4th Grade
AMI Day 1

4th Grade
AMI Day Instructions

For each AMI (Alternative Method of Instruction) day, please have your student complete the packet at their own pace. You will receive an email from us to complete the specific day's packet (Ex: Please complete Day 1 worksheets). They may receive help if needed. When finished, please ensure your child returns the completed work to school on our next school day.

If you have any questions, please feel free to contact your child's teacher during our office hours (10:00 am - 2:00 pm) using the email address below or by sending a message through Class Dojo.

Mrs. Neal: mneal@seymourschool.net

Mrs. Neuroth: jneuroth@seymourschool.net

Mrs. Shelton: rshelton@seymourschool.net

Thank you for your continued support of your child's education!

Fourth Grade Teacher,
Mrs. Neal, Mrs. Neuroth, Mrs. Shelton

4th Grade Snow Day Packet - AMI Day 1

☐ Reading: Read the article "Being an Active Citizen". Complete the questions on the following pages. Make sure you restate your questions in your answers.

☐ Math

Complete the front and back of worksheet 197/176

☐ Science

Read All About Waves. Complete the worksheet 15 using the text and words provided.

☐ Social Studies

Read over The Bill of Rights written in modern language. Read scenario 1 and scenario 2. Fill out scenario 1 and 2 boxes on the recording sheet using the directions given.

Please send the completed work to school with your child on our next school day. We will be discussing the work and I will provide feedback to students.

Day 1

Name: _____

Being an ACTIVE Citizen

President John F. Kennedy

Citizens can make a big difference in their community. In a country that is a democracy, citizens have a say in what happens, especially when they vote and perform community service. President John F. Kennedy once said, "Ask not what your country can do for you—ask what you can do for your country." This historic quote has inspired many people to take action and help their country as well as their local community. You do not have to be an adult to be an active citizen. You can start at any age.

One way to be an active citizen is to vote in elections. When you vote, you exercise your right to have a say in what happens. You must be eighteen or older to vote in a public election, but you can start voting in other elections even earlier. While adults vote for presidents, governors, mayors, and other officials, you can vote to elect leaders, too. You can vote to elect members of school government. Most teams and academic or social clubs have leadership positions that are chosen by a democratic vote. If you're not a member of a club or team, you can still learn more about voting by asking parents, teachers, and other adults how they make decisions in elections. In general, you'll want to make your vote count toward a purpose that you strongly believe in.

Voting is a right that every American citizen over the age of 18 is entitled to.

In order to vote wisely, it's important to learn about issues that affect your school or community. After you learn about these issues, you may form opinions about them. For example, imagine that you are voting for a class president at your school. Would you vote for a person whose speech is full of untrue information? Probably not, but you would need knowledge about the issues in order to tell if a speech was accurate or not. Similarly, would you vote for someone who doesn't care about any of the school's problems? No. You would probably vote for a student who seems enthusiastic about making things better for everyone at the school.

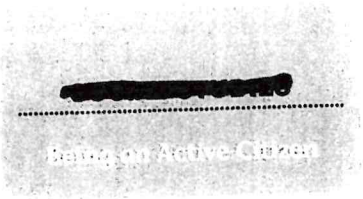
Your vote is important because it supports positive change in your community. You can be more successful in making changes if you are well informed.

Voting isn't the only way to be an active citizen. You can help to clean up your school or a neighborhood park, for example. You can hold a car wash to raise money for a new baseball field. You can volunteer your time at a library, a homeless shelter, a school, or another place that needs help. You can also be of service to an older adult by mowing his or her lawn.

Volunteering time to help your community is one way to be an active citizen.

Being an active citizen is an important part of living in a democracy. Active citizens stay well informed, vote, and volunteer. You are never too young to start being an active citizen.

Name: _____



Dictionary

Content Vocabulary

citizens
people who live in a community or who belong by law to a country

democracy
a type of government that is run by citizens who vote to choose their leaders

elections
public votes to choose leaders

informed
having knowledge or education

issues
important topics that people are thinking and talking about

Academic Vocabulary

historic
important in the past

inspired
filled people with a desire to take action, often to do something brave or creative

local
in or belonging to a certain city or neighborhood

opinions
beliefs or views about something

Write a sentence that includes at least one vocabulary word.

_____

_____

Name: _____

Apply Vocabulary

Use a word from the word box to complete each sentence.

Word Box

local	historic	elections
issues	citizens	informed
inspired	opinions	democracy

1. An adult votes in many _____ during his or her lifetime.

2. People who live in a _____ have many opportunities to get involved and make a difference.

3. It's important to educate yourself about _____ before forming opinions about them.

4. During many difficult times in the past, a president's wise leadership has _____ people to work together to solve problems.

5. When you take time to become _____, you learn about important topics that affect your community.

6. Both young people and adults can be active _____.

7. Your _____ community can be your town or neighborhood.

8. An important past event, such as the first moon landing, is often described as _____.

9. People in the same family often have different _____.

Name: _____

Answer Questions

Use information from the article to answer each question.

1. According to the article, one way to be an active citizen is to _____.
   - Ⓐ do well in school
   - Ⓑ discourage adults from voting
   - Ⓒ learn about important local issues
   - Ⓓ memorize historic quotes

2. To vote in a U.S. government election, a person must be _____ years of age.
   - Ⓐ 16
   - Ⓑ 18
   - Ⓒ 20
   - Ⓓ 21

3. The article does <u>not</u> mention _____ as a way to be an active citizen.
   - Ⓐ voting
   - Ⓑ volunteering
   - Ⓒ cleaning up a park
   - Ⓓ biking every day

4. What do you think President John F. Kennedy meant by the quote in the article?

   _____

   _____

5. What can you vote for, even if you're not yet eighteen years old?

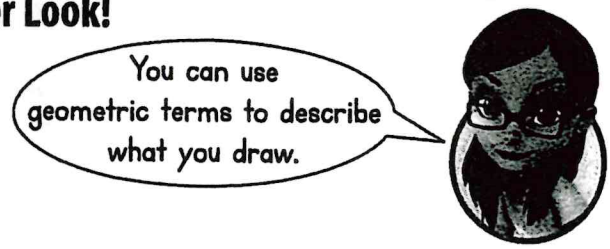
   _____

   _____

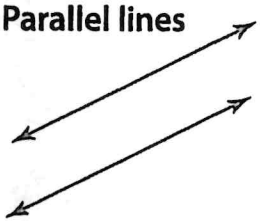
Name _____ Practice Video Tools Games

Additional Practice 16-1
Lines

Another Look!

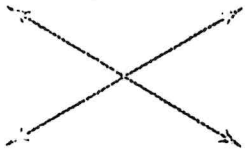


Parallel lines



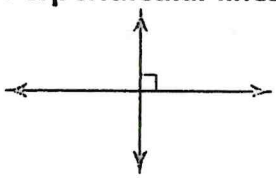
Parallel lines never intersect.

Intersecting lines



Intersecting lines pass through the same point.

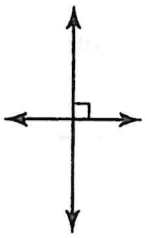
Perpendicular lines



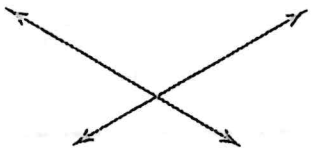
Perpendicular lines form right angles.

For **1–3**, use geometric terms to describe what is shown. Be as specific as possible.

1.



2.



3.

