine-room was at his post. I was near the captain and heard him say, ‘Well boys, it’s every man for himself now.’” — Alfred White, Greaser in the Engine Room

Above: Alfred Write, a crew member in one of the ship’s engine rooms writes about how even after the collision, no one on the ship seemed concerned. No one believed the ship could ever sink. How do you think this affected the overall tragedy of the Titanic? Could more have been done to protect passengers?

“When the Titanic struck the iceberg, I was in bed. However, for whatever reason I was awake and remember the jolt and cessation of motion. A steward knocked on the stateroom door and directed us to get dressed, put on life preservers and go to the boat deck, which we did... The steward as we passed was trying to arouse passengers who had locked themselves in for the night. Elevators were not running. We walked up to the boat deck. Al was calm and orderly. An officer was in charge. ‘Women and children first,’ he said, as he directed lifeboat number 11 to be filled. There were many tearful farewells. We and Uncle Jim said good-bye... The lowering of the lifeboat 70 feet to the sea was perilous. Davits, ropes, nothing worked properly, so that first one end of the lifeboat was tilted up and then far down. …. When I awoke it was broad daylight as we approached the Carpathia. Looking around over the gunwale it seemed to me like the Arctic. Icebergs of huge size ringed the horizon for 360 degrees.” — Marshall Drew Eight-year-old traveling with his Aunt and Uncle

Above: Marshall Drew speaks of evacuating passengers from the ship and remarks on the large number of icebergs surrounding the site of the sinking.
“A number of us who were enjoyed the crisp air were promenading about the deck. Captain Smith was on the bridge when the first cry from the lookout came that there was an iceberg ahead. It may have been 30 feet high when I saw it. It was possibly 200 yards away and dead ahead. Captain Smith shouted some orders... A number of us promenaders rushed to the bow of the ship. When we saw he could no fail to hit it, we rushed to the stern. Then came a crash, and the passengers were panic-stricken.” — George Brayton - First Class Passenge

Above: George Brayton describes the whereabouts of the captain when the fatal iceberg hit the ship. Passengers were able to see the iceberg from the main deck, alluding to the fact that the captain was already aware and dealing with the issue from his point atop the bridge.

Below: A picture is taken of one of the life boats as a rescue ships comes to their aid.
Directions:

The following passages are about the fairy tale “Goldilocks”. Write an essay in which you give your opinion on who you think the “bad guy” is; Goldilocks or the three bears. Explain why the other character(s) is/are the “good guy(s).” Support your opinion with evidence from the sources.

Manage your time carefully so that you can:

- Read the passages;
- Plan your response;
- Write your response;
- Revise and edit your response

Be sure to include:

- An introduction;
- Support for your opinion using information from the passage;
- A conclusion that is related to your opinion

Your writing should be in the form of a well-organized, multi paragraph essay.
What Are Fairy Tales?

Fairy tales are short stories that often feature mythical creatures and characters. These folklore characters (fairies, goblins, elves, etc) are usually set on a magical, far-fetched adventure in order to complete a goal. Although most fairy tales are very old, they are often changed over time, so there are usually many versions of the same fairy-tale told from different points of view. Almost all fairy tales include some of the following:

**Special beginnings or endings:** How many times have you heard the phrase “Once upon a time…” when starting a fairy tale? Or ending with the classic, “They lived happily ever after.” In order to convey a sense of mysticism, or magic, the original storytellers used many of these cliché beginnings and endings to emphasize the magical sense of their stories.

**Good characters:** Sometimes a story has one main “good guy” or sometimes there are a group of them. Either way, no fairy tale is complete without a hero. Good characters are often kind, innocent, and portrayed as handsome or beautiful (although not always). Usually the “good guy” is the main character of a story, but sometimes, in a dark fairy tale, the story can actually be told by the “bad guy.”

**Evil characters:** An evil character is the person or thing who adds conflict to the story. Cinderella would be a happy but boring story without her evil stepmother and sisters to make it interesting! Often times the “Evil” characters in fairy tales are easy to spot for their cruel, unjust actions. But not all “bad guys” come in the shape of ugly stepsisters or sinister wolves; a “bad guy” can be anyone who stirs up trouble and is mischievous when it comes to our “good guys.”

**Universal Truths:** Probably the most important element of a fairy tale is the universal truth guiding it. All fairy tales touch on something that is experienced or felt by humans throughout time and space. Ideas like love, growing up, and being brave are things that happen to everyone at some point in their lives. Fairy tales
use their stories as ways to teach lessons and help guide us through these universal truths.

Source #2

Goldilocks

The story of “Goldilocks and the 3 Bears”, from Goldilocks point of view:

Once upon a time there was a beautiful little girl, named Goldilocks. One day, as she was walking through the woods, she came across a small cottage. Curious as she was, Goldilocks walked to the front window and peeked inside. From the window, she saw 3 delicious bowls of porridge sitting on a table. When she looked down at her stomach, it growled. She had been so busy this morning, she forgot to eat! So Goldilocks walked to the back door and let herself in. She sat down in front of the biggest bowl of soup and took a big gulp.

“Ouch!” she exclaimed, “This porridge is too hot!” So she tried the medium sized bowl next.

“Ick!” she spouted,” This porridge is too cold!” And she moved on to the smallest bowl on the end.

“Mmm,” said Goldilocks. “This porridge is JUST right.” And she ate and she ate until there was nothing left.

After her little snack, Goldilocks noticed some rocking chairs by the fireplace. It was very cold outside, and maybe she should warm up a little before she went back into the woods! She walked over to the biggest rocking chair,

“Ugh!” she complained, “This chair is too hard!” So she moved onto the medium, fluffy pink one next to it. She sank into its many cushions.

“Merp!” she thought, “This chair is too squishy!” So she moved onto the last, little chair with one simple cushion on its back.
“Ahh!” she sighed, “This chair is JUST right!” And she rocked and rocked until *crack* the chair split in half!

“Ouch!” exclaimed Goldilocks. “What an awful chair!” She kicked the broken bits of wood across the living room and set off to find another one. As she climbed up the stairs, she came across a bedroom with 3 beds. “Well,” she thought, “maybe I will take a nap instead!” She walked over to the biggest bed first.

“No way!” she said, “This bed is too hard!” And she jumped into the next, medium sized one. She sank beneath the cushions once again.

“Gross!” said Goldilocks, “This bed is too fluffy!” and she wandered over to the last little bed.

“Perfect!” thought Goldilocks and she shut her eyes to sleep.

