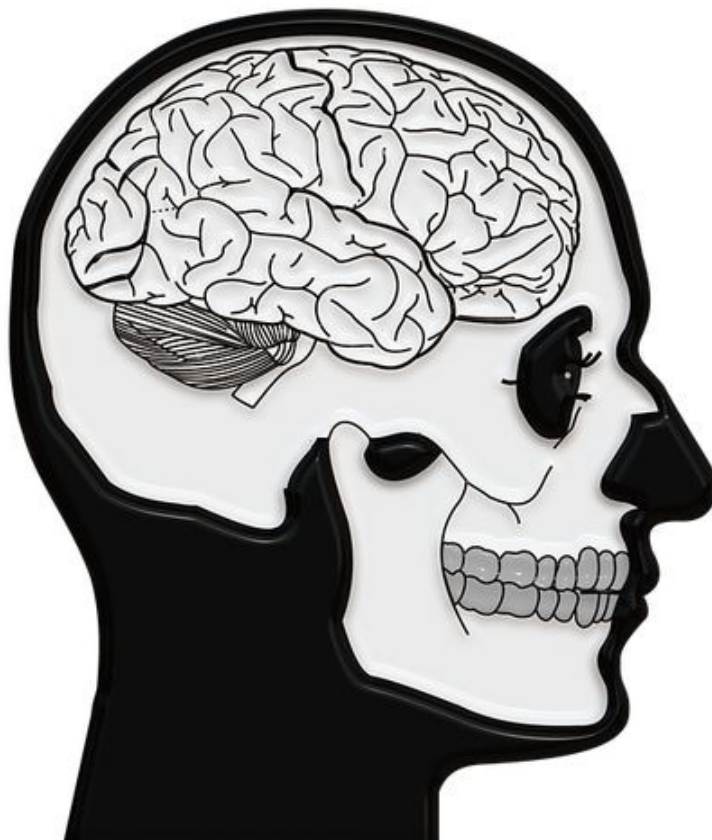


5th Grade

May 18 - May 22



Focus: Understanding How the Brain Works



Riddle: What's the size of a grapefruit, weighs 3 pounds, and contains 10 to 50 billion cells, each of which sends 50,000 messages per minute? Answer: Read on...

If you think the answer is a computer, you're close. Actually, it's the computer you carry around with you every day: your brain. Experts see many similarities between the "command center" in your head and the digital box you may have in your home. But nothing can beat the brain for its blockbuster powers. It may be only the size of a grapefruit and look like a wrinkled blob of pinkish-gray jelly. But the brain has amazing abilities. If you give it proper care, it can often achieve great things.

What's on Your Mind?

The brain is constantly remaking itself. For instance, when the brain analyzes new information, it compares it with what has been learned. The process forms new connections or new pathways in the brain.

Memory and Learning. There are about 500 trillion possible connections among the neurons of the brain! Two processes are responsible for using these connections: memory and learning. For example, when you learned the multiplication tables, you created certain connections in your nervous system. The more you practiced multiplying, the faster and smoother those connections became. The *hippocampus* (part of the brain stem) also helps you learn or remember. It changes short-term memories—memories of things that happened a couple minutes ago—into long-term memories that are kept for years. That's why you may still remember the day you learned to ride a bicycle.

Emotions. The brain also files away learned emotions, such as anger and pleasure. Parts of the temporal and frontal lobes help us recognize danger and experience fear. When this happens, the brain sends out a "fight or flight" message to the body, and stress hormones start preparing you for action.

Pain. The brain takes charge of pain, too, but not in just one area. That's because pain is a complicated sensation. It depends on a combination of memories, attitudes, and emotions. And these important files are located in different parts of the brain.

Scientists don't completely understand how the brain handles pain signals. They do know that the "ouch" effect varies from person to person. In other words, your reaction to pain may differ from that of your best friend. This is true even though your bodies release the same pain-relieving chemicals called *endorphins* (en-DOR-fins). This may partially explain why some athletes continue to perform even though they sprain an ankle or break a bone.

Photos and Faces

Even after you're fully grown, your brain will continue remaking itself. Scientists know the brain is a work-in-progress.

They know this thanks to high-tech imaging techniques, such as magnetic resonance imagery (MRI) and positron emission tomography (PET). The MRI snaps detailed pictures of the brain. The PET scan reflects brain activity.

Recently, experts at the National Institute of Mental Health discovered that the age of 11 to 12 is a good time to learn loads of new skills in areas such as language, math, and music.

Being able to handle math doesn't mean the maturing brain can handle everything. The brain has to "prune" or throw out certain useless connections. So it's not always able to interpret situations correctly and make "good calls." And the pruning process is not complete until early adulthood. That means teenagers and younger kids may have some problems making decisions and coping with certain emotions, such as anger.

Even reading facial expressions can be hard for many teens. A study of Massachusetts teens showed this. The teens could not tell whether someone's face showed anger or fear. And recognizing the difference is crucial information when you're trying to react properly to someone.

It takes time and lots of work for young brains to mature. Some of that work is accomplished during sleep. The

brain eliminates certain information stored in its short-term memory. Without enough sleep, the brain can't do this job. That's why younger kids and teens should not shortchange themselves on sleep.

Problems and Progress

As with every other part of the body, the brain can develop problems. These include tumors, strokes, mental retardation, headaches, and Alzheimer's disease.

Fortunately, science is finding ways to help more people prevent or recover from brain diseases. Experts now know people can help to create and recreate the shape of their brain. A recent study showed that kids with reading problems can often retrain their brains through special word games. And people who suffer strokes can often relearn to walk. Other parts of their brain can take over the functions the damaged parts used to perform. Different physical and surgical therapies help to make this possible.

Take "Brandi," a young girl with severe epilepsy (brain seizures). Doctors removed a large part of Brandi's brain to reduce the number of seizures. And they did this without Brandi losing important abilities. Her brain created other nerve paths as she relearned how to eat, speak, and move like other kids.

Brain Boosters

To make the best use of your brain cells, here are some tips on taking care of your command center:

- **Eat a healthy, well-balanced diet** based on the Food Guide Pyramid. A recent study of English girls found that dieting lowered their IQs. The teens did not get enough iron-rich foods, such as nuts, lean meat, and leafy green vegetables.
- **Exercise regularly.** You need to refresh and reenergize your brain with enough oxygen. Swim, bike, play team sports, or just go for a walk in your neighborhood.
- **Sleep 8 to 10 hours every night.** Your brain needs this downtime to carry out its tasks.
- **Do not use drugs or alcohol.** New studies say that kids and teens who abuse alcohol or use other drugs may damage their brains. This damage can lead to memory loss when they're older.
- **Drink fewer caffeine-containing beverages** such as colas. They can cause you to feel anxious and irritable. They are also addictive.
- **Listen to music you enjoy.** It relaxes the nerves. Now experts say it also may increase your math abilities. Researchers recently found that second-graders who received piano lessons did better on a math test than kids who didn't get music lessons.
- **Keep learning new things.** Reading a lot today can improve your memory as you grow older. Find interesting hobbies, join school and community clubs, and reach out to people and places.
- **Work at staying emotionally healthy.** Depression, anger, and anxiety can harm your brain. So can the stress hormones your body releases.
- **Protect yourself from head injuries.** Wear a helmet that fits properly during sports activities such as rollerblading and bicycling. (The helmet should be approved by a national agency such as the American

National Standards Institute.) Also, wear your seat belt in the car. Car crashes account for 44 percent of all brain injuries, says the Brain Injury Association. Dive only in the deep ends of pools. And stay away from guns.

- **Make time for relaxation**Close your eyes and do nothing for a few minutes each day.
- **Avoid pesticides and other harsh chemicals**Wash fruits and veggies well before eating them, or buy organic foods. Take precautions when getting rid of dangerous chemicals such as household cleaners. Poisonous fumes can harm the brain.
- **Cut back on TV**so that your brain won't become a "couch potato."
- **Learn how to prevent brain injuries**Suggest to your principal that your school become a HeadSmart School. You and your classmates will get a one-day program on how to prevent brain injuries. For more information, check out www.biausa.org, or write to The Brain Injury Association, 105 North Alfred Street, Alexandria, VA 22314. You may also call the Brain Injury Association's Family Helpline at 1-800-444-6443.

The brain is constantly developing and maturing. Your brain will continue to steer you in the right direction if you respect it and its ability to grow and change.

Name: _____ **Date:** _____

1. According to the text, how many possible connections are there among the neurons of the brain?

- A. about 500 million
- B. about 500 trillion
- C. about 5 billion
- D. about 50 trillion

2. What is one tip the text gives for taking care of the brain?

- A. Protect yourself from head injuries.
- B. Sleep three to five hours every night.
- C. Drink more caffeinated soda.
- D. Watch more TV.

3. Read these paragraphs from the text.

Even after you're fully grown, your brain will continue remaking itself. Scientists know the brain is a work-in-progress.

They know this thanks to high-tech imaging techniques, such as magnetic resonance imagery (MRI) and positron emission tomography (PET). The MRI snaps detailed pictures of the brain. The PET scan reflects brain activity.

Based on this evidence, what can you conclude about the way scientists study the brain?

- A. The way that the brain remakes itself can be studied through high-tech pictures and scans.
- B. The only way that scientists study brains is by using high-tech imaging techniques, since no other techniques are useful.
- C. The most important piece of high-tech imaging that scientists use is the MRI because it is more accurate than the PET.
- D. High-tech imaging techniques only help scientists see if there is any physical damage to the brain.

4. Based on the text, what may happen if a person has damaged the temporal and frontal lobes of his or her brain?

- A. That person may have trouble feeling pain.
- B. That person may have trouble remembering other people's names.
- C. That person may have trouble recognizing danger or experiencing fear.
- D. That person may have trouble learning the multiplication tables.

5. What is this text mostly about?

- A. tips for protecting your brain while doing outdoor activities
- B. understanding how the brain works and how to take care of it
- C. understanding different types of brain disorders
- D. how the brain learns new things and remembers them

6. Read this sentence from the text.

It takes time and lots of work for young brains to **mature**.

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

- A. recover
- B. shrink
- C. develop
- D. create

7. Choose the word that best completes the sentence.

Younger kids and teens need lots of sleep at night _____ that their brains can mature.

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

8. What does the text recommend to include in a diet to keep the brain healthy?

9. Based on the text, what would be a good age at which to learn how to play a musical instrument? Use evidence from the text to support your answer.

Aztecs, Incas, and Mayans - The Mayans

by ReadWorks



Mayan calendar

The Mayan civilization was the oldest of the three largest civilizations in South and Central America. The empire lasted from about 300 A.D. to 900 A.D.

While Europeans were in the midst of the Dark Ages, Mayans never stopped learning. They tried out new farming methods. They rotated their crops so that the soil would last longer. They only farmed crops on the same field once every three years or so. Turkey and ducks were tamed and kept on Mayan farms. That way, Mayans wouldn't have to worry about hunting or trapping food.

The Mayans also learned to make paper out of the bark of the fig tree. They had an advanced writing system. In their system, word-pictures stood for different syllables and ideas. Mayan writing did much more than just record dates and information. The writing told stories about life. They also studied the stars and had very advanced calendars. The Mayan farming calendar was

based on the movement of the sun and the stars. It had 365 days, just like ours! The Mayans were also good mathematicians.

The Mayan civilization was very organized. Almost every city had a king, and each person had his or her role. For example, an ancient Mayan man could be a stonecutter or noble. Men were born into their position in life. If a man's father was a stonecutter, the man would cut stone, too. Nobles lived in beautiful houses. Their architecture was splendid. White limestone covered the walls and the floors. The inside walls were painted with murals.

Most Mayans were peasant farmers. They had to give more than half of their crops to the nobles and their king. They farmed corn and beans. Mayans also grew cacao, the basis of chocolate. The first hot chocolate actually came from the Mayans! They made their hot chocolate by mixing water, cacao (same as cocoa), and chili peppers. The Spanish people who later conquered the Yucatan peninsula learned of chocolate from the descendants of the Maya. The Spanish took chocolate back to Europe. In the Mayan empire, chocolate wasn't just a food or drink. Cacao beans were used as currency, or money. People would trade their goods for cacao beans!

No one knows exactly why the Mayan civilization came to an end. By the time Europeans arrived in the New World, the civilization had already crumbled. One idea is that the kings started fighting against each other until all of the peace and wealth ended. Another thought is that the Mayan farms could no longer make enough food for everyone. In a time of extreme drought, peasants might have refused to give the little food that they had to the nobles. Whatever happened, the Mayan empire was long past its peak by the time Europeans arrived. In its height, the empire was active and full of the spirit of learning that many countries in Europe experienced hundreds of years later.

Name: _____ **Date:** _____

1. According to the text, what was the Mayan civilization?

- A. the oldest of the three largest civilizations in the New World
- B. the oldest of the three largest civilizations encountered by the Spanish
- C. the oldest of the three largest civilizations in South and Central America
- D. the oldest of the three largest civilizations in Europe

2. What does the text mostly describe?

- A. the arts and festivals of the Mayans
- B. why the Mayan civilization ended
- C. how the Mayans assigned jobs
- D. what the Mayans did and accomplished

3. Read these sentences from the text.

No one knows exactly why the Mayan civilization came to an end. By the time Europeans arrived in the New World, the civilization had already crumbled. One idea is that the kings started fighting against each other until all of the peace and wealth ended. Another thought is that the Mayan farms could no longer make enough food for everyone.

Based on this information, what can you conclude about the end of the Mayan civilization?

- A. There are many different things that could have caused the Mayan civilization to end.
- B. It is more likely that the Mayan kings were to blame for there not being enough food.
- C. We will never know what happened to the Mayan civilization because there's nothing else to learn.
- D. Another reason that the Mayan civilization may have ended is a natural disaster.

