

Bowe School Fifth Grade Emergency Work Packet



IN CASE OF SCHOOL CLOSING, please follow instructions within this packet to complete work each day that school is not in session.

There is work provided for five days.

Thank you.

Student Name: _____

Directions: Each Day, complete the following learning activities in the attached packet.

Day 1:

- _____ Reading and Questions for "Money Tells a Story" pg. 1-3
- _____ Science: Read "The Water Cycle" and label the diagram.
- _____ Writing Prompt 1
- _____ Grammar, Minutes 21, 22, 23, 24, 25
- _____ Math Work #1

★ Art
Music

Day 2:

- _____ Reading and Questions for "Money Tells a Story" pg. 4-5
- _____ Science: Re-read "The Water Cycle" and complete the crossword and word search.
- Optional: attached experiment.
- _____ Writing Prompt 2
- _____ Grammar Minutes 26, 27, 28, 29, 30, 31
- _____ Math Work #2

Day 3:

- _____ Reading and Questions for "Baseball's Girl Umpire"
- _____ Science: Read "The Science of Fun" and respond to questions. Optional: Friction experiment.
- _____ Grammar Minutes 32, 33, 34, 35
- _____ Math Work #3

Day 4:

- _____ Reading and Questions for "Arriving at Emerald City"
- _____ Science: Read "Pythons Invade the Florida Everglades" and answer Questions 1-2
- _____ Writing Prompt 4
- _____ Grammar Minutes 36, 37, 38, 39, 40
- _____ Math Work #4

Day 5:

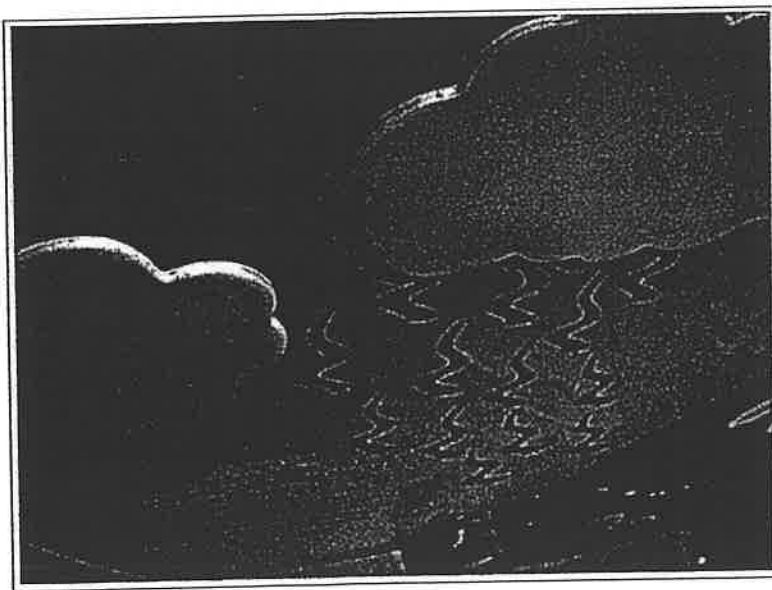
- _____ Reading and Questions for "At the Zoo"
- _____ Science: Re-read "Pythons Invade the Florida Everglades" and answer Questions 3-6
- _____ Writing Prompt 4
- _____ Grammar "Correct the Homophones" & "Subject & Object Pronouns"
- _____ Math Work #5

Name

The Water Cycle

The water cycle is the continuous movement of water all around the Earth. The water cycle is like a big circle and doesn't really have a starting point. There are 4 main stages involved in water cycle i.e. evaporation, condensation, precipitation and runoff. So, how does this cycle works? When the sun shines, the water from the ocean or lake evaporates due to heat from the sun. When it evaporates, it turns into water vapor and goes up into the atmosphere. This water vapor gets together with other water vapor and turns into a cloud. When clouds get dense, they drop the water back to Earth in some form of precipitation like rain, snow, hail or sleet. When the water falls back down to the Earth, they find their way on the ground surface into puddles, streams and rivers. Again this water will evaporate and the whole cycle will start again.

Water is one of the world's most valuable resources, and one that is becoming increasingly difficult to find in drinkable quality. All water in the world is subject to what is known as the water cycle, or the hydrologic cycle, or the H₂O cycle which is the process by which water moves around the world.



Different Stages of the Water Cycle

Water goes through three different states in the water cycle. It can be a liquid (water), a gas (water vapor) or a solid (ice). These three states are interchangeable, as water can freeze into ice or evaporate into water vapor, water vapor can condense as water, and ice can melt into water. The water cycle consists of a number of steps which sees water go through each of these states.

1. Evaporation: Water is found in lakes, oceans, swamps, and soil, as well as in all living creatures and plants. When heat is applied from the sun, through exertion, or by artificial means, the water molecules become excited and spread out. The loss of density is called 'evaporation', and it sees

the water rise into the air forming clouds of ^{CLOSE} vapor. Normally, the evaporation of water occurs when the water hits boiling point, around one hundred degrees centigrade.

However, in places in which the air pressure and humidity is lower, far less heat energy is needed to evaporate the water because there is less pressure holding the water molecules together. The water that evaporates from the oceans is not salty, as the salt is too dense and heavy to rise with the water vapor, which is why water from rivers and lakes is not salty.

- Snow and ice can actually turn into water vapor without first turning into water. This process is called 'sublimation', and it results from low humidity and dry winds. This usually occurs at the peaks of mountains or other high-up places, as the lower air pressure means that less energy is needed to sublimate the ice into water vapor.

Some of the highest peaks on earth, such as Mount Everest, have all of the necessary components for sublimation, namely: strong sunlight, low temperatures, low air pressure, strong wind, and low humidity. If you've ever seen dry ice, which has a fog pouting off of it, this is an example of sublimation in action.

- When water evaporates off of a plant's leaves, the process is known as 'evapotranspiration'. A large percentage of the water in the atmosphere is produced by this process due to the large areas covered by plants and trees across the planet. While about ninety per cent of the water vapor in the world comes from lakes, oceans, and streams, the remaining ten per cent is comprised of the various plant life around the world.

2. Condensation: The water vapor that has risen into the sky cools significantly when it comes into contact with the cooler air found up high. The vapor becomes a cloud, which is pushed around the world by moving air currents and winds.

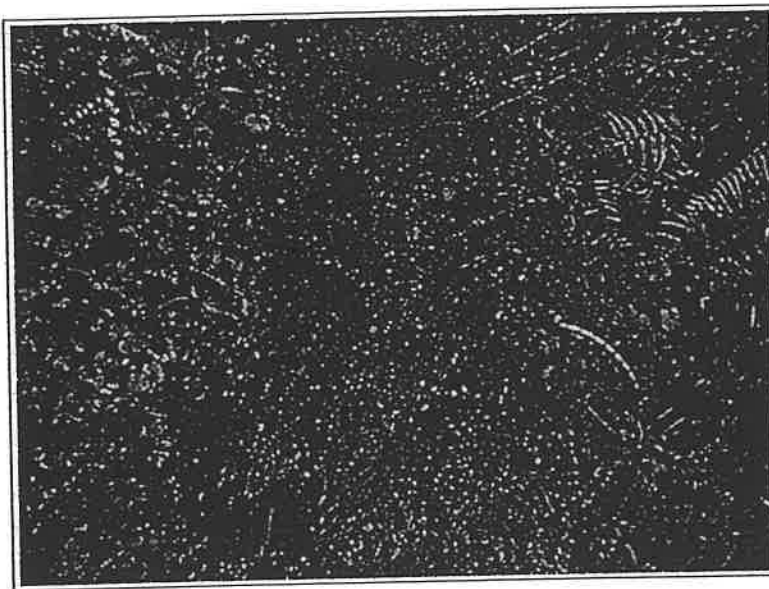
- If the water vapor cools to anything above zero degrees centigrade, it will condense as water. Essentially, the water vapor will start to condense on the surface of tiny particles of dust and dirt that rose with the vapor during the process of evaporation. These tiny droplets will start to fall into one another and merge, producing a larger droplet. When a droplet is large enough, gravity will pull it down at a rate that exceeds the updraft in the cloud, leading to the droplet falling out of the cloud and onto the ground below. This process is called 'precipitation', or – more commonly – rainfall.

- If precipitation occurs in conditions which ^{close} particularly cold or have very low air pressure, then these water droplets can quite often crystallize and freeze. This causes the water to fall as solid ice, known as hail, or as snow. If the conditions are in between those associated with snow and rain, the droplets will fall as icy cold, half frozen water commonly referred to as sleet.

3. Precipitation: The water that has fallen as rain is absorbed into the ground through a process known as 'infiltration'. Soil and other porous materials can absorb great deals of water this way, while rocks and other harder substances will only retain a small amount of water.

When the water infiltrates soil, it will move in all directions until it either seeps into nearby streams or else sink deeper into what is known as 'groundwater storage'. This is where the water that does not seep out or evaporate joins up under the ground, saturating the smallest nooks and crannies of rock and soil under the ground. These formations are also known as 'aquifers', and explain why sometimes the ground underneath the top soil is damp or sodden.

- When an aquifer becomes too full, it starts to leak out onto the surface forming what is known commonly as a 'spring'. These can often be found in formations of porous or brittle rock, which can crack following slightly acidic rainfall. Should the water be located near a volcano or any source of natural thermal energy, it will form a hot spring.



4. Runoff: After the water has fallen and the soil has become saturated, or the snow has melted, the water follows gravity and falls down any hills, mountains, or other inclines to form or join rivers. This process is known as 'runoff', and it is how water comes to rest in lakes and returns to the ocean. The water falls according to the incline of the place from which it is falling, and when several threads of water meet they form a stream.

The direction in which the water moves is known as 'streamflow', and it is central to the concept of the currents within rivers and streams. These streams and rivers will run off eventually to either form lakes or rejoin the ocean, depending on their proximity to the ocean. Due to the amount of water stored in snow or ice, sudden increase in the heat can lead to flooding due to the water suddenly melting and running off at an alarming rate. This is why flooding can occur so easily during a warm spring following a particularly cold and biting winter.

When more snow falls than evaporates or ^{close} sublimates, the ice will compact densely to form what are known as 'ice caps'. The ice caps and glaciers located in the coldest regions of the world are the biggest collections of ice in the world, and are slowly starting to shrink as the water in which they sit is becoming warmer.

This happens in a cyclical manner, with no beginning or end. As precipitation happens in one part of the world evapotranspiration is happening somewhere else. The cycle of water never ends, which is why the oceans stay level, there are always clouds somewhere in the sky, and drinkable water doesn't suddenly just run out. At some point, any water that has infiltrated will be released, any that has joined the ocean will evaporate, and even a large portion of the ice caps may melt, releasing water that has been stored for millions of years back into the water cycle with potentially cataclysmic effects.

Image credit: sharyn morrow , Luke McGuff

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Rinkesh

A true environmentalist by heart ♡. Founded Conserve Energy Future with the sole motto of providing helpful information related to our rapidly depleting environment. Unless you strongly believe in Elon Musk's idea of making Mars as another habitable planet, do remember that there really is no 'Planet B' in this whole universe.

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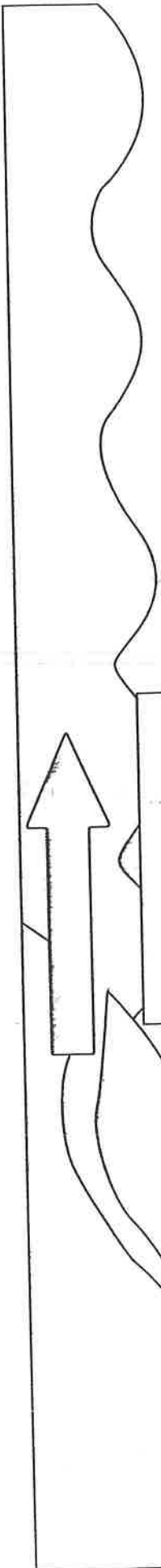
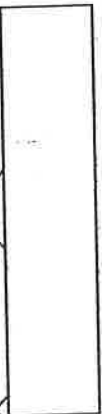
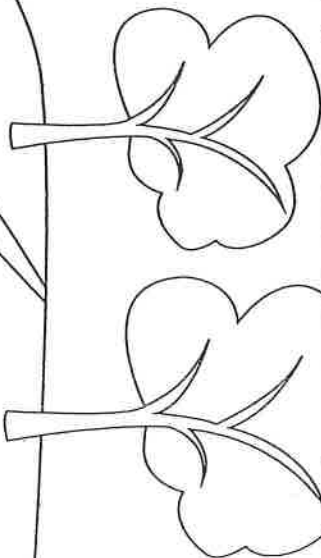
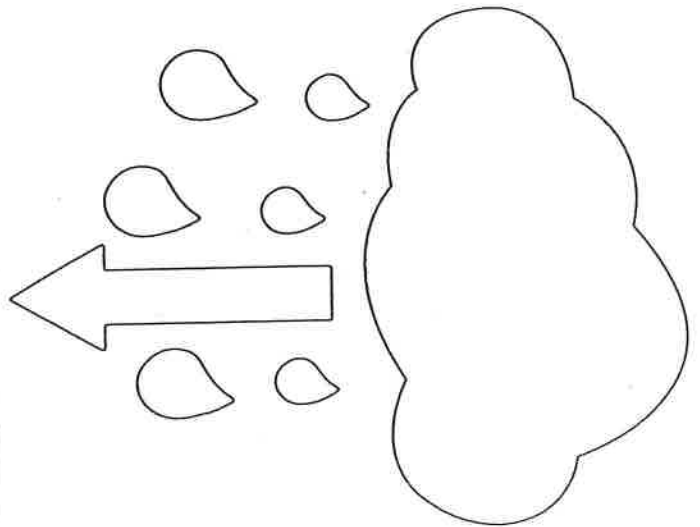
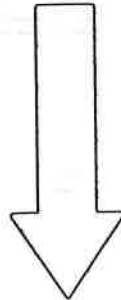
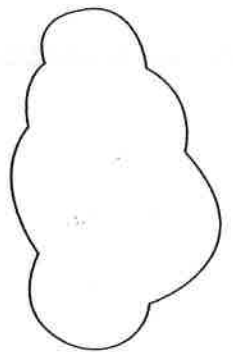
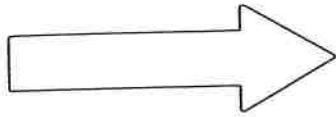
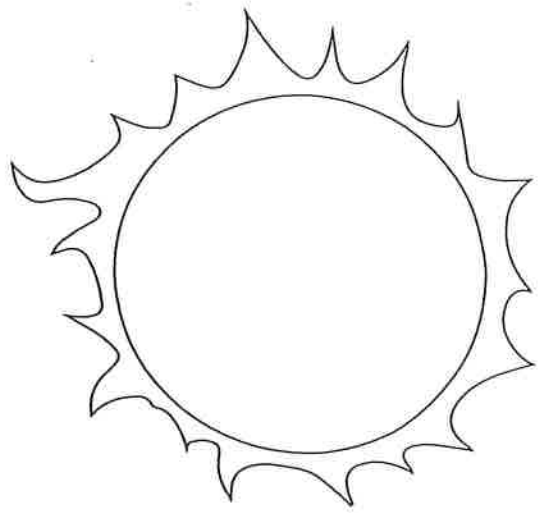
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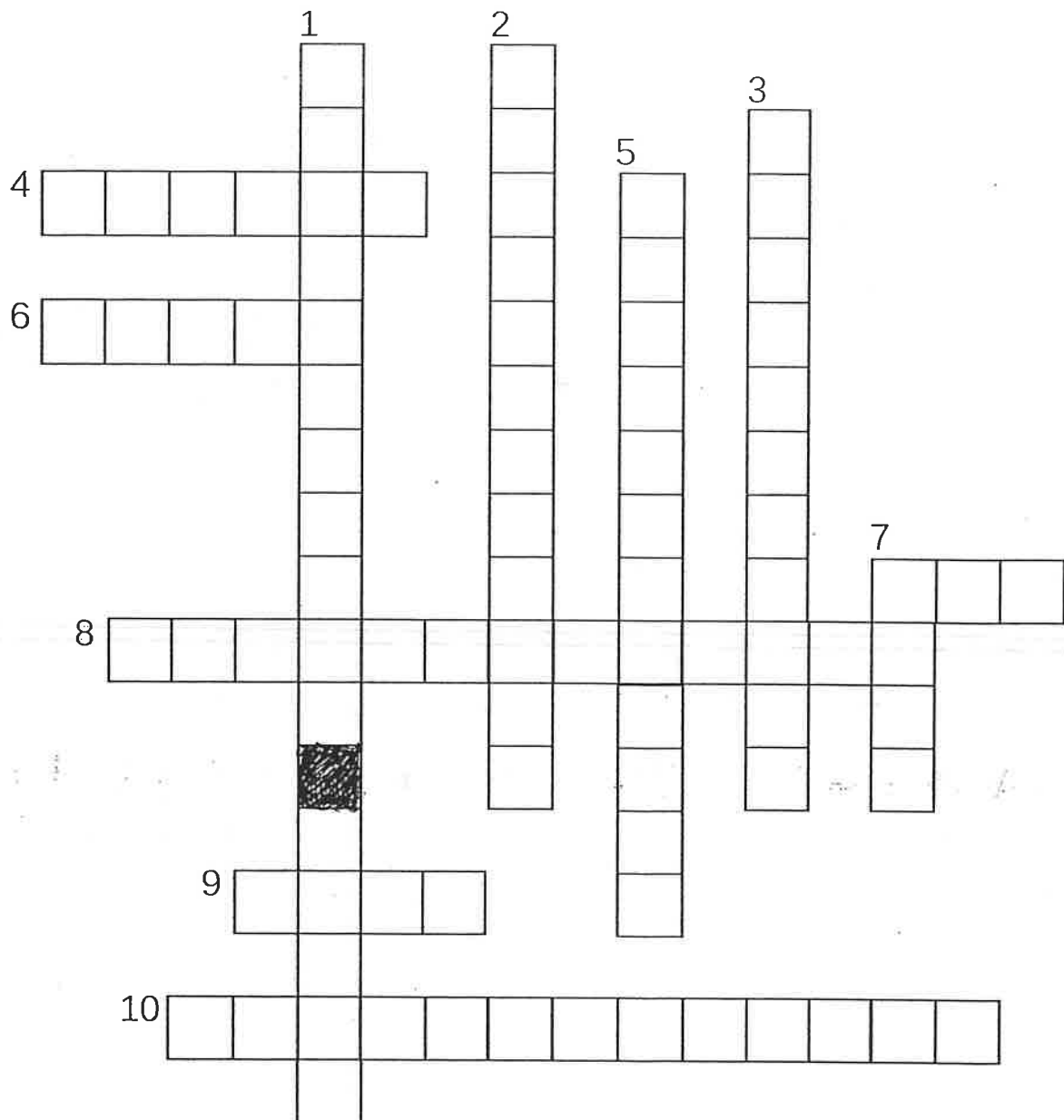
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Water Cycle Crossword



Down

1. Water that is bellow surface
2. When water gathers in lakes, seas or oceans we call that:
3. When water vapors rise from water into the air we call that:
5. When gas changes to liquid we call that:
7. Frozen flakes that fall from the sky during winter