Goldilocks woke with a fright to an angry growl. She opened her eyes and standing over her were 3 terrifying bears! A large papa bear, a medium sized mama bear, and a (still giant), but much smaller, baby bear. Before the father bear let out another angry grumble, Goldilocks was out the bed, through the window, and running back through the woods. She ran all the way back home, and vowed never to return to the cottage or its 3 angry inhabitants!
The Three Bears

The story of “Goldilocks and the Three Bears” as told by Baby Bear:

I will never forget my 6th birthday. Mom and dad had taken me to the lake for a fishing trip. Before we left, mom had laid out my favorite breakfast for when we got home: porridge! Just the way I liked it!

After a long, successful trip on the water, my family and I made the trek back home to our little cottage. It wasn’t much, but it was just what we needed, and nothing could beat an afternoon in front of the fire in my brand new rocking chair!

As we got close to the cottage, we noticed something was wrong…. The back door was open, and the chimney was blowing out smoke, as if someone were home and had lit a fire. When we walked in, we noticed right away something was wrong. My parents walked over to their bowls of porridge and let out a gasp! It only took me a second to realize….

All of my special breakfast porridge was gone! Every last bite! I was upset, but trying to keep calm when I looked over at the fireplace. And then I saw it:

My brand new, home-made rocking chair lay in pieces on the floor. The beautiful chair my father and I had spent months making. Smashed into a dozen pieces. Left in a pile of rubble on the floor. I began to cry, until we heard snoring come from upstairs…

We climbed the stairs, one behind the other, and opened the bedroom door. As I cowered behind my parents I noticed both their beds were disheveled, but there, lying in my very own bed, was a miniature huntress, with golden blonde hair! Had she come here to attack us and accidentally fallen asleep? My dad whispered a low growl for us to get out and run, but the human hunter opened her eyes. She took one look at us and jumped from the bed and ran out the window.

I will never forget that day. The day the infamous Goldilocks snuck into our house, ate our food, broke our things, and ruined my 6th birthday!
Summer Math Reinforcement Packet
Students Entering into 5th Grade

Our fourth graders had a busy year learning new math skills. **Mastery of all these skills is extremely important in order to develop a solid math foundation.** The fifth grade math program will add onto these fourth grade skills, so any time spent learning or reinforcing these concepts will be very beneficial for your child. Each year builds upon the previous year’s skills in math. Any areas your child has difficulty, you may want to give them additional practice. **Student mastery of the basic math skills is as important to success in future mathematical procedures and reasoning as learning the alphabet is to reading and writing.**

Please return this completed packet to your assigned fifth grade teacher. **Students who return the completed packet will receive an incentive.** The biggest prize of all is being ready for fifth grade!

After your child has completed the math problems and if you feel your child is still struggling on a certain concept and needs further practice, you can make up problems of your own for additional practice.

Enjoy your summer!!

Reminder - Practicing multiplication (up to 12) and division facts is VERY important!
FOURTH GRADE
GRADE LEVEL EXPECTATIONS IN MATHEMATICS

When entering fifth grade this is what is expected that your child should already know.

1. Read and write numbers to 1,000,000.
2. Know place value to 1,000,000. Ex. 25,068 is 2 ten thousand, 5 thousand, 0 hundreds, 6 tens and 8 ones.
3. List the first twelve multiples of a given one-digit whole number.
4. Know some numbers are called prime numbers. Some prime numbers are 2, 3, 5, 7 and 11; have exactly two factors one and itself.
5. Add, subtract and multiply whole numbers **fluently**.
6. Divide numbers up to four-digits by one-digit numbers and by 10.
7. Use the relationship between multiplication and division to check results and to find the value of the unknowns in equations such as $x \div 10 = 25$, $10 \times 25 = 250$ so $x = 250$; $125 \div z = 25$, $125 \div 25 = 5$ so $z = 5$.
8. Locate the decimals in tenths and hundredths on a number line.
9. Read, write, interpret, and compare decimals up to two decimal places (hundredths).
10. Convert decimals in tenths and hundredths to fraction and decimal forms.
11. Write improper fractions as mixed numbers and mixed numbers as improper fractions.
12. Compare and order up to three fractions with denominators 2, 4, and 8; and 3, 6, and 12.
13. Add and subtract fractions.
14. Add and subtract decimals up to 2 decimal places.
15. Measure area and perimeter for compound shapes (complex figures).
16. Calculate conversions from one unit to a larger or smaller unit of measure: meters to centimeters, kilograms to grams, liters to milliliters, hours to minutes, minutes to seconds, years to months, weeks to days, feet to inches, ounces to pounds.
17. Identify and draw perpendicular, parallel and intersecting lines.
18. Find the side of a square or rectangle given its perimeter or area and possibly one side.
19. Identify basic geometric shapes including isosceles, equilateral and right triangles.
20. Recognize plane figures that have line symmetry. (Where you can divide a shape in half and both halves are exactly the same.
21. Construct and interpret line plots.
KEY TERMS

Factor: Numbers that are multiplied together to get a product
Multiple: The product of multiplying a number by another whole number
Prime: A number that has only two factors
Composite: A number with more than two factors
Divisor: The number that divides another number
Dividend: A number that is being divided
Quotient: The answer to a division problem
Product: The answer to a multiplication problem
Numerator: The number of parts taken out of a whole (the top number in a fraction)
Denominator: The number of parts in a whole (the bottom number in a fraction)
Right angle: An angle at 90° like a corner of a piece of paper.
Acute angle: An angle smaller than a right angle.
Obtuse angle: An angle larger than a right angle.
Perimeter: You add up all the sides. (You are adding all lengths of the outer edges together.)
Area: *Area of a square or rectangle = length (l) x width (w) answer is written in “square inches” (or whatever the measurement is).
  *Area of a parallelogram is length x height.
  Answer written in “square inches” (or whatever measurement)

Perpendicular lines:  2 lines form a right angle.
Parallel lines:  2 lines that will never cross each other.
Intersecting lines:  2 lines that cross each other but do not form a right angle.

Equilateral triangle is where all 3 sides of the triangle measure the same length.
Isosceles triangle is where only 2 of the sides of a triangle are equal in length.
Conversion:
Here is a link to all necessary conversions:

Select the one best answer for each question. **DO NOT** use a calculator in completing this packet.