4. What part of Mayan life probably had the biggest impact on building their civilization?

- A. farming and raising animals
- B. making hot chocolate
- C. writing with word-pictures
- D. painting murals

5. What is the main idea of this text?

- A. the Mayans lived exactly like Europeans did at the time
- B. the Mayans were an advanced civilization for their time
- C. the Mayans were unaware of modern science and technology
- D. the Mayans disappeared and left no history behind

6. Read these sentences from the text.

Nobles lived in beautiful houses. Their architecture was **splendid** .

Based on the text, what does the word **splendid** mean?

- A. wonderful, magnificent
- B. expensive, costly
- C. simple, basic
- D. terrible, ugly

7. Choose the answer that best completes the sentence.

Mayans often tried new farming methods, _____ rotating crops, in order to preserve their soil and make it fertile longer.

- A. however
- B. such as
- C. as long as
- D. finally

8. According to the text, what did the Mayans use as a guide to create their advanced farming calendar?

9. Explain how farming was important in two Mayan accomplishments. Use evidence from the text to support your answer.

Stargazing

by ReadWorks



After the sun sets, take a look at the night sky. On a clear night, you'll be able to see stars scattered across the black expanse that we call our universe. If you're lucky, you might be able to spot some stars that look bigger than others—they shine brighter and attract our attention more than their smaller neighbors do. You might wonder: why are some stars brighter than others?

After much observation, scientists discovered the way stars appear to us depends on more than their actual size—it's also about how far they are from us. Therefore, the farther a star is from Earth, the smaller it will appear to us. The closer it is, the bigger it will look.

Try to think of the biggest star you've seen in the sky. An easy one, right? The sun! That's because the sun is closest to us compared to all other stars, located at just a short 150 million kilometers from Earth.

The next one? That's a tougher question. Many people answer Alpha Centauri, but some don't know that it's actually a cluster of three stars—Alpha Centauri A, Alpha Centauri B, and Proxima Centauri. Proxima Centauri is 4.24 light-years away and closest to our sun. A light-year is the distance that light travels in one year. We use this measurement because light is the only thing in the universe that maintains a constant speed. However, even though Proxima Centauri is the

closest star to the earth after the sun, you can only see it with a very powerful telescope. That doesn't make sense-didn't we just say that closer stars appear larger and more visible?

Well, Proxima Centauri is what we call a red dwarf. Red dwarf stars are very small, typically having less than half the mass of the sun. That means they generate less energy than the sun. Most stars burn hydrogen for fuel. Similar to the way a car uses gas for power, a star uses hydrogen for energy. Red dwarfs burn hydrogen very slowly, which means they generate little light compared to stars like the sun.

Proxima Centauri is the closest star after the sun, but that doesn't necessarily mean it's what we consider close in our minds. To completely understand how far away this star is, let's think about traveling 4.24 light-years away. NASA has built one of the fastest spacecrafts in existence, called New Horizons, which travels at about 60,000 kilometers per hour. Even at this speed, it would take the spacecraft 78,000 years to reach Proxima Centauri from Earth.

Sadly, the first few closest stars are not visible to the naked eye at night, which means we can't see them while we're stargazing from our homes or backyards. The closest star we can see at night is called Sirius, or the Dog Star. While Proxima Centauri is only 4.24 light-years away, Sirius is 8.6 light-years away. However, since Sirius is so large (almost twice the size of the sun), we can see it in the night sky.

So go outside and see what you can find up there!

Name: _____ Date: _____

1. What affects how big a star appears to be?
 - A. a star's distance from Earth
 - B. the speed of NASA's fastest spacecraft
 - C. what a car uses for power
 - D. the name of the star

2. A large star shining brightly in the sky is an effect. What could be a cause?
 - A. The star is burning hydrogen very slowly.
 - B. The star is far away from Earth.
 - C. The star is close to Earth.
 - D. The star is less than half as big as Proxima Centauri.

3. The sun is closer to Earth than any other star.

What evidence from the passage supports this statement?

- A. A light year is the distance that light travels in one year.
 - B. Alpha Centauri is a cluster of three stars.
 - C. Sirius and the sun can be seen without a telescope.
 - D. The sun appears bigger than any other star.

4. Why do you need a telescope to see Proxima Centauri?
 - A. Proxima Centuari burns hydrogen for energy.
 - B. Proxima Centauri is too small to be seen without a telescope.
 - C. Proxima Centauri is too close to Earth to be seen without a telescope.
 - D. Proxima Centauri is too close to the sun to be seen without a telescope.

5. What is this passage mainly about?
 - A. why Sirius is known as the Dog Star
 - B. why some stars appear larger than others in the sky
 - C. the difference between a light year and a year on Earth
 - D. the New Horizons spacecraft built by NASA

6. Read the following sentence: "Sadly, the first few closest stars are not visible to **the naked eye** at night, which means we can't see them while we're stargazing from our homes or backyards."

What does the phrase **the naked eye** mean in the sentence above?

- A. what people see when they shut their eyes
- B. an eye that cannot see as well as it used to
- C. a patch worn over an eye to protect it from very bright light
- D. eyesight without the help of glasses, telescopes, or other items

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

Proxima Centauri is a red dwarf star; _____, it does not generate as much light as the sun.

- A. most importantly
- B. before
- C. including
- D. consequently

8. Why can Sirius be seen in the night sky?

9. Which would probably generate more light: a star that burns hydrogen quickly or a star that burns hydrogen slowly?

10. Imagine that you are looking at two stars in the night sky. The second star appears brighter than the first star. Name at least two reasons from the passage that the second star might appear brighter.

Unit 5 Writing Prompt

Research Paper

Week 1 and 2

Week 1 and 2: Pick a topic and draft your Research Paper

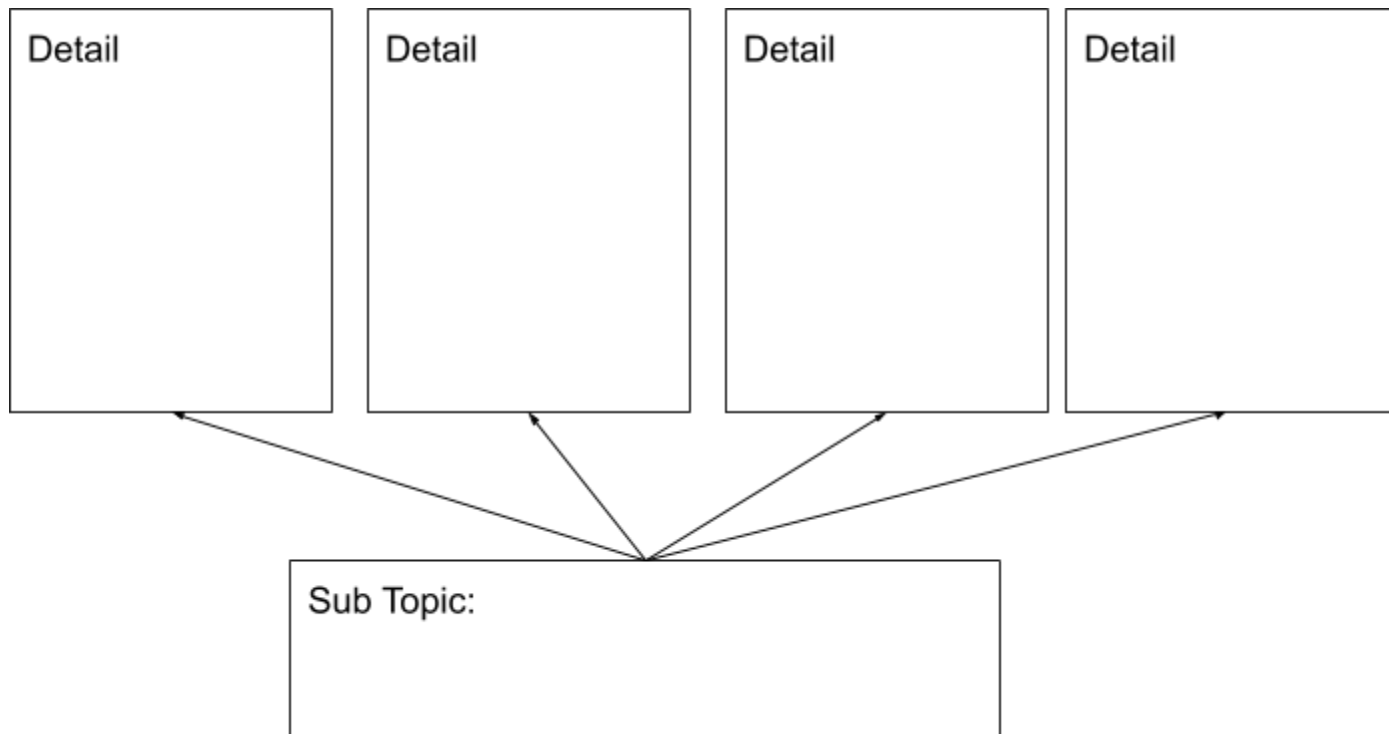
Write about one science or technology topic. Write a research report telling about this topic.

To help come up with an idea, ask yourself what you are interested in and what do you want to learn about this topic?

Examples of Scientific or Technological Topics you could write about:

- The discovery of the planets
- The invention of the world wide web
- How video games are developed
- Mammals of the sea

Week 1 - Use a graphic organizer like the one below to record some facts about your topic. You should come up with three subtopics within your main topic. Then the subtopic can be your Topic Sentence of each paragraph followed by details.



Week 2 - Continuing researching your topic and writing the rough draft.

Follow an outline like this when writing your research paper

The image shows a handwritten outline for an informational writing paper on lined paper. The title "Informational Writing" is written in pink cursive at the top, underlined with a wavy line. Below the title, the outline is organized into five numbered sections, each in a blue box. A pink bracket on the right side groups sections 2, 3, and 4 under the label "Body".

Informational Writing

- 1. Introduction** 2-3
 - Lead / hook / grabber
 - Topic Sentence - Subtopics
- 2. Sub Topic 1** 5+
 - Topic Sentence
 - 3 or more details or facts
 - Closing Sentence
- 3. Sub Topic 2** 5+
 - Topic Sentence
 - 3 or more details or facts
 - Closing Sentence
- 4. Sub Topic 3** 5+
 - Topic Sentence
 - 3 or more details or facts
 - Closing sentence
- 5. Closing** 2-3
 - Tie it together
 - Mention 3 subtopics

Body

Sheet for Rough Draft

Topic:

Introduction:

Paragraph 1 (subtopic 1 with details)

Paragraph 2 (subtopic 2 with details)

Paragraph 3 (subtopic 3 with details)

Conclusion:

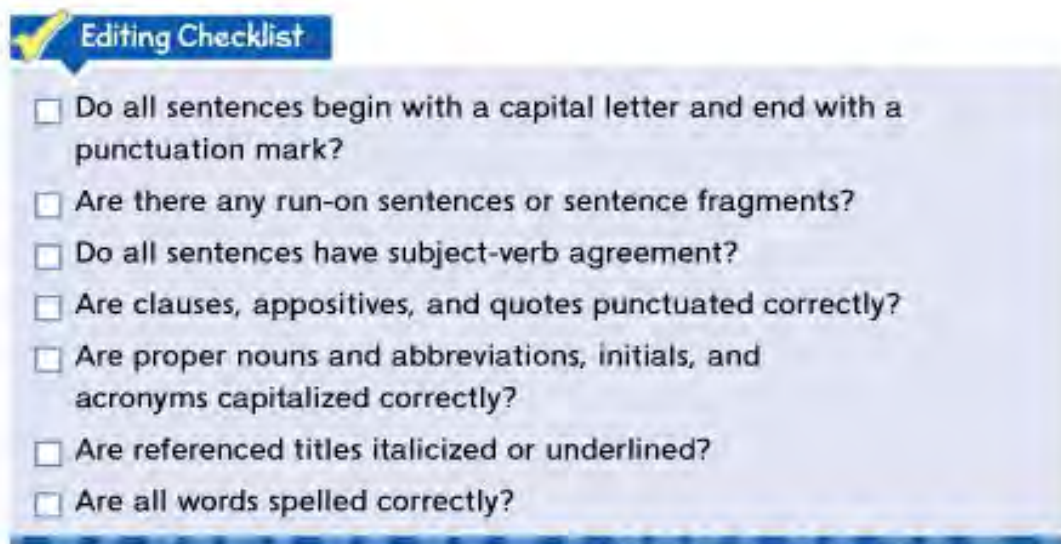
Unit 5 Writing Prompts

Research Paper

Week 3 and 4

Week 3 and 4 - Revising and Final copy

1. Now that you have your rough draft done. Make sure you have it in a 5 paragraph writing form. Once you are done with your draft. Have a family member read it and have them look for the following editing skills.



Editing Checklist

- ☐ Do all sentences begin with a capital letter and end with a punctuation mark?
- ☐ Are there any run-on sentences or sentence fragments?
- ☐ Do all sentences have subject-verb agreement?
- ☐ Are clauses, appositives, and quotes punctuated correctly?
- ☐ Are proper nouns and abbreviations, initials, and acronyms capitalized correctly?
- ☐ Are referenced titles italicized or underlined?
- ☐ Are all words spelled correctly?

2. Once you have checked your grammar using the editing checklist, write your final paper or type it. Make sure your paper follows these guidelines.
 - a. Guidelines for the Research Paper:
 - i. Introduces the topic in a way that captures readers' attention and clearly states the purpose of the report.
 - ii. Provides research facts, specific details, examples, and explanations relevant to the topic.
 - iii. Information is presented in a logical order
3. Publish your paper to your teacher. Here are different ways your teacher would love to see your research paper.
 - a. Email it to your teacher
 - b. Share it, if you typed it in google docs.
 - c. Take a picture of it and send it to your teacher through dojo messenger.

Final Copy Sheet

Topic:

Introduction:

Paragraph 1 (subtopic 1 with details)

Paragraph 2 (subtopic 2 with details)

Paragraph 3 (subtopic 3 with details)

Conclusion:

Fifth Grade Writing Prompts

Persuasive Essay Writing Prompts

Persuasive essays are those written to convince another person to agree with the writer or take action. These persuasive essay prompts inspire 5th graders to share their passions with an audience.