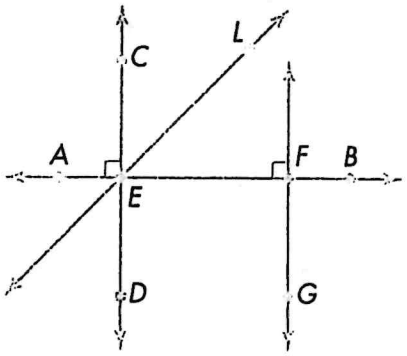
For **4–7**, use the figure at the right.

4. Name three different lines.

5. Name a pair of parallel lines.

6. Name two lines that are perpendicular.

7. Name two intersecting lines that are not perpendicular.



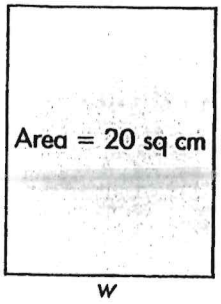
Name _____ Practice Video Tools Games

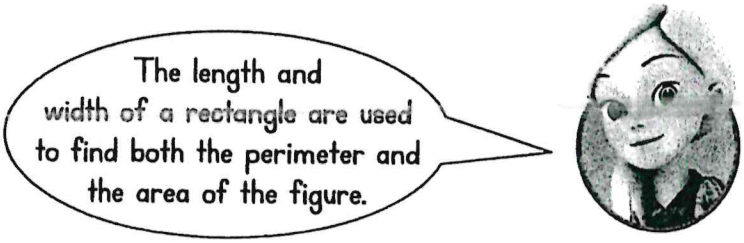
Additional Practice 13-6

Solve Perimeter and Area Problems

Another Look!

Find the perimeter of the rectangle.





Use the formula for the area of a rectangle to find the width.

$A = \ell \times w$

$20 = 5 \times w$

$w = 4$

The width of the rectangle is 4 centimeters.

Use the formula for perimeter to find the perimeter of the rectangle.

$P = (2 \times \ell) + (2 \times w)$

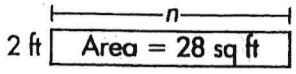
$P = (2 \times 5) + (2 \times 4)$

$P = 10 + 8 = 18$

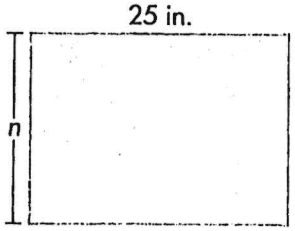
The perimeter of the rectangle is 18 centimeters.

For **1–4**, use the formulas for perimeter and area to solve each problem.

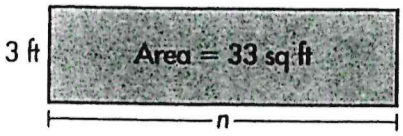
1. Find *n*.



2. Find *n*. Then find the area.
Perimeter = 86 in.



3. Find *n*. Then find the perimeter.



4. Find *n*. Perimeter = $60\frac{2}{4}$ in.

ALL ABOUT WAVES

Listen carefully. Can you hear anything right now? Even if you can hear a tiny sound, that means that there are sound waves around you. All kinds of waves are all around us. You can't see most waves. However, they play an important role in life.

What Are Waves?

Waves are the way that matter transfers energy. When energy moves from one place to another, it moves in waves. Sometimes you can see them. Sometimes you can't.

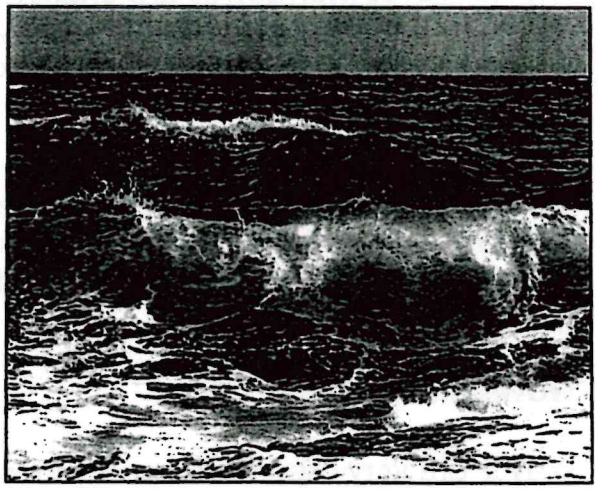
Some examples of waves are waves in water, sound waves, light waves, and even microwaves like the ones used in microwave ovens.

Types of Waves

There are two main types of waves: mechanical and electromagnetic. They are different in one major way. Mechanical waves require a medium in which to move. Some examples of mediums are water and air. This type of wave needs molecules to move through. The molecules bump against each other which helps the wave move.

Electromagnetic waves don't need a medium. That means that they can move even in space, where there is no air. They travel through special electric and magnetic fields. Charged particles generate these fields. Some of these waves are light, microwaves, and radio waves.

Other important types of waves are transverse and longitudinal waves. Transverse waves are like the waves you see in water. They move up and down and left to right or right to left. Electromagnetic waves are transverse waves.



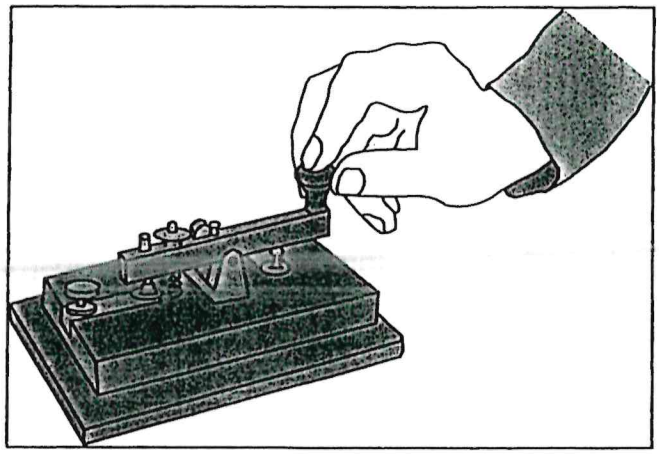
How can you describe the waves shown above? Can they be described in more than one way?

Longitudinal waves are different. They act more like a coil spring. Imagine the spring is laying on the floor. If you pinch together and let go of one end of the spring, the energy will move through the spring in a wave. Another way to describe these waves is that they push. They push, compress, and then spread again, moving in a direct line. Sound waves are longitudinal waves.

Parts of a Wave

When you imagine a picture of a transverse wave, it looks like a rope moving up and down. To talk about this kind of a wave, scientists use special words. Two important words are the amplitude and wavelength.

Imagine a line that goes right through the middle of the wave. This is the resting point. The distance between the resting point and the high points above (the crest) or the low points below (the trough) is the amplitude. The energy of the wave is bigger when the amplitude is bigger. The distance between high points is the wavelength. The wavelength tells you the frequency, or how much energy the wave has.



The device pictured above was used to create messages using Morse Code. Morse Code can be transmitted via electric current, radio waves, visible light, or sound waves. The waves are present when the dash or dot is sent, and then the wave is absent during the pauses between the dots and dashes.

Waves Move Objects

Sometimes, waves can cause objects to move. Waves themselves are energy. However, that energy sometimes moves things like water. This happens when lake or ocean waves move boats and move water that hits beaches.

Another example of waves moving items is sound waves. When you hear really loud music, have you ever felt vibrations? Sometimes a loud bass can cause objects around them to move just a tiny bit. For example, a pencil might move a little bit if it's sitting on a table where a bass speaker is also sitting.