1. Which of the following sets of numbers are **all** of the factors of 24?
   
   A. 1, 3, 8, 24  
   B. 2, 4, 6, 8, 12, 24  
   C. 2, 3, 4, 6, 8, 12  
   D. 1, 2, 3, 4, 6, 8, 12, 24

2. Which of the following numbers is a multiple of 8?
   
   A. 18  
   B. 28  
   C. 44  
   D. 56

3. The following are all multiples of a one-digit number: 12, 24, 30, and 42.
   
   A. 5  
   B. 6  
   C. 7  
   D. 8

4. Which number is a multiple of 3?
   
   A. 83  
   B. 84  
   C. 85  
   D. 86

5. Which of the following set of numbers are all multiples of 7?
   
   A. 35, 47, 52  
   B. 35, 36, 37  
   C. 35, 42, 49  
   D. 37, 47, 57
6. Which of the following is NOT true about prime numbers?

   A. They have exactly two factors
   B. One is a factor of every prime number
   C. No prime numbers end in zero
   D. All prime numbers are odd numbers

7. Which set does NOT contain any multiples of 4?

   A. {24, 36, 42, 54}
   B. {12, 15, 20, 24}
   C. {8, 16, 24, 34}
   D. {6, 10, 14, 18}

8. I am a factor of 36 and a multiple of 3. What number am I?

   A. 2
   B. 4
   C. 12
   D. 15

9. Since 4 x 10 = 40, and 40 x 5 = 200, then which of the following is true?

   A. 14 x 45 = 200
   B. 4 x 10 x 5 = 200
   C. 4 x 10 x 40 = 200
   D. 40 x 10 x 5 = 200

10. My number is a multiple of 5. It is less than 100 and has a factor of 6. What is my number?

    A. 25   C. 60
    B. 36   D. 66
11. Write the products: Practice any you do not know quickly.

\[
\begin{array}{cccccccccccc}
4 & 8 & 11 & 2 & 2 & 7 & 10 & 12 & 6 & 5 & 9 & 5 & 0 \\
\times2 & \times4 & \times2 & \times5 & \times3 & \times5 & \times3 & \times4 & \times4 & \times4 & \times3 & \times2 \\
3 & 9 & 2 & 5 & 7 & 10 & 6 & 5 & 11 & 1 & 4 & 8 & 11 \\
\times3 & \times5 & \times7 & \times5 & \times4 & \times4 & \times4 & \times2 & \times5 & \times3 & \times5 & \times2 & \times4 \\
6 & 8 & 6 & 3 & 9 & 10 & 12 & 3 & 7 & 4 & 9 & 4 & 12 \\
\times5 & \times4 & \times2 & \times4 & \times3 & \times2 & \times3 & \times5 & \times3 & \times4 & \times2 & \times3 & \times2 \\
9 & 7 & 5 & 2 & 6 & 7 & 3 & 4 & 5 & 8 & 3 & 11 & 5 \\
\times8 & \times6 & \times10 & \times7 & \times9 & \times7 & \times8 & \times6 & \times9 & \times7 & \times9 & \times7 & \times7 \\
9 & 2 & 6 & 4 & 5 & 6 & 4 & 8 & 10 & 3 & 7 & 4 & 7 \\
\times6 & \times9 & \times7 & \times11 & \times6 & \times8 & \times9 & \times8 & \times8 & \times6 & \times8 & \times7 & \times9 \\
2 & 3 & 9 & 8 & 2 & 3 & 9 & 7 & 0 & 2 & 5 & 4 & 6 \\
\times6 & \times12 & \times9 & \times6 & \times8 & \times6 & \times7 & \times8 & \times9 & \times12 & \times8 & \times9 & \times6 \\
\end{array}
\]

12. Since \(5 \times 20 = 100\), which number will complete the number sentence below to make it true?

\[5 \times ____ \times 5 = 100\]

A. 4  
B. 5  
C. 20  
D. 25


A. 61  
B. 69  
C. 71  
D. 79

   A. 158
   B. 242
   C. 162
   D. 262

15. Which expression is equal to 3 x 49?

   A. 3 x (4 + 9)
   B. 3 + (4 x 9)
   C. 3 x (40 + 9)
   D. (3 x 4) + (3 x 9)

16. Which has the same value as 57 x 4?

   A. (50 x 4) + (7 x 4)
   B. (50 + 5) + 2
   C. (50 x 5) + 2
   D. (50 x 4) + 7

17. Which expression is equal to 83 x 5?

   A. 80 x (3 + 5)
   B. (80 x 5) + (3 x 5)
   C. (5 x 80) + 3
   D. (80 x 5) + ((80 x 3)

18. Solve the following:

   \[
   \begin{array}{cccc}
   2,749 & 156 & 837 & 368 \\
   \times 6 & \times 78 & \times 46 & \times 20 \\
   \end{array}
   \]

19. What is 1486 divided by 3? Show your work.

   A. 4,812 r0
   B. 495 r1
   C. 280 r10
   D. 496 r0
20. What is 2,520 divide by 10? Show your work.
   A. 25,200
   B. 2,520
   C. 253
   D. 252

21. What is the value of this expression? 420 ÷ 4
   A. 15
   B. 100
   C. 105
   D. 150

22. There are 168 lunches to be shared equally among 3 fourth-grade classes. How many lunches will go to each class?
   A. 56
   B. 165
   C. 171
   D. 504

23. What is the value of this expression? 3750 ÷ 10
   A. 370
   B. 375
   C. 3740
   D. 37500

24. Which division problem is correct? Show your work.
   A. 4,836 ÷ 6 = 86
   B. 4,836 ÷ 6 = 806
   C. 3,215 ÷ 5 = 641
   D. 3,215 ÷ 5 = 603

25. If 600 ÷ A = 300, what is A?
   A. 200
   B. 30
   C. 20
   D. 2
26. Fill in the blank with the number that makes this math sentence correct:

\[ 12 \times \Box = 60 \]

A. 7
B. 4
C. 6
D. 5

27. What value of A makes the number sentence true?

\[ 100 \div A = 20 \]

A. 4
B. 5
C. 80
D. 120

28. What value of n makes the equation below true?

\[ n \div 7 = 21 \]

A. 3
B. 28
C. 141
D. 147

29. Which value of g makes the number sentence true?

\[ g \div 8 = 32 \]

A. 4
B. 24
C. 40
D. 256

30. What value of p makes the equation below true?

\[ 270 \div p = 27 \]

A. 7
B. 8
C. 9
D. 10
31. Which math problem can be checked using $3 \times 6 = 18$?

A. $18 \times 3 = _____$
B. $18 + 3 = _____$
C. $18 \div 3 = _____$
D. $18 - 3 = _____$

32. The students in your class collected pop cans to raise money for a class trip. The goal for each student was to collect 150 cans each. There are 27 students in your class. How many cans would that be altogether?