1. **Pets Day.** You've just gone to work with your parent for "bring your child to work day." Write an essay convincing your school to have a "bring your pet to school" day.
2. **Yuck.** What is your least-favorite cafeteria food? Give three compelling reasons why your school should quit serving it.
3. **Let's Trade.** Your friend's lunches from home always look better than yours. Write an essay convincing your buddy that you should start swapping meals every day. Be sure to highlight the benefits of the food you bring!
4. **Home Alone.** Write an essay convincing your parents that you are old enough and responsible enough to stay at home alone.
5. **Sunny Day.** The weather outside is beautiful for the first time in weeks. Persuade your teacher not to assign any homework so that you'll have time to go out to play.
6. **The Sequel.** The long-awaited sequel to your favorite book or video game is now available. Convince your brother or sister to do your chores this week so that you have plenty of time for reading or gaming.
7. **Seating Chart.** Because of your teacher's seating chart, you're not going to be able to sit next to your friend all year! Persuade your teacher to let students choose their seats.
8. **Birth Order.** Are you an only child, the oldest sibling, the youngest, or the middle? What makes your birth order the best?
9. **The Ultimate Game.** What is the best video game on the planet? Explain why it's better than similar games.
10. **Life Lessons.** What are the three most important lessons parents should teach their children and why?

11. **Test Time.** Do you think standardized tests are helpful or harmful? Explain your answer.
12. **Tunes.** Some studies have shown that listening to music can help students concentrate. Should students be allowed to listen to music using headphones during independent work times at school? Persuade the reader of your answer.
13. **Catch-22.** You're not a big fan of writing. Write an essay convincing your teacher that you shouldn't have to write any more essays this year.

Expository Essay Writing Prompts

Expository essays are often called how-to essays. They usually teach the reader something or provide facts about a particular topic.

1. **Let's Play.** Your family frequently attends community theater productions, but your friend has never seen one. Write an essay describing what he or she can expect during the evening.
2. **Band.** You're graduating elementary school, and a younger student is taking your spot in the school band. Explain to him or her how to clean and care for your musical instrument.
3. **Lessons Learned.** Write an essay to a younger sibling explaining two or three key strategies for having a positive 5th-grade experience.
4. **Class Pet.** You've cared for your class pet this week, but now it's another classmate's turn. Explain how to feed and care for the pet properly.
5. **Upgrade Ahead.** You have an idea to improve your school. Explain it.
6. **Safety Zone.** Explain three of the best steps kids can take to be safe online.
7. **Family Traditions.** Does your family have any customs or traditions that might be unfamiliar to a classmate? Describe them.
8. **Pen Pal.** Describe for your pen pal who lives in another state an animal native to your area, including its physical characteristics, behaviors, and any sounds that it makes.
9. **Creepy Crawlies.** Compare and contrast two insects or animals that are similar, but have different characteristics such as a bumblebee and a

yellow jacket or a horse and a mule. How are they alike and how are they different?

10. **Clean Up.** Your class is going to spend a day cleaning up at a local park. You've done this with another group before, but some of your classmates haven't. Explain the process.
11. **Action.** Your favorite book was made into a movie. Compare and contrast the film and book versions.
12. **Team Players.** Explain how contributing responsibly helps or how it hurts a group when someone doesn't do his part.
13. **Tell and Show.** Your class is having a "tell and show" day. You have to describe your item in as much detail as possible without naming it. Only when the class guesses or gives up can you show your item. Write out the description of your item

Name _____

- **Good** and **bad** have irregular comparative and superlative forms.
- Use **better** to compare two people, places, or things. Use **best** to compare more than two.

Read each sentence. Choose which word in parentheses best completes the sentence. Write your answer on the line provided.

1. Mom wanted a (better, best) storage system for her tools. _____
2. Her carpenter called for using the (better, best) materials available. _____
3. She felt that oak was a (better, best) choice of wood than pine. _____
4. The carpenter had an even (better, best) suggestion. _____
5. Some recycled materials were (better, best) options than new wood. _____
6. The (better, best) thing of all was that they helped the environment. _____
7. Mom studied the data in order to make a (good, best) decision. _____
8. In the end, she had the (good, better, best) storage closet ever. _____

Connect to
Community

Talk to a parent or another trusted adult about something you can do in your community to help the environment. Then write a paragraph about the conversation. Include the words *good*, *bad*, *better*, and *best* in your response. Check to make sure that you use each adjective correctly.

Name _____

- **Good** and **bad** have irregular comparative and superlative forms.
- Use **worse** to compare two people, places, or things: *This new design is worse than the last one.* Use **worst** to compare more than two people, places, or things: *That was the worst orange I've ever eaten.*

Read each sentence. Choose which word in parentheses best completes the sentence. Write your answer on the line provided.

1. "I've got some (bad, worst) news," my brother said. _____
2. "Your favorite band just put out their (worse, worst) song ever." _____
3. "It can't be (worse, worst) than 'Sippy-Sip-Sip,'" I replied. _____
4. "Well, that is the (worse, worst) song title they ever wrote," he admitted. _____
5. He continued, "But at least it wasn't a (bad, worst) melody." _____
6. "In the new song, the music is bad, and the lyrics are (worse, worst)." _____
7. The song is called "The (Worse, Worst) Hat I Ever Wore." _____
8. "It even has a (bad, worse) title," I said. _____
9. "The live version is (bad, worse) than the recorded version," he said. _____
10. I couldn't imagine how the song could be (worse, worst). _____



In your writer's notebook, write a short passage about a song you dislike. Use the irregular comparative and superlative forms of the word **bad** in your explanation. Edit and proofread your work.

Name _____

- In comparisons, *better* and *best* are the irregular forms of the adjective *good*; *worse* and *worst* are the forms of the adjective *bad*.
- The comparative form of *many* is *more*; the superlative form is *most*.
- The comparative form of *much* is *more*; the superlative form is *most*.
- Never add *-er*, *-est*, *more*, or *most* to an irregular comparative or superlative form.

Read each sentence. Write the proper comparative or superlative form of the adjective in parentheses on the line provided.

1. We waited for the (good) day possible to go on a sailing trip. _____
2. There were (many) boats on the water today than yesterday. _____
3. My father gives me (much) advice about sailing than my mother does. _____
4. Dad is a (bad) swimmer than my mother, though. _____
5. It was the (much) fun I've had in a long time! _____

**Reading/Writing
Connection**

Read the excerpt from one author's argument in "What Is the Future of the Rain Forests?" Underline the irregular comparative adjective. Then write a few sentences explaining your opinion of the author's plan. Include two irregular comparative adjectives.

The removal of rain forest trees has some negative consequences, but it is necessary for the survival of people and national economies. Therefore, it is not practical or desirable to try to stop the cutting of all rain forest trees. A better plan is to make economic use of rain forests.

Name _____

- In comparisons, *better* and *best* are the irregular forms of the adjective *good*; *worse* and *worst* are the forms of the adjective *bad*.
- The comparative form of *many* is *more*; the superlative form is *most*.
- The comparative form of *much* is *more*; the superlative form is *most*.
- Never add *-er*, *-est*, *more*, or *most* to an irregular comparative or superlative form.

Proofread the paragraph. On the lines below, correct mistakes in the use of adjectives and the irregular formation of comparatives and superlatives.

The mechanic needed most time than he had to fix the car. Our attempt to fix it ourselves had made the problem worst, not gooder. He could repair the brakes, but he felt that the most best option would be to install new ones. That, of course, would cost most money. Either way, the mechanic said he needed to order most parts. He assured us that he would do the goodest job possible in the most quickest amount of time.

Name _____

Read the student draft and look for any corrections that need to be made. Then choose the best answer to each question.

(1) Our new cat creates most problems than our old cat. (2) She has the worse temper I have ever seen! (3) She is a good "attack cat" than a "lap cat." (4) Mom has the more patience of anyone in the house. (5) Even she thinks that adopting the new cat was the worst decision the family has made in a long, long time! (6) We hope to find her a gooder home than ours soon.

1. What is the correct way to write sentence 1?
 - A Our new cat creates more problems than our old cat.
 - B Our new cat creates many problems than our old cat.
 - C Our new cat creates mostest problems than our old cat.
 - D Our new cat creates morer problems than our old cat.
2. What change, if any, should be made in sentence 2?
 - F Change **worse** to **bad**
 - G Change **worse** to **most worser**
 - H Change **worse** to **worst**
 - J Make no change
3. What is the correct way to write sentence 3?
 - A She is a gooder "attack cat" than a "lap cat."
 - B She is a best "attack cat" than a "lap cat."
 - C She is a better "attack cat" than a "lap cat."
 - D She is a much "attack cat" than a "lap cat."
4. How is the correct way to write sentence 4?
 - F Mom has the most patience of anyone in the house.
 - G Mom has much patience of anyone in the house.
 - H Mom has the more patience of anyone in the house.
 - J Mom has the better patience of anyone in the house.
5. What change, if any, needs to be made to sentence 5?
 - A Change **worst** to **worse**
 - B Change **worst** to **bad**
 - C Change **worst** to **best**
 - D Make no change
6. What is the correct way to write sentence 6?
 - F We hope to find her a best home than ours soon.
 - G We hope to find her a better home than ours soon.
 - H We hope to find her a more better home than ours soon.
 - J We hope to find her a most better home than ours soon.

Name _____

Fold back the paper along the dotted line. Use the blanks to write each word as it is read aloud. When you finish the test, unfold the paper. Use the list at the right to correct any spelling mistakes.

- | | |
|----------------------------------|-------------------|
| 1. _____ | 1. impress |
| 2. _____ | 2. impression |
| 3. _____ | 3. elect |
| 4. _____ | 4. election |
| 5. _____ | 5. locate |
| 6. _____ | 6. location |
| 7. _____ | 7. confuse |
| 8. _____ | 8. confusion |
| 9. _____ | 9. correct |
| 10. _____ | 10. correction |
| 11. _____ | 11. discuss |
| 12. _____ | 12. discussion |
| 13. _____ | 13. concentrate |
| 14. _____ | 14. concentration |
| 15. _____ | 15. estimate |
| 16. _____ | 16. estimation |
| 17. _____ | 17. decorate |
| 18. _____ | 18. decoration |
| 19. _____ | 19. exhaust |
| 20. _____ | 20. exhaustion |
| Review Words 21. _____ | 21. hopeless |
| 22. _____ | 22. fearless |
| 23. _____ | 23. forgiveness |
| Challenge Words 24. _____ | 24. conclude |
| 25. _____ | 25. conclusion |

Name _____

One common suffix, **-ion**, is added to certain words to change them from verbs to nouns.

confuse	restrict	impress
confusion	restriction	impression

The consonant sound at the end of each verb changes when **-ion** is added. The /z/ in *confuse* changes to /zh/ in *confusion*; the /t/ in *restrict* changes to /sh/ in *restriction*; the /s/ in *impress* changes to /sh/ in *impression*.

When the letter *i* follows *c*, *s*, *ss*, *sc*, or *t* in the last part of a word, it is usually silent and the consonants represent /sh/ (*confession*, *vacation*, *magician*) or /zh/ (*revision*).

DECODING WORDS

- When the base word ends in *e*, as in *locate* and *estimate*, the *e* is dropped before the suffix **-ion** is added: *location*, *estimation*.
- The final stable syllable **-tion** is always pronounced /shən/. Read the word *option* aloud: /op/ /shən/.

Write the spelling words that do not end in **-ion** next to the matching spelling words that do end in **-ion**. Then read each word aloud.

impress	locate	correct	concentrate	decorate
impression	location	correction	concentration	decoration
elect	confuse	discuss	estimate	exhaust
election	confusion	discussion	estimation	exhaustion

words without -ion**words with -ion****words without -ion****words with -ion**



Look through this week's readings for words with the suffix **-ion**. Record each word and a related word in your writer's notebook. Note any consonant sound changes. Then read the words aloud.

Name _____

One common suffix, **-ion**, is added to certain words to change them from verbs to nouns.

confuse **restrict** **impress**
confusion **restriction** **impression**

Notice how the consonant sound at the end of each verb changes when **-ion** is added. The /z/ in *confuse* changes to /zh/ in *confusion*; the /t/ in *restrict* changes to /sh/ in *restriction*; the /s/ in *impress* changes to /sh/ in *impression*.

When the letter *i* follows *c*, *s*, *ss*, *sc*, or *t* in the last part of a word, it is usually silent and the consonants represent /sh/ (*confession*, *vacation*, *magician*) or /zh/ (*revision*).

DECODING WORDS

- When the base word ends in *e*, as in *locate* and *estimate*, the *e* is dropped before the suffix **-ion** is added: *location*, *estimation*.
- The final stable syllable **-tion** is always pronounced /shən/. Read the word *option* aloud: /op/ /shən/.

Write the spelling words that do not end in **-ion** next to the matching spelling words that do end in **-ion**. Then read the words aloud.

impress	locate	correct	decorate	relate
impression	location	correction	decoration	relation
elect	confuse	discuss	estimate	direct
election	confusion	discussion	estimation	direction

words without -ion**words with -ion****words without -ion****words with -ion**

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



Look through this week's readings for words with the suffix **-ion**. Record each word and a related word in your writer's notebook. Note any consonant sound changes. Then read the words aloud.

Name _____

A. Write the spelling words that do not end in *-ion*. Then write the matching spelling words that do end in *-ion*. Read each word aloud.

impress	discuss	inflect	motivate	concentrate
impression	discussion	inflection	motivation	concentration
predict	estimate	exhaust	appreciate	confuse
prediction	estimation	exhaustion	appreciation	confusion

words without *-ion*

words with *-ion*

B. Compare the words *impression* and *inflection*. How are they alike? How are they different?



Look through this week's readings for words with the suffix *-ion*. Record each word and a related word in your writer's notebook. Note any consonant sound changes. Then read the words aloud.