Waves and Patterns

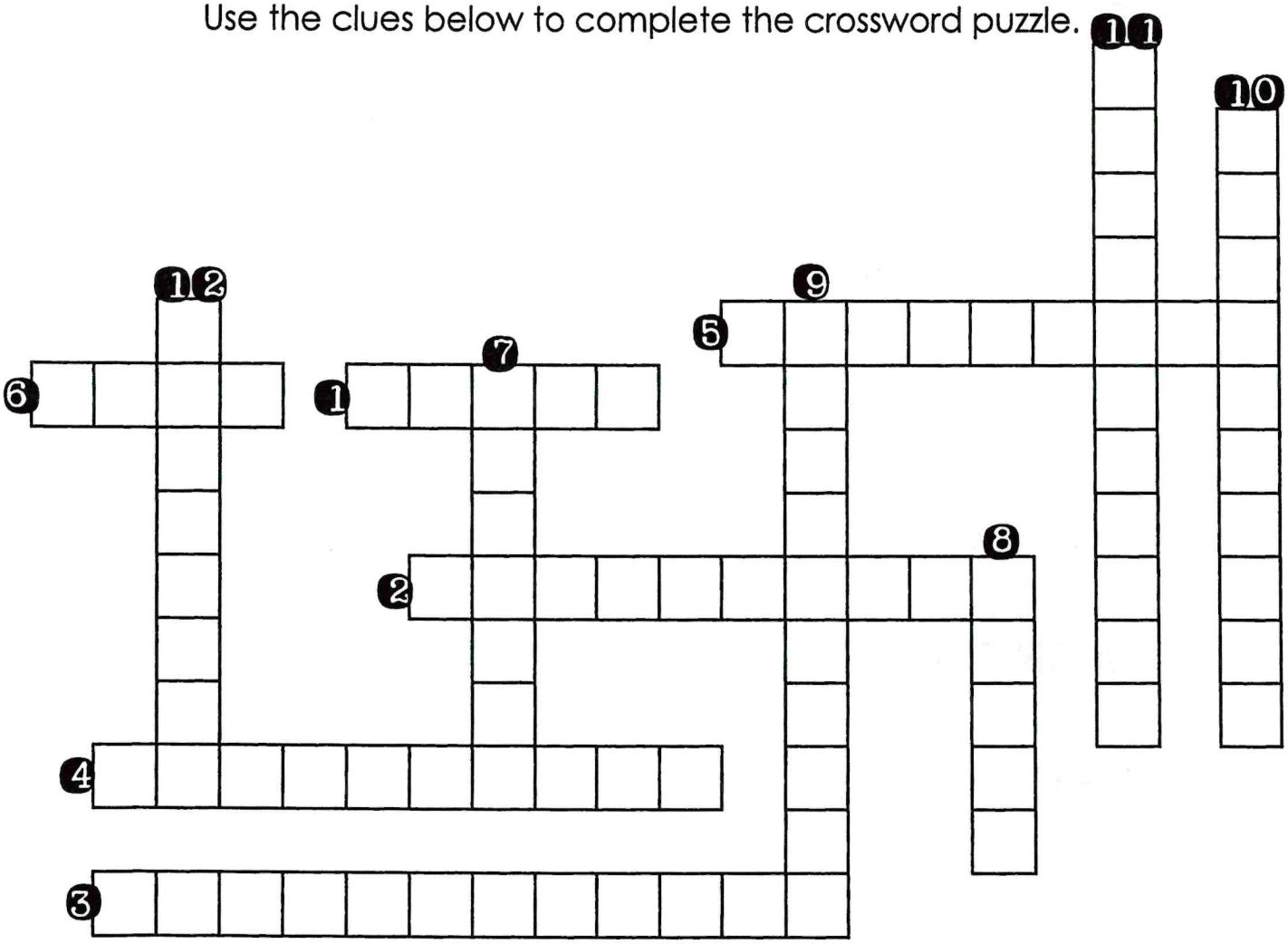
Waves are very useful for making sound, light, and even heating up food. We can also use waves in patterns to communicate. One example of this type of pattern is Morse code. Morse code is a special code that uses sounds or flashes of light that represent letters. The code is a mix of dots and dashes.

The dots are short beeps or flashes. The dashes are longer beeps or flashes. For example, the letter "a" is one dot and one dash. However, the letter "h" is four dots. Then, people listen or watch the code and turn it into letters. Morse code was used with telegraphs for many years. It was also used during WWII to help armies communicate with each other from far away.

Other patterns also help us communicate. For example, computers use patterns of 0s and 1s. Also, music is stored in a pattern of 0s and 1s. Computers, phones, and other digital devices can read the pattern very quickly. They know how to turn the pattern into an image, sound, or an action.

VOCABULARY CROSSWORD PUZZLE

Use the clues below to complete the crossword puzzle.



Across:

1. Matter transfers energy through _____.
2. _____ are used in a common household appliance.
3. Waves that act like a coil spring are _____ waves.
4. Waves that move up and down and left to right or right to left are _____ waves.
5. The energy of a wave is bigger when the _____ is bigger.
6. Waves are useful for preparing

Down:

7. Some waves are _____.
8. When you listen to music, you can hear _____ waves.
9. _____ waves require a medium in which to move.
10. The distance between a wave's highpoints is the _____.
11. Waves can be used to _____. For example, messages can be sent via Morse Code.
12. A _____ can turn patterns of 0s and 1s into an image, sound, or an action

COMPUTER

FOOD

TRANSVERSE

LONGITUDINAL

WAVES

VISIBLE

MICROWAVES

MECHANICAL

SOUND

AMPLITUDE

COMMUNICATE

WAVELENGTH

The Bill of Rights

Written in Modern Language

The Bill of Rights was approved in 1791 and contains the first ten Amendments (changes) to the Constitution. These Amendments protect our rights as Americans.

Amendment 1: This is also called the "First Amendment." Because of this Amendment, we have the right to practice any religion we choose. We have the right to say what we would like (in most cases). We have the freedom to print our opinions in newspapers, books, and magazines. Citizens are allowed to sign petitions and present them to the government. Americans are allowed to join together peacefully in groups of any size.

Amendment 2: We have the right to own guns.

Amendment 3: Americans cannot be forced to let soldiers live in their homes.

Amendment 4: This Amendment protects our privacy. The police cannot search your body or property without a warrant from a judge.

Amendment 5: We have the right to a fair, legal trial if we are accused of a crime. You don't have to say things in court that show you are guilty of a crime.

Amendment 6: We have the right to a speedy and public trial. You should not have to wait many years for your trial to start.

Amendment 7: You have the right to a jury trial in private cases, like when you are suing someone. The amount of damage must be more than $20.

Amendment 8: In this Amendment, cruel and unusual punishment is outlawed. Also, if you are charged with a crime, the judge cannot set an unreasonable bail amount.

Amendment 9: This Amendment tells us that Americans have rights that are not listed in the Constitution.

Amendment 10: Power that was not given to the U.S. Government by the Constitution belongs to the states or to the people.

Scenario 1

Maria Sanchez and four of her friends are visiting with each other in the park. The five ladies are quietly talking and laughing. A policewoman approaches the group and tells them that they must separate. Maria argues that the park is still open and that they should be able to talk as long as they like. The officer says that the women must leave the park because they do not have the right to sit together on public property.

Scenario 2

Bradley Wilson lives alone in a four-bedroom house that he inherited from his uncle. One day, an army officer comes to his house and says that the army is running out of housing for soldiers. Since Bradley has extra, empty bedrooms, the army officer requires Bradley to house soldiers. Bradley tries to argue his point, but no one will listen to him. Three soldiers come to live in Bradley's home.