Across

4. A visible (sometimes fluffy looking) mass in the sky made from water or ice droplets
6. A large stream of water
7. Centre of the solar system
8. When water vapors rise from plants into the air we call that:
9. A body of water surrounded by land
10. When rain or snow falls down we call that:

word bank

clouds

sun

lake

transpiration

underground water

evaporation

river

precipitation

accumulation

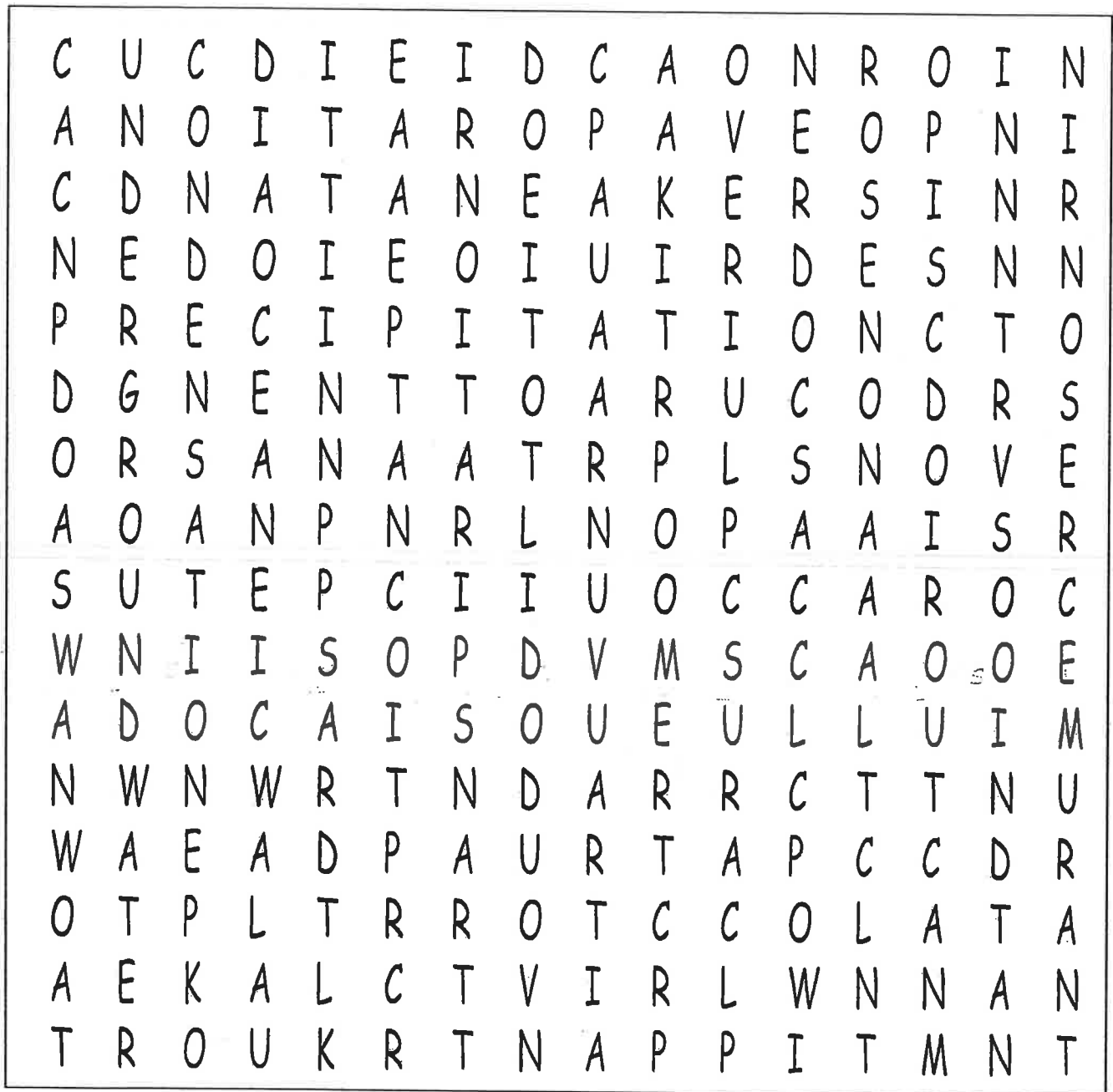
condensation

snow

sun

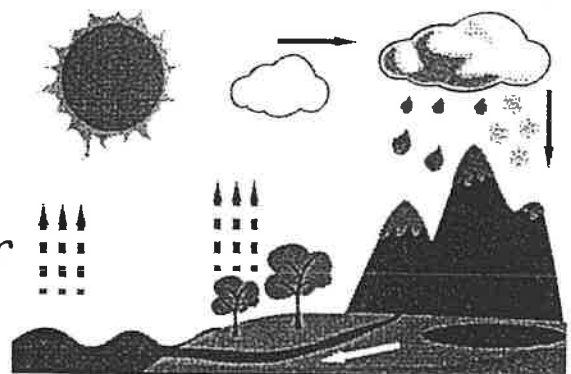
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Water Cycle Wordsearch



Evaporation
Accumulation
Condensation
Snow
Lake
River
Ocean

Precipitation
Transpiration
Clouds
Rain
Underground Water
Sea



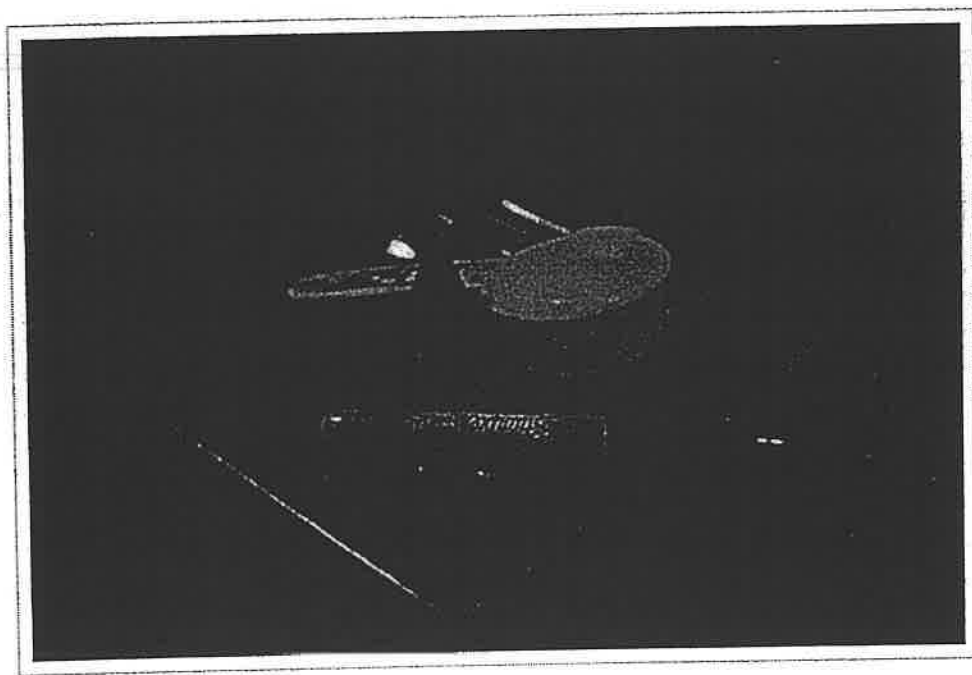
DIY Science: Water Cycle in a Bag!

Posted on April 6, 2017 by greensborosciencecenter

With all the rain we have been experiencing in the Triad lately, we decided it would be the perfect opportunity to have a lesson on the water cycle!

For this experiment you will need the following:

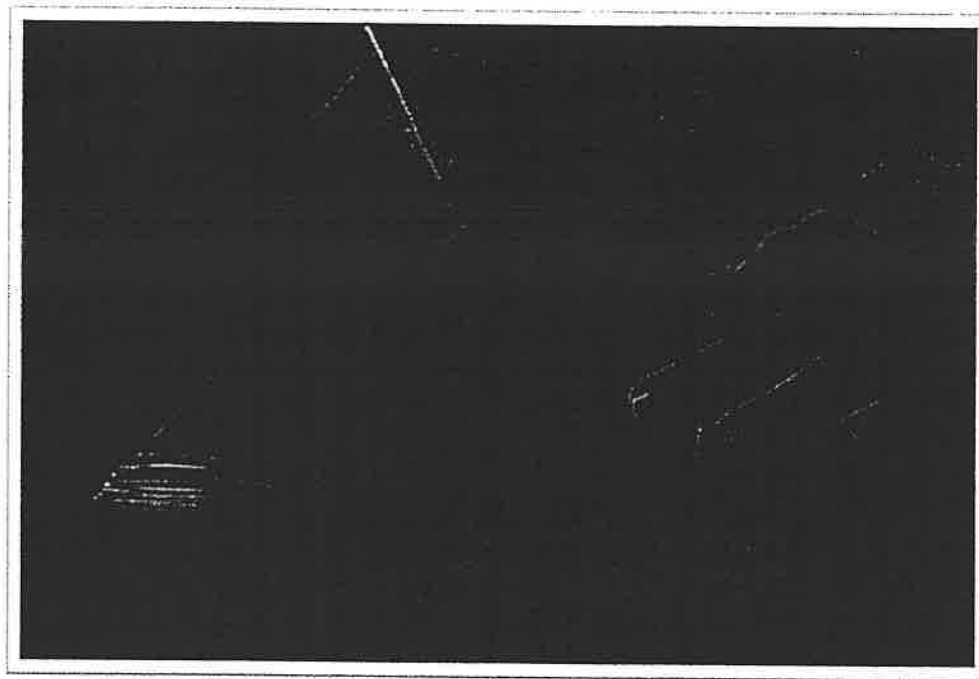
- Plastic ziplock bag
- Sharpie (to draw clouds and waves)
- ¼ cup of water
- Blue food coloring
- Painter's tape



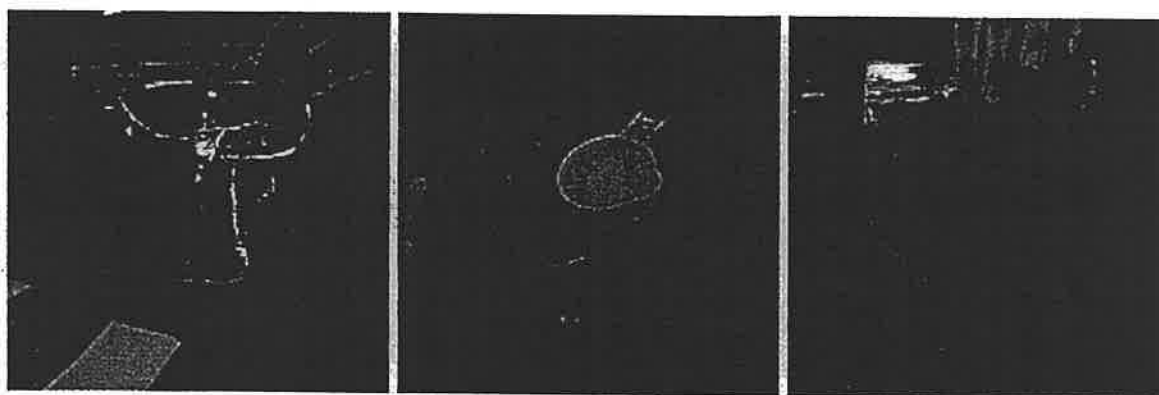
Begin your experiment by drawing clouds around the top and water around the bottom of your plastic bag. This will serve as a visual aid of the water cycle and how it works.

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Next, fill your plastic bag with $\frac{1}{4}$ cup of water, and add about 4 drops of food coloring.



Seal your bag shut, and hang it in a window (we recommend using painter's tape since it is easy to remove once your experiment is over.)

Now it's time to let nature run its course! Check on your bag periodically and notice how much condensation your baggie collects over time.

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What's the science?

In nature, the sun's heat causes water to evaporate from streams, lakes, rivers, and oceans. As the water vapor rises, it condenses to form clouds when it reaches cooler air. When the clouds are full of water, or saturated, they release some of the water as rain. Then the cycle starts over again.

The same principle can be applied to your experiment. Over the next few days, you will see that the water has warmed in the sunlight and evaporated into vapor. As that vapor cooled it began changing back into liquid, just like a cloud. When enough water condensed, the air couldn't hold it anymore and the water fell down in the form of precipitation.

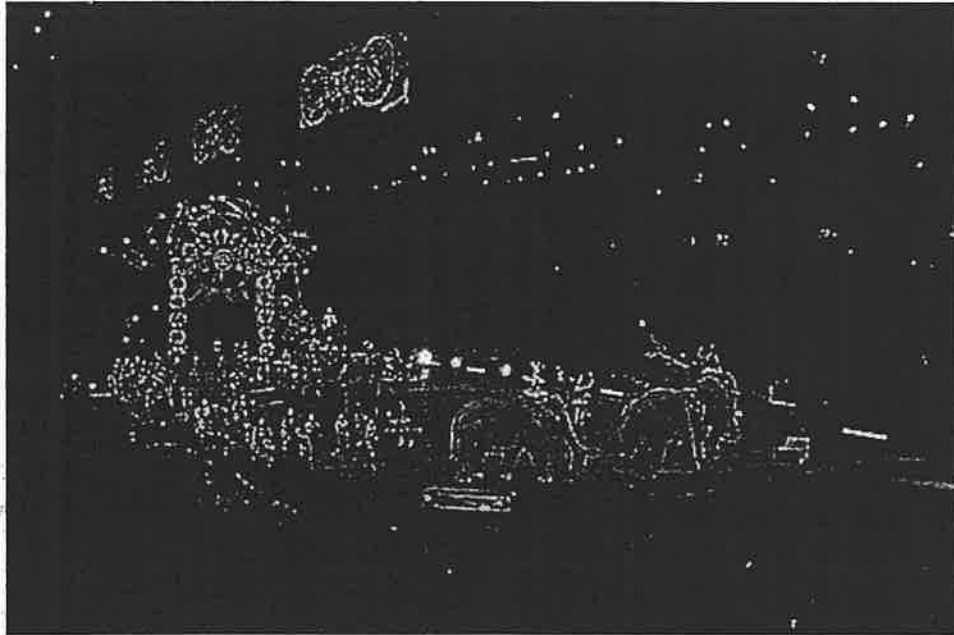
Remember, it is important to note that an experiment uses a variable (something that changes) to answer a question. To turn this demonstration into an experiment, you have to change something! Check out these questions to get you started:

- Does the location (North facing, South facing, partial shade, full sun, etc) of the window have any impact on the cycle?
- Does the amount of food coloring used have any impact?
- How does the outside temperature impact the experiment?

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The Science of Fun!



Bello Nock recently raced up a thin wire on a motorcycle. He drove the motorcycle high over thousands of spectators' heads. He's a clown with the Ringling Bros. and Barnum & Bailey circus.

To the spectators below, Bello's stunt looked dangerous - and it was. But Bello knew a secret. He was using science to help keep himself safe.

Circus Science

Bello began performing circus stunts when he was nine years old. He walked on a thin wire that was stretched nine feet off the ground.

To stay on a wire without falling, Bello needs to keep his center of gravity low. An object's center of gravity is usually located in the middle of the object. That is where the object's weight is centered.

By crouching and keeping low, Bello keeps his center of gravity low. The lower his center of gravity, the harder it is for Bello to fall.

Bello often carries a heavy metal stick when he performs. The stick bends downward, lowering his center of gravity.

Moving On

Bello also uses Newton's first law of motion when he performs. That law is named for Isaac Newton. He was a scientist who lived about 275 years ago.

Newton's first law of motion says that a moving object will keep moving unless an outside force acts on it. (The law also says that an object at rest will stay that way unless an outside force acts on it.) Bello uses that law when he rides his *miniature*, or tiny, bike.

As Bello speeds along on his tiny bike, he sometimes has to stop before slamming into a wall. To stop, Bello uses the bike's brakes. The brakes create *friction* between the bike's tires and the ground. The friction is an outside force that slows the bike.

Friction also changes the bike's motion into heat energy. You could say that Bello's act is really hot!

To see how friction works, rub your hands together as fast as you can. When you rub your hands together, they should start to feel warm. Friction between your hands changes into heat energy.

Bello always puts on a high-energy show. "I always want to capture the attention of children," he said. He captures their attention with science.

Name: _____ Date: _____

1. According to the passage, what does friction do with the motion of the bike?

- A. Friction changes the motion into heat energy.
- B. Friction helps keep the bike's center of gravity low.
- C. Friction means that Bello can rub his hands together while he rides.
- D. Friction makes Bello less likely to fall off the bike.

2. Which of the following does the author describe first in the passage?

- A. The author describes Bello's life as a clown in the circus.
- B. The author describes Bello's decision to use Newton's first law of motion.
- C. The author describes Bello's high-energy show as a tightrope walker.
- D. The author describes Bello's circus act of riding a motorcycle on a wire.

3. It can be inferred from the passage that

- A. Bello is a very inexperienced clown, and this inexperience shows in his act
- B. Bello only knows how to ride a motorcycle, not a bicycle
- C. the children in the audience at the circus may not understand the science behind Bello's act
- D. Bello will probably stop performing as a circus clown soon because it is too dangerous

4. Read the following sentence: "To the spectators below, Bello's stunt looked dangerous."

In this sentence **stunt** means

- A. trick
- B. motorcycle
- C. motion
- D. secret

5. This passage is mostly about

- A. how a clown enjoys his life performing in the circus
- B. how a clown got his start as a circus performer
- C. how a clown puts on a high-energy show
- D. how a clown uses science to stay safe as he does stunts

6. Why does Bello often carry a heavy metal stick when he performs?

7. What word would the author most likely use to describe Bello Nock?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Bello Nock keeps his center of gravity low, _____ he can stay on the high wire without falling.

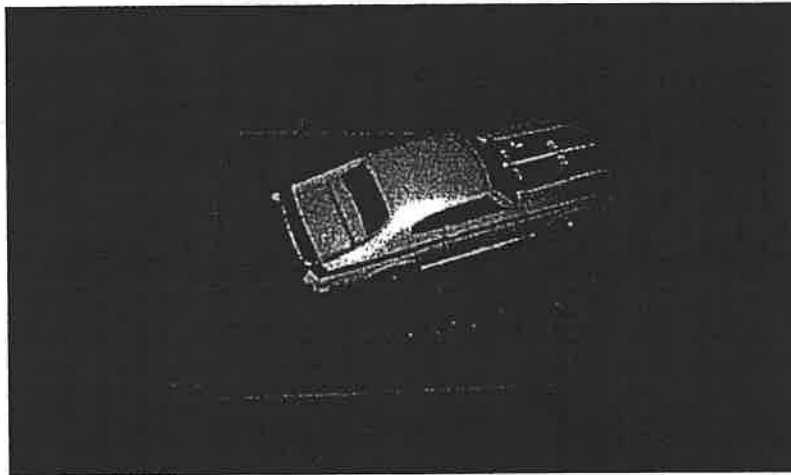
- A. so
- B. but
- C. although
- D. however

How to Do a Friction Science Experiment

Updated on June 20, 2017



Candace Bacon ▶ more
Contact Author



What surfaces create the most friction?

Friction is something we experience everyday, but understanding it, let alone explaining it, gets tricky. These experiments will help teach the concept of friction and make it easier for kids to understand.

Test which surfaces create more friction, see how strong friction is, learn how to reduce friction, and even discover the side effects of friction.

Four Types of Friction

- **Fluid friction** - friction that happens when an object moves through a liquid or gas.
- **Sliding friction** - friction that occurs when two surfaces slide over each other.
- **Rolling friction** - friction that is produced when a circular object rolls over another surface.
- **Static friction** - friction that is applied to an object that isn't moving.

Ok, What Is Friction Anyway?

Most people have a hard time understanding friction because the term is used to describe a force that works in a wide variety of ways.

- Without getting too technical, friction is simply a force that reduces the motion between objects that are in contact with each other. So friction stops or slows down movement.

- In general, the smoother an object, the less friction it will create. The rougher the surface of an object is, the more friction will be produced. The angle of the surface and the weight of the object can also affect friction.
- There are times when more friction is best, like when you are pressing the brakes in a car. And there are times when you want less friction, like when you are going down a water slide.

Now that we have talked about what friction is, let's investigate how it works with the following experiments.

Stronger Than Glue

Interwoven pages of books will stick together so tightly they can't be pulled apart.

Phone Book Friction

Materials:

- 2 Phone books about the same size (2 books with soft covers will work)

This experiment was tested on the show Mythbusters. The phone books wouldn't come apart using all the Mythbusters' gadgets and even attaching the phone books between two cars. It took two tanks to pull the books apart. That's how strong friction can be.

Phone books are what is usually used for this experiment, but any books with lots of pages (100+) and soft covers will work. Textbooks work great as well. The main thing you want is two books of about equal size.