Name _____

impress	locate	correct	concentrate	decorate
impression	location	correction	concentration	decoration
elect	confuse	discuss	estimate	exhaust
election	confusion	discussion	estimation	exhaustion

A. Write the spelling word that matches each definition below. Use spelling words that do not end in *-ion*.

1. to tire out _____
2. to make right _____
3. to choose by voting _____
4. a rough calculation _____
5. to find _____
6. to think; to focus _____
7. to talk about _____
8. to have a favorable effect _____
9. to adorn, make pleasing _____
10. to mix up _____

B. Write the spelling word that best completes each sentence. Use spelling words that end in *-ion*.

11. We had a long _____ about the popular movie.
12. Do you know the _____ of the new restaurant?
13. The puzzle took _____, but I finally solved it.
14. I thought it would take two hours, but my _____ was wrong.
15. She dressed neatly to make a good _____.
16. The basket of shells made a nice _____ in the beach house.
17. A busy schedule and lack of sleep can lead to _____.
18. There was _____ because the directions were unclear.
19. Will the mayor run for office again in the next _____?
20. I made a _____ to my writing when I edited it.

Name _____

Underline the six misspelled words in the paragraphs below. Using your knowledge of the suffix *-ion*, write the words correctly on the lines.

I support Mayor Jackson in the upcoming electshun. There has been a lot of discusion about his policies, but I feel he has been a good mayor. Recently he has put aside other matters to concentrat on plans for a new city park. I applaud his dedication to this project!

1. _____ 2. _____ 3. _____

Mayor Jackson gives me the impression that he isn't a good leader. When talking about the locashun for the new city park, his ideas seemed to confuus citizens. Is he really the best mayor for our community? I don't think so!

4. _____ 5. _____ 6. _____

Writing Connection

Write an opinion about something related to your own school or community. Use at least four spelling words in your writing.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Name _____

Remember

The suffix **-ion** is added to certain words to change them from verbs to nouns.

revise (verb)**attract** (verb)**transmit** (verb)**revision** (noun)**attraction** (noun)**transmission** (noun)

The consonant sound at the end of each verb changes when **-ion** is added. The /z/ in *revise* changes to /zh/ in *revision*; the /t/ in *attract* changes to /sh/ in *attraction*; the /t/ in *transmit* changes to /sh/ in *transmission*.

When the base word ends in *e*, as in *concentrate*, the *e* is dropped before the suffix **-ion** is added: *concentration*. Read each of these words aloud.

impress

locate

correct

concentrate

decorate

impression

location

correction

concentration

decoration

elect

confuse

discuss

estimate

exhaust

election

confusion

discussion

estimation

exhaustion

Fill in the missing letters to form a spelling word. Write the spelling word.

1. decor _ t _

11. estim _ t _

2. decora _ _ _ _

12. estima _ _ _ _

3. el _ ct

13. loc _ t _

4. elec _ _ _ _

14. loca _ _ _ _

5. impr _ ss

15. conf _ s _

6. impres _ _ _ _

16. confu _ _ _ _

7. concentr _ t _

17. corr _ ct

8. concentra _ _ _ _

18. correc _ _ _ _

9. disc _ ss

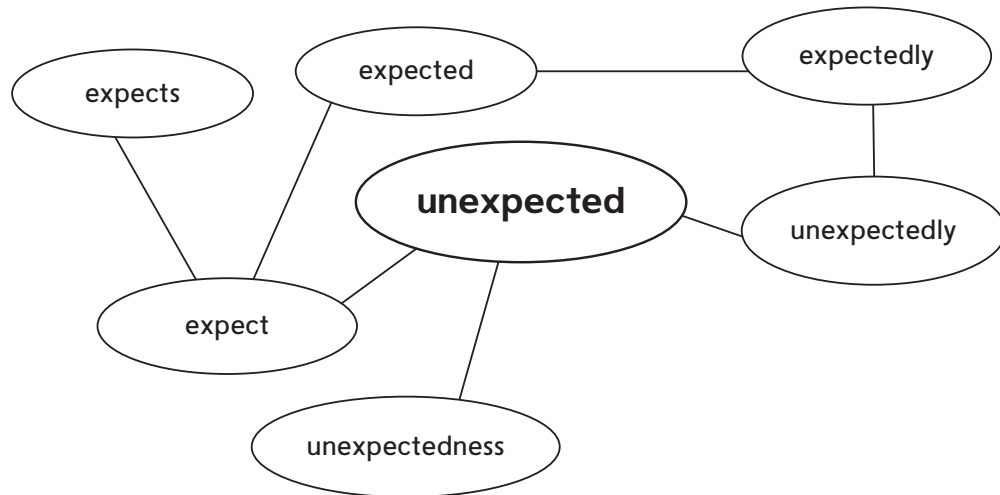
19. exh _ _ st

10. discus _ _ _ _

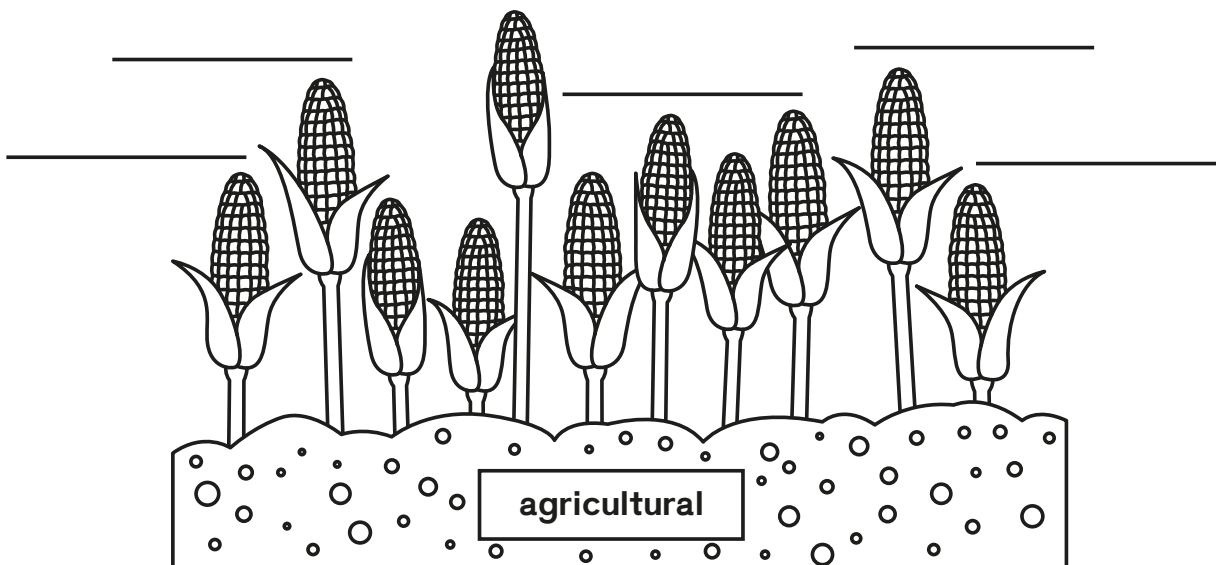
20. exhaus _ _ _ _

Name _____

Expand your vocabulary by adding or removing inflectional endings, prefixes, or suffixes to a base word to create different forms of a word.



Write as many related words as you can on the lines below. Use a print or electronic dictionary to help you.



Name _____

Learning the meaning of roots can help you figure out the meaning of unfamiliar words. Then you can use the words in your own writing.

Latin root	Meaning	Examples
<i>vivere</i>	to live	sur <u>vi</u> val, sur <u>vi</u> ve
<i>cultura</i>	cultivation	agri <u>cult</u> ure
<i>merc/merx</i>	merchandise	com <u>merc</u> e, com <u>merc</u> ial
<i>portare</i>	to carry	trans <u>port</u>
<i>sedere</i>	to sit	re <u>side</u>
<i>sorbere</i>	to suck in/suck up	abs <u>orb</u> , abs <u>orb</u> ing
<i>specere</i>	to look at	pers <u>pect</u> ive

Read each passage from “What Is the Future of the Rain Forests?” Use the root words in the box and sentence clues to help you figure out the meaning of each word in bold. Write the word’s meaning on the line. Then write your own sentence that uses the word in the same way.

- When part of a rain forest is cut down, subsistence **agriculture** takes its place. Subsistence agriculture is farming or ranching that produces only enough for a family to meet its everyday needs.

- The families need these farms or ranches in order to **survive**.

- Commercial** activities also play a role in the use of rain forest land. Lumber from rain forest trees is used to make furniture, flooring, and paper. Many countries buy beef that comes from cattle ranches on former rain forest land. Other rain forest land is converted to farms that grow coffee, soybeans, and palm trees. Oil from those palm trees can be used to make biofuels.

B

Improvement _____ # Correct _____

Multiply.

1	$3 \times 10 =$		23	$44 \times 20 =$	
2	$13 \times 10 =$		24	$44 \times 200 =$	
3	$13 \times 100 =$		25	$42 \times 10 =$	
4	$5 \times 10 =$		26	$42 \times 20 =$	
5	$35 \times 10 =$		27	$42 \times 100 =$	
6	$35 \times 100 =$		28	$42 \times 200 =$	
7	$8 \times 10 =$		29	$32 \times 30 =$	
8	$28 \times 10 =$		30	$32 \times 300 =$	
9	$28 \times 100 =$		31	$81 \times 2 =$	
10	$4 \times 10 =$		32	$81 \times 20 =$	
11	$4 \times 2 =$		33	$13 \times 3 =$	
12	$4 \times 20 =$		34	$13 \times 4 =$	
13	$14 \times 10 =$		35	$13 \times 40 =$	
14	$14 \times 2 =$		36	$13 \times 400 =$	
15	$14 \times 20 =$		37	$72 \times 30 =$	
16	$14 \times 100 =$		38	$15 \times 300 =$	
17	$14 \times 200 =$		39	$81 \times 600 =$	
18	$2 \times 3 =$		40	$16 \times 40 =$	
19	$22 \times 3 =$		41	$65 \times 30 =$	
20	$22 \times 30 =$		42	$48 \times 300 =$	
21	$22 \times 300 =$		43	$89 \times 60 =$	
22	$44 \times 2 =$		44	$76 \times 800 =$	

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A

Correct _____

Multiply.

1	$3 \times 3 =$		23	$8 \times 5 =$	
2	$0.3 \times 3 =$		24	$0.8 \times 5 =$	
3	$0.03 \times 3 =$		25	$0.08 \times 5 =$	
4	$3 \times 2 =$		26	$0.06 \times 5 =$	
5	$0.3 \times 2 =$		27	$0.06 \times 3 =$	
6	$0.03 \times 2 =$		28	$0.6 \times 5 =$	
7	$2 \times 2 =$		29	$0.06 \times 2 =$	
8	$0.2 \times 2 =$		30	$0.06 \times 7 =$	
9	$0.02 \times 2 =$		31	$0.9 \times 6 =$	
10	$5 \times 3 =$		32	$0.06 \times 9 =$	
11	$0.5 \times 3 =$		33	$0.09 \times 9 =$	
12	$0.05 \times 3 =$		34	$0.8 \times 8 =$	
13	$0.04 \times 3 =$		35	$0.07 \times 7 =$	
14	$0.4 \times 3 =$		36	$0.6 \times 6 =$	
15	$4 \times 3 =$		37	$0.05 \times 5 =$	
16	$5 \times 5 =$		38	$0.6 \times 8 =$	
17	$0.5 \times 5 =$		39	$0.07 \times 9 =$	
18	$0.05 \times 5 =$		40	$0.8 \times 3 =$	
19	$7 \times 4 =$		41	$0.09 \times 6 =$	
20	$0.7 \times 4 =$		42	$0.5 \times 7 =$	
21	$0.07 \times 4 =$		43	$0.12 \times 4 =$	
22	$0.9 \times 4 =$		44	$0.12 \times 9 =$	

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B Improvement _____ # Correct _____

Multiply.

1	$2 \times 2 =$		23	$6 \times 5 =$	
2	$0.2 \times 2 =$		24	$0.6 \times 5 =$	
3	$0.02 \times 2 =$		25	$0.06 \times 5 =$	
4	$4 \times 2 =$		26	$0.08 \times 5 =$	
5	$0.4 \times 2 =$		27	$0.08 \times 3 =$	
6	$0.04 \times 2 =$		28	$0.8 \times 5 =$	
7	$3 \times 3 =$		29	$0.08 \times 2 =$	
8	$0.3 \times 3 =$		30	$0.08 \times 7 =$	
9	$0.03 \times 3 =$		31	$0.9 \times 8 =$	
10	$4 \times 3 =$		32	$0.08 \times 9 =$	
11	$0.4 \times 3 =$		33	$0.9 \times 9 =$	
12	$0.04 \times 3 =$		34	$0.08 \times 8 =$	
13	$0.05 \times 3 =$		35	$0.7 \times 7 =$	
14	$0.5 \times 3 =$		36	$0.06 \times 6 =$	
15	$5 \times 3 =$		37	$0.5 \times 5 =$	
16	$4 \times 4 =$		38	$0.06 \times 8 =$	
17	$0.4 \times 4 =$		39	$0.7 \times 9 =$	
18	$0.04 \times 4 =$		40	$0.08 \times 3 =$	
19	$8 \times 4 =$		41	$0.9 \times 6 =$	
20	$0.8 \times 4 =$		42	$0.05 \times 7 =$	
21	$0.08 \times 4 =$		43	$0.12 \times 6 =$	
22	$0.6 \times 4 =$		44	$0.12 \times 8 =$	

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Problem 1

Jaxon earned \$39 raking leaves. His brother, Damon, earned 7 times as much waiting on tables. Write a numerical expression to show Damon's earnings. How much money did Damon earn?

Problem 2

Aneisha is setting up a play space for her new puppy. She will be building a fence around part of her yard that measures 29 feet by 12 feet. How many square feet of play space will her new puppy have?

Problem 3

Scientists are creating a material that may replace damaged cartilage in human joints. This *hydrogel* can stretch to 21 times its original length. If a strip of hydrogel measures 3.2 cm, what would its length be when stretched to capacity?