The Bill of Rights

Cooperative Group Activity

Group Members: _____

_____

Instructions: Read and discuss the scenario cards with your group members. Write the Amendment number that relates to each scenario.
If the person's rights were respected, check the appropriate box.
If the person's rights were NOT respected, check the appropriate box. Then, write what should have been done differently to ensure the person's rights were not violated.

Scenario 1

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 2

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 3

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 4

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

4th Grade
AMI Day 2

4th Grade
AMI Day Instructions

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Mrs. Neal: mneal@seymourschool.net

Mrs. Neuroth: jneuroth@seymourschool.net

Mrs. Shelton: rshelton@seymourschool.net

Thank you for your continued support of your child's education!

Fourth Grade Teacher,
Mrs. Neal, Mrs. Neuroth, Mrs. Shelton

4th Grade Snow Day Packet - AMI Day 2

☐ Reading Read the article "Getting to Know Snakes". Complete the questions on the following pages. Make sure you restate your questions in your answers.

☐ Writing In 1-2 paragraphs, explain how a snake's body helps it move, eat, and survive. Include facts and details from the article in your answer.

☐ Math
Complete the front and back of worksheet 199/205

☐ Science
Review All About Waves article. Complete worksheet p. 16 using details from the text.

☐ Social Studies
Read over The Bill of Rights written in modern language. Read scenario 3 and scenario 4. Fill out scenario 3 and 4 boxes on the recording sheet using the directions given.

Please send the completed work to school with your child on our next school day. We will be discussing the work and I will provide feedback to students.

Day 2

Name: _____

Getting to Know SNAKES

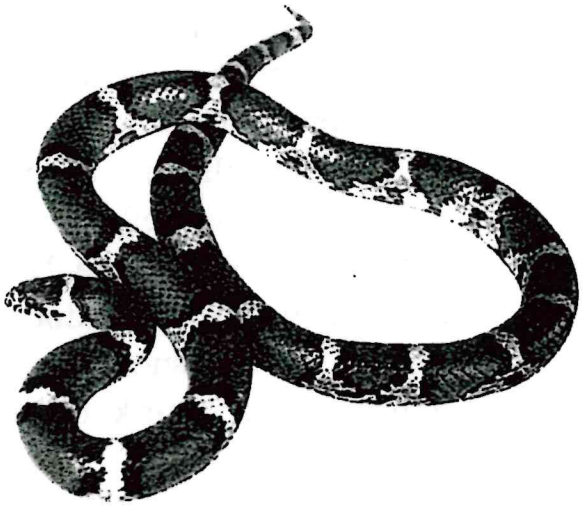
Say the word *snake* among a group of friends, and you'll probably see panic on at least a few faces. Learning about these legless reptiles can lessen the fear of them. Read about where snakes live, how they move and hunt, and their role in nature. Finally, learn how to stay safe around snakes.

Where do snakes live?

Snakes live on almost every continent, but mostly in warm climates. In places with cold winters, snakes stay underground and conserve energy until spring. They move and eat very little during cold months. This is because snakes, like other reptiles, need sunlight or another heat source to keep their bodies warm. Even during warmer months, it is common to find snakes napping on rocks in the sun. They may also rest under a warm rock or underground where a patch of soil has been warmed by sunlight.

How do snakes move around?

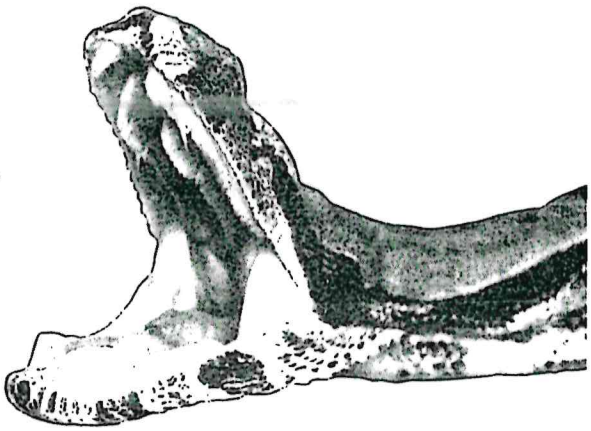
Snakes get around by using the muscles and scales of their long, limbless bodies. They propel themselves forward or sideways using their strong muscles. Their scales help them grip surfaces and also protect their bodies as they move over rough ground. All that motion wears out the scales, though, so snakes grow replacement scales. This is one reason that snakes shed their skin many times during their lives.



Strong muscles and scales help snakes move forward and sideways.

How do snakes catch and eat their food?

All snakes swallow their prey whole. Some, including rattlesnakes, use venom to kill their prey. Others, such as pythons, squeeze their prey to death before swallowing it. A snake's jawbones separate so the snake can open its mouth very wide. The anaconda (AN-uh-KON-duh), a large South American snake, can swallow a young deer whole!



Snakes' jawbones are able to separate in order to fit rodents and other small animals.

What role do snakes play in nature?

Snakes are important to the ecosystems in which they live. They eat mice, rats, and other animals that humans consider pests. Without snakes, those animals would multiply beyond balanced levels. Snakes help keep nature in balance in another way, too. Their predators, which include foxes, raccoons, coyotes, and large birds, would have less food to eat if snakes disappeared.

How can I stay safe in snake country?

If you're going to be out in nature, find out if any venomous snakes live in the area. Snakes want to avoid you as much as you want to avoid them. They want to be safe and will strike in self-defense if you get too close. Avoid ditches and piles of broken tree branches, where snakes are likely to hide. Never reach for or step over an object without first making sure no snake is on the other side. If you see a snake, *leave it alone.* Keep your eyes open and remember your knowledge of snake habits to stay safe.

Name: _____

Dictionary

Content Vocabulary

ecosystems
communities of living things and their natural settings

limbless
having no arms, legs, or wings

predators
animals that hunt and eat other animals for food

prey
animals that are hunted and eaten by other animals for food

venom
a poisonous liquid used by some animals to kill prey and protect themselves, usually delivered through a bite or sting

Academic Vocabulary

conserve
to protect something important so it will last longer

propel
to push or cause to move in a certain direction

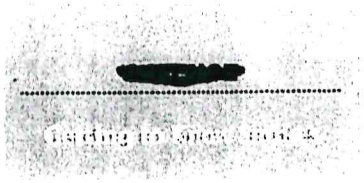
self-defense
the act of fighting in order to protect oneself from harm

Write a sentence that includes at least one vocabulary word.

_____

_____

Name: _____



Answer Questions

Use information from the article to answer each question.

1. Snakes live _____.
   - Ⓐ only in South America
   - Ⓑ on almost every continent
   - Ⓒ only in jungles
   - Ⓓ on every continent

2. Venomous snakes _____.
   - Ⓐ do not kill prey
   - Ⓑ create their own body heat
   - Ⓒ include rattlesnakes
   - Ⓓ only live in cold climates

3. According to the article, how do snakes get warm?

   _____

   _____

4. How do scales help snakes move?

   _____

   _____

5. Explain why snakes shed their skin.

   _____

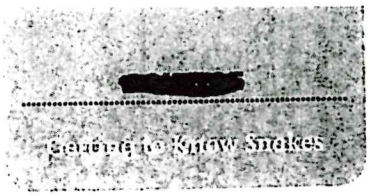
   _____

6. How do snakes kill their prey?

   _____

   _____

Name: _____



Apply Vocabulary

Use a word from the word box to complete each sentence.

Word Box

limbless	venom	propel	predators
self-defense	ecosystems	prey	conserve

1. Some kinds of snakes use their strong muscles to _____ themselves forward, while others use their muscles to move sideways.