1. Before you begin, just half the books and put them together to show how easily they will come apart that way.
2. Now, interlace the pages by alternating a page from each book. The pages of the books will be woven and the spines will be facing out. Make sure several inches of the pages overlap. So you'll lay down the cover of book A, then the cover of book B over it. Then the back page of book A and the back page of book B. Then the next page and so on until the books' pages are woven together.
3. You don't actually have to do every page for the experiment to work. You can weave a few pages at a time so it won't be an all day process.
4. Now grab one of the book spines and have a friend grab the other spine. Pull on the books to see if you can pull them apart. Have a game of tug of war with the books.

The books will stick together like glue because each page is exerting friction against the page from the other book. When the combined friction from each of the pages is added up, it equals a big force.

Do some tests with interlacing the pages. What if you only weave every ten pages or every twenty? Is the force still as strong? What is the least amount of weaving necessary to produce the glue-like effect?

When you are done with the experiment, just unlace the pages one by one to release the books. They don't have to stay stuck forever!

Which piece will float the best?

Floating Paper Air Friction

Materials:

- Two pieces of paper
- Timer (optional)

Air friction (air resistance or drag) is a type of fluid friction. This is a very easy way to show friction in action. The shape of the paper will determine how much friction is caused as it falls.

1. Wad one of the pieces of paper into a ball. Leave the other piece of paper like normal. Have someone ready with a timer if you want to make measurements.
2. Hold the pieces of paper above your head.
3. Drop the pieces at the same time.

The wadded piece will fall to the ground immediately. The flat piece of paper will flutter down more slowly because it has more surface area to create friction or drag on the air as it drops.

You can also try dropping the pieces of papers from a higher spot, like while standing on a table or over a balcony. Does the time difference become more noticeable this way? Try other shapes of paper. What differences do those make? How can you make drop faster? How can you make it drop slower?

It floats!

[Click thumbnail to view full-size](#)

Holding up the bottle with just a chopstick!

Sticky Rice Friction

Materials:

1. Bottle (about 20 oz size)
2. Dry rice
3. Chopstick

You can't hold up a bottle of rice with just a chopstick, right? Well, actually you can if you know the trick to friction.

1. To begin, fill the bottle with rice. Try sticking the chopstick down into the bottle. When you grab the chopstick and pull up, what happens? The stick should just come right out.
2. How do you make the rice stick to the chopstick so you can just pick it up? You've got to add more friction. Here's how: Put the lid on the bottle and tap the bottom of the bottle on a hard surface. Do this a few times to compact the rice and get rid of the air pockets. Now you should have room to add a bit more rice to the bottle.
3. Once you've added a bit more rice, stick the chopstick back into the bottle. This time, when you pull up on the chopstick, you should be able to pick up the whole bottle.
4. If it still doesn't stick, try tapping the bottom again. You may have to add more rice as well. Sometimes letting the rice settle for about an hour will help if it doesn't seem to be working.

How does it work? Compacting the rice and adding a bit more created more friction when you put the chopstick back in. So the rice had a firmer hold on the stick.

[Click thumbnail to view full-size](#)

Sliding Friction

Materials:

- Slide (or ramp)
- Items to be tested (toy car, shoe, paper, book, ball, block, etc.)
- Water (optional)

You can test how much friction an item will produce by heading to a playground. You could also do this experiment on a ramp.

1. Gather some items to be tested. You want a wide range of materials like a toy car, ball, book, shoe with rubber sole, a wooden block.
2. Put each item at the top of the slide or ramp and let it fall down on its own. Don't give it a push. Measure how far it went.
3. You could try wetting the slide and then retesting the items to see if they went farther than before. You could tape sandpaper to the slide or ramp and see how that affects the distance the items go. Spraying or rubbing oil onto the slide is another good way to test friction.

Which items slide the best? What materials slide the worst? What does this tell you about friction?

How will the car perform on the ramp with sandpaper?

| [Source](#)

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Static Friction Experiment

Materials:

- Shoe
- Rubber band
- Ruler or measuring tape
- Weight (something to put in the shoe to make it heavier, like rocks)
- Aluminum foil (optional)
- Cooking spray or oil (optional)

This is a good project for older kids who are studying the forces of friction and motion in more depth. It is easy to do, but can teach a lot.

When an object isn't moving, it has static friction. It will take a certain amount of force to get the object moving. The amount of force it will take depends on the surfaces and the weight of the object, among other factors.

To test how much force is needed to overcome static friction, you can try dragging a shoe over various surfaces.

1. Cut a rubber band in half.
2. Tie one end to a shoe.
3. Tug on the other end of the rubber band until the shoe starts moving.
4. Measure how far the rubber band had to stretch in order for the shoe to move.
5. Now put something in the shoe to make it heavier, like rocks or small pieces of wood. Try pulling the shoe to see how far the rubber band has to stretch before the shoe starts moving.
6. Tape some aluminum foil to the ground. Drag the shoe over it and measure the rubber band. Try oiling the aluminum foil. How hard do you need to pull the rubber band now?
7. You can also try dragging the shoe over salt or grass or other types of terrain to see how easy or hard it is to get the shoe moving.
8. You can even try testing ice. Fill a cookie sheet with water and carefully place it in the freezer for several hours. When it is a solid sheet of ice, try dragging the shoe across it.

What happens if you try a shoe with a different type of sole? What does this tell you about traction and friction?

Can you make fire?

Click thumbnail to view full-size

Rub the sticks together.

Heated Friction

Materials:

- 2 Sticks

When two objects are rubbed against each other, the friction can produce heat. You can demonstrate this by rubbing two sticks together. This is an old-fashioned way to make a fire.

1. Take two sticks and rub them together in a back and forth motion, kind of like sawing.
2. Rub as quickly as you can for about 30 seconds to a minute.
3. Use your hand to feel where the sticks rubbed against each other. You will be able to feel warmth.

You are probably not going to be able to make fire this way, but you can understand friction from it. The friction will even rub part of the bark off the stick. It's a good way to demonstrate how friction can heat up objects as they come into contact with each other and how friction can wear away objects after a time.

If you really want to make a fire with friction, you can try some of the methods at campfiredude.com.

Up to the Top!

Click thumbnail to view full-size

Reducing Friction with Salt and a Marble

Materials:

- Test tube with a lid (or an elongated bottle or jar with a lid)
- Salt
- Marble or gumball

We've tested the friction produced by surfaces and seen ways to increase friction. Well, here is an experiment that reduces friction.

1. Put the marble (or gumball) into the bottom of the bottle or tube.
2. Fill the tube about 3/4 of the way full with the salt.
3. Screw the lid on tightly.
4. Try to get the marble to the top of the bottle. Easier said than done, right?
5. The trick is all in how you move the bottle. Try shaking the bottle straight up and down. Watch for the marble to work its way to the top.

It works because the friction is reduced when the bottle is shaken. All of the particles are moving around and the marble is free to move.

You can try getting the prizes out of cereal boxes the same way. Shake the box straight up and down until the prize works its way to the top of the box.

Friction Poll

What friction experiment are you going to put into motion?

I'm going to float some rice.

Sticking books together sounds fun.

Heating up sticks is fine with me.

I'll try the marble trick.

I'm just going to slide some things.

Paper will be flying everywhere.

Vote See results ▶

Source

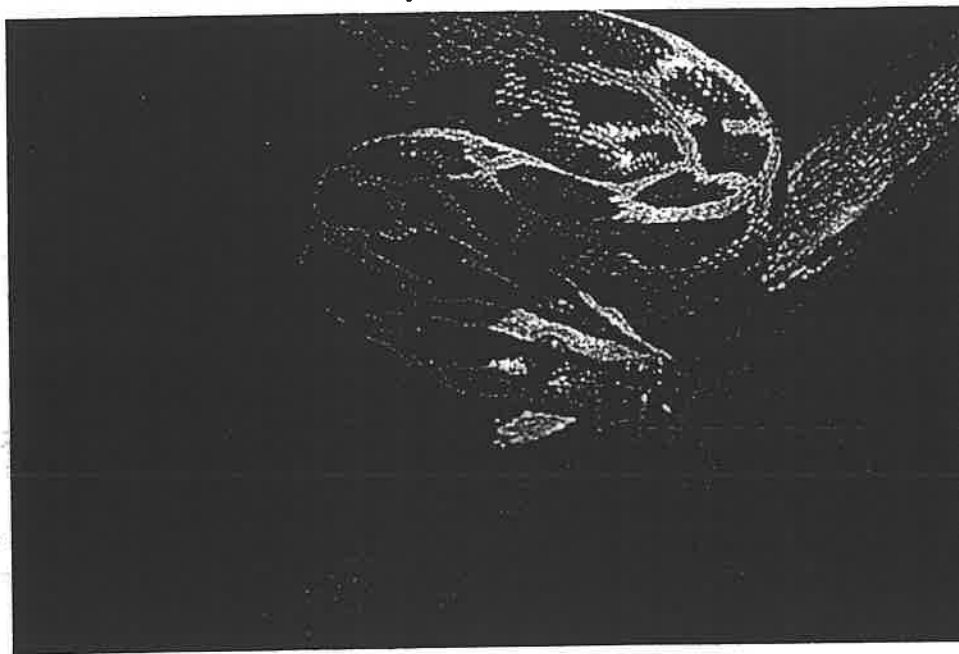
More Friction Experiments

- Learn about friction with moving parts by making ball bearings.
- Find friction lessons and play interactive computer games with friction.
- Test friction in everyday life with these simple activities:
 1. Hold your hand out the car window when it is moving. How does moving your hand in different positions effect the fluid friction or create drag?
 2. Try sliding on the floor in socks. Why doesn't sliding on the floor work with most types of shoes?
 3. Use friction to create static electricity by rubbing a balloon on hair. What other types of materials create static electricity when you rub the ballon on them?
 4. Erasers work by friction. Get some erasable pens and explore how friction wears away surfaces.
 5. Head to a playground an slide down the fire pole. Try it with pants on and then with shorts so that your bare legs are against the pole. Why does it make a difference?



Pythons Invade the Florida Everglades

by ReadWorks



When Tommy Owen, a tour guide in the Everglades National Park, saw the animal, he immediately went after it. Owen was giving a tour of Florida's famous national park wetlands. He and a group of tourists were floating in a boat through the shallow water that makes up the Everglades. One of the women in the boat he was steering saw a snake in the water. She got Tommy's attention and pointed the snake out to him. When Tommy saw the snake, he acted fast. He reached into the water and grabbed the animal by the head. He got a good grip and didn't let go. Tourists in the boat were worried when the snake wrapped itself around Tommy's arm. After several minutes, he got control of the animal and removed it from the water. The snake was a ten-foot-long Burmese python. It was a snake not native to Florida and, quite simply, it didn't belong there.

* * *

The Florida Everglades teems with life. Situated at the southern end of the state, between Lake Okeechobee and the Gulf Coast, the Everglades is the largest wilderness east of the Mississippi River. Migratory and wading birds tiptoe through marshy grasslands. Orchids and ferns dot the hardwood forests. Alligators lounge in the shallows and on muddy riverbanks. Mangrove leaves rustle in the wind as the brackish water laps at their roots.

All of this life is made possible by the presence of water. The Everglades is a natural region of subtropical wetlands. Water flows from the Kissimmee River into the wide, shallow Lake Okeechobee. From there the lake drains south, into the Everglades marsh and the Florida flats. The Everglades is sometimes called the "River of Grass" after a book of the same name by author Marjory Stoneman Douglas. The phrase illustrates the fact that the Everglades is basically a very wide and shallow river.

The Florida Everglades once covered 11,000 square miles across the southern end of the state. Wetlands are an important ecosystem. For centuries, however, humans thought of wetlands as unhygienic swamps. Draining the Everglades was suggested in the late 19th century. As soon as Florida became a state in 1845, its legislature asked permission from Congress to drain the Everglades. Canals were dug to remove or redirect the water. Land that dried out was reclaimed for agriculture or building purposes. This reclamation allowed for significant development in south Florida. Sugar farmers moved into the area and prospered. The city of Miami took root.

Approximately 50% of the Everglades was reclaimed for agricultural or urban use. Much of the northern area was polluted with phosphorus. This phosphorus was agricultural runoff from the farms near the Everglades.

Concerned Floridians began advocating for saving the area in the 1930s. Their efforts paid off in 1947 when Congress created the Everglades National Park. Starting in the late 1970s, environmental concerns at both the national and international levels refocused attention on the Everglades. The area was designated as one of the world's most important wetland areas.

Since then efforts have been underway to safeguard the park and return the Everglades to health. Water levels are monitored, as are nutrient levels in both water and soil samples.

Much of the conservation project was designed to reverse-engineer the canal system that was built in the 19th and mid-20th centuries. By the mid-2010s, ecological indicators showed some improvements. For example, the crayfish population was up. Wading and migratory birds improved their nesting habits.

Despite conservation efforts, the Everglades ecosystem began facing another threat in the early 2000s.

* * *

Burmese pythons were breeding in the Everglades, and they reached numbers that designated them as an invasive species. They were classified as an invasive species when their population swelled to a large size.

Pythons are eating machines. They can eat animals of different sizes, from mice to deer. They especially enjoy dining on small mammals and birds. Studies have shown that since the appearance of Burmese pythons in the Everglades, the numbers of small mammals in the area dropped significantly. This population loss was not observed in areas where the Burmese python had not established itself.

The Burmese python is native to tropical and subtropical zones in Southeast Asia. In their native habitat, Burmese pythons are nocturnal carnivores. When they live close to human habitations, Burmese pythons eat rats, mice, and rabbits that are attracted to human dwellings and farms. They can also eat small farm animals like chickens. When they live away from human habitations, Burmese pythons eat birds and small wild mammals. The Burmese python is a solitary animal. It kills by constricting its body around its prey. Python eggs and hatchlings are a food source for other animals. In the wild, Burmese pythons grow to be on average 12 feet long. (Habitat loss and the exotic pet trade in Asia are depleting the Burmese python's numbers in the Asian wild.)

The first Burmese python was found in the Florida Everglades in 1979. It's presumed the animal was originally kept as a pet and then released by its owner. It was removed, but that wasn't the last of Burmese pythons in south Florida. It's thought that numerous Burmese pythons escaped pet stores and cages damaged in Hurricane Andrew in 1992. Since then, the numbers of Burmese pythons grew at a fast rate. The escaped Burmese pythons weren't the only cause of the most recent population increase of Burmese pythons.

In the United States the Burmese python was a popular exotic pet. Docile and beautifully patterned in brown and gold diamond shapes, these snakes could be purchased at pet stores or reptile shows. Owners kept them in cages or tanks and fed them rats or mice. Most people bought Burmese pythons when they were small. Burmese pythons grow very quickly. For many pet owners, the pet Burmese pythons became too big to manage. So they released them into the wild.

When the Burmese python was designated as an invasive species, many agencies and individuals began trying to put a stop to the python invasion. The National Park Service started a program to study these animals in the Florida Everglades. Park Service scientists implanted tracking devices into seventeen large pythons that were later re-released into the

wild. They provided scientists with information regarding python behavior.

In January 2013 to February 2013, the Florida Fish and Wildlife Conservation Commission ran a contest called the 2013 Python Challenge. The Commission issued permits to hunt the snakes within state wildlife-managed areas of the Everglades. Sixty-eight Burmese pythons were captured.

Later in 2013, Jason Leon was driving in a rural area near Florida City when he spotted a Burmese python's head protruding from the brush. The man was a biologist, and he was familiar with pythons. He approached the snake and pulled it out of the bush. The animal was bigger than he expected. After a struggle with the animal, Leon killed it. The Burmese python was 128 pounds and longer than 18 feet. Leon contacted the Florida Fish and Wildlife Conservation Commission, which agreed to pick up and examine the snake. The snake was found to be the largest ever in the state of Florida.

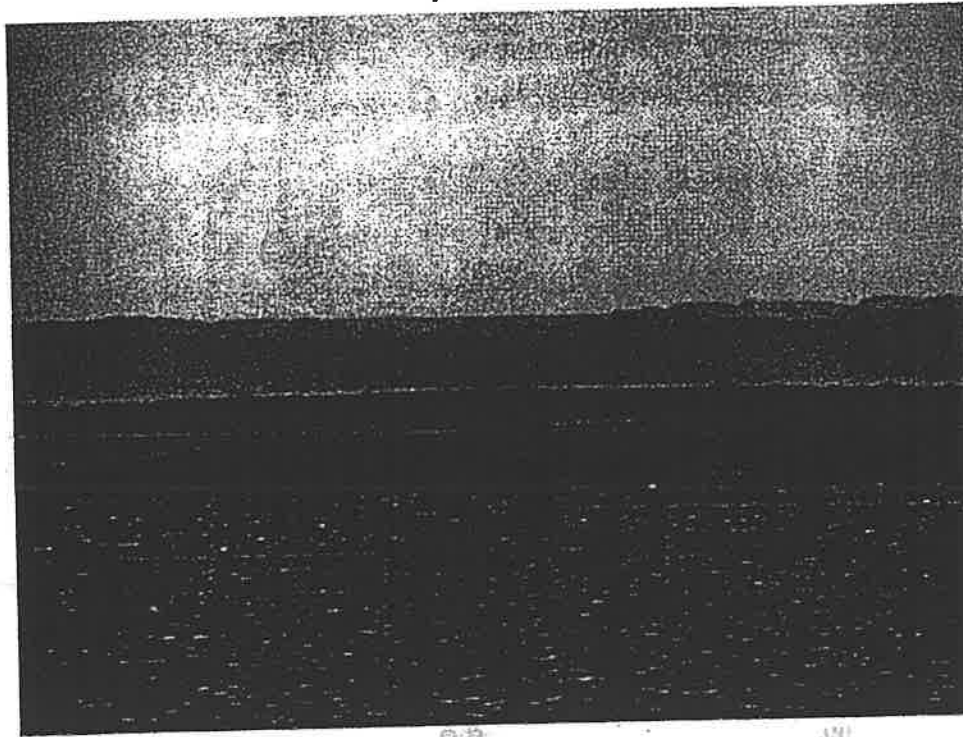
The state later issued a statement:

Jason Leon's nighttime sighting and capture of a Burmese python of more than 18 feet in length is a notable accomplishment that set a Florida record. The Florida Wildlife Commission is grateful to him both for safely removing such a large Burmese python, and for reporting its capture.

Despite these efforts, the population of Burmese pythons continued to grow. The Florida Fish and Wildlife Conservation Commission held another contest in 2016 called the 2016 Python Challenge.

All the Pieces Matter

by A.P. Raj



Jason stared at the whiteboard at the front of the classroom, trying to make sense of what he saw there. Mr. Freamon had drawn a complicated diagram of all the creatures living in the nearby Ho Tep Wildlife Reserve. Every type of living thing, from trees and insects to mammals and birds, was written down and circled on the board. Arrows snaked around the board, connecting the circles, showing which creatures depended on which other creatures to survive.

Though he had been hiking out in Ho Tep plenty of times, Jason had never given much thought to the animals and other wildlife he had seen out there. He'd never thought about how the amount of rainfall affected the amount of moisture in the soil, which affected how well plants could grow, which affected the ability of the animals that ate those plants to survive. It was enough to make his head swim a little.

Jason wasn't the only one who was confused. Mr. Freamon could tell that his students were all struggling to make sense of the mess of connections drawn out on the board. He smiled and stopped drawing for a moment to speak to the class.

"Take a deep breath," Mr. Freamon said. "You don't need to memorize what's on the board. If you're going to take away one thing from this lesson, let it be this: All the pieces matter. Every ecosystem on Earth depends on a delicate balance among all of the different forms of life within it."

Adriana raised her hand and asked why that was.

"Well," Mr. Freamon said, "in any ecosystem, all of the creatures within it are competing for the same resources: food, water and shelter-the basic needs of every living thing. There's only so much to go around, so creatures have to compete with other creatures to get what they need. And since they all go about it in a unique way, all of the creatures in an ecosystem end up depending on one another. Let me give you an example.

"Remember that video we watched last week? With the wolves killing the elk at Yellowstone National Park?"

Everyone nodded.

"And how many of you thought that the wolves were mean for killing those elk?"

About half the students raised their hands, but Jason kept his hand down. Wild animals will do what they do, he thought. The idea of meanness never enters into it. They act on instinct.