See Primary-Source
Related Media...



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GRADE

5

The Plant Kingdom

It's Plant Kingdom Week here at Science Studies Weekly, and the kingdom is thriving. Subjects of the Kingdom Plantae are everywhere in our lives—from the backyard to the refrigerator and in between. Even animals that provide meat and dairy products originally nourish themselves with plants. Cattle graze on grass, hay or corn before supplying us with hamburger and cheeses. But we use plants for more than just nutrition and landscaping. Houses, furniture, dyes, clothing, paper, medicines, beauty products, latex materials and musical instruments are just a handful of products we make from plants and plant byproducts. Don't forget that a lot of plants are just plain pretty. We decorate our homes with plants and give bouquets of flowers to our sweethearts on Valentine's Day (along with a box of chocolates made from the cocoa plant, of course).

There are more than 300,000 plant species known to scientists and even more that we don't have names for yet. While many organisms can crawl, fly, walk or swim, plants cannot. They're just happy to stay where they are. They get all of the food and energy they need for life right where they grow. In fact, plants use energy from the sun to create their own food! Plants are what we call the primary producers of our planet, which means that they are the basic food source for all other living things on Earth.

Anything as incredibly vital to our lives as plants must have been around for a while, and indeed, they have been. Back in the time of dinosaurs, there were trees and ferns that landscaped the Earth. Much, much later, grass and flowers

popped up, and these days, there is an enormous diversity, or variety, of living plants. That diversity spans ecosystems and biomes all over the Earth. You'll learn more about ecosystems and biomes in upcoming issues of Science Studies Weekly, but for now, please trust us when we tell you that plants of all kinds cover deserts, forests, seashores, plains and mountains. In this week's issue, we will learn more about how plants get their energy to grow and how they reproduce. Plant yourself in a comfy spot and read on!





The Amazing Plant Kingdom

The Worldwide Food Web

Remember the old lady who swallowed a dog to swallow the cat to swallow the bird to swallow the spider to swallow the fly? That's called a food chain. But in nature, it's not always that simple, and plants are right at the center of it. You see, in nature, food chains tend to overlap into what are called food webs. It would be simple if trees were only eaten by one kind of creature, which in turn was eaten by only one type of creature, and so on. But in the real world, a tree might be nibbled on at one end by a deer and at the other end by an earthworm. And each of those animals might have half a dozen more after it. It gives a whole new meaning to the term World Wide Web, doesn't it?

Photosynthesis

Plants collect energy from the sun and save it inside their cells for a cloudy day, and then, when they need it, they can use it up. The process is called photosynthesis, which basically means

“putting stuff together out of light.” Energy from the sun hits the green parts of the plant, like the leaf. That energy goes right into the plant's cells, powering little packets of a chemical called chlorophyll. The little packets are called chloroplasts. Those chloroplasts act just like tiny chemical factories. Inside them, something amazing happens: Water combines with carbon dioxide to create sugar and oxygen. The sugar is stored in the roots. The oxygen flies away into the air. And here's a bonus. Humans and animals use the sugar created by plants for food energy (when we eat the plants), and we use the oxygen to breathe.

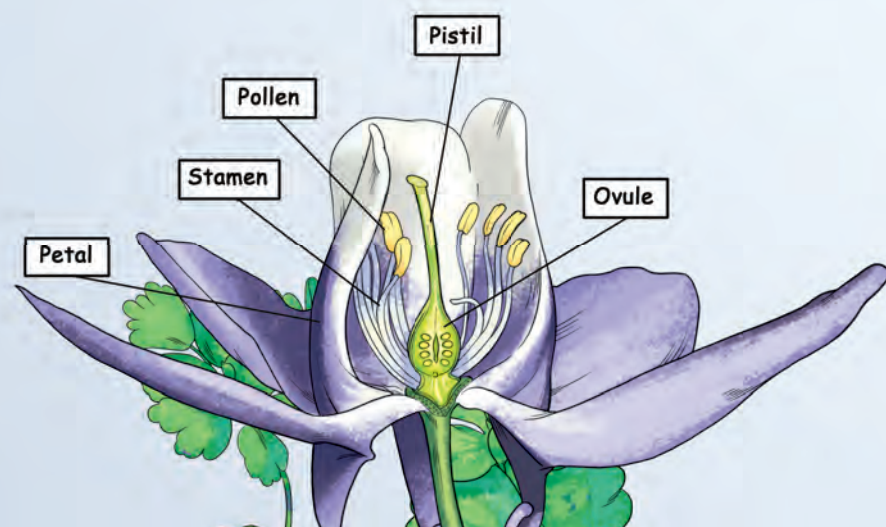
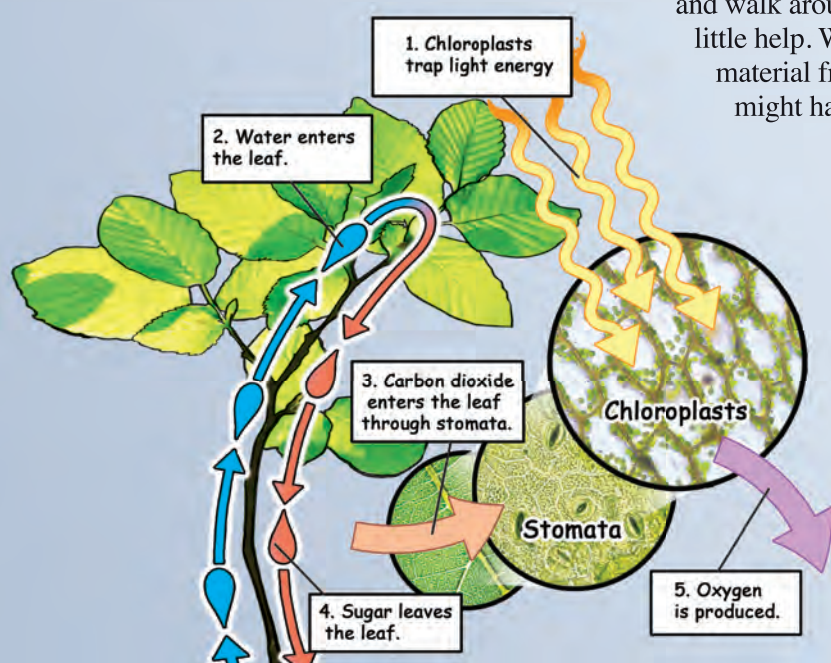
Pollination

Plants like to store half of their genetic material in one place (like pollen) and half in another place (like flowers). To make more plants, those halves have to get together. In many plants, getting the genetic material (sometimes called the pollen and the egg) together is called pollination. But because plant parts can't get up and walk around, they almost always need a little help. Who can help a plant get genetic material from place to place? Well, you might have seen hungry insects carry

pollen packed with genetic material from one plant part to another. Sometimes, the wind does it. Other times, animals eat fruits and berries containing genetic material. Then, for a while anyway, the seeds of that plant goes wherever the animal goes. Eventually, the seeds pass through the animal's digestive system and end up as waste. Some grow into plants wherever the waste is deposited.

Let's Get Organized!

There are so many plants in the world that scientists like to divide them into groups so that they can study them more easily. So what's the best way to divide something as huge as the plant kingdom? One way is to divide plants according to the way they process nutrients. For example, some plants have tube-like structures for water and nutrients to travel up and down from roots to leaves, just like blood traveling through your body in blood vessels. Those plants are called vascular plants. Most trees and flowers are vascular plants. Nutrients go up and down vascular plants through long tissue (like pipes) called xylem. Other plants (like mosses), called non-vascular plants, like to cling to things like damp rocks. They get fed through little hair-like fibers called rhizoids, which absorb nutrients directly into the plants' cells.



Technology & Science

Hydroponics

What do plants need to grow? The list is short: water, sunlight, nutrients and something to wrap their roots around. That usually means dirt. But some clever people have discovered that many plants can grow without soil. Growing plants without soil is called hydroponics. You can do hydroponics experiments at home with some seeds, plastic bags, water, sunlight and nutrients.

Why would you want to grow plants without soil when there's dirt all over the place? What if you lived on a space station? Soil is messy and heavy to transport and takes up a lot of space. NASA already uses hydroponics to grow plants in space and plans to grow hydroponic plants on the international space station. A hydroponics system can use far less water than soil planting and could provide food and oxygen for future space explorers and colonists.

'Edible Schoolyard: A Universal Idea' by Alice Waters

Many schools have a small garden where younger classes plant seeds. But a middle school in Berkeley, California has a large organic garden where all students grow and harvest fruits and vegetables. It even has free-roaming hens, so students gather eggs each day, too.

This “edible schoolyard” is the brainchild of Alice Waters, an award-winning chef and owner of a famous California restaurant. You can read all about it and see color photographs in her book, “Edible Schoolyard.”

The school has a large kitchen classroom. Students cook meals with produce from their garden. They have math lessons on weight and measurement using winter squash, and on cups, pints and quarts while making a soup with the squash. Then they set the table with pretty dishes and enjoy the meal together. Some kids discover they love foods that they would never

try at home.

To be labeled “organic,” foods must follow rules set by the U.S. Department of Agriculture. Farmers grow their crops without using synthetic pesticides, chemical fertilizers and artificial additives, in a manner that is safe for the environment.

All produce in your grocery store must meet government standards of safety for humans to eat. However, a nonprofit organization, Environmental Working Group, has made a list of foods they call the “Dirty Dozen.” They suggest that organic items are a smart option when buying apples, celery, cherry tomatoes, cucumbers, grapes, hot peppers, imported nectarines, peaches, potatoes, spinach, strawberries, sweet bell peppers, kale/collard greens and summer squash. Why might these be on the list? (Hint: edible skins.)

Book Science



It's a Jungle Out There

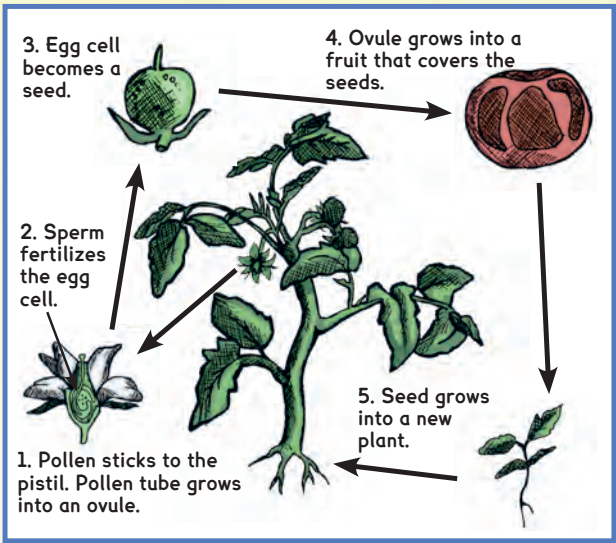
The plant kingdom seems so organized that you may think that all plants have no reason not to be the best of friends. The truth is, there's plenty of stuff plants can do to injure and even kill each other. Take the strangler fig, for example. They don't call it the strangler for nothing! This plant grows on trees and slowly sends down strangling roots, which eventually kill the very tree it's growing on. Hey, just because one plant is thriving doesn't mean it's good for its neighbors!

Flowers or Cones?

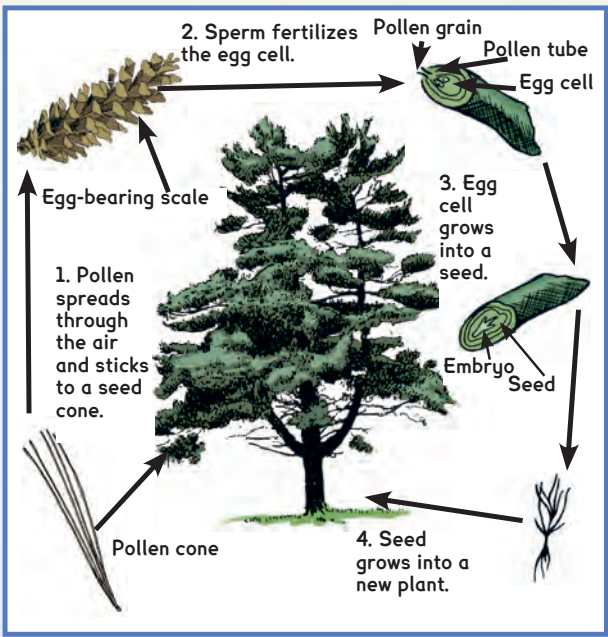
Because there are all kinds of plants, you may guess that not all of them store their genetic material in the same way. And you'd be right! In some plants, like pine trees, the genes are stored in pine cones that can pollinate each other. Soon, pollinated pine seeds fall to the ground, and in no time, up comes a baby tree. These plants that use cones to distribute their seeds are called conifers. Conifers belong to a group of plants that don't have flowers or fruit, called gymnosperms. In another group of plants, angiosperms, pollen is stored in flowers, ready to be carried to the plant's egg which is stored in the ovary, or fruit.

These are diagrams of the way gymnosperms (plants with no flowers or fruit) and angiosperms (plants with flowers and fruit) reproduce.

Life Cycle of Flowering Plants



Conifer Life Cycle



Why is the coconut palm called the tree of life?

Great legends have been told of the coconut palm. In Papua, it is believed to have magical beginnings. Many cultures consider it sacred because it has sustained them for centuries. The coconut palm (*cocos nucifera*) is one of the most amazing plants on the planet. Coconut seeds have an oil in them that is sold as a food product like margarine, or can be added to soaps and cosmetics. Fibers that surround the coconut (called coir) are used for making doormats, stuffing beds and pillows, adding nutrients to potting soils, and making rope and fishing nets. Coconut palms are used to make the roofs of huts and are woven to make baskets, floor mats, and hats.