2. Snakes help the balance of nature by keeping their _____ from multiplying too much.

3. When snakes strike, they're usually acting in _____.

4. Rattlesnakes use _____ to kill the animals they eat.

5. _____ of snakes would have trouble finding enough food if there were no snakes.

6. Snakes are important members of their _____ because of what they eat as well as what eats them.

7. Snakes are _____ reptiles that inspire fear in many people.

8. In winter, many kinds of snakes stay underground to _____ their energy.

Name: _____

Write About It

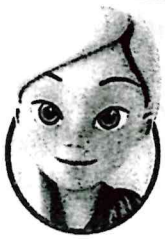
Explain how a snake's body helps it move, eat, and survive. Include facts and details from the article in your answer.

A Snake's Body Helps It Survive

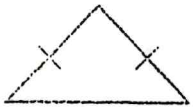
Name _____ Practice Video Tools Games

Additional Practice 16-2
Classify Triangles

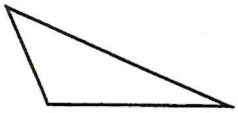
Another Look!



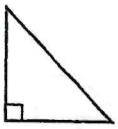
Equilateral triangle
All sides are the same length.



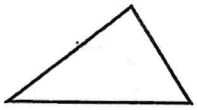
Isosceles triangle
At least two sides are the same length.



Scalene triangle
No sides are the same length.



Right triangle
One angle is a right angle.

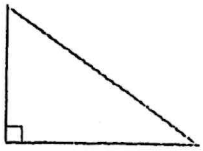


Acute triangle
All three angles are acute angles.

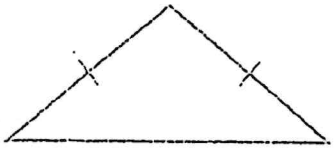
Obtuse triangle
One angle is an obtuse angle.

For **1–6**, classify each triangle by its sides and then by its angles.

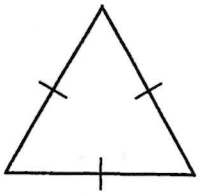
1.



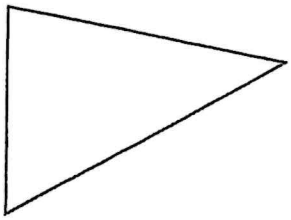
2.



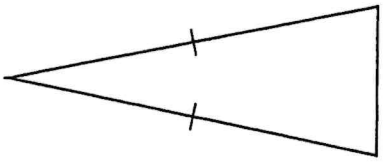
3.



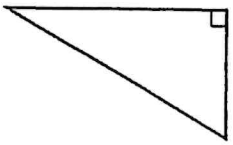
4.



5.



6.



Name _____ Practice Video Tools Games

Additional Practice 16-5

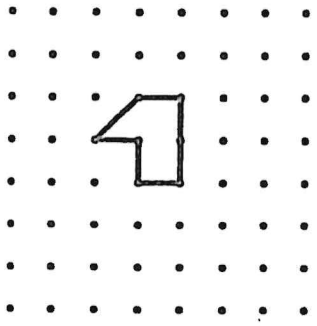
Draw Shapes with Line Symmetry

Another Look!

How to draw a line-symmetric figure:

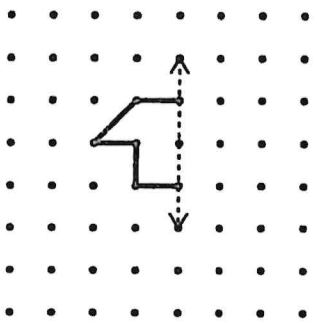
Step 1

Draw a figure on dot paper.



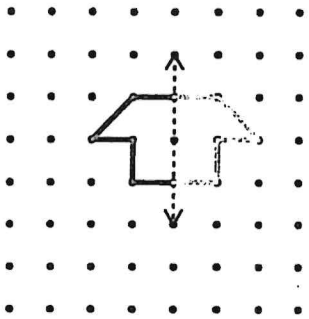
Step 2

Draw a line of symmetry.



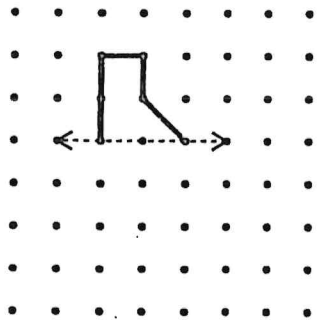
Step 3

Complete the figure on the opposite side of the line of symmetry.

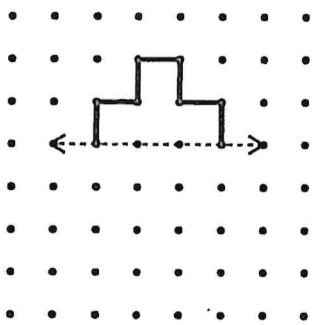


For **1–6,** use the line of symmetry to draw a line-symmetric figure.

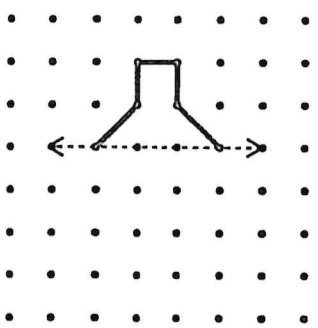
1.



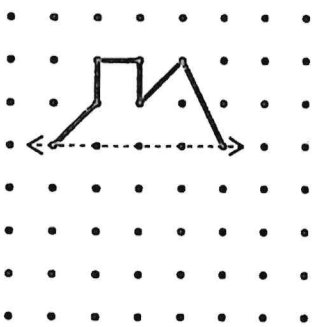
2.



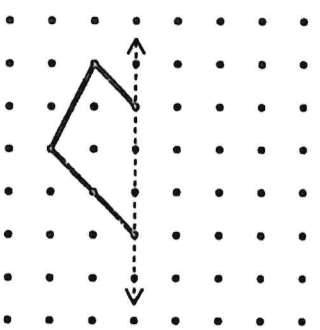
3.



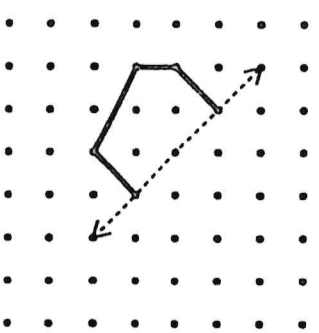
4.



5.



6.



ALL ABOUT WAVES

Listen carefully. Can you hear anything right now? Even if you can hear a tiny sound, that means that there are sound waves around you. All kinds of waves are all around us. You can't see most waves. However, they play an important role in life.

What Are Waves?

Waves are the way that matter transfers energy. When energy moves from one place to another, it moves in waves. Sometimes you can see them. Sometimes you can't.

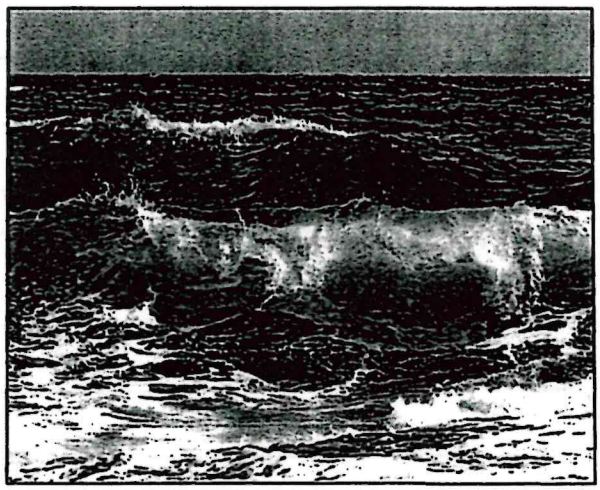
Some examples of waves are waves in water, sound waves, light waves, and even microwaves like the ones used in microwave ovens.