A. 177 cans
B. 405 cans
C. 1,350 cans
D. 4,050 cans

33. Suppose 33 photos are placed in a photo album. How many pages are needed if 3 photos fit on a page? Show your work.

A. 9 pages
B. 10 pages
C. 11 pages
D. 12 pages

34. Which answer means the same as $12.49$?

A. One and two forty nines
B. Twelve and forty nine
C. Twelve and forty nine tens
D. Twelve and forty nine hundredths

35. Mr. Clark was given some change at the grocery store. He was given 5 one dollar bills, 6 quarters, 2 dimes and a penny. How much change did he get?

A. $5.62
B. $6.71
C. $56.21
D. $6.21

36. What decimal part of one dollar is the sum of these coins?

A. 2.00
B. 0.20
C. 0.02
D. 0.22
37. What is another way to write 0.7 inches?

A. $\frac{7}{10000}$ inches
B. $\frac{7}{1000}$ inches
C. $\frac{7}{100}$ inches
D. $\frac{7}{10}$ inches

38. Which is equal to 0.45?

A. $\frac{4}{5}$
B. $\frac{45}{100}$
C. $\frac{100}{45}$
D. $\frac{5}{100}$

39. Which number is the same as one fourth?
   (think of $\frac{1}{4}$ of 100 when converting to decimals; think of money)

A. 0.4
B. 0.04
C. 0.25
D. 0.75

40. Which point on the number line below best represents 1.75?

A. Point A
B. Point B
C. Point C
D. Point D
41. Match the following: Draw a line to make a match.

- Four tenths \(\quad .08\)
- Eight hundredths \(\quad .3\)
- 64 hundredths \(\quad .4\)
- 3 tenths \(\quad .64\)

42. Divide 3,252 ÷ 7
   
   A. 463 R11
   B. 464
   C. 464 R4

43. Write the following in fraction and decimal form:
   
   Eight tenths = _________ = __________
   Twenty-seven hundredths = _________ = __________
   Five hundredths = _________ = __________
   Five tenths = _________ = __________

44. Write the following fractions in decimal form. Remember: tenths hundredths

   \[
   \begin{align*}
   \frac{4}{10} &= __________ \\
   \frac{8}{10} &= __________ \\
   \frac{23}{100} &= __________ \\
   \frac{56}{100} &= __________ \\
   \frac{8}{100} &= __________ \\
   \frac{5}{10} &= __________ \\
   \frac{66}{100} &= __________ \\
   \frac{2}{10} &= __________ \\
   \end{align*}
   \]

45. Which number is the same as .5?
   
   A. One half
   B. 5/1
   C. Five hundredths
   D. 5/1000

46. How is eighteen hundredths written in standard form?
   
   A. 0.018
   B. 0.18
   C. 18.00
   D. 1800
47. Solve each of these without using a calculator:

\[
\begin{align*}
4 \times 6 &= \underline{} \\
8 \times 8 &= \underline{} \\
6 \times 6 &= \underline{} \\
2 \times 9 &= \underline{} \\
5 \times 5 &= \underline{} \\
9 \times 6 &= \underline{} \\
8 \times 5 &= \underline{} \\
2 \times 2 &= \underline{} \\
3 \times 4 &= \underline{} \\
32 \div 4 &= \underline{} \\
7 \times 7 &= \underline{} \\
56 \div 7 &= \underline{} \\
72 \div 9 &= \underline{} \\
18 \div 2 &= \underline{} \\
3 \times 8 &= \underline{} \\
45 \div 9 &= \underline{} \\
4 \times 4 &= \underline{} \\
8 \times 7 &= \underline{} \\
24 \div 3 &= \underline{} \\
3 \times 3 &= \underline{} \\
3 \times 8 &= \underline{}
\end{align*}
\]

48. Choose the circled group that represents \(1/3\).

- A. A
- B. B
- C. C
- D. D
49. There are 4 red cars, 5 blue cars, and 2 green cars in the parking lot. What is the fraction of Blue cars in the parking lot?

\[
\begin{align*}
\text{A. } & \frac{5}{4} \\
\text{B. } & \frac{5}{9} \\
\text{C. } & \frac{5}{11} \\
\text{D. } & \frac{11}{5}
\end{align*}
\]

50. What is the fraction for the shaded part of this set?

51. Look at this set of objects. Which fraction stands for the part of the set that is shaded?

\[
\begin{align*}
\text{A. } & \frac{3}{5} \\
\text{B. } & \frac{5}{3} \\
\text{C. } & \frac{5}{8} \\
\text{D. } & \frac{3}{8}
\end{align*}
\]
52. Which number line shows these two fractions?

53. Which of the following best represents the location of the X on the number line below?

- A. 1 ¼
- B. 1 ½
- C. 1 ¾
- D. 2 ¼

54. How many twelfths equal 5/6?

- A. 10/12
- B. 11/12
- C. 6/12
- D. 5/12

55. How many eighths equal ¼?

- A. 1/8
- B. 2/8
- C. 4/8
- D. 7/8
56. Convert this improper fraction into a mixed number. \( \frac{11}{2} \)

A. 11 \( \frac{1}{2} \)  
B. 2/11  
C. 4 \( \frac{1}{2} \)  
D. 5 \( \frac{1}{2} \)

57. Which of the following is listed from smallest to largest? Draw pictures to help

\[
\begin{array}{c}
\frac{11}{4}, \frac{15}{6}, \frac{7}{12} \\
\frac{15}{8}, \frac{2}{7} \\
\frac{5}{6}, \frac{2}{7}, \frac{8}{12} \\
\frac{6}{8}, \frac{7}{12}, \frac{11}{3} \\
\frac{3}{8}, \frac{7}{12}, \frac{1}{4}
\end{array}
\]

A. \( \frac{11}{4}, \frac{15}{6}, \frac{7}{12} \)  
B. \( \frac{15}{8}, \frac{2}{7} \)  
C. \( \frac{5}{6}, \frac{2}{7}, \frac{8}{12} \)  
D. \( \frac{6}{8}, \frac{7}{12}, \frac{11}{3} \)  

58. Solve the following:

\[
\begin{align*}
1 \times 9 &= \_\_\_ \quad 3 \times 6 &= \_\_\_ \quad 9 \times 7 &= \_\_\_ \quad 6 \times 2 &= \_\_\_ \\
8 \times 6 &= \_\_\_ \quad 2 \times 2 &= \_\_\_ \quad 3 \times 8 &= \_\_\_ \quad 9 \times 9 &= \_\_\_ \\
24 \div 3 &= \_\_\_ \quad 7 \times 7 &= \_\_\_ \quad 56 \div 7 &= \_\_\_ \quad 4 \times 0 &= \_\_\_ \\
48 \div 6 &= \_\_\_ \quad 18 \div 6 &= \_\_\_ \quad 7 \times 3 &= \_\_\_ \quad 7 \times 7 &= \_\_\_
\end{align*}
\]

59. Which of the following is a prime number?

A. 21  
B. 33  
C. 49  
D. 53

60. The distance from home to school is 7/8 of a mile for Amy and 4/8 of a mile from Tom. How much farther does Amy walk than Tom?