Coconut palms are used in the Pacific Islands, Asia, South America, Africa, and Florida. Coconuts have flesh in them used for food and milk that can be drunk or used in cooking. Vinegar and sugar can be made from parts of coconut palms. They're also loaded with Vitamin C, potassium, iron and calcium, and are considered good survival food if one is stranded on an island. The trunk of the tree can be used for making houses and fences. Some people use coconut fuel for stoves, sleep on coconut-palm mats, live in coconut-wood huts, decorate with coconut art and drive coconut cars—OK, maybe not coconut cars! But the roots, bark, flowers and other parts have been used for medicine. That is why some societies call it the Tree of Life or Tree of Abundance. That's some tree!

This Week's Question

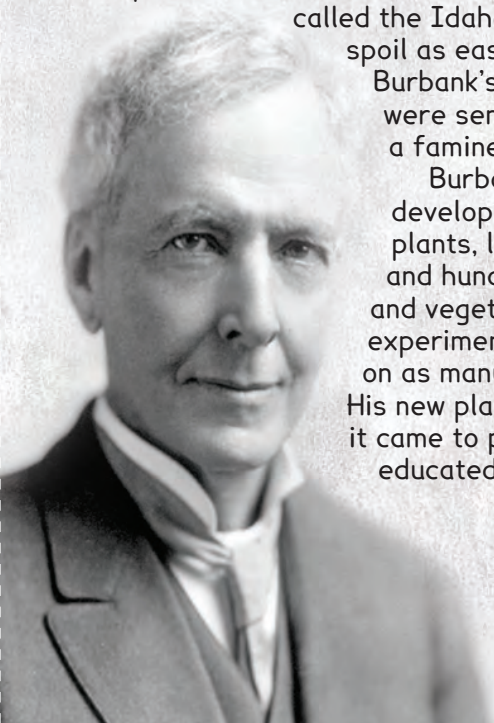
Luther Burbank (1849-1926)

Spotlight

Luther grew up on a farm in Massachusetts and learned how to grow and work with plants at an early age. Little did he know that his early gardening and farming experience would help him become one of the greatest botanists (someone who studies plants) and horticulturists (somebody who studies how to use plants for food and other products) of all time.

When Burbank got out on his own, he bought a farm and started to breed his own plants. He came up with some doozies, but his most famous plant breed was the russet Burbank potato, which is now called the Idaho potato. These potatoes do not spoil as easily as other kinds. In fact, in Burbank's day, russet Burbank potatoes were sent to Ireland to save people from a famine.

Burbank moved to California and developed more than 800 new kinds of plants, like the thornless edible cactus and hundreds of fruits, berries, flowers and vegetables. Burbank was quite an experimenter. At one time, he was working on as many as 3,000 plant experiments. His new plants were patented as well. When it came to plants, Burbank inspired and educated (and even fed) the world.



Xylem in Action

We've talked about how plants carry water through their xylem up the roots and into the plants. Do you think this can be seen by the human eye? In which plant do you think you will be able to see xylem in action the best? Create some hypotheses about the experiment below and see if you are correct.

Materials

- a couple of glasses filled with water
- 2 or 3 different colors of food coloring (Red works the best.)
- fresh carrots
- fresh celery

Instructions

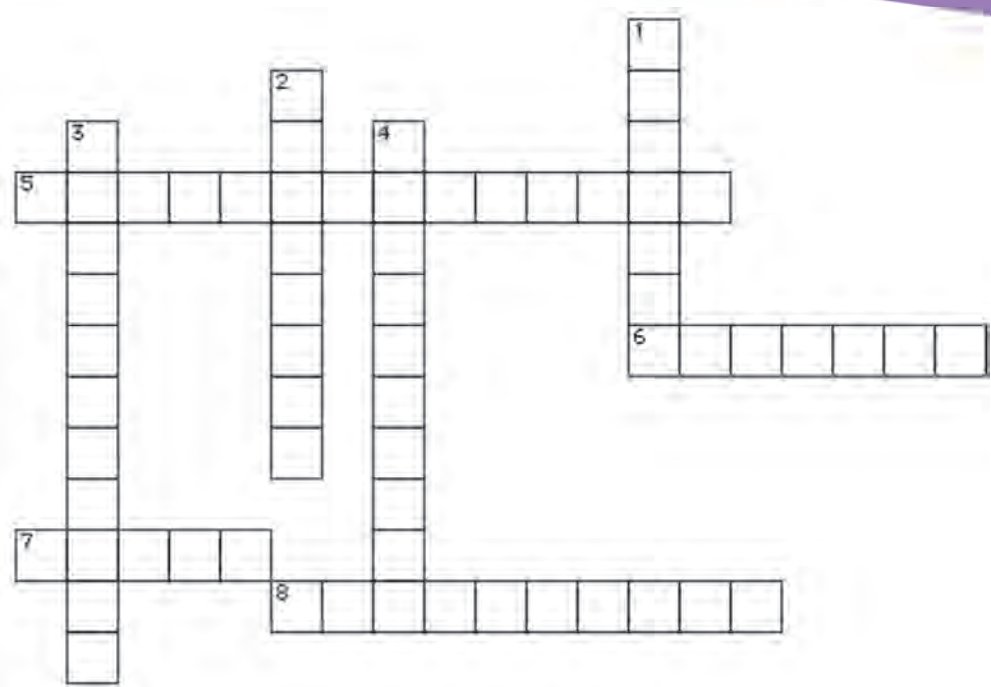
1. Set a whole carrot (with the greens cut off) in a glass of water dyed with food coloring.
2. Let the carrot sit overnight.
3. Remove it from the glass, and slice off a section from the top. Slice the bottom part lengthwise. What do you notice?
4. This effect is even easier to see in celery. Place a celery stalk (with the leaves still on) in the dyed water for three hours or so. What happens to the celery stalk?
5. Try splitting a celery stalk in two at the bottom, but leave the leaves together. Put the two bottom halves in two different colors of water. What effect does this have on the celery?

Conclusion: What have you learned from this experiment? Was your hypothesis correct about what would happen to the vegetables in the colored water?

What have you learned about the path the xylem takes in a plant? Do you know what causes the xylem to flow upwards in the plant? Here's a hint: capillary action. See what you can find out about this interesting scientific phenomenon. Form a theory from your findings, and you'll be on your way to being a real-life botanist.



Name _____



- ACROSS
5.

This word basically means “putting stuff together out of light.”
6.

hair-like fiber that carries nutrients to non-vascular plants
7.

tubes that carry fluids from the roots up to the leaves of vascular plants
8.

group of plants that do not have flowers
- DOWN
1.

group of plants that use cones to distribute their seeds
2.

plants that have tube-like structures for water and nutrients to travel up and down from roots to leaves
3.

a chemical that is energized by photosynthesis
4.

group of plants where pollen is stored in flowers

It’s a Jungle Out There!

Mini-Lab

Survival for plants and animals is sometimes difficult. Many species are threatened to become extinct—even plants. Why is this important? Well, important medicines are often made from plants. For example, natives in Peru used bark from the cinchona tree to cure malaria in the 1600s. This bark contains a medicine called quinine. Doctors

now use artificial drugs to treat malaria, but the parasite is becoming resistant to these drugs. Only cinchona bark works. These trees, however, are becoming extinct. See if you can complete the table below. Use the pictures and the information in the paragraph with what you already know to help finish the assignment.



Willow



Belladonna



Foxglove



Periwinkle



Rauwolfia



Cinchona



Pacific Yew

Plant	Parts	Medicine	Uses
Willow			
Belladonna		atropine	breathing problems
Foxglove			heart problems
Periwinkle		winblastine	leukemia
Rauwolfia		reserpine	high blood pressure
Cinchona			
Pacific Yew		taxol	cancer

Let’s Investigate

One of the toughest parts of being in a science fair is choosing a project. Never fear—we can help! Here are some great books and Web sites that can tell you everything you need to know about science fairs, including how to pick a cool project. “Crime-Solving Science Projects” by Kenneth Rainis shows you how to do everything from making fingerprints to analyzing fibers to comparing handwriting. Or check out “Yikes! Wow! Yuck! Fun Experiments for Your First Science Fair” by Elizabeth Snoke Harris. Here are the Web addresses for two of our favorite science fair sites: www.all-science-fair-projects.com/ and www.sciencebuddies.org/science-fair-projects/project_ideas.shtml.

If you’d like to make any editorial comments about our paper, please write to us at support@studiesweekly.com.

Answers to STEM activity: : 4,600,000,000 kg and 10,143,000,000 pounds. 405,720,000 bags rice

STEM How Much Food?

How many people at your school were born in another country? One? Ten? Half? These days it is not uncommon to share our shrinking world with each other. Technology and travel have made it possible for people to move around like never before. We share languages, traditions, holidays and culture more than ever. But that’s not all. It takes a lot to feed the world, and we often share important food resources, too. In 2010, The World Hunger Organization reported that over 925 million people were hungry.

Relief organizations such as the World Food Programme (WFP) provide food for millions of people. The WFP feeds over 90 million people in more than 70 countries each year. In one year alone they delivered 4.6 million

metric tons of food to hungry people everywhere. The WFP supports school meals for children and families seeking shelter from disaster, just to name a few million.

Now let’s do some math ourselves. A metric ton is 1,000 kg or 2,205 lbs. How many kilograms of food were delivered to hungry people by the WFP?

How many pounds?

If rice or flour can be delivered in 25 pound bags, how many bags of rice would that be?

(The answers are on Page 4 – don’t peek!)



Things Heat up in Philadelphia

“Whew! Jackson, it’s really hot in here. Can we turn on the air conditioning...or at least open a window?”

“Shhh, Alana! They’ll hear us. You know there isn’t any air conditioning in Philadelphia in 1787. And no, we can’t open a window because they’re all nailed shut.”

“Why are all the windows nailed shut?”

“The men at the Constitutional Convention wanted their meetings to be held in private, so they had all the windows nailed shut. They also closed the curtains to keep people from looking in. There were guards at all the doors and the delegates were the only ones allowed into the convention.”

“Delegates are representatives, right? And why did they want to keep the meeting private?”

“Well, they wanted to be able to speak freely

and to change their opinions back and forth without having their words printed in every newspaper in the country. They were willing to brave the summer heat to protect the privacy of their meetings.”

“These guys must have been strong, Jackson. I’m ready to melt in this heat.”

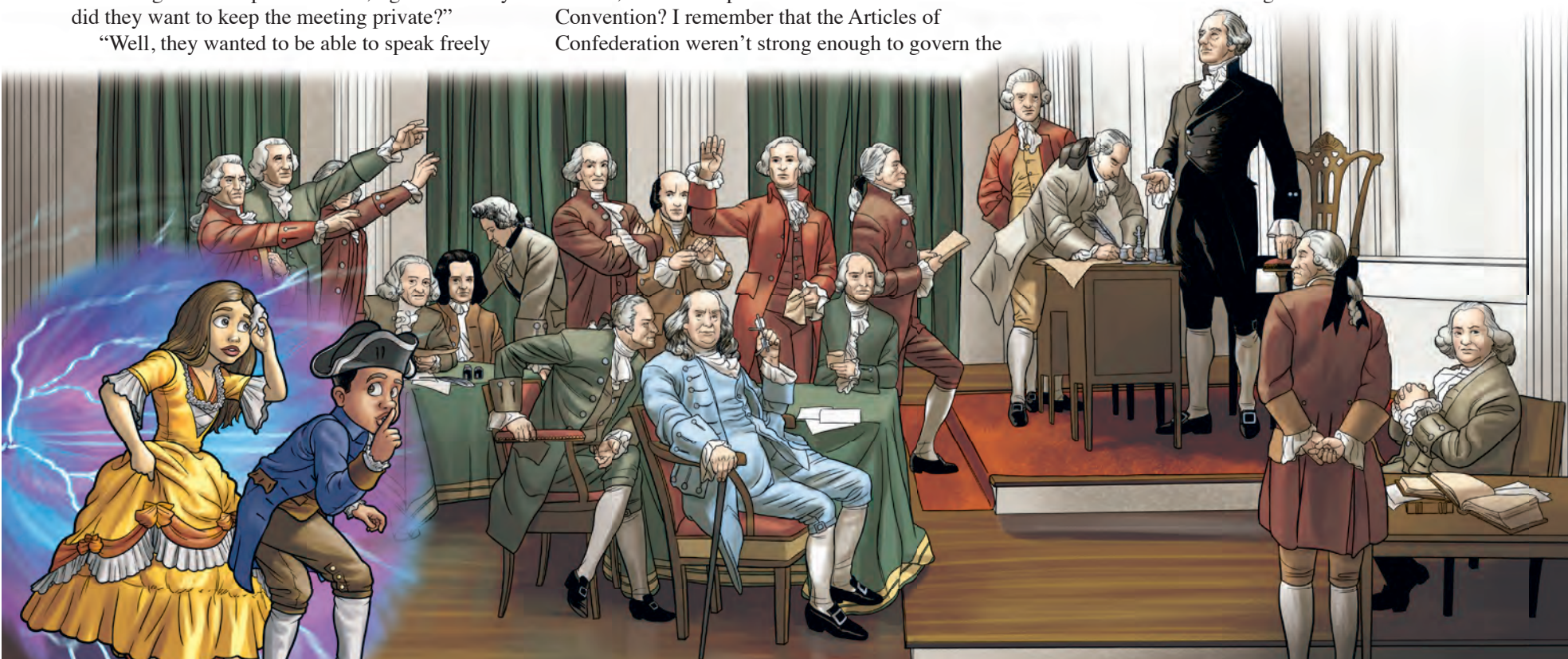
“Take a look around, Alana. Some of the smartest and bravest leaders of their time are here today. There’s George Washington, James Madison, Alexander Hamilton, Benjamin Franklin and Edmund Randolph, just to name a few. Many of the delegates were members of the Continental Congress and helped write their own state constitutions.”

“So, what is the point of the Constitutional Convention? I remember that the Articles of Confederation weren’t strong enough to govern the

new nation. Are they planning to change them?”

“That was the original plan, so the delegates got together to make changes in the Articles of Confederation. When they started working, they decided it would be better to start over and create a completely new constitution, or written plan for government. Right now the delegates from Virginia, including James Madison and Edmund Randolph, are presenting a plan to write a new document that gives more power to the national government. If we’re quiet, maybe we will learn more about this plan and what it means for the United States.”