Types of Waves

There are two main types of waves: mechanical and electromagnetic. They are different in one major way. Mechanical waves require a medium in which to move. Some examples of mediums are water and air. This type of wave needs molecules to move through. The molecules bump against each other which helps the wave move.

Electromagnetic waves don't need a medium. That means that they can move even in space, where there is no air. They travel through special electric and magnetic fields. Charged particles generate these fields. Some of these waves are light, microwaves, and radio waves.

Other important types of waves are transverse and longitudinal waves. Transverse waves are like the waves you see in water. They move up and down and left to right or right to left. Electromagnetic waves are transverse waves.



How can you describe the waves shown above? Can they be described in more than one way?

Longitudinal waves are different. They act more like a coil spring. Imagine the spring is laying on the floor. If you pinch together and let go of one end of the spring, the energy will move through the spring in a wave. Another way to describe these waves is that they push. They push, compress, and then spread again, moving in a direct line. Sound waves are longitudinal waves.

THINKING ABOUT WHAT YOU READ

Answer the questions below using details from the text. Remember to restate, answer the question in complete sentences, and prove it!

1. What role do waves play in our daily lives? Give two examples.

2. What are mechanical and electromagnetic waves? How are they different?

3. What are transverse and longitudinal waves? How are they different?

4. What are amplitude and wavelength? How are they measured?

The Bill of Rights

Written in Modern Language

The Bill of Rights was approved in 1791 and contains the first ten Amendments (changes) to the Constitution. These Amendments protect our rights as Americans.

Amendment 1: This is also called the "First Amendment." Because of this Amendment, we have the right to practice any religion we choose. We have the right to say what we would like (in most cases). We have the freedom to print our opinions in newspapers, books, and magazines. Citizens are allowed to sign petitions and present them to the government. Americans are allowed to join together peacefully in groups of any size.

Amendment 2: We have the right to own guns.

Amendment 3: Americans cannot be forced to let soldiers live in their homes.

Amendment 4: This Amendment protects our privacy. The police cannot search your body or property without a warrant from a judge.

Amendment 5: We have the right to a fair, legal trial if we are accused of a crime. You don't have to say things in court that show you are guilty of a crime.

Amendment 6: We have the right to a speedy and public trial. You should not have to wait many years for your trial to start.

Amendment 7: You have the right to a jury trial in private cases, like when you are suing someone. The amount of damage must be more than $20.

Amendment 8: In this Amendment, cruel and unusual punishment is outlawed. Also, if you are charged with a crime, the judge cannot set an unreasonable bail amount.

Amendment 9: This Amendment tells us that Americans have rights that are not listed in the Constitution.

Amendment 10: Power that was not given to the U.S. Government by the Constitution belongs to the states or to the people.

Scenario 3

Jenna Smith is a college student who does not like the governor of her state. She feels that the governor is not doing a good job. Jenna decides to write an article in the newspaper telling why she does not agree with the governor. The governor does not like this article, but she does respect Jenna's right to state her opinion.

Scenario 4

Valerie Pacheko is suing the person who damaged her car in an accident. The damages total $245. Valerie goes to court and the judge tells her that she doesn't want to bring a jury into the case for such a small amount of money. The judge wants Valerie to just forget about the car accident and move on.

The Bill of Rights

Cooperative Group Activity

Group Members: _____

_____

Instructions: Read and discuss the scenario cards with your group members. Write the Amendment number that relates to each scenario.
If the person's rights were respected, check the appropriate box.
If the person's rights were NOT respected, check the appropriate box. Then, write what should have been done differently to ensure the person's rights were not violated.

Scenario 1

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 2

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 3

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 4

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

4th Grade
AMI Day 3

4th Grade
AMI Day Instructions

For each AMI (Alternative Method of Instruction) day, please have your student complete the packet at their own pace. You will receive an email from us to complete the specific day's packet (Ex: Please complete Day 1 worksheets). They may receive help if needed. When finished, please ensure your child returns the completed work to school on our next school day.

If you have any questions, please feel free to contact your child's teacher during our office hours (10:00 am - 2:00 pm) using the email address below or by sending a message through Class Dojo.

Mrs. Neal: mneal@seymourschool.net

Mrs. Neuroth: jneuroth@seymourschool.net

Mrs. Shelton: rshelton@seymourschool.net

Thank you for your continued support of your child's education!

Fourth Grade Teacher,
Mrs. Neal, Mrs. Neuroth, Mrs. Shelton

4th Grade Snow Day Packet - AMI Day 3

☐ Reading Read the article "Julia Morgan Architect and Trailblazer". Answer the questions on the following pages. Make sure you restate your question in your answers.

☐ Math
Complete the front and back of worksheet 121/117

☐ Science
Review the text All About Waves. Complete the Venn Diagram (p. 17) using the text details.

☐ Social Studies
Read over The Bill of Rights written in modern language. Read scenario 5 and scenario 6. Fill out scenario 5 and 6 boxes on the recording sheet using the directions given.

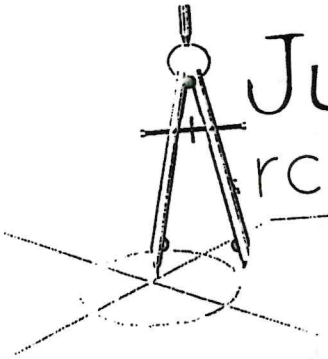
Please send the completed work to school with your child on our next school day. We will be discussing the work and I will provide feedback to students.

Day 3

BIOGRAPHY

Julia Morgan: Architect and Trailblazer

Name: _____

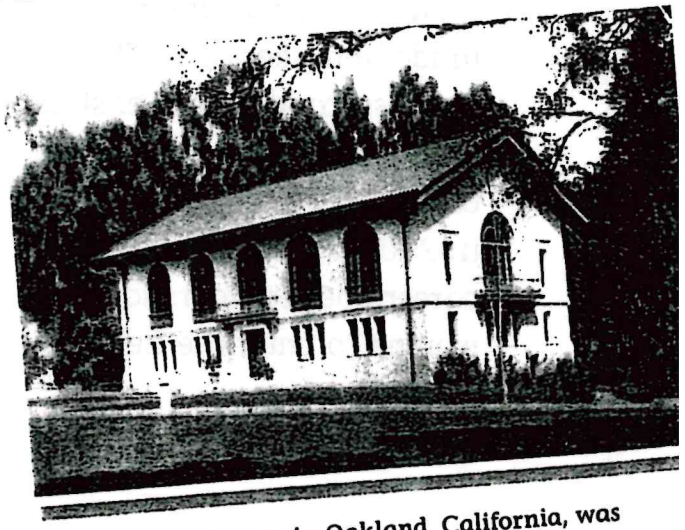


Julia Morgan
Architect and Trailblazer

Julia Morgan was born in 1872 in San Francisco, California. During her teens, she met an architect and became interested in designing buildings. Most girls in the 1800s did not go to college, but Julia was not like most girls. She attended the University of California, Berkeley, where she studied math and science. She earned a degree in civil engineering in 1894 and was the only female in her program.

After graduation, one of Julia's teachers urged her to attend a famous architecture school in France. She moved to France in 1896, even though the school did not allow women to attend. The next year, the school changed its rules and allowed women to apply. Julia became the school's first female student. She won medals for her work. After submitting an excellent design for a theater, she was awarded a certificate in architecture in 1902. She was the school's first female graduate.