A. \( \frac{11}{8} \)  
B. \( \frac{11}{16} \)  
C. \( \frac{3}{16} \)  
D. \( \frac{3}{8} \)
61. Sonya needs ½ teaspoon of salt for her recipe to make rolls. She needs ¼ teaspoon of salt for her recipe to make biscuits. How much salt will she need to make both recipes?

A. 2/6 tsp.
B. 3/4 tsp.
C. 1/8 tsp.
D. 1/6 tsp.

62. Solve for the unknown in this equation: \( \frac{2}{4} + n = \frac{3}{4} \)  \( n = \) _______

A. 5/4
B. 1/2
C. 1/4
D. 5/8

63. Which of the following is closest to the sum of 811 and 356? No calculator.

A. 1400
B. 1300
C. 1200
D. 1100

64. Which of the following is closest to the product of 81 and 82? Do not use a calculator.

A. 6400
B. 7200
C. 720
D. 64,000

65. One hundred fourth graders at Beacon Tree Elementary are attending a field day. The teachers need to know how many hot dogs to buy. All the following are reasonable approximations EXCEPT.

A. 100 hot dogs
B. 150 hot dogs
C. 200 hot dogs
D. 50 hot dogs

66. A cat sleeps an average of 17 hours each day. About how many hours does a cat sleep in a month?

A. 300 hours
B. 600 hours
C. 170 hours
D. 6000 hours
67. Find the difference: Remember “bottom bigger better borrow” and you can only borrow from next door. You can always check your answers by adding your answer and the second number and this should equal your top number.

\[
\begin{array}{cccccccc}
701 & 68 & 100 & 63 & 35 & 114 & 66 \\
\end{array}
\]

68. Find the product:

\[
\begin{array}{cccccccc}
36 & 47 & 59 & 28 & 19 & 56 & 78 \\
x47 & x68 & x39 & x18 & x47 & x36 & x37 \\
\end{array}
\]

69. This pencil is about how many centimeters long?

A. 9 cm  
B. 10 cm  
C. 11 cm  
D. 12 cm
70. What is the length of this light bulb to the nearest inch?

A. 2 in.  
B. 3 in.  
C. 4 in.  
D. 5 in.

71. Which is most likely the length of a telephone book?

A. 30 kilometers  
B. 30 centimeters  
C. 30 millimeters  
D. 30 meters

72. Brent is making a sail for a toy boat. The sail needs to be 3.55 cm wide. Which measure would be MOST useful in making the sail?

A. To the nearest millimeter  
B. To the nearest decimeter  
C. To the nearest meter  
D. To the nearest kilometer

73. Bobbie was writing an article for the school newspaper about the amount of homework the 4th grade teachers were assigning. He was surprised to find out that the average student only spent 20 minutes per night doing homework. To make it sound longer, he decided to convert the time from minutes to seconds in the article. How many seconds did the average student spend on homework?

A. 80 seconds  
B. 120 seconds  
C. 800 seconds  
D. 1,200 seconds
74. Sheryl planned to buy a wallpaper border for her bedroom. She measured the lengths of the walls and found the perimeter of her room. Use the picture below to determine the perimeter.

\[ \text{Perimeter} = 2(10\text{ ft.}) + 2(12\text{ ft.}) = 44\text{ ft.} \]

A. 22 ft.  
B. 34 ft.  
C. 44 ft.  
D. 120 ft.

75. Sheryl may want to buy new carpeting for her room. She needs the square footage of the room to take to the store to price how much carpeting would be. What is the area of her room in the picture above?

\[ \text{Area} = 10\text{ ft.} \times 12\text{ ft.} = 120\text{ square feet} \]

A. 22 square feet  
B. 120 square feet  
C. 100 square feet  
D. 144 square feet

76. Using the formula for finding the area, what is the area of the figure below?

\[ \text{Area} = 1\text{ cm} \times 2\text{ cm} = 2\text{ cm}^2 \]

A. 18 sq. cm.  
B. 22 sq. cm.  
C. 32 sq. cm.  
D. 54 sq. cm.
77. Find the perimeter of the figure below?

![Diagram of a figure with dimensions: 6 feet by 4 feet by 4 feet by 2 feet by 2 feet]

78. What is the area of the figure in number 77 above?

A. 12 square feet  
B. 28 square feet  
C. 24 square feet  
D. 36 square feet

79. Sharon had a rectangular garden with a perimeter of 36 feet. The fence surrounding it was falling down on one of the short sides (width). If the length of the garden was 10 feet, how many feet of fence did she need to replace the broken portion (width) of the fence?

<table>
<thead>
<tr>
<th>Width = ? ft.</th>
<th>Perimeter = 36 ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length = 10 ft.</td>
</tr>
<tr>
<td>A. 6 feet</td>
<td></td>
</tr>
<tr>
<td>B. 8 feet</td>
<td></td>
</tr>
<tr>
<td>C. 10 feet</td>
<td></td>
</tr>
<tr>
<td>D. 26 feet</td>
<td></td>
</tr>
</tbody>
</table>

80. What is the area of the rectangle garden in number #79?

A. 6 square feet  
B. 18 square feet  
C. 80 square feet  
D. 100 square feet
81. If the perimeter of a square is 48 cm, what is the length of each side? (Draw a picture and think of the key word of what type of shape it is.)