"Consider this, then," Mr. Freamon continued. "Without the wolves in the park to keep the elk population in check, the elk would have eaten all of the aspen and willow in the park. Not only would those plants be gone, but the other animals that depend on them to survive, would have been out of luck too. All the pieces matter."

After class that day, Jason went home and looked up "ecosystem resilience" on the Internet. He found a lot of interesting links about different ecosystems that had changed rapidly because one of the pieces had been taken out of the puzzle, as Mr. Freamon would have put it.

In Africa, people hunted lions and leopards and reduced their population, leading to higher populations of a certain type of baboon. That had led, somehow, to higher rates of parasites in baboons and people. And along some coasts, human activity had reduced the sea otter population. The sea otters ate sea urchins that ate kelp from massive kelp forests. Without the sea otters to keep them in check, the kelp started to disappear.

The whole idea was starting to make sense to Jason. It was basically like dominoes-all the

pieces lined up, and if you knocked one down, it would knock down the next one, which would knock down the one after that, until they all went down. Of course, it was a lot more complicated than that, but that was the basic idea.

The next time Jason went to Ho Tep Wildlife Reserve, on a camping trip with his dad, he made a point of observing the wildlife. He spent twenty minutes watching a copperhead snake slither across the forest floor, wondering about its role in the larger system. Through his binoculars, he watched a robin build its nest near the top of an oak tree. He imagined the robin catching insects to bring back to the nest to feed her chicks. He thought about how the roots of the tree reached way down into the soil to drink the moisture there. It really was fascinating how everything fit together.

Later, when he was back at school, he asked Mr. Freamon about the ecosystem at Ho Tep. He mentioned how he thought about the trees and how they were rooted in the soil.

"It's funny you should mention that, Jason," Mr. Freamon said. "You know, without those trees to anchor the soil, Ho Tep would still be a desert, like it was thousands of years ago."

"You mean Ho Tep hasn't always been a forest?"

"No, it hasn't. For a long time it was a desert-a totally different ecosystem. But over time, things changed," Mr. Freamon said.

"What things?" Jason asked.

"Weather patterns, for one. There probably wasn't a lot of rain falling on that area for a long time. But as that changed, there was more moisture in the soil. Enough for flowering plants to begin to take root, and eventually trees," replied Mr. Freamon.

"And once there are trees, there's shelter for birds and other animals," Jason said.

"Exactly right," Mr. Freamon said. "You've got the idea."

"Does that mean that we can deliberately change an ecosystem? Turn a desert into a forest, or something like that?"

Mr. Freamon smiled. "Well, it isn't that simple. Nature has a way of changing itself, but it takes a very long time, and it doesn't have an end goal in mind. Ecosystems fall apart, and then eventually find a new way to rebuild. But that's not quite the same as planning out a change.

"There are so many variables to consider- not only things like trees and birds, but the

bacteria and other creatures you can only see with a microscope. Not to mention, we haven't exactly figured out how to change the weather."

"So we've never changed an ecosystem?" Jason asked.

"Oh, I wouldn't say that," Mr. Freamon said. "We've changed plenty of ecosystems all right. Except when humans change an ecosystem, it's usually not deliberate. Usually it's because clearing out land to build things drives out other creatures."

"Well, it's like you always say: humans are a part of nature too, right?"

"Exactly right, Jason," Mr. Freamon said. "That's exactly right."

Name: _____ Date: _____

Use the article "Pythons Invade the Florida Everglades" to answer questions 1 to 2

1. What kind of animal had a population increase in the Florida Everglades in the early 2000s?
2. What effect has the release of these animals have on the number of small mammals in the Everglades? Support your answer with evidence from the text.

Use the article "All the Pieces Matter" to answer questions 3 to 4.

3. What caused higher populations of a certain type of baboon in Africa?
4. What effect has the higher population of this type of baboon had on baboons and people? Support your answer with evidence from the text.

Use the articles "All the Pieces Matter" and "Pythons Invade the Florida Everglades" to answer questions 5 to 6.

5. Think about the process of cause and effect involving Burmese pythons in the Everglades. How is it similar to the changes in Africa described by "All the Pieces Matter"?
6. Explain why understanding the process of cause and effect might be important to someone studying the environment. Support your answer with evidence from the articles.

1.

2.

3.

4.

5.

6.



Minute 21

Name _____

For Numbers 1–5, use either of the relative pronouns *who* or *that* to correctly complete each sentence.
(Hint: Use *who* when referring to a person or *that* if referring to an object or animal.)

1. The customers _____ want a bargain will shop at Pick-n-Pay.
2. The lamp _____ my brother made is purple and yellow.
3. The student _____ has a hearing impairment won an award for bravery.
4. The monkey _____ ate his hat went to the veterinarian.
5. The person _____ is hungriest should eat first.

For Numbers 6–10, circle the indefinite pronoun in each sentence.
(Hint: An *indefinite* pronoun does not refer to a specific person, place, or thing.)

6. Anyone can go to the performance on Saturday.
7. There wasn't anything Jackson could have done to prevent the collision.
8. Antonio wants somebody to play tennis with on Thursday.
9. Can everyone see the board?
10. Each of the girls sent a birthday card to Jessica.



Minute 22

Use the correct pronoun to complete each sentence.

Hybrid cars save gasoline, but _____ more expensive to buy.
it is they are

Lewis and Clark explored America with _____ corps of volunteers.
his their

Catherine the Great, empress of Russia, expanded _____ empire
during her reign.
her their

Anybody who loses _____ ticket will not be admitted to the show.
their his

Both boys practiced _____ jump shot each night.
their his

Something under the bed moved _____ fluffy tail.
its their

People should brush _____ teeth twice a day.
their her

A technician must complete extensive training before doing a job on
_____ own.
each her

Campers should be especially careful when _____ near
poison oak.
they are she is

The first time Wes and Tyson went bowling, _____ each scored over
one hundred points.
they he

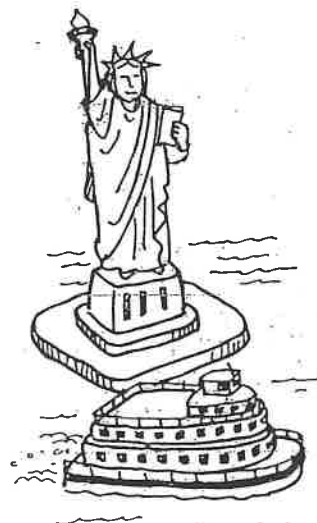


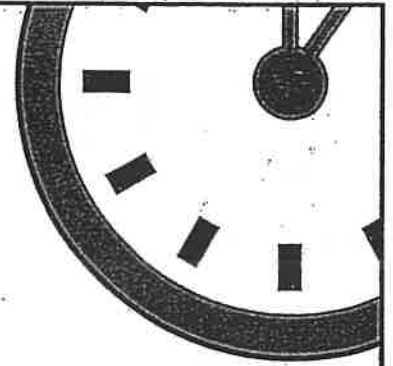
Minute 23

Name _____

Underline the common noun(s) and circle the proper noun(s) in each sentence.

1. When Charlene is hungry, she makes a sandwich.
2. The guitar was less expensive at Melody Music Shop.
3. Parker's birthday is January 27.
4. The Tour de France is a bicycle race through France.
5. Let's meet at the movie theater on Monday.
6. A squirrel raced through the trees in Highland Park.
7. My apartment is on the third floor.
8. Louise asked the banker for a loan.
9. The Statue of Liberty is in New York City.
10. Please take the garbage out.





Minute 24

Name _____

For Numbers 1–5, read the paragraph and circle the five plural nouns. Write them on the lines.

The climbers set off to reach the summit of Mt. Kilimanjaro. They carried knives, cooking utensils, and food with them. It would take a long time to reach the top and set up camp. They had been training for months with people around the area. What victory it would be to finally reach their destination!

1. _____
2. _____
3. _____
4. _____
5. _____

For Numbers 6–10, write the plural form for each noun.

6. beetle _____
7. hobby _____
8. mouse _____
9. half _____
10. echo _____



Minute 25

Name _____

For Numbers 1–5, rewrite each phrase in possessive form.

1. The department for men

2. The bookshelf belonging to Cindy

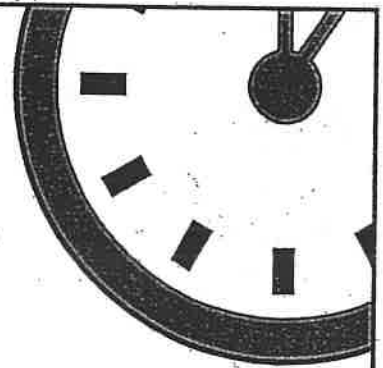
3. The windows of the galleries

4. The crayons belonging to the kindergartner

5. The water bottles belonging to the runners

For Numbers 6–10, underline the singular possessive phrase and circle the plural possessive phrase in each sentence.

6. Melissa's motorcycle ran more smoothly than her friends' motorcycles.
7. The Dolphins' victory made Dad's day.
8. The flowers' pollen affected Jessica's allergies.
9. I don't like to walk to Daria's Grocery Store because of the neighborhood dogs' loud barking as I enter their territory.
10. Lisa's pet hamster can't climb onto the sofas' slippery cushions.



Minute 26

Name _____

For Numbers 1–5, circle the correct object pronoun(s) to complete each sentence.

1. Mom made lasagna for my brother and (me/I).
2. Mrs. Green chose Warren and (she/her) to finish the math problems on the board.
3. The puppy followed (they/them) home from the park.
4. The calculators belong to (she/her) and (he/him).
5. Lisa asked (he/him) and (I/me) to go to the movies.

For Numbers 6–10, write a subject pronoun to replace the underlined word or words in each sentence.

6. Ronald appears in many television commercials. _____
7. The turtle sunned itself on the rocks. _____
8. Air pollution is hazardous to the earth and to humans' health. _____
9. The twins will receive an award for their volunteer work at the daycare center. _____
10. Erin and I earn money by mowing our neighbors' lawns. _____



Minute 27

Name _____

For Numbers 1–5, write the correct possessive pronoun to complete each sentence.

1. When Jenna's baby brother laughs, _____ new baby teeth show.
2. _____ neighbor's house has lights that turn off automatically.
3. Trent and Carla are working on _____ project.
4. Even though Liz said she wasn't good at bowling, I found out _____ top score in bowling is 219.
5. We could hardly believe _____ eyes.

For Numbers 6–10, write the correct reflexive pronoun from the box to complete each sentence.

themselves herself himself itself yourself

6. Henry built a clubhouse all by _____.
7. Kenlyn ate a hot dog, but Sarah made a salad for _____.
8. He and his friends bought concert tickets for _____.
9. You should drive to the store by _____.
10. A lizard can grow _____ a new tail.



Minute 28

Name _____

For Numbers 1–5, circle the correct relative pronoun to complete each sentence.

1. Mother Teresa was a woman (who/that) served the poor her entire life.
2. The antique chair (who/that) belongs to my mother is a family heirloom.
3. Belinda has a favorite hat (who/that) once belonged to her sister.
4. The television (who/that) has loud speakers is better for playing video games.
5. The person in the drama club (who/that) raises the most money for the trip will win a prize.

For Numbers 6–10, write **Yes** if the **indefinite pronoun** in the phrase is used correctly. Write **No** if it is not.

6. Many of the students put his backpacks under the desks. _____
7. Either boy can drive his truck. _____
8. Someone brought their skateboard into the house. _____
9. Does everyone have their homework finished? _____
10. Both of the boys received telescopes for their birthdays. _____

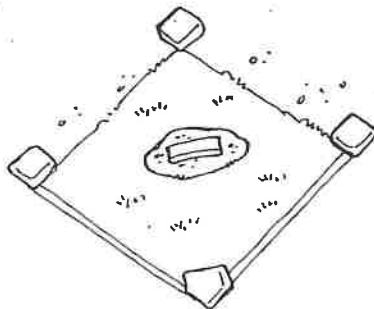


Minute 29

Name _____

Underline the action verb in each sentence. Write another action verb on the line to replace the one you underlined.

1. The glider soars through the air. _____
2. Evan drives over the Rocky Mountains. _____
3. The stars sparkle in the night sky. _____
4. The lamb leaps across the meadow. _____
5. Marcy and Mike skate to the park. _____
6. The farmer cuts the corn. _____
7. The storm is here, and I lost my umbrella. _____
8. The boat sails into the harbor. _____
9. The diver is not afraid as he swims. _____
10. Helen is happy because she hit a home run. _____





Minute 30

Name _____

For Numbers 1–5, underline the linking verb in each sentence.

(Hint: A *linking verb* does not express action. It connects the subject to the rest of the information about the subject.)

1. That octopus is large and scary.
2. I am sleepy after my long trip.
3. Apples are my favorite fruit.
4. The animals in the zoo are interesting to watch.
5. The airplanes were all late because of the storm.

For Numbers 6–10, circle the sentence in each pair that has a helping verb.
(Hint: A *helping verb* is the first word of a verb phrase and often sets the time and mood.)

6.
 - a. She will go to the movies with Brenda.
 - b. She watched the movie with Brenda.
7.
 - a. Janice and Nicolas helped their mother with the cooking.
 - b. Janice and Nicolas are helping their mother cook.
8.
 - a. We meet to play soccer on Wednesday.
 - b. We have been playing soccer for an hour.
9.
 - a. She is nice.
 - b. She is acting nice.
10.
 - a. I am going to my house.
 - b. I want to go home.



Minute 31

Name _____

Write the past tense forms of each verb below.
(Hint: Not all past tense verbs end in -ed.)

Present Tense

Past Tense

1. sail

2. scream

3. fly

4. answer

5. grow

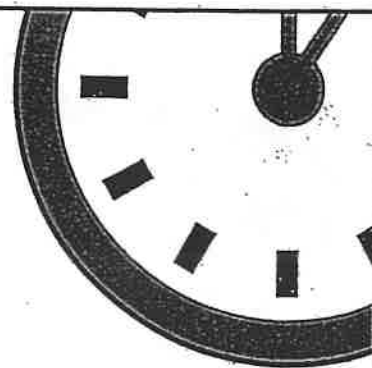
6. act

7. wear

8. write

9. boil

10. break



Minute 32

Name _____

Add *-ed* or *-ing* to the verb to correctly complete each sentence.

1. Who _____ the Internet?
invent
2. The lionesses _____ in the cool hours of the evening.
hunt
3. Travis was _____ about his bicycle tricks.
joke
4. Mrs. Jones _____ there would be a math test on Thursday.
mention
5. Thousands of people are _____ to warmer locations.
move
6. The sporting goods store is _____ a discount for frequent shoppers.
offer
7. The queen _____ the country for more than 40 years.
rule
8. Shelly is _____ a surprise birthday party for her mother.
plan
9. The workers are _____ the produce for the restaurant.
unload
10. Aunt Betsy is _____ from Vermont for a week.
visit



Minute 33

Name _____

For Numbers 1–5, circle the correct verb to complete each sentence.
(Hint: The verbs *lay*, *set*, and *raise* are used with a direct object.)

1. Please (lay/lie) the books on the table.
2. Robert (lies/lays) on the couch because he isn't feeling well.
3. Mr. Henderson (set/sit) the microscopes on the tables.
4. We taught our dog to (sit/set) on command.
5. The hills (rise/raise) above the valley.

For Numbers 6–10, write the correct past tense verb on the line.

6. Ms. Fortunato _____ the curtain and the show began.
 raised rose
7. Yesterday the cat _____ in the sunshine on the porch.
 lay laid
8. Cherise _____ the plates around the table.
 past passed
9. We each _____ at a computer station in the library.
 sat set
10. I always _____ my library card right on the counter.
 lay lie



Minute 34

Name _____

For Numbers 1-5, write the correct form of the verb to complete each phrase.

Example: Wait

1. Laugh

2. Ask

I wait

I _____

I _____

You wait

You _____

You _____

He waits

She _____

He _____

They wait

They _____

They _____

3. Start

4. Paint

5. Dance

I _____

I _____

I _____

You _____

You _____

You _____

It _____

He _____

She _____

They _____

They _____

They _____

For Numbers 6-10, circle the correct verb form to complete each sentence.

6. Jerry and June (mops/mop) the floor.
7. The fifth-grade class (plant/plants) a tree every year.
8. The bee (stings/sting) the predator who threatens it.
9. He (turn/turns) off the light when leaving the room.
10. Fran (ignore/ignores) the telephone while she is studying.

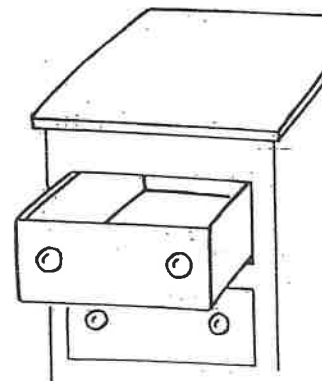
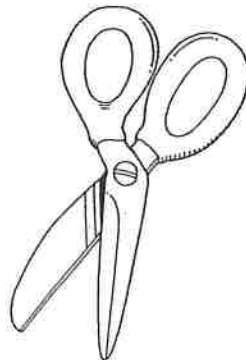


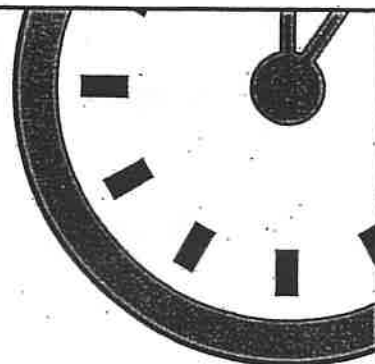
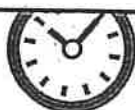
Minute 35

Name _____

Circle the correct verb form to complete each sentence.

1. Our baseball team (is/are) the best in the state.
2. The class (earn/earns) a quarter for each bake sale item sold.
3. The number of people who like Brussels sprouts (is/are) very small.
4. The hills (is/are) gleaming with white snow.
5. Doctors (is/are) very caring people.
6. Chandra's glasses (is/are) on her desk.
7. Raven and Jan (is/are) playing tetherball.
8. Either William's brother or my mom (drive/drives) us to school.
9. Neither Chris nor James will (wear/wears) braces anymore.
10. The scissors (is/are) in the top drawer.





Minute 36

Name _____

For Numbers 1–5, either circle the action verb or underline the linking verb in each sentence.

1. The roller coaster raced around the track.
2. A snowman melts in the sunshine.
3. Natalie was fourteen years old.
4. Pete and Hank built a go-cart from scraps of wood.
5. He is very tired.

For Numbers 6–10, write a sentence that includes an action verb.

6. It is snowy outside.

The snow _____

7. It is nice weather in the city today.

The sun _____

8. My friend and I had fun at the concert.

My friend and I _____

9. Lisa is tired.

Lisa _____

10. I am hungry.

My stomach _____

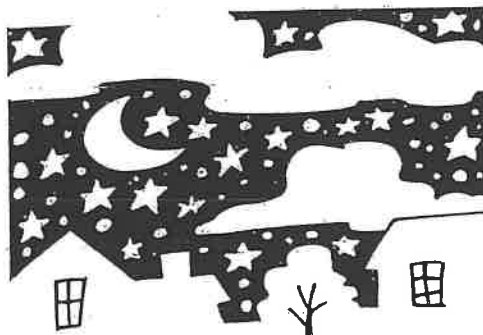


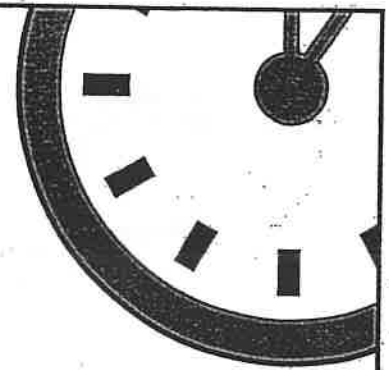
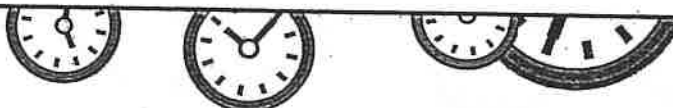
Minute 37

Name _____

Write *H* if the verb in the sentence helps another verb or expresses time or mood. Write *L* if the verb links two ideas together.