Julia then returned to California and worked for an architect. She passed a test in 1904 and became California's first licensed female architect. She opened her own architecture office in San Francisco. Among her first projects were several buildings for a nearby women's college.

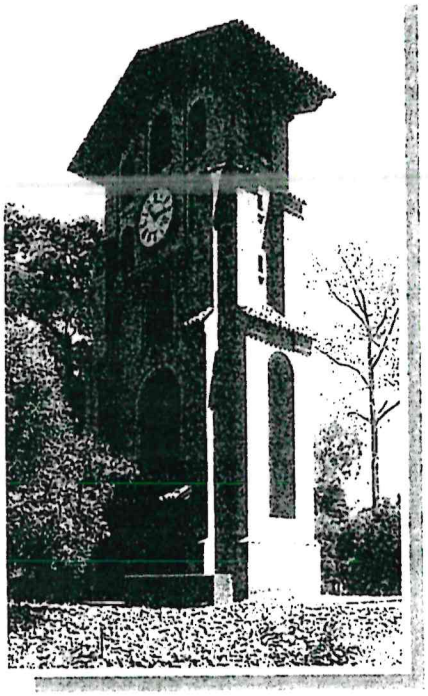


Mills College Library, in Oakland, California, was one of Julia Morgan's first projects.

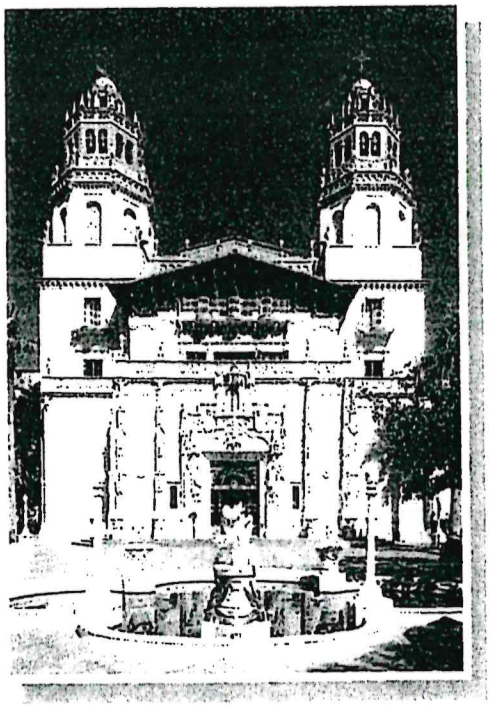
In 1906, there was a huge earthquake in San Francisco. Many buildings were destroyed, but a college bell tower designed by Julia was left standing. After that, she gained attention and new work, including the repair of a large hotel damaged in the earthquake. She designed hundreds of homes and other buildings after the earthquake.

Julia retired in 1951. During her lifetime, she designed over 700 buildings, most of them in California. One of her most famous buildings is Hearst Castle. Her projects included homes, schools, college buildings, churches, and museums. Julia's buildings are well made and beautiful. They never seem to go out of style.

Julia became a member of the California Hall of Fame in 2008. Her trailblazing career opened doors for women to enter the field of architecture.

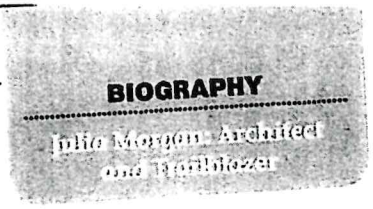


The Bell Tower at Mills College was left standing after the 1906 earthquake.



Hearst Castle, in California, is one of Julia Morgan's most famous buildings.

Name: _____



Dictionary

Content Vocabulary

architect
a person who designs buildings and makes sure they are built correctly

certificate
a piece of paper proving that something is true, especially that a person has finished school or a training program

civil engineering
the science of designing and building bridges, roads, and large buildings

designing
thinking about and planning how to build or make something

licensed
having a legal paper giving permission to do, use, or own something

Academic Vocabulary

submitting
presenting to someone for approval

gained
got or earned something

retired
stopped working, usually after reaching a certain age

trailblazing
setting out in a new direction and making it easier for others to follow

Write a sentence that includes at least one vocabulary word.

_____

_____

BIOGRAPHY

Name: _____

Answer Questions

Use information from the article to answer each question.

1. When Julia was a teenager, she became interested in _____.
   - Ⓐ moving to France
   - Ⓑ designing buildings
   - Ⓒ joining the California Hall of Fame
   - Ⓓ repairing buildings damaged by earthquakes

2. Julia's degree from the University of California, Berkeley, was in the field of _____.
   - Ⓐ medicine
   - Ⓑ architecture
   - Ⓒ museum studies
   - Ⓓ civil engineering

3. Julia went to France because _____.
   - Ⓐ she wanted to study architecture
   - Ⓑ her home in San Francisco was destroyed by an earthquake
   - Ⓒ her family wanted her to get married
   - Ⓓ she wanted to help women find meaningful work

4. How did the 1906 San Francisco earthquake help Julia's career?

   _____

   _____

5. Why does the article describe Julia's career as trailblazing?

   _____

   _____

   _____

Name: _____

Apply Vocabulary

Use a word from the word box to complete each sentence.

Word Box

retired	certificate	gained
architect	trailblazing	licensed
designing	submitting	civil engineering

1. After _____ a school assignment, you will receive feedback and a grade from your teacher.

2. A _____ from a school proves that a person has completed a course of study.

3. Julia Morgan met an _____ who inspired her future career.

4. A person who does something that other people thought was impossible might be described as _____.

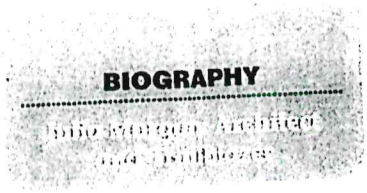
5. When Julia _____, she stopped designing buildings.

6. A _____ architect is permitted by law to work in the field of architecture.

7. If you want to build bridges, you should study _____ in college.

8. Julia studied architecture because she was interested in _____ buildings.

9. After the earthquake, Julia _____ new work.



Name: _____

Time Order

A text that has a **time order** structure presents the main idea and details in the order in which they happen.

Authors use these signal words to create a **time order** structure:

Signal Words

at	then	next	during	finally
first	last	after	before	following

1. The first paragraph of the article tells us that Julia Morgan _____ before becoming interested in architecture.

2. What happened a year after Julia moved to France?
   Why is this discussed after the information in the first paragraph?

   _____

   _____

3. Write two sentences from the article that use **time order** signal words.

   a. _____

   _____

   b. _____

   _____

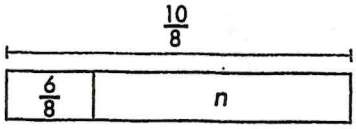
Name _____ Practice Video Tools Games

Additional Practice 9-5

Subtract Fractions with Like Denominators

Another Look!

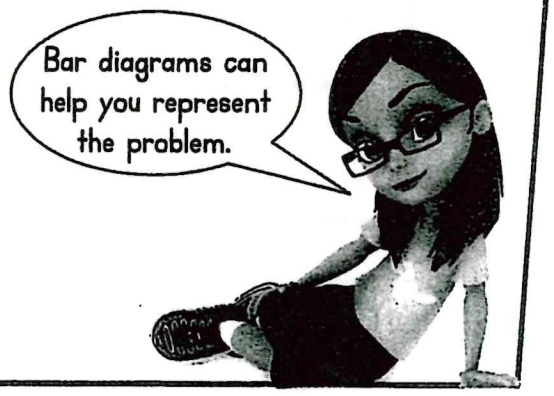
Flora has $\frac{10}{8}$ cups of flour. She uses $\frac{6}{8}$ cup to make dough. How much flour, n, does Flora have left?