A. 8 cm  
B. 10 cm  
C. 12 cm  
D. 24 cm

82. What is the width of a rectangle that has a length of 6 feet and an area of 60 square feet? Draw a picture.

A. 10 feet  
B. 12 feet  
C. 24 feet  
D. 66 feet

83. What is the width of a rectangle with a length of 5 inches and a perimeter of 16 inches? Draw a picture.

A. 2 inches  
B. 3 inches  
C. 8 inches  
D. 21 inches

84. Sarah opens her book. What is the angle formed by the open book?

A. less than a right angle (acute)  
B. equal to a right angle  
C. greater than a right angle (obtuse)  
D. cannot tell without a picture of a right angle
85. What is the size of this angle?

![Angle Diagram]

A. acute  
B. equal to a right angle  
C. obtuse  
D. cannot tell without a picture of a right angle

86. Which angle is a right angle?

![Angle Options]

87. These lines are

![Lines Diagram]

A. parallel  
B. perpendicular  
C. not intersecting

88. These lines are

![Lines Diagram]

A. parallel  
B. perpendicular  
C. intersecting
89. Find the difference. Remember bottom bigger better borrow.

```
307          821          600          501          427          800
- 147                    - 424                    - 323                    - 247                    - 247                    - 248
```

90. In the drawing below, which line is parallel to line A?

A. none of them
B. B
C. C
D. D

In the drawing above, which line is perpendicular to A?

A. none of them
B. B
C. C
D. D

91. Which type of triangle has only 2 equal sides, like the drawing below?

A. equilateral triangle
B. isosceles triangle
C. pyramid
D. right triangle
92. Which geometric figure is shown here?

![Triangle](image)

A. equilateral triangle  
B. isosceles triangle  
C. pyramid  
D. right triangle

93. Which of these shapes can be folded in half so that both halves are the same (line symmetry)? Show this by drawing the line of symmetry on the figure, then choose the correct answer.

![Shapes](image)

94. Sharon had a bag of 12 marbles. She gave 8 of the marbles to Don. Which fractional part of the marbles did Sharon have left?

A. 8/12  
B. 4/8  
C. 4/12  
D. ½
95. Laura wrote 200 words on the first page of her journal. After the second page, she had 400 words. If the pattern continues, how many pages will it take her to write 1000 words? Continue to fill in the table to find the answer.

<table>
<thead>
<tr>
<th>Page Number</th>
<th>Words</th>
<th>Total words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>3</td>
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<td>4</td>
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<td>6</td>
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<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. 3  
B. 4  
C. 5  
D. 6

96. What is the length of a rectangle with a width of 4 centimeters and a perimeter of 28 centimeters?

A. 7 centimeters  
B. 10 centimeters  
C. 20 centimeters  
D. 24 centimeters

97. Divide 875 ÷ 5. Show your work!

98. Multiply 46 by 78. Show your work!

99. Find the sum or difference: Watch the signs.

\[
\begin{array}{cccccccc}
135 & +479 & 17 & +18 & 17 & -39 & 54 & -53 \\
546 & +137 & 54 & -39 & 135 & -53 & 3.2 & +2.8 \\
71 & -18 & 135 & +2.8 & 3.2 & +2.8 & 8.8 & +1.3 \\
50 & -26 & 3.2 & +1.3 & 8.8 & 8.1 & 8.1 & -5.7 \\
304 & +235 & 8.8 & 8.8 & 8.1 & 8.1 & 8.1 & -5.7 \\
63 & -42 & 8.1 & 8.1 & 8.1 & 8.1 & 8.1 & -5.7 \\
426 & -135 & 4.8 & 4.8 & 4.8 & 4.8 & 4.8 & -2.6 \\
\end{array}
\]
119. Which shows the fractions in order from least to greatest?

A. ¼, 1/3, ½
B. ½, 1/3, ¼
C. 1/3, ¼, ½

120. Shade 3/5 of the boxes below:

```
[ ] [ ] [ ] [ ] [ ]
```

121. Place these two fractions on the two number lines below to show why they are equivalent.

```
\[
\begin{array}{c|c|c}
\frac{6}{8} & \frac{3}{4} \\
0 & 1 & 2 \\
0 & 1 & 2
\end{array}
\]
```

122. Show how these two fractions are equal by shading some of each rectangle.

```
\[
\begin{array}{c|c|c}
\frac{1}{2} & \frac{2}{4} \\
[ ] & [ ]
\end{array}
\]
```
123. Explain how these two fractions are equal.

\[ \frac{1}{3} \quad \frac{2}{6} \]

You may use fraction bars or number lines to illustrate your explanation.

124. Locate these two fractions on the number line, label each, and then explain which is larger.

\[ \frac{7}{12} \quad \frac{11}{4} \]

is larger.

125. Locate and label these two fractions on the number line. Then tell which is larger.

\[ \frac{2\frac{1}{2}}{2} \quad \frac{3}{2} \]

is larger.
126. On the strips below, shade and label the following fractions.

\[
\frac{2}{3} \quad \frac{4}{6} \quad \frac{8}{12}
\]

Largest fraction __________
Middle size fraction_________
Smallest fraction_________

127. Locate and label this fraction on the number line. Then write it as a mixed number:

\[
\frac{5}{4}
\]

128. Write this fraction as a mixed number. Then create a picture that represents it as a mixed number:

\[
\frac{13}{3}
\]
129. Identify the shaded portion of this picture as a mixed number and an improper fraction.

![Fraction Diagram]

=  =  

130. Write the following fractions in order from least to greatest: Draw a picture

\[
\frac{11}{3} \quad \frac{1}{6} \quad \frac{1\frac{2}{3}}{}
\]

131. Write the following fractions in order from greatest to least.

\[
1\frac{1}{4} \quad \frac{3}{4} \quad \frac{9}{4}
\]

132. Solve the following problems:

\[
\frac{3}{4} + \frac{2}{4} = \\
\frac{3}{4} - \frac{2}{4} =
\]
133. Using a ruler and a tool or object with a 90 degree corner, draw and label all of the following:

- A pair of intersecting lines that is not perpendicular.
- A pair of perpendicular lines.
- A pair of parallel lines.
- Draw a right angle.
- Draw an obtuse angle.