1. I will run to the store quickly. _____
2. The capital of the United States is Washington, D.C. _____
3. The peaches are ripe. _____
4. The bananas will ripen if you store them in a paper bag. _____
5. They should walk to the store rather than drive. _____
6. He is taking his time. _____
7. The shoes were in the closet. _____
8. He can store his shoes in the closet. _____
9. The evening sky is beautiful. _____
10. The chef seems capable. _____





Minute 38

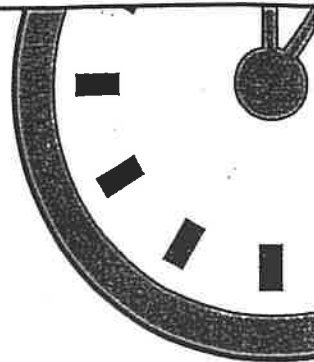
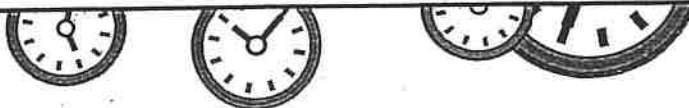
Name _____

For Numbers 1-5, write the past tense form of each verb.

- | | | | |
|-----------|-------|----------|-------|
| 1. run | _____ | 4. walk | _____ |
| 2. dive | _____ | 5. think | _____ |
| 3. freeze | _____ | | |

For Numbers 6-10, add *-ing* or *-ed* to the verb to correctly complete each sentence.

6. Janice is _____ the crumbs that fell on the floor.
sweep
7. When the glue has _____, we can take home our projects.
dry
8. The drummers are _____ in a parade this Saturday.
march
9. All of the athletes _____ after completing the race.
stretch
10. The fireworks _____ in the sky.
explode



Minute 39

Name _____

For Numbers 1–5, circle the correct verb to complete each sentence.

1. Where did you (lay/lie) the pencils?
2. It feels good to (lie/lay) down after a long bike ride.
3. Jimmy likes to (set/sit) out all his materials before he paints.
4. Mom honked the car horn as we (passed/past) the school.
5. The class will (rise/raise) money to take a field trip.

For Numbers 6–10, write *Yes* if the correct verb is used for each sentence.
Write *No* if it is not.

6. We passed time by playing road trip games. _____
7. The bread will raise to the top of the pan. _____
8. I lie the presents on the table. _____
9. The vase sits on the mantle in our living room. _____
10. After you're finished reading the newspaper, sit it on the shelf. _____





Minute 40

Name _____

Circle the correct verb form to complete each sentence.

1. Candice (expect/expects) her team to win the competition.
2. The tired old dog (flop/flops) down on the kitchen floor.
3. There (was/were) too many students standing in the hallway.
4. In my grandfather's attic (is/are) dozens of old cameras.
5. Blanca, my older sister, (plan/plans) to attend Stanford University in the fall.
6. The flesh of the fruit (is/are) tender and juicy.
7. Harry (wish/wishes) his best friend would get well soon.
8. The teacher (eat/eats) lunch in the school cafeteria along with his students.
9. Among the top three tennis players in the world (is/are) two Europeans and one Canadian.
10. The adventurous climber (use/uses) ropes and other safety devices as she climbs the face of the cliff.

Name _____

Correct the Homophones



Recall that **homophones** are words that **sound the same** but **have different meanings**.

For example, a stake is a wooden post, and a steak is a piece of meat.



Read each sentence. If you find a misused homophone, rewrite the sentence correctly. If there is no error, write: The sentence is correct as it is.

1. I went to bed so late that I had trouble falling asleep last knight.

2. You're lucky that you will sail to Europe on vacation this summer.

3. Our fruit salad had apples, oranges, and pairs.

4. Don't stare at me!

5. There are too people in line in front of us.

6. Her cousin is always hungry an our after eating lunch!

7. Eric had to read many books in college.

8. As we drove threw the countryside, we saw a heard of cattle in a field.

9. I could not find everything that I knead at the grocery store.

10. The building was made of concrete and steal.

11. The busy bee flew around the garden, gathering pollen from all of the flowers.

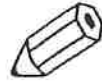
12. He is always responsible when it comes to his bills, paying them as soon as they are dew.

NAME: _____

DATE: _____

GRAMMAR WORKSHEET

SUBJECT & OBJECT PRONOUNS



| | | | | | | | | |
|-----|-----|----|-----|----|----|----|------|------|
| she | her | he | him | it | we | us | they | them |
|-----|-----|----|-----|----|----|----|------|------|

- Replace the underlined words with the appropriate pronouns in the box. Use capital letters when necessary.

him

1. I saw Mr. Brown this morning and gave Mr. Brown my homework.
2. John likes computer games but he doesn't play computer games very often.
3. Neil Armstrong was born in 1930. Neil Armstrong landed on the moon in 1969.
4. Penguins don't live near the North Pole. Penguins live near the South Pole.
5. My aunt lives in Toronto but my aunt often comes to visit my family and me.
6. If you have your ticket, you can give your ticket to that man over there.
7. First, my friend and I went shopping. Later, my friend and I went home.
8. Where was Sarah? I didn't see Sarah at the party last week.
9. John is a really nice guy. I like John a lot.
10. The planet Mars has two moons. The two moons are both very small.
11. I really liked the cake. Unfortunately, I didn't have time to finish the cake.
12. Suzy and I paid for the meal but the waiter forgot to bring Suzy and me the food.

Name _____

Practice
Chapter 9
Section A

1

Review and Practice

Vocabulary Fill in each blank with a word from the word bank.

factor unit fraction whole number numerator denominator

1. The _____ is the top number of a fraction.
2. A _____ has a 1 as the numerator.
3. One _____ of 8 is 4. Others are 1, 2, and 8.

(Lessons 1 and 2) Find each product.

4. $\frac{1}{3}$ of 24 _____
5. $\frac{1}{9}$ of 36 _____
6. $\frac{10}{11} \times 22 =$ _____
7. $\frac{5}{6} \times 18 =$ _____
8. Find two-thirds of thirty. _____

(Lesson 3) Estimate each product. Use rounding, benchmarks, or compatible numbers.

9. $\frac{3}{4} \times 18$ _____
10. $3\frac{2}{5} \times 32$ _____
11. $2\frac{7}{20} \times 41$ _____
12. $\frac{6}{11} \times 12$ _____
13. $\frac{1}{8}$ of a small box of detergent cleans 1 load of laundry. How many loads could you wash with 5 boxes of detergent?

(Lessons 4 and 5) Find each product.

14. $\frac{8}{9} \times \frac{1}{4} =$ _____
15. $\frac{5}{7} \times \frac{3}{4} =$ _____
16. $\frac{6}{10} \times \frac{5}{12} =$ _____
17. $\frac{3}{8} \times \frac{8}{9} =$ _____

Complete.

18. $\frac{1}{3}$ of _____ = $\frac{1}{9}$
19. $\frac{1}{6}$ of _____ = $\frac{5}{42}$

(Mixed Review) Round each to the nearest whole number.

20. $2\frac{1}{3}$ _____
21. $6\frac{3}{8}$ _____
22. 5.75 _____
23. 6.09 _____
24. $14\frac{7}{8}$ _____
25. 2.49 _____

Name _____

Practice
Chapters 1–8



Cumulative Review

(Chapter 4 Lesson 5) Divide.

1. $6 \overline{)726}$

2. $8 \overline{)2488}$

3. $5 \overline{)834}$

(Chapter 7 Lesson 7) Write in order from least to greatest.

4. $\frac{1}{4}, \frac{5}{6}, \frac{2}{9}$ _____, _____, _____

5. $\frac{2}{3}, \frac{1}{5}, \frac{3}{8}$ _____, _____, _____

6. $\frac{1}{2}, \frac{5}{9}, \frac{2}{5}$ _____, _____, _____

(Chapter 7 Lesson 13) Write each as a percent.

7. 12 out of 100 _____

8. $\frac{31}{100}$ _____

Write each as a hundredths fraction and as a decimal.

9. $\frac{15}{25} =$ _____, _____

10. $\frac{2}{50} =$ _____, _____

(Chapter 8 Lessons 4, 6, and 10) Add or subtract.

11.
$$\begin{array}{r} \frac{1}{5} \\ + \frac{3}{5} \\ \hline \end{array}$$

12.
$$\begin{array}{r} \frac{7}{8} \\ - \frac{3}{8} \\ \hline \end{array}$$

13.
$$\begin{array}{r} \frac{4}{7} \\ + \frac{2}{7} \\ \hline \end{array}$$

14.
$$\begin{array}{r} \frac{6}{9} \\ - \frac{2}{3} \\ \hline \end{array}$$

15.
$$\begin{array}{r} 3\frac{1}{4} \\ + 2\frac{3}{6} \\ \hline \end{array}$$

16.
$$\begin{array}{r} 4\frac{7}{9} \\ - 1\frac{2}{3} \\ \hline \end{array}$$

17.
$$\begin{array}{r} 5 \\ + \frac{4}{11} \\ \hline \end{array}$$

18.
$$\begin{array}{r} 4 \\ - 1\frac{2}{5} \\ \hline \end{array}$$

19.
$$\begin{array}{r} 3\frac{1}{4} \\ - 1\frac{2}{3} \\ \hline \end{array}$$

20.
$$\begin{array}{r} 8\frac{1}{12} \\ + 3\frac{4}{6} \\ \hline \end{array}$$

21.
$$\begin{array}{r} 4\frac{2}{3} \\ - 1\frac{2}{8} \\ \hline \end{array}$$

22.
$$\begin{array}{r} \frac{6}{7} \\ + 3\frac{1}{6} \\ \hline \end{array}$$

Name _____

Practice
8-16



Analyze Word Problems: Exact or Estimate?

Decide whether you need an exact answer or an estimate. Solve.

1. Kathy wants to build a bulletin board frame that is $6\frac{1}{8}$ ft wide and 4 ft high. Would three pieces of wood that are each 8 ft long be enough to build the frame? Explain your answer.

2. If Kathy wanted to make the frame 2 ft wider and 2 ft higher, would she have enough wood?

3. Carly usually does gymnastics for three hours on Monday through Friday, and for two hours on Saturday. About how many hours does she do gymnastics in a month?

4. Donald needs to be at school band practice by 7:30 A.M. He wants to get to school at least 15 minutes early. School is about a $\frac{1}{2}$ -hr bike ride away. What time should Donald leave for school?

5. Sharish saved \$210 for a stereo for her room. The stereo costs \$186. Sharish also wanted to purchase two CD's at \$11 each. While at the store, Sharish found another CD she wanted for \$13. Did Sharish have enough money to pay for everything she wanted? Tell what strategy you used.

Name _____

Practice
8-13

2

Compare Strategies: Work Backward/Draw a Picture

Work backward or use any strategy to solve the problem.

1. Stacey, Kiesha, and Maria planned their trip to band camp. Maria had to travel 5 more miles than Kiesha. Stacey had to travel $\frac{1}{2}$ the distance Kiesha traveled. Stacey traveled 50 miles. How far did Maria travel?

2. Sven and Ryan hiked a desert trail for their scout badge. They followed the trail $1\frac{1}{4}$ miles west, then turned north for $\frac{5}{8}$ mile. Finally they headed east for $1\frac{5}{8}$ mile to join the troop for camp. The next morning they hiked back over the same trail. How many miles in all did they hike? _____
3. Students voted to raise money for new soccer goals for their school. The goals cost \$450. Students raised $\frac{1}{3}$ of the money. The school's PTA contributed \$50 more than the students. Parents organized an additional fundraiser for the extra funds needed. How much did each group contribute?

4. Carly, Courtney, and Ashley went to the skating party for their school. Courtney skated three times as many laps as Ashley. Carly skated $\frac{2}{3}$ of the distance Courtney skated. Ashley skated 50 laps. How many laps did Courtney and Carly skate?

5. Max invited his friends over for pizza. Matt ate 12 slices. Cole ate half as much as Matt but twice as much as Sergio. Max ate 2 more slices than Sergio. How much pizza did Cole, Sergio, and Max each eat?

Name _____

Practice

8-7

2

Analyze Word Problems: Too Much or Too Little Information

Write if each problem has too much or too little information.
Solve, or if possible, tell what is needed to solve.

1. During one week, $\frac{1}{3}$ of the hotel rooms were available. The clerk took 20 additional reservations. How many rooms are still available?

2. The school is $\frac{2}{3}$ mi from the library. Jessie lives $\frac{3}{5}$ mi from school. John lives $\frac{1}{10}$ mi closer than Jessie. How far from school is John?

3. Cary cut a hero sandwich into 10 pieces. Only 8 pieces were eaten. His 3 sisters had ravioli. What fraction of the hero sandwich was left?

4. Mom built a shelf. She used $\frac{1}{2}$ a board for the shelf and $\frac{2}{5}$ of the board for the braces. How many inches of the board were left?

5. John rode with his mom in the car $\frac{1}{3}$ mi. He walked the rest of the way to Jim's house. How far did he have to walk?

6. For a recipe Lee needs $\frac{1}{3}$ cup of sugar, $\frac{3}{4}$ cup of flour, and twice as much milk as sugar. How many cups of milk does she need?

Name _____

Practice
Chapter 7
Section A



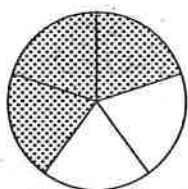
Review and Practice

Vocabulary Write true or false for each statement.

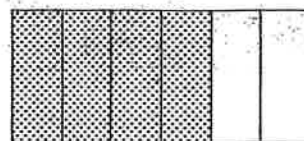
1. The denominator is the bottom number in a fraction. _____
2. A fraction is in simplest form when the GCF of the numerator and denominator is less than 3. _____
3. $\frac{2}{3}$ and $\frac{3}{4}$ are equivalent fractions. _____

(Lesson 1) Write the fraction that names each shaded part.

4. _____



5. _____



(Lessons 2 and 3) Complete.

$$6. \frac{3}{4} = \frac{\boxed{}}{12} = \frac{6}{\boxed{}} = \frac{\boxed{}}{16}$$

$$7. \frac{5}{6} = \frac{10}{\boxed{}} = \frac{\boxed{}}{60}$$

(Lesson 4) Find the greatest common factor for each pair.

8. 12 and 8 _____

9. 20 and 9 _____

(Lesson 5) Find the simplest form for each fraction.

$$10. \frac{22}{66} = \underline{\hspace{2cm}}$$

$$11. \frac{36}{48} = \underline{\hspace{2cm}}$$

$$12. \frac{14}{16} = \underline{\hspace{2cm}}$$

(Lessons 6 and 7) Write each set of fractions in order from least to greatest.

$$13. \frac{1}{6}, \frac{2}{3}, \frac{1}{5} \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$$

$$14. \frac{5}{6}, \frac{9}{12}, \frac{5}{8} \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$$

(Lesson 8) Solve. You may make a table to help.

15. On Monday, Megan found a 3-leaf plant. On Tuesday, she found a 4-leaf plant and on Wednesday she found a 5-leaf plant. If she continues to find plants in the same pattern, on what day of the week would she find a 10-leaf plant?
- _____

(Mixed Review) Complete each number sentence.

$$16. 36 \div \underline{\hspace{2cm}} = 4$$

$$17. \underline{\hspace{2cm}} \div 6 = 8$$

$$18. \underline{\hspace{2cm}} \times 7 = 56$$

Name _____

Practice
Chapters 1–5

3

Cumulative Review

(Chapter 2 Lesson 19) Choose an operation then solve.

1. Rob is 60 inches tall. He has grown 7 inches in the last 5 years. How tall was he 5 years ago? _____

(Chapter 3 Lesson 16) Solve.

2. At the scout shop a compass costs \$5 and a flashlight costs \$8. The scouts spent a total of \$90 on 15 items. How many compasses and how many flashlights did they buy?

(Chapter 4 Lesson 15) Solve.

3. If you add 3 to Sandro's age and divide by 3 you get 6. How old is Sandro? _____

(Chapter 4 Lesson 12) Find each quotient.

4. $3 \overline{)29.202}$

5. $5 \overline{)8.275}$

6. $6 \overline{)67.224}$

(Chapter 5 Lessons 4 and 10) Divide.

7. $23 \overline{)221}$

8. $16 \overline{)133}$

9. $48 \overline{)153}$

10. $21 \overline{)\$99.96}$

11. $13 \overline{)\$8.97}$

12. $40 \overline{)\$675.20}$

Name _____

**Practice
5-11**



Decision Making

| |
|-------------------------------------------------------------------|
| Rock & Roll Hall of Fame and Museum Cleveland, Ohio |
| Admission: \$12.95 Adults, \$9.50 Children |
| Hours: 10:00 A.M. to 5:30 P.M. |

| Features |
|---------------------------------------------------------------------------------------|
| Ground Level Artists' Careers Interactive Videos Mystery Train Cinema |
| Level 2 Memphis Recording Studio |
| Level 3 Museum Café |
| Level 4 Rock & Roll Cinema |
| Level 5 Radio Studio Past Hall of Fame Inductees |
| Level 6 Hall of Fame |

1. You want to plan a day for you and your family at the Rock & Roll Hall of Fame. You buy 2 adult and 2 children admissions. How much do you spend? _____

2. Your family will drive 2 hours to the museum. You want to arrive at 10:00 A.M. What time should you leave? _____

3. You plan to spend 3 hours at the museum. At what time will you leave? _____

4. On which level will you eat lunch? _____

5. Name 3 levels you want to visit. _____

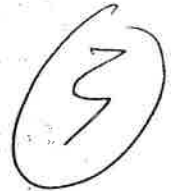
6. Plan a schedule. Include rest periods, gift shop, and lunch in your schedule.

| Time | Activity | Time | Activity |
|-------|---------------|-------|--------------|
| _____ | Leave home | _____ | _____ |
| _____ | Arrive museum | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | Leave museum |
| _____ | _____ | _____ | Arrive home |

Name _____

Practice

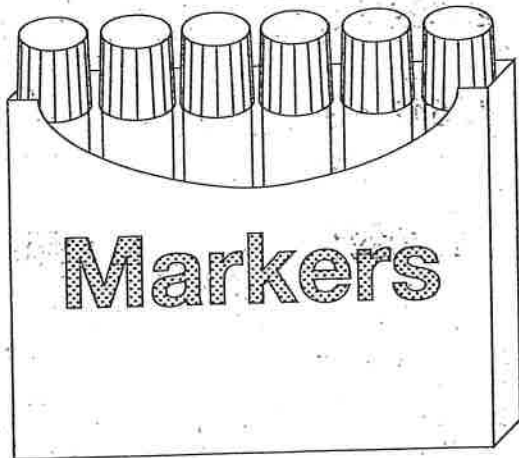
4-6



Analyze Word Problems:

Interpret Remainders

Solve. Use the picture to answer 1–3.



1. If you need markers for a class of 28 students, how many full boxes will you use? _____
2. How many more markers will you need after using the full boxes? _____
3. If you opened enough boxes to supply the entire class with markers, how many boxes would you open? _____
4. In the store room, folders are stored in packages of 8. What is the least number of packages needed for a class of 35 students? _____
5. The cafeteria workers keep small milk cartons in the refrigerator in stacks of 6. If each worker carries no more than one stack, what is the least number of cafeteria workers needed to carry small milk cartons for a class of 32?

6. In the cafeteria's refrigerator, cups of yogurt are kept in stacks of 9. If each worker carries no more than one stack, what is the least number of workers needed to carry cups of yogurt for a class of 42?

7. In the teachers' lunchroom, teachers sit at tables for 6. There are 22 teachers eating lunch. How many tables must be set up?

Name _____

Practice
Chapter 4
Section A

4

Review and Practice

Vocabulary Use the example to answer each question.

1. Which number is the quotient? _____

2. Which number is the dividend? _____

3. Which number is the divisor? _____

4. Which number is the remainder? _____

$$\begin{array}{r} 9 \text{ R}1 \\ 3 \overline{)28} \end{array}$$

(Lesson 1) Find each quotient. Use mental math.

5. $24 \div 3 =$ _____

6. $25 \div 5 =$ _____

7. $36 \div 9 =$ _____

8. $56 \div 8 =$ _____

9. Whitney poured 36 ounces of juice in 6 glasses.
How many ounces of juice are in each glass? _____

(Lesson 2) Find each quotient. Use mental math.