“That sounds exciting, Jackson. But first, let’s go outside and see if there’s a breeze. I can’t take as much heat as the Founding Fathers!”



Connections

It’s Constitution Day! Let’s Celebrate!

On Sept. 17, 1787, the Constitutional Convention completed its work in Philadelphia. The U.S. Constitution was finished. How are you celebrating Constitution Day this year?

Did you know that Congress actually passed a law that schools across the country should celebrate this important day in history by learning more about our Constitution?

It’s true. Some students celebrate by memorizing the Preamble and reciting it together on September 17. Others sing the national anthem or dress in red, white and blue. At some schools, students play games, perform plays or write reports that help

them learn more about the Constitution.

Here are a few Constitution facts for you:

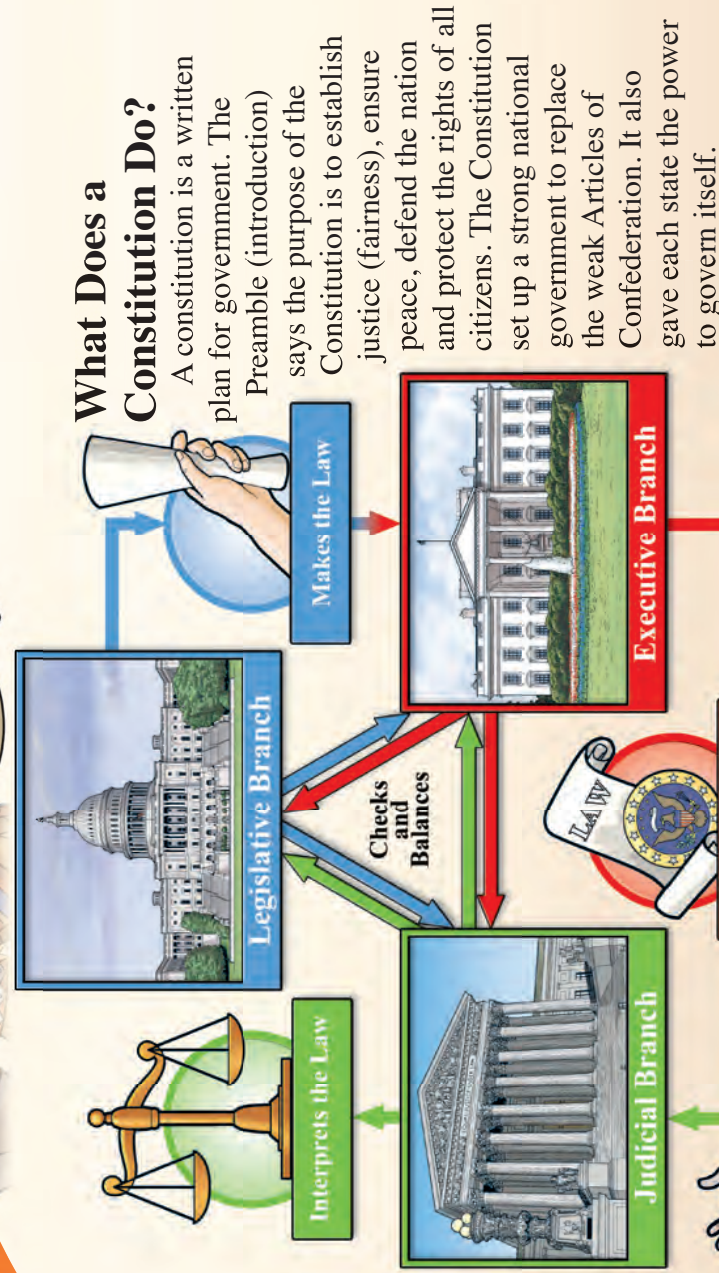
- Benjamin Franklin, at 81, was the oldest delegate to attend the convention. He was very sick and had to be carried to the meetings in a special chair.
- Jonathan Dayton was the youngest delegate at the age of 26.
- The Constitution is made up of 4,543 words including the signatures.
- The original Constitution is on display in the National Archives Building in Washington, D.C.

What does your school do for Constitution Day?





The Constitution is Born!



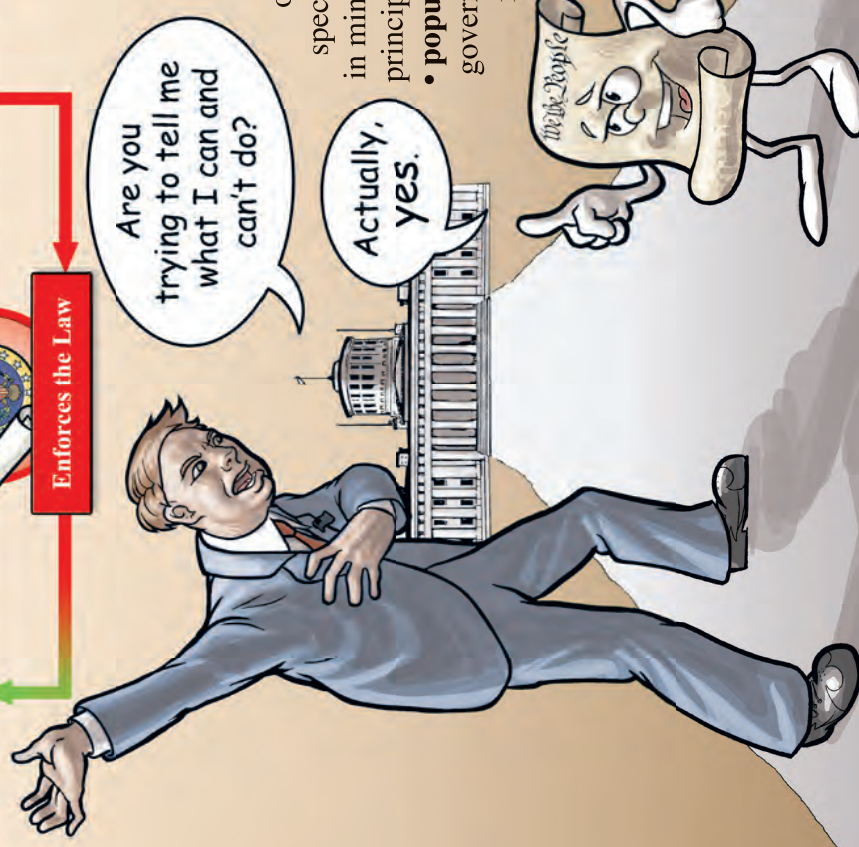
What Does a Constitution Do?

A constitution is a written plan for government. The Preamble (introduction) says the purpose of the Constitution is to establish justice (fairness), ensure peace, defend the nation and protect the rights of all citizens. The Constitution set up a strong national government to replace the weak Articles of Confederation. It also gave each state the power to govern itself.

What Does our Constitution Really Say?

The Constitution sets up our government with some very specific principles, or basic truths, in mind. Some of these important principles are listed below:

- **popular sovereignty:** the idea that government is created by and receives its power from the people
- **rule of law:** the belief that everyone, rich or poor, powerful or weak, must obey the law
- **separation of powers:** the fact that each branch of government (executive, judicial and legislative)



Compromise

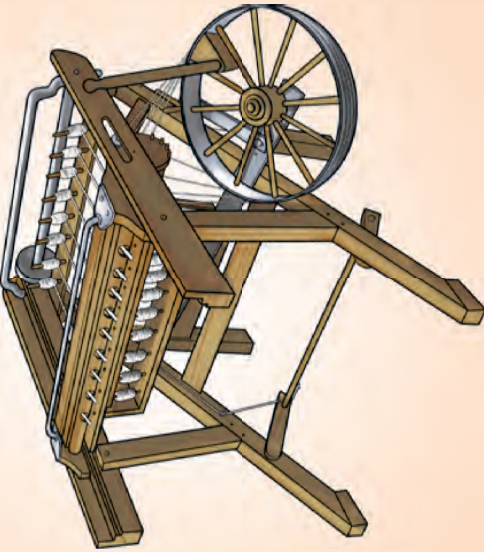
During the Constitutional Convention, the states disagreed on how to set up Congress. The small states wanted to have the same number of representatives in Congress as the large states. The large states wanted the number of representatives to be based on the population (number of people living in a place) of each state. Instead of refusing to give up everything they wanted, the delegates decided to compromise, or give up something they wanted in order to reach an agreement. Roger Sherman suggested an idea to divide the Congress into two houses: one where the representation would be equal (Senate) and one where it would be based on the population of each state (House of Representatives). This made both sides happy and the problem was solved.

When problems come up, good citizens work together and find a way to compromise. This allows both sides to be happy with the outcome.



Trades&Technology

The Spinning Jenny



In 1764, the American textile (cloth-making) industry got a huge boost with the invention of the spinning jenny. James Hargreaves was a British spinner and weaver. He created the invention to speed up the process of spinning yarn and thread used to make cloth. The spinning jenny held eight spindles instead of just one. When the spinner turned a wheel, eight balls of yarn were wound at once. Since the cotton business was booming at the time, speeding up the spinning process made it possible to weave more cloth in a much shorter time. Because of the success of the spinning jenny and several other textile inventions, many textile factories were built in the New England area. These factories gave jobs to workers in the area and offered Americans quality fabrics for a cheaper price.

promised that Congress would amend (change) the Constitution. They promised to add a bill of rights later if the states would vote to approve it as it was. By the end of 1788, nine states had voted to approve the Constitution and it went into effect in 1789. By 1790, all 13 states had voted to ratify the Constitution.

Amending the Constitution

Under Article V of the Constitution, there is a way to amend the Constitution whenever it becomes necessary. One way to amend the Constitution is for two-thirds of both houses of Congress to propose (suggest) a change. The other way is for two-thirds of the state legislatures to ask Congress to hold a national convention and suggest an amendment. Once an amendment is proposed, it must be approved by three-fourths of the state legislatures or three-fourths of all ratifying conventions held in the states. It isn't often that both the Congress and the people of the United States agree that a proposal is important enough to be added to the Constitution. The process may be long and hard, but amending the Constitution is possible.

Adding the Bill of Rights

The Constitution was ratified, but the writers weren't done with it yet. In order to fulfill the promise they had made, they had to come up with a bill of rights to add to the document. When he first began, James Madison wrote down all the rights that must be protected by the Constitution. Eventually, this list was trimmed down to 10 amendments which were then added to the Constitution. These 10 amendments came to be known as the Bill of Rights and were officially ratified on Dec. 15, 1791.

Summary of The Bill of Rights

First Amendment: Gives freedom of religion, speech and the press. It

also gives the right to meet together peacefully and the right to complain to the government.

Second Amendment:

Protects the right to own and bear arms, or guns.

Third Amendment:

States that the government cannot force people to open their homes to soldiers during times of peace.

Fourth Amendment:

States that the government cannot unfairly search citizens or take away their property.

Fifth Amendment: Guarantees that no one can have his or her life, liberty or property taken away unless authorities follow the appropriate legal process.

Sixth Amendment: Gives citizens the right to a lawyer and a trial by jury in criminal cases.

Seventh Amendment: Guarantees the right to a trial by jury in civil cases.

Eighth Amendment: Protects citizens from being punished with very high bail, fines or extreme punishments.

Ninth Amendment: States that citizens have more rights than just those listed in the Constitution.

Tenth Amendment: Gives the powers that are not granted to the federal government to the states or the people themselves.

How are voting rights protected by the Constitution?

Over the years the Constitution has been amended several times to expand our rights to vote. When the Constitution was written it said that men would be allowed to vote no matter what their religion. In 1870 more voting rights were added by the 15th Amendment. It stated that race, color or "condition of servitude" (slavery) could not keep a citizen from voting. In 1920 the 19th amendment guaranteed women the right to vote. In 1964 the 24th Amendment made it illegal to charge people a tax to vote. Finally, in 1971 the 26th Amendment lowered the voting age from 21 to 18 years of age. This happened during the Vietnam War when many 18-year-old soldiers were fighting in battle, even though they were too young to legally vote. Supporters of the 26th Amendment often chanted, "Old enough to vote!"



George Mason

When the Constitution was being drafted, George Mason, a delegate from Virginia, was amazed that a list of guaranteed rights was not included in the new document. He had written the Virginia Declaration of Rights and many other states had followed his example by adding their own bill of rights to their constitutions. He was worried about the new government having too much power.

When the delegates voted to accept the new Constitution without a bill of rights, Mason refused to sign it and set out to convince the 13 states not to ratify the new document unless a bill of rights was added. Eventually, a bill of rights based on the one suggested by George Mason was added to the Constitution, protecting the rights of all Americans.



Name _____

Primary Source: The Preamble

Activity

A preamble is an introduction to something. The Preamble was written to clearly outline the goals of the Constitution. Read the copy of the Preamble below. When you have finished, look for any words that are unfamiliar. Underline these words in the paragraph and write them under “Unfamiliar Words.” Look up these words in the dictionary and write the definition under “Definitions.” (Use a separate piece of paper if you need more room.) Then rewrite the Preamble using words that are familiar to you, but that still have the same meaning as the paragraph. When you are finished, trade your paragraph with a friend to see if he or she agrees with your version of the Preamble. Remember not to change the meaning—just make the words more familiar and easier for you to understand.

Preamble
We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

Unfamiliar Words

Definitions

My Version of the Preamble

Twice As Good

Condoleezza Rice (1954 -)

Spotlight

Condoleezza Rice was the first African American woman to serve as secretary of state. However, she did not always want to be a politician. This Alabama native had endured racial discrimination in her past, so her father told her she had to be “twice as good” at things to be successful. Since then, she always tried doubly hard to do well and pursued several interests passionately. Her first goal was to be a concert pianist. She studied music seriously and still plays on national stages. She was also inspired to learn about international relations at the University of Denver and studied Russian at Moscow State University.