134. Find the products.
Any multiplication problem you do not know quickly please practice on flash cards.

\[
\begin{array}{cccccccccccccc}
6 & 4 & 7 & 5 & 12 & 3 & 6 & 0 & 7 & 5 & 6 & 3 & 8 \\
\times 2 & \times 4 & \times 2 & \times 4 & \times 0 & \times 5 & \times 3 & \times 8 & \times 8 & \times 3 & \times 5 & \times 4 & \times 9 & \times 3 \\
\end{array}
\]

\[
\begin{array}{cccccccccccccc}
6 & 2 & 3 & 8 & 7 & 12 & 8 & 3 & 11 & 7 & 9 & 4 & 4 & 9 \\
\times 5 & \times 12 & \times 6 & \times 2 & \times 5 & \times 1 & \times 4 & \times 7 & \times 4 & \times 6 & \times 2 & \times 8 & \times 6 & \times 3 \\
\end{array}
\]

\[
\begin{array}{cccccccccccccc}
4 & 5 & 0 & 5 & 9 & 5 & 2 & 9 & 5 & 11 & 5 & 9 & 7 & 7 \\
\times 7 & \times 0 & \times 3 & \times 8 & \times 4 & \times 7 & \times 1 & \times 5 & \times 6 & \times 5 & \times 9 & \times 8 & \times 7 & \times 9 \\
\end{array}
\]

\[
\begin{array}{cccccccccccccc}
8 & 6 & 8 & 1 & 9 & 9 & 8 & 1 & 9 & 2 & 1 & 3 & 12 & 1 \\
\times 8 & \times 6 & \times 7 & \times 2 & \times 6 & \times 9 & \times 6 & \times 9 & \times 1 & \times 5 & \times 1 & \times 4 & \times 3 & \times 3 \\
\end{array}
\]

\[
\begin{array}{cccccccccccccc}
8 & 8 & 12 & 8 & 12 & 5 & 3 & 4 & 2 & 7 & 6 & 2 & 6 & 12 \\
\times 0 & \times 1 & \times 4 & \times 9 & \times 0 & \times 1 & \times 2 & \times 0 & \times 2 & \times 1 & \times 8 & \times 6 & \times 7 & \times 5 \\
\end{array}
\]

\[
\begin{array}{cccccccccccccc}
8 & 4 & 2 & 9 & 12 & 11 & 2 & 7 & 0 & 6 & 1 & 5 & 3 & 2 \\
\times 5 & \times 1 & \times 8 & \times 7 & \times 8 & \times 6 & \times 9 & \times 4 & \times 2 & \times 0 & \times 2 & \times 3 & \times 4 \\
\end{array}
\]

\[
\begin{array}{cccccccccccccc}
4 & 12 & 4 & 4 & 1 & 2 & 11 & 6 & 7 & 5 & 2 & 1 & 4 & 11 \\
\times 9 & \times 6 & \times 2 & \times 3 & \times 4 & \times 3 & \times 7 & \times 1 & \times 8 & \times 3 & \times 7 & \times 8 & \times 5 & \times 4 \\
\end{array}
\]
141. Find the quotients.

\[
\begin{align*}
2 \div 2 &= 3 \div 3 & 8 \div 8 &= 7 \div 7 & 5 \div 10 &= 4 \div 4 & 1 \div 1 &= 4 \div 8 & 2 \div 12 &= 9 \div 54 & 1 \div 3 &= 1 \div 2 & 2 \div 4 \\
8 \div 8 &= 7 \div 63 & 8 \div 40 &= 5 \div 0 & 4 \div 4 &= 4 \div 12 & 9 \div 45 &= 9 \div 63 & 6 \div 6 & 3 \div 12 &= 1 \div 7 & 3 \div 0 &= 1 \div 9 \\
2 \div 16 &= 3 \div 3 & 3 \div 15 &= 5 \div 20 & 3 \div 18 &= 3 \div 6 & 5 \div 15 &= 7 \div 0 & 9 \div 27 &= 4 \div 16 & 7 \div 21 &= 4 \div 20 & 7 \div 28 \\
8 \div 16 &= 3 \div 21 & 9 \div 18 &= 4 \div 24 & 2 \div 6 &= 1 \div 8 & 5 \div 35 &= 7 \div 35 & 3 \div 27 &= 6 \div 36 & 3 \div 24 &= 2 \div 0 & 4 \div 32 \\
9 \div 9 &= 4 \div 36 & 6 \div 42 &= 5 \div 40 & 8 \div 64 &= 7 \div 14 & 6 \div 30 &= 8 \div 56 & 1 \div 5 &= 4 \div 28 & 7 \div 56 & 8 \div 24 & 6 \div 24
\end{align*}
\]

\[
\begin{align*}
81 \div 9 &= & 48 \div 6 &= & 18 \div 6 &= & 42 \div 7 &= &
10 \div 2 &= & 54 \div 6 &= & 36 \div 9 &= & 45 \div 5 &= \\
72 \div 8 &= & 8 \div 2 &= & 72 \div 9 &= & 6 \div 1 &= 
\end{align*}
\]

142. Plot the fractions on the number line:

\[
\begin{align*}
&10 \frac{1}{2} & 9 & 10 & 10 & 10 \frac{1}{2} & 11 \frac{1}{2} & 9 \frac{1}{2} & 11 \\
&9 & 9 & 11 & 11 & 10 \frac{1}{2} & 10 & 11 \frac{1}{2} & 9 \frac{1}{2}
\end{align*}
\]

\[
\begin{array}{cccccccc}
\text{9} & \text{10} & \text{11} & \text{12} \\
\end{array}
\]
The line plot below shows the height (in inches) of different phone brands.

What is the difference in height between the shortest phone and longest phone?

146. Plot the fractions on the number line:

\[
\begin{array}{cccccccc}
11 & 11\frac{3}{4} & 11 & 10\frac{3}{4} & 10 & 11\frac{1}{4} & 11\frac{1}{4} & 10\frac{2}{4} \\
9 & 10\frac{3}{4} & 10\frac{1}{4} & 9\frac{2}{4} & 11\frac{3}{4} & 9\frac{1}{4} & 10\frac{1}{4} & 10\frac{3}{4}
\end{array}
\]

The line plot below shows the amount of water (in gallons) students drank in a week.

What is the difference in the lowest amount of water and the highest amount of water students drank?

CONGRATULATIONS!!! You have completed the summer math packet. You are now ready for 5th grade success! Please turn this packet into your 5th grade teacher, the first week of school.
Science
Earth’s Layers

The Earth is a large planet that is made up of many layers. It takes about 4,000 miles from the surface to reach the center. The outermost layer of the Earth is called the crust. It is made up of rocks, soil, and minerals. This layer is cool to the touch and about 5 miles thick below the oceans and 25 miles thick below the continents.