10. $4,500 \div 9 =$ _____

11. $40,000 \div 5 =$ _____

12. $1,200 \div 2 =$ _____

13. $540 \div 6 =$ _____

Complete.

14. $14,000 \div$ _____ $= 7,000$

15. _____ $\div 8 = 30$

(Lesson 3) Estimate each quotient by substituting compatible numbers.

16. $163 \div 2$ _____

17. $459 \div 9$ _____

18. $761 \div 8$ _____

19. $358 \div 4$ _____

(Mixed Review) Add or subtract.

20.
$$\begin{array}{r} 6,512 \\ + 739 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 3,003 \\ - 1,439 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 117 \\ - 99 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 997 \\ + 53 \\ \hline \end{array}$$

Name _____

Practice
Chapter 3
Section B

4

Review and Practice

Vocabulary Underline the word that correctly to completes the sentence.

1. 4 and 25 are (compatible, decimal) numbers for multiplication.
2. The product of 0.23 and 10 is a (compatible, decimal) number.

(Lesson 8) Find each product.

- | | |
|------------------------------|----------------------------------|
| 3. $6.04 \times 10 =$ _____ | 4. $1.85 \times 100 =$ _____ |
| 5. $0.92 \times 100 =$ _____ | 6. $0.0065 \times 1,000 =$ _____ |
| 7. $1.98 \times 10 =$ _____ | 8. $0.0236 \times 1,000 =$ _____ |

(Lesson 9) Estimate each product.

- | | |
|----------------------------|----------------------------|
| 9. 16×8.46 _____ | 10. 6.12×82 _____ |
| 11. 307×9.5 _____ | 12. 4.78×30 _____ |
| 13. 25×0.12 _____ | 14. 1.11×73 _____ |

(Lesson 10) Use estimation to place the decimal point in each product.

- | | |
|--------------------------------|------------------------------------|
| 15. $6.15 \times 98 = 6027$ | 16. $9.82 \times 35 = 3437$ |
| 17. $52.7 \times 23 = 12121$ | 18. $11.1 \times 49 = 5439$ |
| 19. $\$1.23 \times 9 = \1107 | 20. $\$6.88 \times 707 = \486416 |

(Lesson 11) Solve each problem.

21. A granola bar sells for \$0.55. An eight-pack of the same bars costs \$4.00. How much could you save on a purchase of an eight-pack? _____
22. A candle maker can make 3 candles from 6 pounds of wax. How many pounds of wax would be needed to make 15 of the same candles? _____

(Mixed Review) Multiply or divide.

- | | |
|--------------------------|--------------------------|
| 23. $3 \times 8 =$ _____ | 24. $45 \div 9 =$ _____ |
| 25. $42 \div 7 =$ _____ | 26. $5 \times 7 =$ _____ |
| 27. $8 \times 9 =$ _____ | 28. $36 \div 6 =$ _____ |

Name _____

Practice
Chapter 2
Section B

4

Review and Practice

(Lessons 7 and 9) Write each number in decimal form.

1. 29 hundredths _____
2. 7 hundredths _____
3. 16 thousandths _____
4. 7 tenths _____
5. eight and forty hundredths _____
6. nine and two hundred three thousandths _____

(Lesson 8) In each group circle equivalent decimals.

7. 0.4 0.04 0.40

8. 0.02 0.20 0.2

(Lesson 10) Name the number shown by each letter.



9. A _____

10. B _____

11. C _____

(Lesson 11) Write $>$, $<$, or $=$ to complete.

12. 0.71 0.231

13. 0.6 0.600

14. 2.38 1.8

15. 6.07 6.070

16. 0.29 0.3

17. 5.8 6.7

(Lesson 12) Round each number to the place of the underlined digit.

18. 0.651 _____

19. 5.63 _____

20. Carolyn owes Michael 72¢. She only has dimes.

What is the nearest amount she can give him? _____

(Mixed Review) Write $>$, $<$, or $=$.

21. $6 + 9 + 3$ $9 + 4 + 6$

22. $18 - 5$ $17 - 4$

23. 9×3 $15 + 13$

24. $5 + 0$ 0×8

Name _____

Practice
2-13



Analyze Strategies: Draw a Picture

Draw a picture to solve.

1. Jessica, Sarah, Annie, Tiffany, and Megan decide to go to an early movie that will cost them each \$4. Jessica and Tiffany want to split a container of popcorn that costs \$2. Megan and Annie want to share nachos that cost \$4. Sarah wants to buy the souvenir movie poster for \$3. Everyone brings \$6.
 - a. Will everyone have enough money for the movie and the items they want to buy?

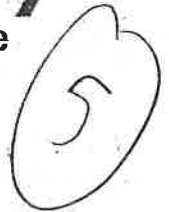
 - b. Who will spend the most money? _____
 - c. How much money will Jessica have left? _____
2. Sam is 12 years old. Garrett is younger than Sam but older than David and Mark. David is 9 and Mark is 10. What is Garrett's age? _____
3. The school is having a skating party. The students decide to do a line dance. They form three lines. The longest line is 60 students. One of the other lines has half as many students but is twice as long as the third line. How many students are in each of the other two lines?

4. Danny, Philip, Jennifer, and Emily are having a bike race. Jennifer only finishes ahead of Philip, who comes in last. Emily finishes behind Danny. What was the order of the finish from first to last?

5. Jean is younger than Dan but older than Rob. Sue is the oldest of the four. Who is the youngest?

Name _____

Practice
Chapter 2
Section A



Review and Practice

Vocabulary Write whether each is true or false.

1. A period is one of the symbols: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. _____
2. A number line shows numbers in order. _____
3. A digit is a group of three numbers. _____

(Lesson 1) What is the value in dollars of the money in each stack?

4. one hundred \$10 bills _____
5. ten \$100 bills _____

(Lesson 3) Complete.

6. $10 \times \underline{\hspace{2cm}} = 50,000$
7. $\underline{\hspace{2cm}} \times 800 = 80,000$
8. $10 \square = 100,000$

(Lessons 2 and 4) In the number 79,402,356,108 write the value of:

9. 4 _____
10. 7 _____
11. 9 _____
12. 2 _____

13. Write one hundred fifty million, two hundred fifty-seven thousand, nine hundred forty-five in standard form. _____

(Lesson 5) Write $>$, $<$, or $=$ to complete.

14. 235,641 ☐ 93,584
15. 90,006 ☐ ninety thousand six
16. 899,002 ☐ six hundred million
17. 89,903 ☐ 89,099

(Lesson 6) Use the table to answer 18 and 19.

18. Write the letter for the breed that has registered about:

- a. 70,000 dogs _____
- b. 100,000 dogs _____

19. To the nearest thousand, how many Labrador retrievers are registered? _____

| Top 5 American Kennel Club Registrations | |
|------------------------------------------|---------------|
| Breed | Registrations |
| A. Labrador Retrievers | 124,899 |
| B. Rottweilers | 104,160 |
| C. German Shepherds | 79,936 |
| D. Cocker Spaniels | 75,882 |
| E. Golden Retrievers | 68,125 |

(Mixed Review) Find each product or quotient.

20. $36 \div 9 =$ _____
21. $7 \times 7 =$ _____
22. $48 \div 6 =$ _____

Name _____

Practice

11-9

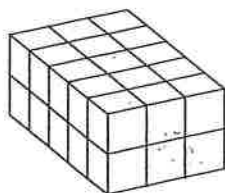
V

5

Exploring Volume

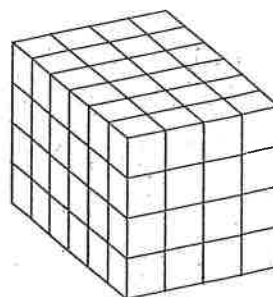
Find each volume.

1.



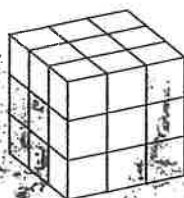
_____ units³

2.



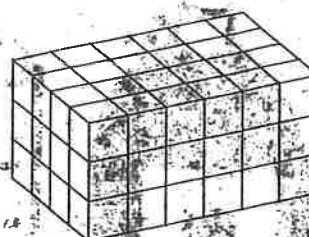
_____ units³

3.



_____ units³

4.



_____ units³

Complete.

4. $l = 10$ cm

$w = 5$ cm

$h = 5$ cm

$V =$

5. $l = 8$ in.

$w = 3$ in.

$h = 5$ in.

$V =$

6. $l = 10$ ft

$w = 10$ ft

$h = 8.5$ ft

$V =$

7. $l = 6$ ft

$w = 8$ ft

$h = 11$ ft

$V =$

8. Use mental math to estimate the volume of a box whose dimensions are $11 \text{ m} \times 17 \text{ m} \times 13 \text{ m}$. _____

Writing Class Work

Student Directions

Each day has three writing prompts.

- Expository: An expository piece is used to explain, describe, give information, or to inform.
- Persuasive: A persuasive piece is used to persuade or convince someone of something by giving reasons for supporting your point of view.
- Narrative: A narrative piece is used to tell a story.

Choose at least one prompt EACH DAY to write about.

1. Prewrite to plan your response.
2. Write for as long as you can to draft. If you need additional space, feel free to attach additional pages of paper.
3. Reread your writing to revise. Add details, transitions, stronger word choice, etc.
4. Reread your writing to edit. Check for spelling, grammar, punctuation, and capitalization.

Criteria

Expository:

- My writing gives information about my topic and has interesting ideas.
- My writing is organized with a main idea in the introduction, 2-3 body paragraphs supporting my main idea, and a conclusion.
- My writing uses interesting words and sentences.

Persuasive:

- My writing persuades or convinces someone of something and has interesting ideas.
- My writing is organized in paragraphs with detailed reasons for supporting my main idea. It has an introduction, 2-3 body paragraphs, and a conclusion.
- My writing uses interesting words and sentences.

Narrative:

- My writing tells a story with detailed events and has interesting ideas.
- My writing is organized in paragraphs and has a catchy lead, dialogue, conflict, and a resolution.
- My writing uses interesting words and sentences.

Name: _____

Writing Classwork Day 1

Select one of the following prompts. Prewrite, draft, revise, and edit your piece in the space below.

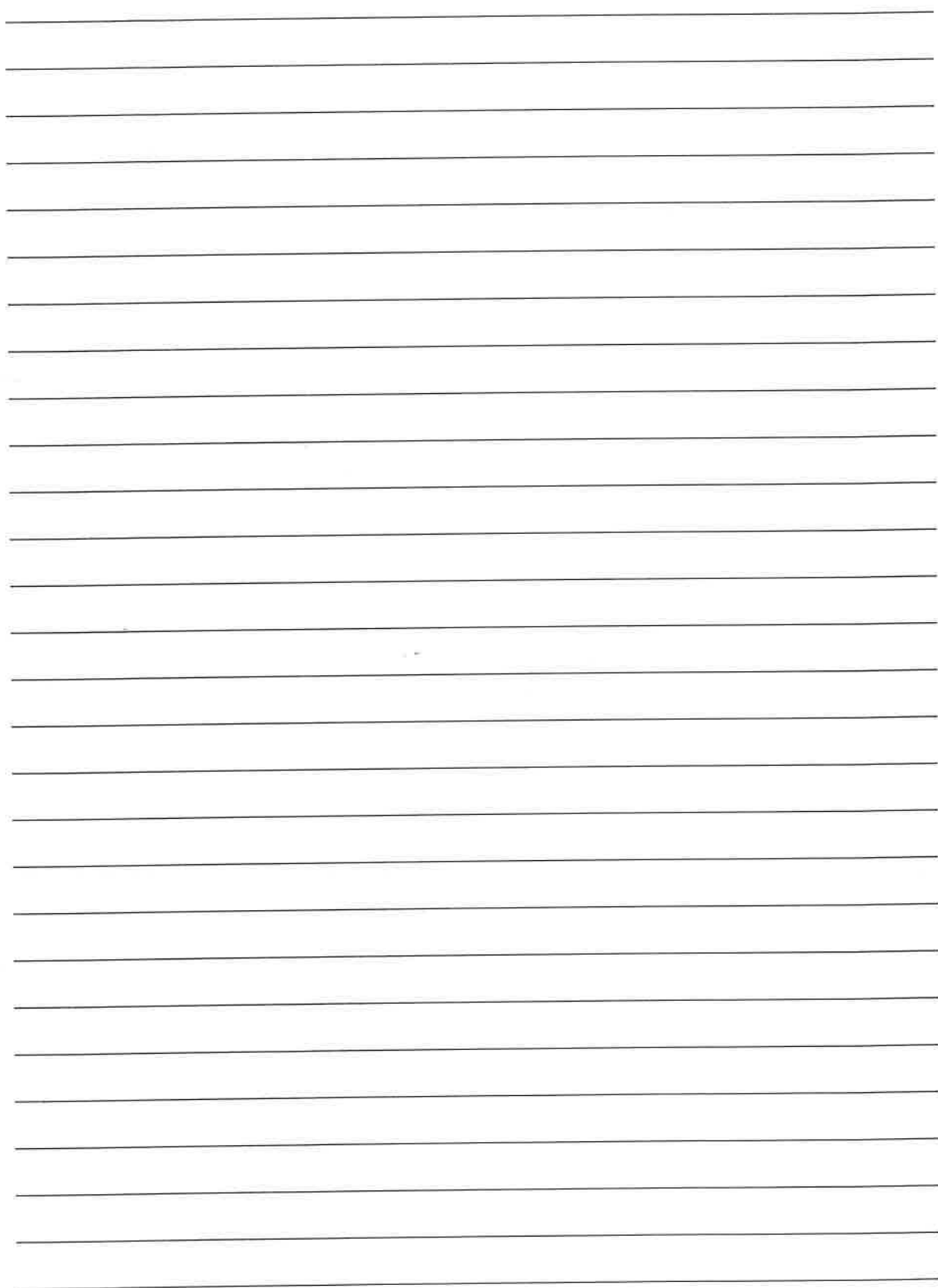
Expository: Imagine you have a big party at your house. Write about some things you would like to have at your party. Make a plan.

Persuasive: What is your definition of success in life?

Narrative: Write a story using this picture. →



Prewriting Space



Name: _____

Writing Classwork Day 2

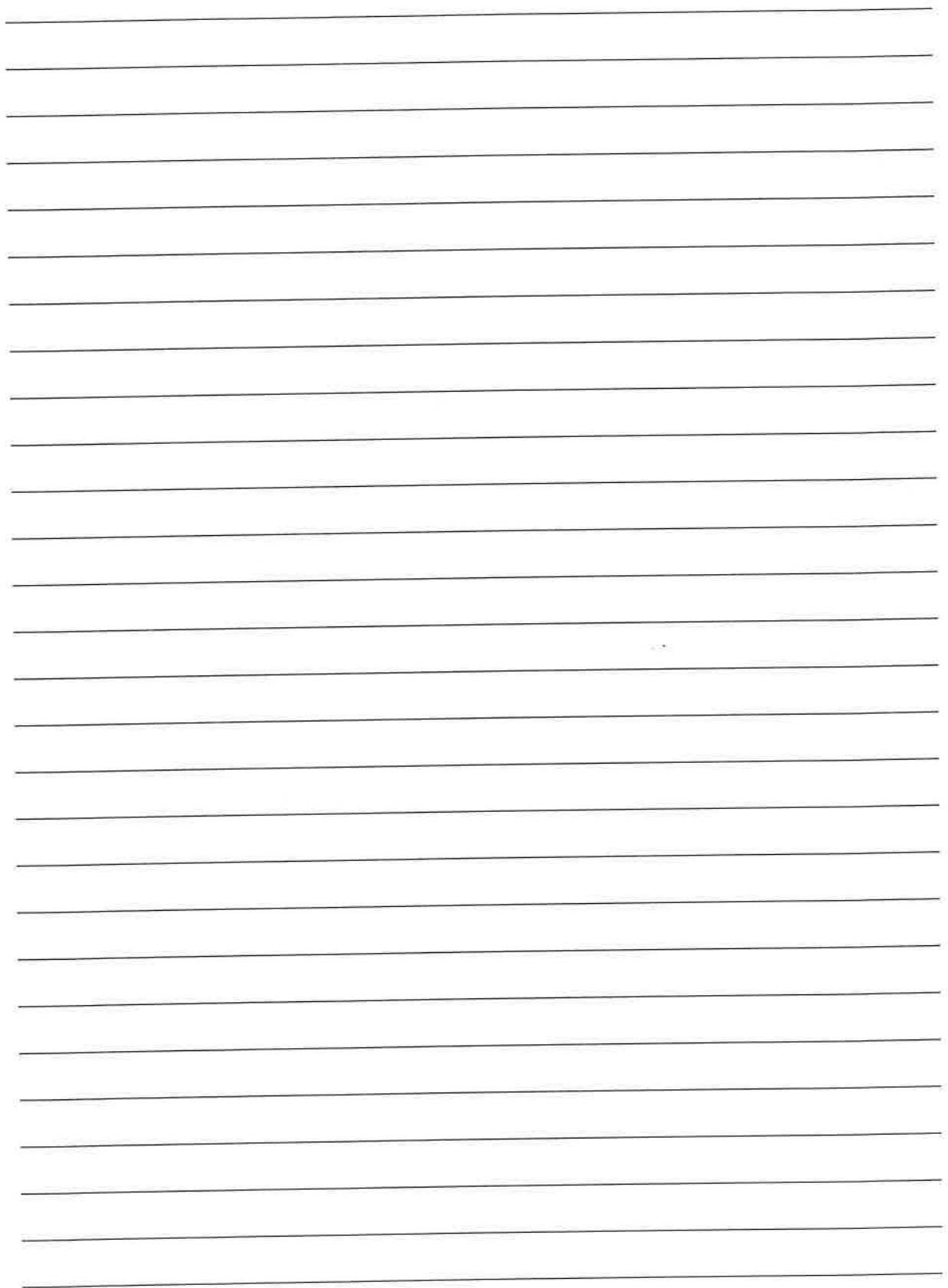
Select one of the following prompts. Prewrite, draft, revise, and edit your piece in the space below.

Expository: What is your best school memory? Why is it a special memory?

Persuasive: There is one thing you have always wanted to learn at school. Convince your teacher that the class should learn it this year.

Narrative: Write a story about the first day of school. It can be real or imaginary.