She earned her Ph.D. in political science in 1981. Rice has worked hard at universities and big businesses. She became the national security advisor, and then in 2005, President George W. Bush appointed her secretary of state. Condoleezza’s U.S. government jobs were difficult, but she promoted peace, met with world leaders and tried to get governments to work together. Rice hasn’t given up working hard; she has been a provost (a high-ranking university official) and a professor at Stanford University. In 2012, she became one of the first two women in history to be admitted to Augusta National Golf Club.



Over the last few years, many amendments have been proposed, but not passed, by Congress. Some of these include making it illegal to damage the American flag on purpose, allowing prayer in public schools and making English our country’s official language. Write a paragraph proposing your own amendment to the Constitution. Explain why you think it is important and what difference it would make for the country.

Let's Write

If you’d like to make any editorial comments about our paper, please write to us at support@studiesweekly.com.

Think & Review

1. Where was the Constitutional Convention held?

2. Why were the windows nailed shut during the convention?

3. What is the Preamble to the Constitution?

4. What did many members of the convention feel was missing from the Constitution?

5. What is a system of checks and balances? How does it protect the people of this country?

6. How has the right to vote changed since the Constitution was ratified?

7. What does it mean to amend the Constitution?

8. What are the first 10 amendments to the Constitution called?

9. What is meant by the “rule of law”?

10. What is the spinning jenny? How did it improve business in the United States?

USA Studies Weekly—Ancient America to Reconstruction

Teacher Supplement

USA Studies Weekly—Ancient America to Reconstruction, Week 17

Name _____ Date _____

Write Your Own Bill of Rights

Use the space below to write your own Bill of Rights. Think about rights that are important to you as a student today. What rights do you think should be guaranteed to someone your age? Keep in mind that these rights should keep you safe, allow you to grow and help you become a productive member of society. Use your knowledge and imagination as you write your ideas.

Right 1:

Right 2:

Right 3:

Right 4:

Right 5:

Right 6:

Right 7:

Right 8:

Right 9:

Right 10:

This project could begin as an individual assignment, but then students could compare their Bill of Rights with a partner or group. Students may have similar amendments and could see firsthand that the majority is stronger in getting something passed into law.

USA Studies Weekly—Ancient America to Reconstruction

Teacher Supplement

Week 17

Name _____

Date _____

Common Core Connection

RI.4.4

Analogies

Think about how the following pairs of words are related. Some analogies show relationships that have the same meaning while others show relationships with the opposite meanings.

Examples:

(same meaning) hot : cold :: open : close

(opposite meaning) quiet: soft :: happy : glad

When you read an analogy, you read it like this:

“**Hot** is to **cold** as **open** is to **close**.”

“**Quiet** is to **soft** as **happy** is to **glad**.”

Complete the analogies below with a word from this week’s magazine.

domestic
liberty
preamble

delegate
propose
establish

tranquility
amend
union

1. _____ : representative :: deception : lie
2. speak : listen :: _____ : refuse
3. _____ : conclusion :: open : close
4. profession : career :: homelike: _____
5. change : _____ :: defend : protect
6. destroy : _____ :: love : hate
7. merger : separation :: division : _____
8. chaos : disturbance :: _____ : peace
9. freedom: _____ :: imprisonment : incarceration

Wayne Westland Community Schools
Elementary Art
Distance Learning Lessons

Week of 5/18/20

PORTRAITS



DIRECTIONS:

Using materials available in your house, create a portrait or a self-portrait. You may draw it, paint it, create a collage, or build it with found objects.

DEFINITIONS:

Portrait is an artwork that has been created about a person or persons (*sometimes animals*). It should tell us something about the people in the work of art.

Self-portrait is a work of art that the artist does of themselves.

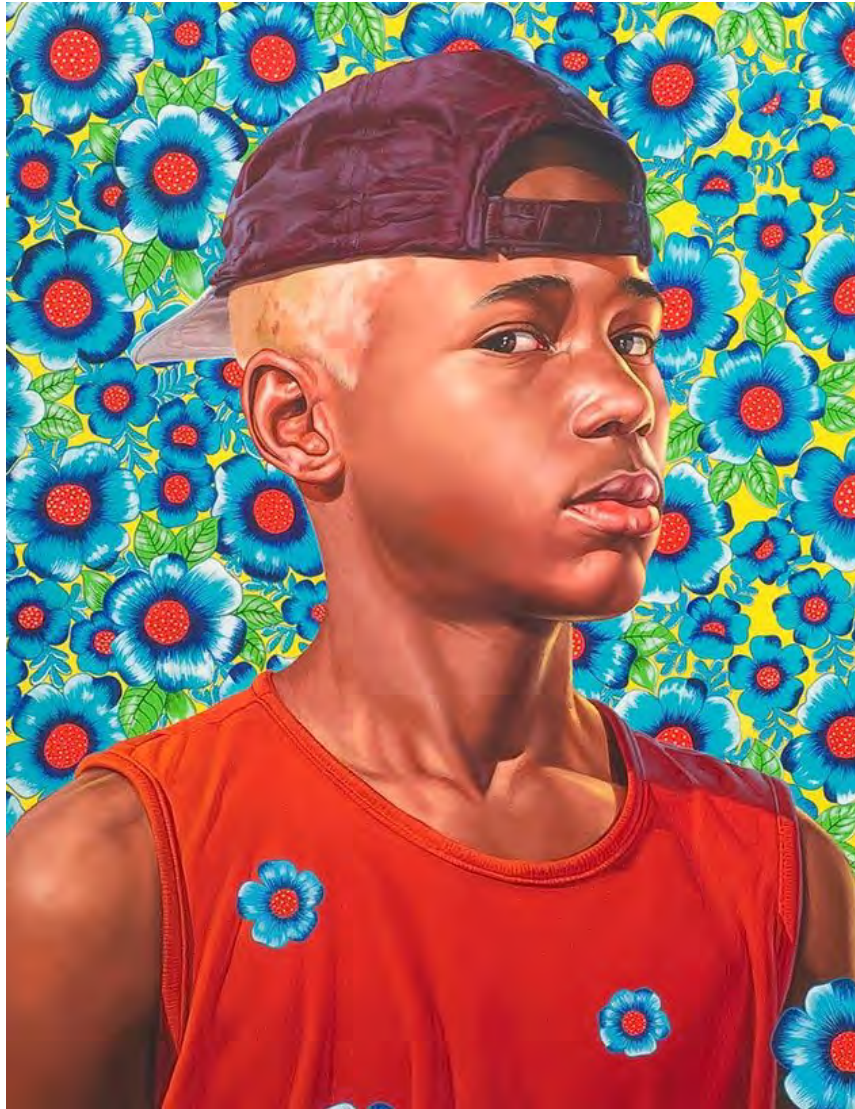
Found object is a natural or man-made object or part of an object that is found by the artist and kept because of some interest or value to the artist. It can be changed or left whole before using in larger works.

Collage describes both the technique and the resulting work of art, in which paper is torn or cut, arranged and stuck to a supporting surface.



Assemblage is art made by assembling unlike object's often every day, common objects scavenged by the artist. It is a 3-D collage.

INSPIRATION:



Portrait by Kehinde Wiley a Contemporary Artist who celebrates the proud Heritage of Black Women and Men in sculpture, painting and stained glass.

Found object faces:

<https://artsandactivities.com/found-object-faces/>

Collage self-portraits:

<http://www.artteacherinla.com/funky-collage-self-portraits/>

Lego style self-portraits:

<https://www.artwithmrsnguyen.com/2014/03/lego-style-self-portraits>

Must see video featuring Kehinde Wiley describing his Art:

<https://youtu.be/dHx4IFPqPil>

If you choose to create a self-portrait, this may be a great time for self-reflection. Try to answer at least 6 of these questions about him/herself. You can talk to someone about it, have someone read it to you or read and write them all by yourself.

- 1. What is your name?**
- 2. What is your favorite food?**
- 3 If you could make the world a better place what would you do?**
- 4. Who do you spend the most time with?**
- 5. What is your favorite season?**
- 6. What is your favorite thing to do?**
- 7. If you could spend time with anyone, who would it be?**
- 8. What would you like to learn from that person?**
- 9. If you had a superhero power what would it be?**
- 10. What do you miss most about school?**
- 11. What would you like to learn that you have not yet?**
- 12. What do you want to do some day or when you grow up?**

Now, collect your materials and create your portrait! Have fun and stick with your choice.

ASSESSING YOUR WORK:

- 1. Did you include a person or persons?**
- 2. Does your portrait tell the viewer something about the person or people in the work of art? For example: What do they look like? What they're doing?**
- 3. Did you use as many elements of art as possible? (*line, color, shape, etc.*)**

PORTRAIT RESOURCES:

YouTube Videos:

[Symmetry Song for Kids | A Day at Symmetry Land | Lines of Symmetry](#)

[ARTY PANTS \(Episode 1\) - Portraiture](#)

[How to Make a Self Portrait | Miss Brushes Art Academy \(Sesame Studios\)](#)

[The History of Portraits](#)

[Sesame Street: Chuck Close And Self Portrait](#)

Books:

[How Mona Lisa Got Her Smile](#)

[Seeing Symmetry](#)

Famous Portraits:

[Famous Portrait Paintings](#)

Games:

[Mona Lisa Puzzle | Online Arts Game](#)

[Free art game for kids- Draw a Portrait](#)

[Symmetry Painter . Games . peg + cat](#)

[Van Gogh self Jigsaw Puzzle](#)

[Disney Yourself](#)

[Vermeer: Girl with a Pearl Earring Breakout Game | Arcade style arts game for kids | Based on a Vermeer painting](#)

[Andy Warhol's Marilyn Prints](#)

We would love to see your creations! You can post photos of them to your Dojo story or email them directly to your art teacher!

Ms. Huhn huhnb@wwcsd.net

Ms. Kurtz kurtzd@wwcsd.net

Mrs. Windley WindleyA@wwcsd.net

Ms. Peck peckme@wwcsd.net

Mrs. Smith smitha@wwcsd.net

Mr. Wilburn wilburnp@wwcsd.net

Wayne-Westland Physical Education Elementary Distance Learning Lessons

Week of May 18th

Move It Monday

Today we are going to have some fun with balloons! Try to do this outside if you have space and the weather is cooperating! If you don't have a balloon, try using a light weight ball. This will also make it more challenging!

[Balloon Fun](#)

Turn It Up Tuesday

Time to get moving! Click on the link below and get a great workout! Invite your family to join in on the fun too!

[20 minute workout for kids](#)

Walk Around Wednesday

Get outside and walk around your backyard, around your block or around your neighborhood.

Walk at a fast pace for at least 30 minutes to get your heart pumping! Being outside and in the sun helps your body produce vitamin D which gives you energy and makes you feel better!

Team Spirit Thursday

Put on your favorite school t-shirt and let's do some running!!!

[20 Meter Pacer Demonstration](#)

[20 Meter Cadence w/ music](#) - approximately 65 feet

Fun Time Friday

Today you are going to create a new game! It can be anything from using a ball or jump rope or any other sports or fitness equipment you might have at home or it could even be a new tag game. You can make the rules as easy or complex as you'd like. Make sure everyone in your family plays with you!

Topic: Develop, implement, and model effective decision making skills to responsibly deal with daily academic and social situations.

Kindergarten Read [Curious George Gets a Bike](#). Discuss decision making and brainstorm decision making situations that you could be in at home or at school.

1st Good vs bad choice activity- use the “If _____ then _____” model to explain what you would do in certain situations to make a good choice.

2nd Repeat 1st grade lesson.

3rd Discuss strategies you could use to help make a decision (pros and cons list, ask someone’s opinion, flip a coin etc) and explain how some strategies work better for certain situations. For example, you might flip a coin to choose where to go for lunch but not for what house you’re going to buy.

4th Discuss choices and consequences. Have the student verbalize or write about multiple choices they have made and what the consequences are to them (good or bad). How can we learn from the bad choices?

5th Repeat 4th grade lesson.

All grades: Please feel free to play the games we do at the end of each class that help practice teamwork, communication, active listening, cooperation, etc. Even ask your child at the end of the game why the game is played in life skills and they’ll have an answer for you!

Game Ideas:

Simon Says

Four Corners

Would You Rather

Telephone

Hot Potato

Pictionary

Charades

5th - 6th Grade Media Choice Board

Please choose **ONE** activity to do **per WEEK** along with 10 minutes of [TypingClub](#)
Typing Club - Log in with your school email - if you forgot it please ask a parent and
make a new account or use the free option, it just won't save your progress.

These can be completed in any order - Just try to complete one box a week!

We Miss you!

- Play Digital Compass
- This game will teach you about being a good digital citizen.

[Digital Compass](#)

- Code for 20 minutes
- Pick an activity from the Hour of Code
- You do not need to sign in but you can if you want to use your school email.

[Hour of Code](#)

- Type an E-mail using your school email to your teacher telling them how you are doing.

- Open a new Google Doc
- Type your first and last name 10 times
- Each time use a different **color**, **FONT**, and **size**.
- You DO NOT need to upload this to google classroom

- Create your own Comic
- Read/Show your comic to someone in your household
- [Pixton](#)
 - Click For Students
 - Click On MY Own
 - Click "Try for Free" or "Sign Up" using your school email

- Log into your **MEDIA** Google Classroom
- Complete My Quarantine Time Capsule

3D Learning: Tinker for 20 min / Complete the 7 Starters at your own pace

- If this is your first time using [Tinkercad.com](https://tinkercad.com) , scroll down to watch the “See How It Works” video.
- Click the blue box “**Start Tinkering**”
- Sign in (or create a free personal account, if this is your first time)
- Click “**Learn**” at the top
- Go to the “**Starters**” There are 7 direct starters that explain and help you learn important 3D functions. Try to complete all 7 Starters at your own pace.
- Once you complete the starters, you are ready to begin the **Lessons**
- Have fun tinkering!

[Tinkercad.com](https://tinkercad.com)

Other activities you may choose to do can include the following:

- Use Google Drawing to edit or create your own picture
- Use Google Sheets to create pixel artwork
- Use Google Sheets to create a graph