The next layer below the crust is the mantle. The mantle is the thickest layer of the Earth. It is about 1,800 miles thick! The first 50 miles is hard rock. Below that is about 150 miles of molten rock. Molten rock is rock that is so hot that it has melted and can flow. Then, below that, there is another layer of hard rock.

Below the mantle is the outer core. The outer core begins about 3,000 miles below the Earth’s surface. In the outer core, you will find very hot liquid lava. This layer of the Earth is magnetic.

The last layer of the Earth is the inner core. It is about 900 miles deep. There is a lot of heat and pressure in the inner core. It is about 9,000 to 13,000 degrees Fahrenheit! Because there is so much pressure, the rocks cannot melt and remain a solid.

Label the layer of the Earth in the two diagrams below. The first diagram shows what Earth will look like inside if it was cut in half. The second is a 3D diagram of the Earth.
Minerals

Minerals are a naturally occurring substance on Earth. They are not man-made. They are formed within the Earth's mantle, on the Earth's crust, or on the surface of the Earth. Strong heat and pressure help to form minerals in the same way that rocks are formed. They can grow, but they are not a living thing. Each kind of mineral has its own properties that help identify it. Each mineral has its own special color, luster, hardness, and streak.

Minerals are not only found outside on the ground, but can be found in objects you use everyday! Toothpaste contains the mineral fluorite. Baby powder contains the softest mineral, talc. Inside electronics you can find parts made out of the minerals copper, gold, and quartz. The pencil you are using today has graphite in it. You even eat the mineral salt when you season your food!

Fill in the blank with the words from the word bank.

minerals  crust  hardness  graphite  properties

1. Minerals can be found on Earth’s mantle, ________, or surface.

2. Each mineral has its own special color, luster, ________, and streak.

3. The pencil you are using today has ________ in it.

4. ________ are a naturally occurring substance on Earth.

5. Each mineral has its own ________ that help identify it.
Crystals

Crystals are non-living substances that grow into different shapes. They have atoms that are arranged in a regular pattern. Sometimes crystals are confused with gemstones that are shaped perfectly and are transparent and clear. Most crystals aren’t clear or transparent.

Minerals and rocks are made of crystals, and some are snowflakes, salt, and sugar. A crystal is really just another form of a rock or mineral, except the word “crystal” tells us that the rock or mineral is of a certain shape.

Crystals grow larger as the atoms arrange themselves in layers. They can grow from a gas, liquid, or a solid. Temperature, pressure, chemical conditions, and the amount of space all affect the growth.

The shape of crystals is called their “habit.” The habit of crystals is used to identify them. As crystals grow, some faces develop more than others.

Answer the questions based on the passage you just read.

1. Name three things that crystals can grow from __________, __________, and __________.
2. What four things can affect the growth of crystals? __________, __________, __________, __________
3. What is a common confusion people have about crystals? __________________________________________________________________________
4. When someone refers to a crystal’s “habit.” what is he/she referring to? __________________________________________________________________________
Igneous Rocks

All rocks can be classified into three groups. The groups are determined based on how the rocks have formed. Igneous rocks form when liquid rock cools. Because the Earth’s core is very hot, it can melt rock. When liquid rock is under ground, it is called magma. Magma always rises up towards the Earth’s surface. As it rises, it slowly cools as it moves farther away from the hot core. This will form an intrusive igneous rock. Other times, magma erupts from a volcano. When magma is outside the earth, it is called lava. Lava cools very quickly when it is outside a volcano. This will form an extrusive igneous rock.

Fill in the blank with the words from the word bank.

1. _______ rocks are formed when liquid rock cools.
2. _______ is liquid rock that is still under Earth’s surface.
3. An igneous rock formed outside a volcano is an ________ igneous rock.
4. _______ is liquid rock that erupts from a volcano.
5. An igneous rock forms inside the Earth is an ________ igneous rock.
Metamorphic rocks are rocks that change from extreme heat and pressure inside the Earth. The temperature inside the Earth, along with the weight of tons of land pressing down on the rock, causes it to go through a physical or chemical change. Some metamorphic rocks are made by sandstone being pressed together. Sandstone will change to quartzite, one of the hardest rocks, through this process. Another type of metamorphic rock forms when pressure rearranges the minerals inside rocks into layers, instead of grains that are found in igneous rock. In the picture, you can see that the first rock, granite, contains specks, or grains of minerals. After being pushed down from the pressure of the earth, these specks form layers and change to the metamorphic rock, gneiss.

---

Fill in the blank with the words from the word bank.

pressure  layers  metamorphic  heat  change

1. _________ rocks go through a physical or chemical change.

2. Metamorphic rocks are formed from extreme _________ and _________.

3. The pressure of the Earth can cause grains in igneous rock to change into _________ that are commonly found in metamorphic rocks.

4. Metamorphic rocks are rocks that _________ into another type of rock.
Another of the three types of rock is the sedimentary rock. Sedimentary rocks are formed very slowly, over many many years. These rocks are made from small pieces of sediment (old broken down rocks, minerals, fossils, and sand). Sediments are found on the bottom of bodies of water. Over many years, sediments are layered up on top of each other. Chemicals in the water or minerals in the sediment act like glue and help the pieces of sediment stick together. This is how sedimentary rocks are formed.

Fill in the blank with the words from the word bank.

1. ________ rocks are formed very slowly, over many years.

2. They are made from small pieces of ________.

3. Sediments are found on the bottom of bodies of ________.

4. ________ in the water or minerals in the sediment help the pieces ________ together.

\[
\begin{array}{cccc}
\text{sediments} & \text{water} & \text{chemicals} & \text{sedimentary} & \text{stick}
\end{array}
\]
Weathering and Erosion

Weathering and erosion work together to change how our environment looks. This process breaks rocks down into smaller pieces and moves it to another location.

Weathering is what breaks down rocks into tiny pieces called sediment. Weathering can happen in many ways. Water can constantly flow over a rock, and over many years, make it smaller. Water can freeze inside a tiny crack of a rock and split it into two smaller pieces. Another way weathering can happen is from different plants or animals breaking down a rock.

Erosion is what moves the tiny pieces that have been weathered. This can happen when rocks fall down a hill or mountain into a new location. Flowing water can move pieces of rock down stream. Animals and people can also move rocks and sediments.

Fill in the blank with the words from the word bank.

erosion     weathering     location     sediment     change

1. ________ is the process of breaking down rocks into tiny pieces.

2. The tiny pieces of broken down rock are called ________.

3. ________ is what moves sediment from one ________ to another.

4. Weathering and erosion work together to ________ how our environment looks.