Prewriting Space



Name: _____

Writing Classwork Day 3

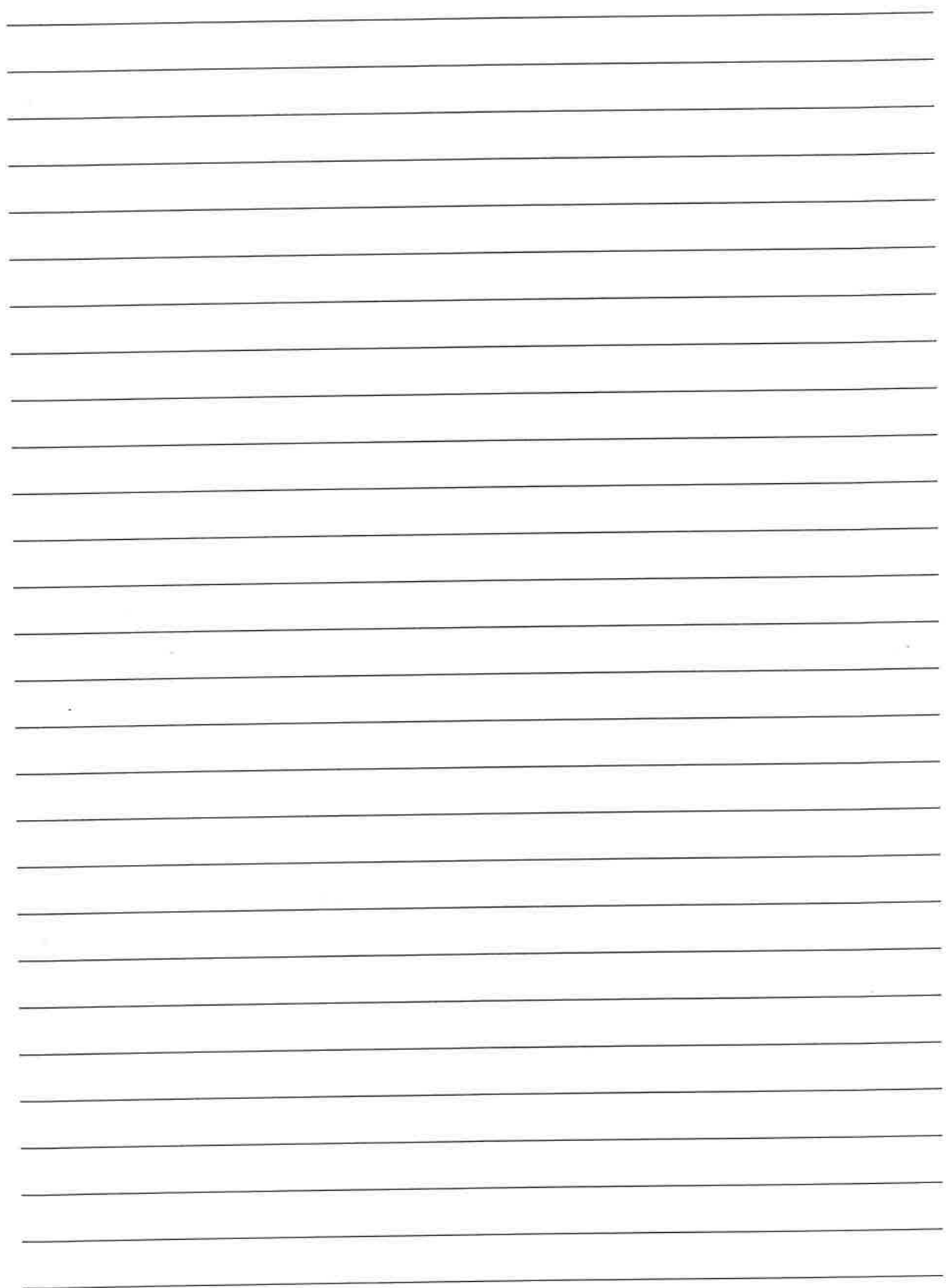
Select one of the following prompts. Prewrite, draft, revise, and edit your piece in the space below.

Expository: Write about how to learn to play a musical instrument.

Persuasive: Convince someone to learn how to play a musical instrument of your choice.

Narrative: Write a story about the friendship between two unusual animals.

Prewriting Space



Name: _____

Writing Classwork Day 4

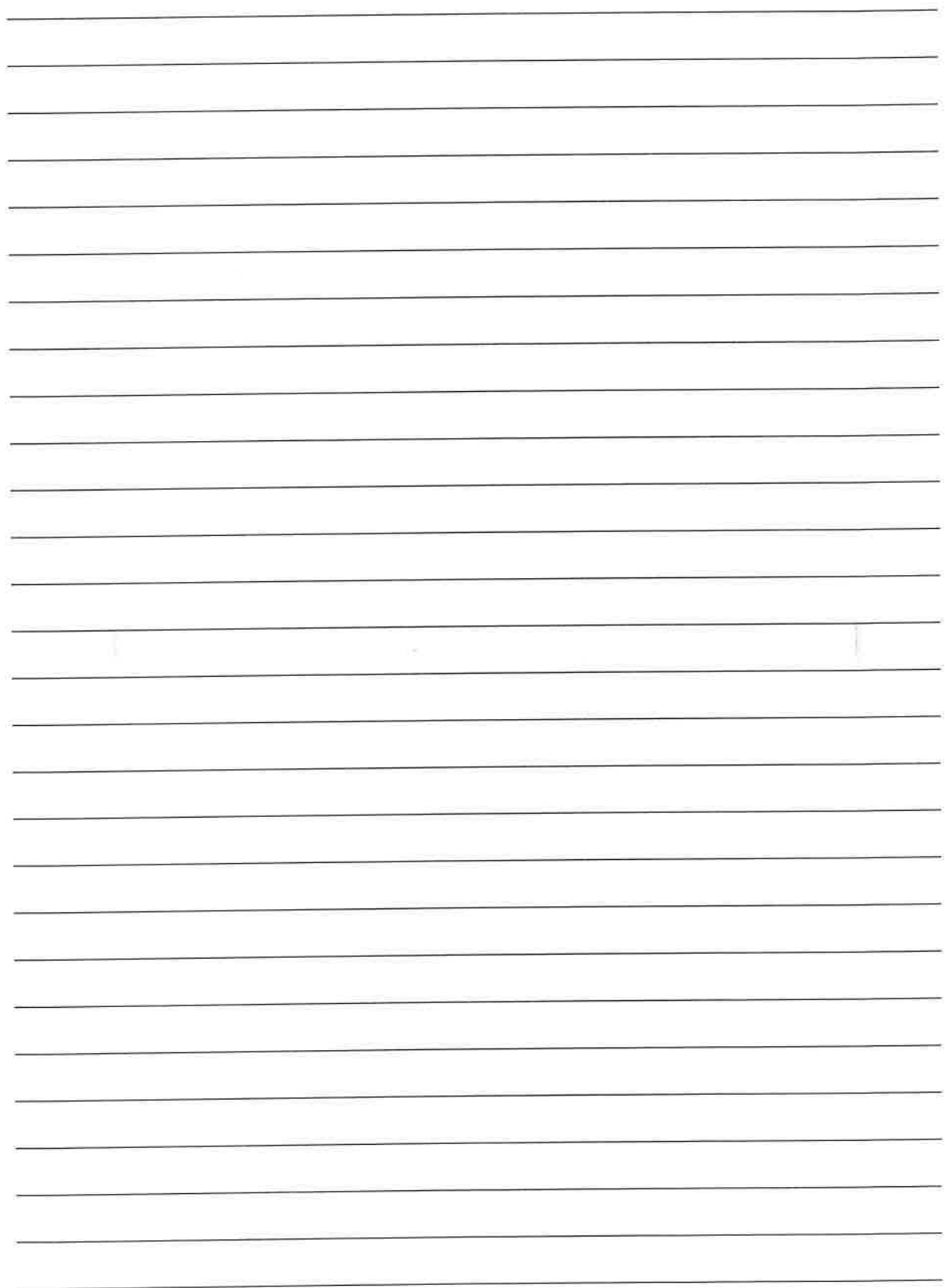
Select one of the following prompts. Prewrite, draft, revise, and edit your piece in the space below.

Expository: Write a report on an animal of your choice. Give facts and details.

Persuasive: What is something you believe your community needs but does not have? Write an essay to convince your readers of this need.

Narrative: You find a mysterious portal to another world behind a bookshelf. What happens next? Write a story about your adventure.

Prewriting Space



Name: _____

Writing Classwork Day 5

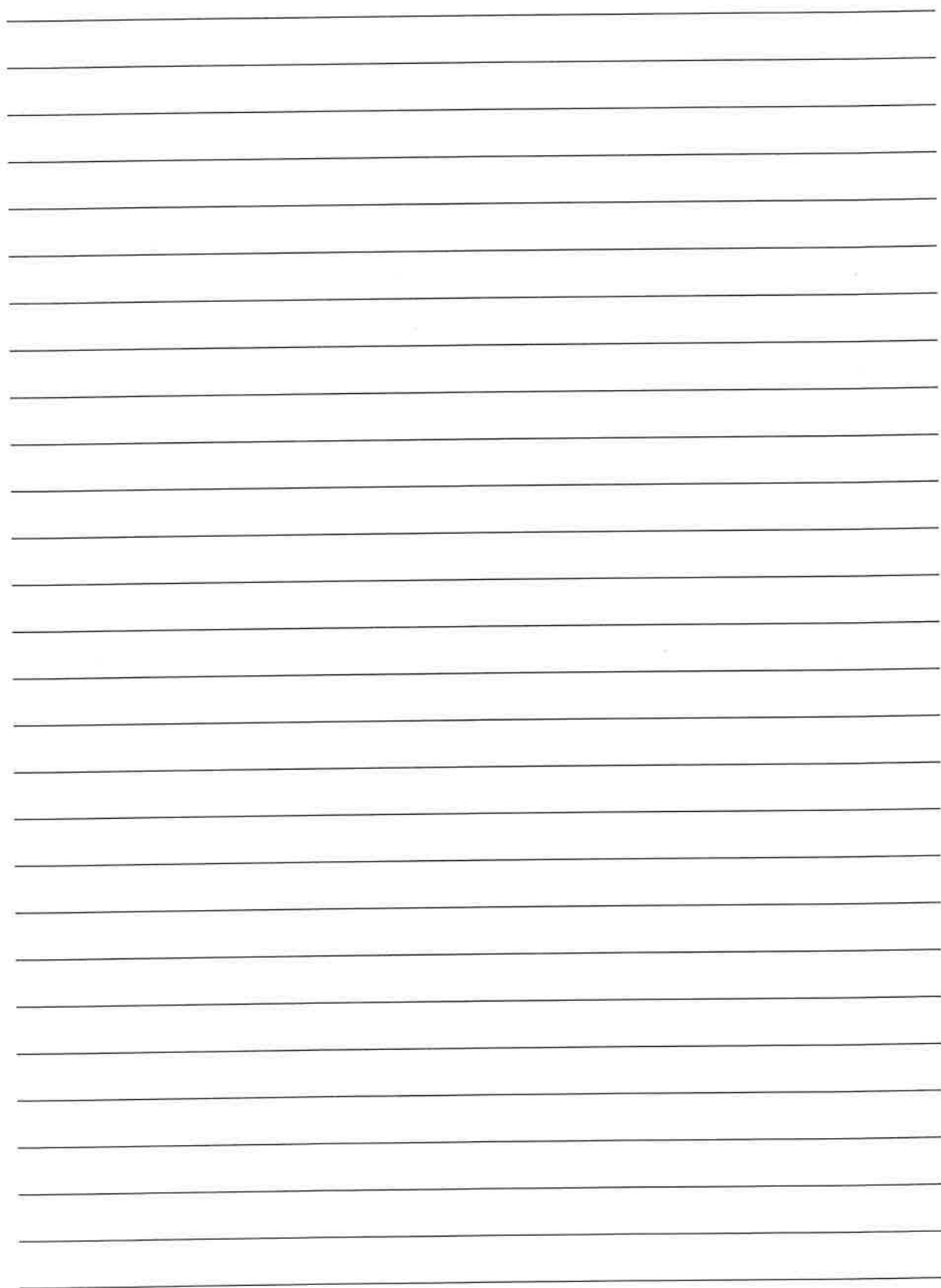
Select one of the following prompts. Prewrite, draft, revise, and edit your piece in the space below.

Expository: Compare and contrast two topics of your choice.

Persuasive: Who is your hero? Write a report explaining why this individual should be considered a hero.

Narrative: Write a story where the main character learns a valuable lesson about honesty.

Prewriting Space



Name: _____

Class: _____

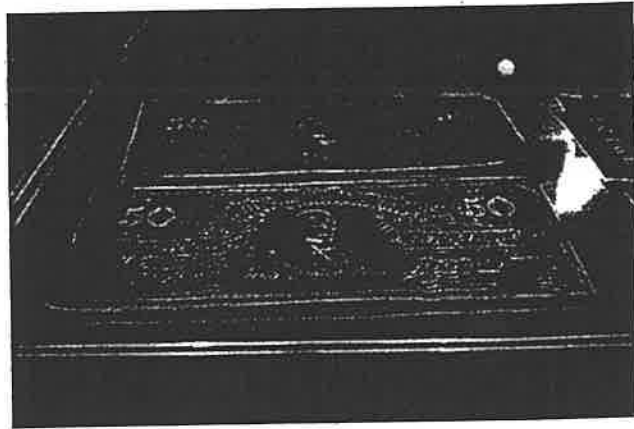
Money Tells a Story

By Carol Baldwin
2007

Slavery in the United States led to a political divide that eventually resulted in the American Civil War. In 1861, 11 Southern states seceded, or left the United States, to form the Confederate States of America. Confederate states wanted slavery to continue, while Northern states, known as the Union, wanted to end slavery. Though it lasted only four years, the Confederacy had its own capital, president, and money system. In this informational text, Carol Baldwin discusses the Confederate bill that John Jones found and his illustration of slavery. As you read, take notes on what the Confederate bill revealed about slavery in the South.

- [1] In 1996, John Jones made a startling¹ discovery. He had just scanned and enlarged a piece of paper money for a customer — a Confederate bank note. Suddenly, he was face to face with an image that shocked and amazed him: slaves happily picking cotton in their master's fields.

Jones grew up in South Carolina. He had heard painful stories of slavery from his great-grandmother. He had seen the scars on her back from the whippings she had received.



"Confederate Money" by jmv0586 is licensed under CC BY-NC 2.0.

The image on the money did not match the history of African American slaves that he'd heard all his life. "I had never seen that type of image on money before," he said.

The Search Begins

Jones wondered why slaves were shown on Confederate money. Why did they look so contented?² His curiosity aroused,³ he started doing research. Searching for and finding the answers to his questions changed his life. For two years, he searched flea markets, hobby shops, and the Internet. He found more than 120 different bills. The currency⁴ ranged from a \$1 bill to a rare \$500 bill. The bills represented money issued by banks in Southern states around the time of the Civil War.

- [5] Jones discovered that the bills had several things in common. They showed slaves working in jobs related to farming. Many of them portrayed⁵ the slaves as content, healthy, and smiling. None of the bills showed the hardships of slavery.

1. **Startle (verb):** to surprise
2. **Content (adjective):** in a state of peaceful happiness
3. **Arouse (verb):** to awaken a feeling or emotion
4. **the money that a country uses**
5. **Portray (verb):** to show something in a certain way in art or literature

Building the South

Jones enlarged the pictures on the bills. He saw slaves involved in every aspect of cotton farming. They were sowing⁶ seeds, hoeing⁷ in the fields, picking cotton, lifting cotton bales, delivering cotton to the market, and loading steamboats.

"Cotton and slaves were the foundations on which the economy of the South was built," Jones believes. Images of slaves on money may have promoted⁸ the slave labor system of the Southern economy.

Sharing the Story

Jones wanted to share what he had learned. "I wanted other people to see what I had seen," he says. He decided to make large paintings of the pictures on the money. He used his favorite artistic medium — acrylics⁹ on canvas. As he reproduced the images, he felt very connected to the slaves. "These were my ancestors,"¹⁰ he says with emotion. "They are my history."

After three years of intense work, Jones had painted more than 80 slavery scenes. He paired each painting with the currency on which the image appeared. "The Color of Money" — an exhibit of his work — has toured the country.

- [10] Jones sees himself as a visual storyteller. His paintings tell an important story about the South 150 years ago. He likes to repeat the saying "The story is on the money." In this case, the saying happens to be true.

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6. to plant seeds by scattering them on or in the earth
7. to use a tool to dig
8. **Promote (verb):** to support or actively encourage
9. a type of paint
10. **Ancestor (noun):** a person related to you who lived a long time ago

Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: Which sentence describes the central idea of the text?
 - A. When learning about history, art can be more moving than facts
 - B. Confederate bills showed that slaves weren't as unhappy as people believed.
 - C. The images on the bills help people today understand the horrors of slavery.
 - D. Slaves were pictured as happy on Confederate bills to encourage people to accept slavery.

2. PART B: Which detail from the text best supports the answer to Part A?
 - A. "He had heard painful stories of slavery from his great-grandmother. He had seen the scars on her back from the whippings she had received." (Paragraph 2)
 - B. "They showed slaves working in jobs related to farming. Many of them portrayed the slaves as content, healthy, and smiling." (Paragraph 5)
 - C. "Images of slaves on money may have promoted the slave labor system of the Southern economy." (Paragraph 7)
 - D. "Jones sees himself as a visual storyteller. His paintings tell an important story about the South 150 years ago." (Paragraph 10)

3. Why did John Jones further explore the images on the Confederate bills?
 - A. The bills challenged what he knew about slavery in the South.
 - B. He knew he could turn the bills into an art piece.
 - C. The bills supported his great-grandmother's stories about slavery.
 - D. He had a special interest in bills from different times and places.

4. How does the author of the text organize the information?
 - A. The author discusses why Jones was confused by the images on the bills, and then the likely reason why slaves were shown in a certain way on the money.
 - B. The author compares the previous art pieces that Jones has created with his art that has images from the Confederate bills.
 - C. The author discusses how slaves were depicted on Confederate bills, and then compares it to other currency in the United States.
 - D. The author discusses the life of slaves in the South, and then compares it to the images of slavery on the bills.

5. What motivated the Confederate States of America to depict slaves as happy and healthy on bills?

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. John Jones describes himself as a “visual storyteller”. Do you think visual storytelling is as powerful as written storytelling? Why or why not? Describe a time when you were a visual storyteller.
2. In the text, John Jones uses art to reveal what he discovered on the bills. How do you think this creates important change in the world? How else can art be used to tell a story and create change?
3. The Confederate money that John Jones discovered helped him better understand slavery in the South. Look at images on the bills that you use. What do you think the images reveal about America?

Name: _____

Class: _____

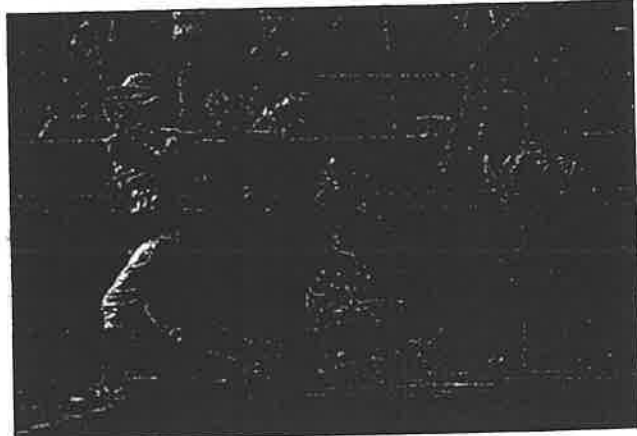
Baseball's Girl Umpire

By Glenna Marra
2017

In this informational text, Glenna Marra tells the story of Amanda Clement, the first woman who was paid to umpire a baseball game. As you read, take notes on how Amanda was treated as a female umpire.

- [1] Twelve-year-old Amanda Clement raced to the ballpark across the street from her house in Hudson, South Dakota. She couldn't wait to join her brother, Hank, and the boys for a game of baseball.

Would they let her play? She could throw, run, and bat as well as any of them, but they let her play only when they needed her. She would probably have to umpire again. At least she'd be part of the game. Amanda knew all the rules, and the boys could count on her.



"High School Girls JV Softball" by mark6mauno is licensed under CC BY 2.0.

Over the next few years, local teams began asking her to call their games, too. One summer day in 1904, Amanda and her mother traveled to Hawarden, Iowa, to watch Hank pitch in the championship semiprofessional game. Two local teams were scheduled to play a game before the semipro teams. Amanda agreed to be the umpire. Little did she know she'd be making baseball history that day.

As Amanda finished the morning game, she saw two men walking toward her. To her surprise, they were the managers of the semipro teams. They were impressed¹ with her umpiring and wanted her to call the afternoon championship game. They would even pay her.

Making History

- [5] The large crowd watched in disbelief² as the 5-foot-10-inch 16-year-old took her position behind the pitcher's mound, where umpires stood. She was about to become the first female paid to umpire a baseball game.

"Strike!" "Ball!" "Safe!" "Out!" Amanda was calm and confident and made her calls fairly. She was "right on the spot," watching closely as each play was made.

News of Amanda's expert umpiring spread. Newspaper reporters said that she "knows her baseball book," is "the possessor of an eagle eye," and "is absolutely fair." Managers began to ask for her first when they needed an umpire.

1. **Impress (verb):** to make someone feel respect
2. **Disbelief (noun):** difficulty accepting something as real

Amanda was popular with the fans, too. She “makes a hit with the crowd when she throws up her right arm and shouts, ‘Stee-rike,’” wrote a reporter. At one game, the spectators³ weren’t happy with the umpire and insisted on replacing him with Amanda. They decided to collect the money to pay her and hired a car to take her to the game.

Amanda became a big attraction. Posters that said “The Only Lady Umpire in the World” drew large crowds to games. She made “an inspiring sight on the baseball diamond.”⁴ Her uniform was a white blouse, blue ankle-length skirt, cap, and black necktie. Later she wore a shirt with “UMPS” on the front.

- [10] In those early days of baseball, crowds threw bottles at male umpires and shouted insults like “Kill the umpire!” But Amanda usually received polite comments such as “Beg your pardon, Miss Umpire, but wasn’t that one a bit high?” And if a player was unruly,⁵ she wasn’t afraid to stand up to him or take action. Once, she threw out six players in a game.

A Tough Job

Being an umpire was hard work. Amanda made all the calls for the entire game. She couldn’t take a break and go to the dugout⁶ as the players did.

And she worked in all kinds of weather. She took special pride in umpiring a game that lasted 17 innings⁷ on a day when the heat reached 100 degrees. The game ended in a tie at sundown.

Umpiring suited⁸ Amanda. “It isn’t as easy as it looks, but for all that, there is a good deal of enjoyment in the work. Of course the players kick sometimes, just awfully, but not when I’m umpiring... You’ve got to have confidence in your ability or you won’t do well at anything.”

Amanda’s career as an umpire lasted six years. She called about 50 games each summer and was paid a top fee for the time, \$15 to \$25 a game. With her earnings, Amanda paid for college, where she studied physical education.

- [15] Many years later, other women followed in Amanda’s footsteps as umpires. Today, women are referees in professional soccer, basketball, football, and tennis.

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3. someone who watches a game or event
4. a baseball field
5. **Unruly (adjective):** difficult to control
6. a low shelter by the field where players and coaches sit
7. a division of a game during which each team has a chance to score until three outs are made against them
8. **Suited (adjective):** right for a person

Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: Which sentence describes the central idea of the text?
 - A. People usually assumed Amanda's calls were wrong because of her gender.
 - B. Amanda had to work harder than the boys to become an umpire.
 - C. Women often make better umpires than men in baseball because their calls are more fair.
 - D. Amanda's success as an umpire challenged people's views on the role of women in baseball.

2. PART B: Which detail from the text best supports the answer to Part A?
 - A. "Would they let her play? She could throw, run, and bat as well as any of them, but they let her play only when they needed her." (Paragraph 2)
 - B. "In those early days of baseball, crowds threw bottles at male umpires and shouted insults like 'Kill the umpire!'" (Paragraph 10)
 - C. "Amanda's career as an umpire lasted six years. She called about 50 games each summer and was paid a top fee for the time, \$15 to \$25 a game." (Paragraph 14)
 - D. "Today, women are referees in professional soccer, basketball, football, and tennis." (Paragraph 15)

3. PART A: What is the meaning of "eagle eye" in paragraph 7?
 - A. good vision
 - B. pretty eyes
 - C. limited vision
 - D. an angry expression

4. PART B: Which quote from the text best supports the answer to Part A?
 - A. "Amanda was calm and confident and made her calls fairly." (Paragraph 6)
 - B. "watching closely as each play was made." (Paragraph 6)
 - C. "Newspaper reporters said that she 'knows her baseball book'" (Paragraph 7)
 - D. "Managers began to ask for her first when they needed an umpire." (Paragraph 7)

5. How was Amanda treated as an umpire in comparison to male umpires?

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. Amanda was the first woman ever paid to umpire a baseball game. Why do you think women before her didn't umpire baseball games? How often do you see female sports referees today?
2. In the text, the author describes some of the ways that Amanda was treated better than male umpires. What challenges do you think she likely encountered as a female umpire that male umpires did not? Describe a time when you were treated differently because of your gender.

Name: _____ Class: _____

Arriving at Emerald City

From The Wonderful Wizard of Oz

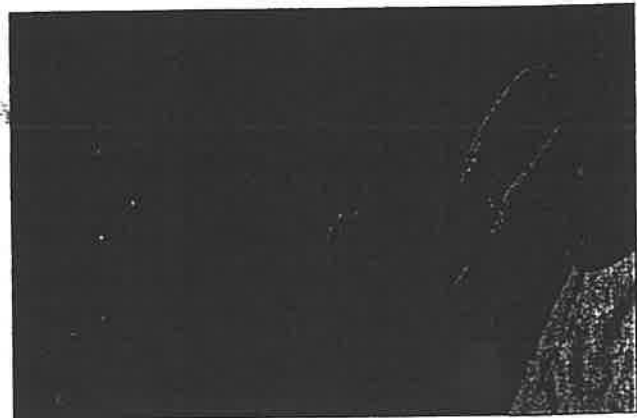
By L. Frank Baum
1900

Lyman Frank Baum (1856-1919), also known as L. Frank Baum, was an American author, best known for his children's books. Baum is the author of *The Wonderful Wizard of Oz* and its sequels. He wrote 14 novels in the Oz series. In this excerpt from *The Wonderful Wizard of Oz*, Dorothy and her friends arrive at the Emerald City. As you read, take notes on how the Great Oz is described to Dorothy and her friends.

- [1] The next morning, as soon as the sun was up, they started on their way, and soon saw a beautiful green glow in the sky just before them.

"That must be the Emerald City," said Dorothy.

As they walked on, the green glow became brighter and brighter, and it seemed that at last they were nearing the end of their travels. Yet it was afternoon before they came to the great wall that surrounded the City. It was high and thick and of a bright green color.



"Untitled" by Katarzyna Kos is licensed under CC0.

In front of them, and at the end of the road of yellow brick, was a big gate, all studded with emeralds¹ that glittered so in the sun that even the painted eyes of the Scarecrow were dazzled² by their brilliancy.

- [5] There was a bell beside the gate, and Dorothy pushed the button and heard a silvery tinkle sound within. Then the big gate swung slowly open, and they all passed through and found themselves in a high-arched room, the walls of which glistened with countless emeralds.

Before them stood a little man about the same size as the Munchkins.³ He was clothed all in green, from his head to his feet, and even his skin was of a greenish tint. At his side was a large green box.

When he saw Dorothy and her companions, the man asked, "What do you wish in the Emerald City?"

"We came here to see the Great Oz," said Dorothy.

The man was so surprised at this answer that he sat down to think it over.

1. decorated with green gems
2. **Dazzled (verb):** to amaze someone
3. In *The Wonderful Wizard of Oz*, Munchkins are small childlike creatures.

- [10] "It has been many years since anyone asked me to see Oz," he said, shaking his head in perplexity. "He is powerful and terrible, and if you come on an idle⁴ or foolish errand to bother the wise reflections⁵ of the Great Wizard, he might be angry and destroy you all in an instant."

"But it is not a foolish errand, nor an idle one," replied the Scarecrow. "It is important. And we have been told that Oz is a good Wizard."

"So he is," said the green man, "and he rules the Emerald City wisely and well. But to those who are not honest, or who approach him from curiosity, he is most terrible, and few have ever dared to ask to see his face. I am the Guardian of the Gates, and since you demand to see the Great Oz, I must take you to his Palace. But first you must put on the spectacles.⁶

"Why?" asked Dorothy.

"Because if you did not wear spectacles the brightness and glory of the Emerald City would blind you. Even those who live in the City must wear spectacles night and day. They are all locked on, for Oz so ordered it when the City was first built, and I have the only key that will unlock them.

- [15] He opened the big box, and Dorothy saw that it was filled with spectacles of every size and shape. All of them had green glasses in them. The Guardian of the Gates found a pair that would just fit Dorothy and put them over her eyes. There were two golden bands fastened to them that passed around the back of her head, where they were locked together by a little key that was at the end of a chain the Guardian of the Gates wore around his neck. When they were on, Dorothy could not take them off had she wished, but of course she did not wish to be blinded by the glare of the Emerald City, so she said nothing.

Then the green man fitted spectacles for the Scarecrow and the Tin Woodman and the Lion, and even on little Toto, and all were locked fast with the key.

Then the Guardian of the Gates put on his own glasses and told them he was ready to show them to the Palace. Taking a big golden key from a peg on the wall, he opened another gate, and they all followed him through the portal into the streets of the Emerald City.

"Arriving at Emerald City" from The Wonderful Wizard of Oz by L. Frank Baum (1900) is in the public domain.

4. pointless
5. thoughts or ideas
6. glasses

Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. In the passage "Arriving at the Emerald City," what does the word "perplexity" mean as it is used in paragraph 10?
 - A. forgetfulness
 - B. uncertainty
 - C. disagreement
 - D. anxiety

2. PART A: Which statement best describes what Dorothy thinks of the Emerald City as she first arrives?
 - A. The gates and walls of the Emerald City are radiant.
 - B. The streets of the Emerald City are clean and simple.
 - C. The people of the Emerald City are festive and excited.
 - D. The sights and sounds of the Emerald City are terrifying.

3. PART B: Which paragraph in the passage best supports the answer to Part A?
 - A. Paragraph 4
 - B. Paragraph 6
 - C. Paragraph 10
 - D. Paragraph 12

4. PART A: How does the Dorothy feel about the green glasses?
 - A. She worries that they will not fit her.
 - B. She is fearful she will not be able to take them off.
 - C. She is puzzled about why they need to wear them.
 - D. She wants to see what city looks like without them.

5. PART B: Which paragraph supports the answer to Part A?
 - A. Paragraph 12
 - B. Paragraph 13
 - C. Paragraph 14
 - D. Paragraph 15

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. How does fear push Dorothy to following the little man's instructions in the text? Have you ever let fear control your actions and acted in a certain way because you were afraid?

2. Do you think Oz's power has made him cruel? Why or why not? In your experience, what makes people mean? Cite examples from the text, your own experience, and other literature, art, or history in your answer.

Name: _____

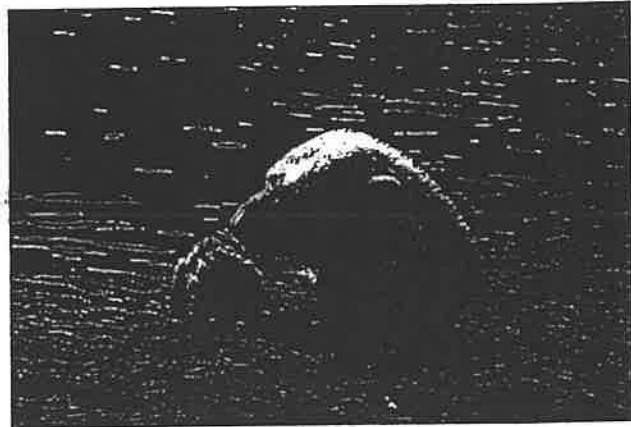
Class: _____

At the Zoo

By William Makepeace Thackeray
1899

William Makepeace Thackeray (1811-1863) was an English writer who was best known for his stories about life in England. In this poem, a speaker describes animals at the zoo. As you read, take notes on words and phrases that are repeated throughout the poem.

- [1] First I saw the white bear, then I saw the black;
Then I saw the camel with a hump upon his back;
Then I saw the grey wolf, with mutton¹ in his
maw;²
Then I saw the wombat waddle³ in the straw;
[5] Then I saw the elephant a-waving of his trunk;
Then I saw the monkeys — mercy, how
unpleasantly they smelt!⁴



"Polar Bear 4" by John Vetterli is licensed under CC BY-NC-ND 2.0.

"At the Zoo" by William Makepeace Thackeray is in the public domain.

1. the meat that comes from sheep
2. the mouth of an animal
3. **Waddle (verb):** to walk with short steps in a clumsy swaying motion
4. an old term for "smelled"

Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: Which of the following is a theme of the poem?
 - A. The zoo is a dangerous place.
 - B. There are too many animals at the zoo.
 - C. Things that smell bad should be kept in the wild.
 - D. The variety of animals at the zoo is amazing.

2. PART B: Which detail from the poem best supports the answer to Part A?
 - A. "First I saw the white bear, then I saw the black" (Line 1)
 - B. "with mutton in his maw" (Line 3)
 - C. "wombat waddle in the straw" (Line 4)
 - D. "mercy, how unpleasantly they smelt!" (Line 6)

3. Who is speaking in the poem?
 - A. an animal at the zoo
 - B. someone visiting the zoo
 - C. a doctor for the animals
 - D. the animals' feeder

4. What does the speaker of the poem think about the animals at the zoo?

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

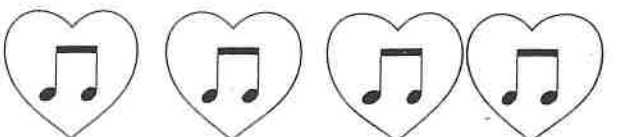
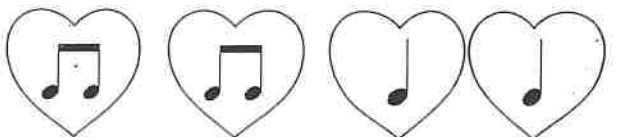
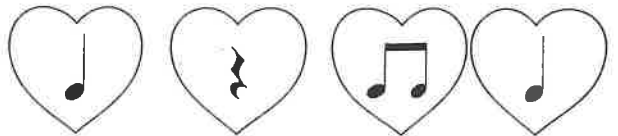
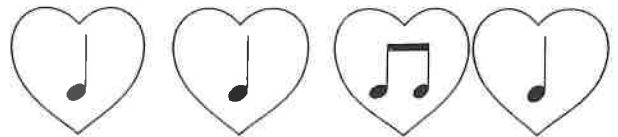
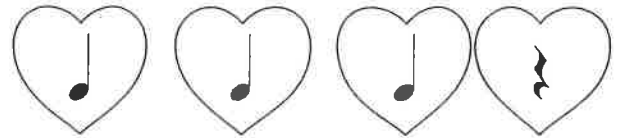
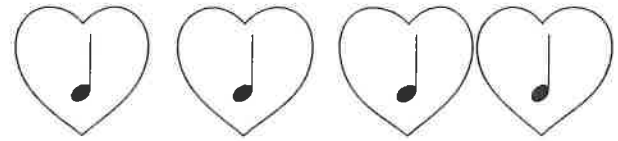
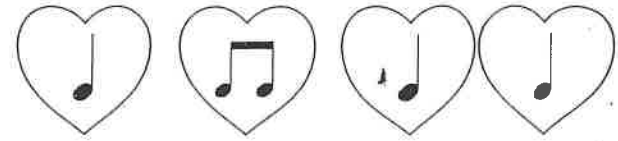
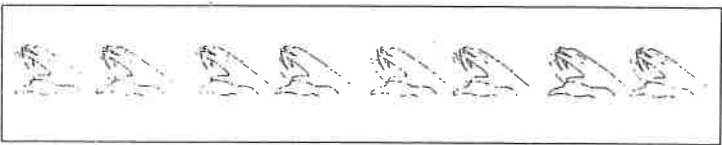
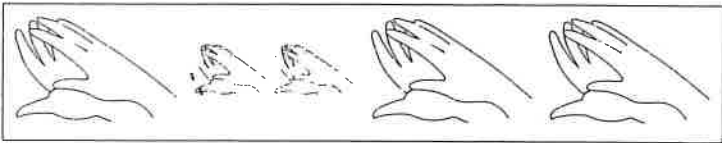
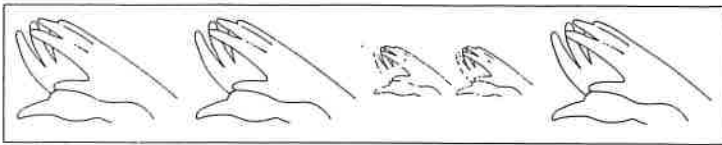
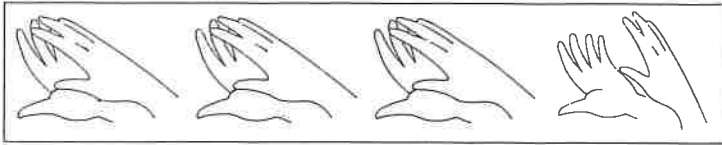
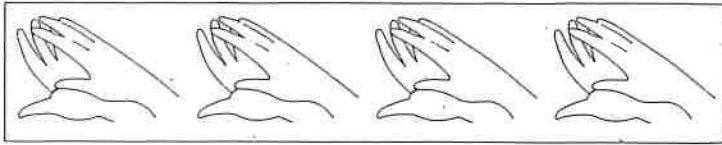
1. Describe a time when you visited the zoo. What animal did you see and what did you find interesting about them?
2. Do you think zoos control animals or attempt to help them? Describe a time you visited the zoo and how the animals were treated.

Name _____

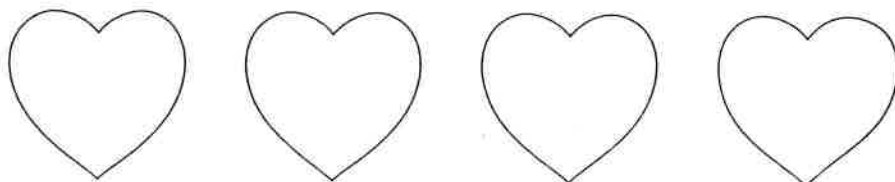
CLAPPING HANDS MATCH-UP

Teacher R/W MUSIC

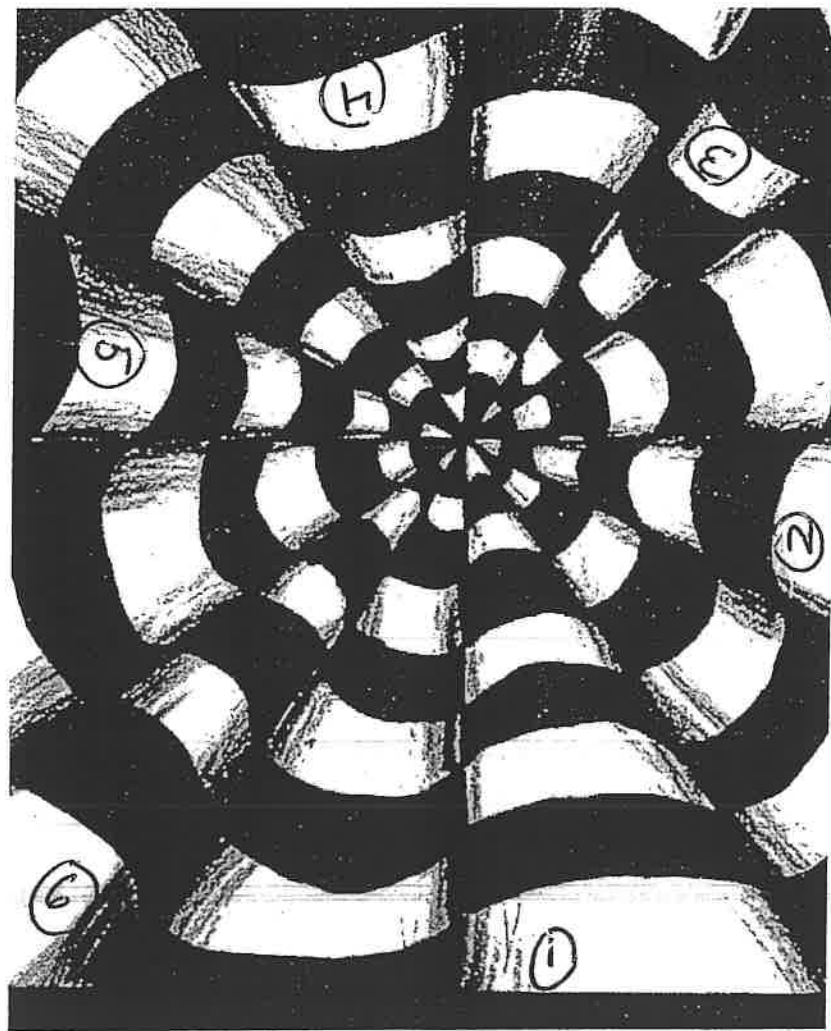
DIRECTIONS: Clap each row of hands. Draw a line from each row of clapping hands to the matching row of music.



SHOW WHAT YOU KNOW: Circle the row of clapping hands that shows "B I NG O." Draw the music notes below.



If we miss more than one Tuesday, please check
Grade Classroom - code: ksdu 7n i



OP Art (optical illusion)

- 1) draw 6 cones, points all touching in the center. Number them (1-6) so you don't get confused.
- 2) Shade them to create form.
- 3) Draw, then color or paint curved stripes on each cone from bottom to point. Turn paper as you work.
- 4) Repeat with remaining "cones"!