Subtract the numerators. Write the difference over the like denominator.

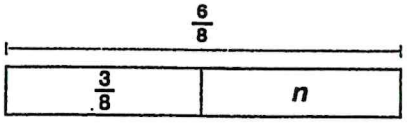
$n = \frac{10}{8} - \frac{6}{8}, n = \frac{4}{8}$

Flora has $\frac{4}{8}$ cup flour left.

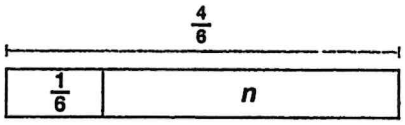


For **1–10**, subtract the fractions.

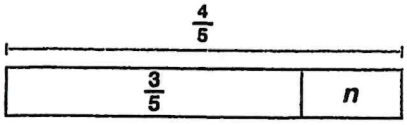
1. $\frac{6}{8} - \frac{3}{8}$



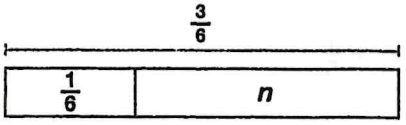
2. $\frac{4}{6} - \frac{1}{6}$



3. $\frac{4}{5} - \frac{3}{5}$



4. $\frac{3}{6} - \frac{1}{6}$



5. $\frac{97}{100} - \frac{40}{100}$

6. $\frac{5}{8} - \frac{1}{8}$

7. $\frac{10}{10} - \frac{9}{10}$

8. $\frac{17}{12} - \frac{5}{12}$

9. $\frac{33}{100} - \frac{4}{100}$

10. $\frac{50}{100} - \frac{10}{100}$

Name _____ Practice Video Tools Games

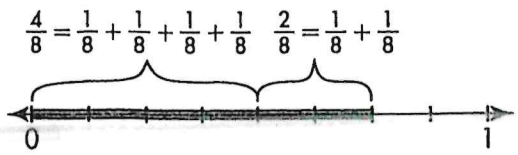
Additional Practice 9-3

Add Fractions with Like Denominators

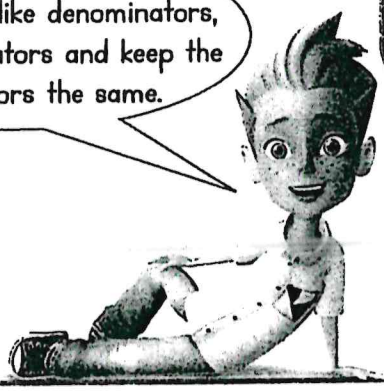
Another Look!

Find $\frac{4}{8}+\frac{2}{8}$.

When you add fractions with like denominators, add the numerators and keep the denominators the same.



$\frac{4}{8}+\frac{2}{8}=\frac{4+2}{6}=\frac{6}{8}$



For **1–18**, find each sum. Use drawings or fraction strips as needed.

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

2. $\frac{3}{10}+\frac{6}{10}$

3. $\frac{5}{12}+\frac{2}{12}$

4. $\frac{3}{12}+\frac{7}{12}$

5. $\frac{5}{10}+\frac{3}{10}$

6. $\frac{2}{8}+\frac{4}{8}$

7. $\frac{7}{10}+\frac{3}{10}$

8. $\frac{1}{8}+\frac{6}{8}$

9. $\frac{1}{10}+\frac{5}{10}$

10. $\frac{4}{5}+\frac{1}{5}$

11. $\frac{2}{8}+\frac{6}{8}$

12. $\frac{6}{10}+0$

13. $\frac{1}{5}+\frac{2}{5}+\frac{4}{5}$

14. $\frac{2}{8}+\frac{1}{8}+\frac{12}{8}$

15. $\frac{2}{6}+\frac{10}{6}$

16. $\frac{20}{100}+\frac{25}{100}+\frac{25}{100}$

17. $\frac{2}{10}+\frac{6}{10}+\frac{1}{10}$

18. $\frac{10}{10}+\frac{10}{10}+\frac{10}{10}$

ALL ABOUT WAVES

Listen carefully. Can you hear anything right now? Even if you can hear a tiny sound, that means that there are sound waves around you. All kinds of waves are all around us. You can't see most waves. However, they play an important role in life.

What Are Waves?

Waves are the way that matter transfers energy. When energy moves from one place to another, it moves in waves. Sometimes you can see them. Sometimes you can't.

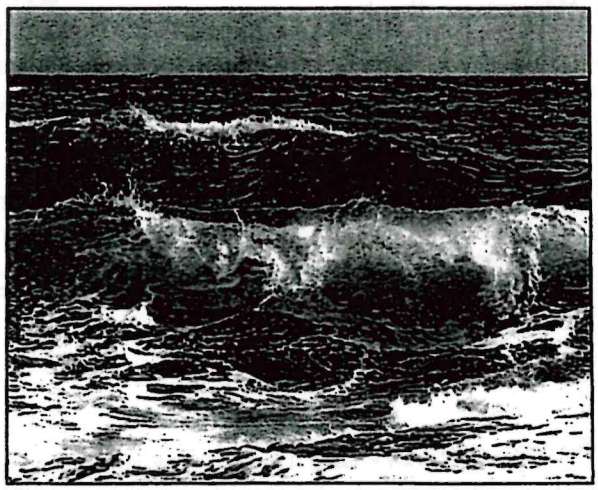
Some examples of waves are waves in water, sound waves, light waves, and even microwaves like the ones used in microwave ovens.

Types of Waves

There are two main types of waves: mechanical and electromagnetic. They are different in one major way. Mechanical waves require a medium in which to move. Some examples of mediums are water and air. This type of wave needs molecules to move through. The molecules bump against each other which helps the wave move.

Electromagnetic waves don't need a medium. That means that they can move even in space, where there is no air. They travel through special electric and magnetic fields. Charged particles generate these fields. Some of these waves are light, microwaves, and radio waves.

Other important types of waves are transverse and longitudinal waves. Transverse waves are like the waves you see in water. They move up and down and left to right or right to left. Electromagnetic waves are transverse waves.



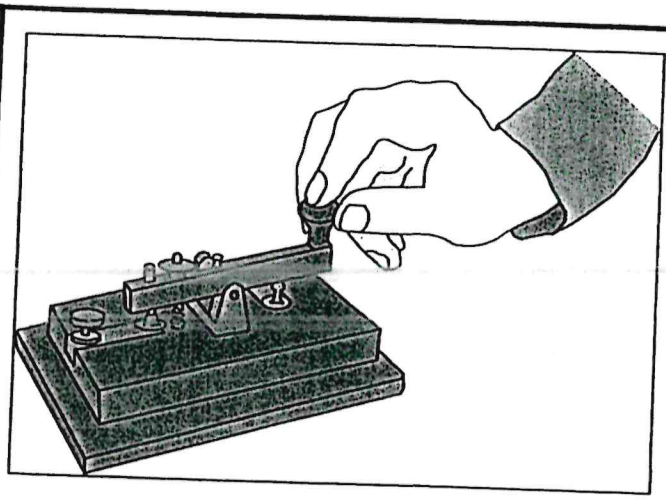
How can you describe the waves shown above? Can they be described in more than one way?

Longitudinal waves are different. They act more like a coil spring. Imagine the spring is laying on the floor. If you pinch together and let go of one end of the spring, the energy will move through the spring in a wave. Another way to describe these waves is that they push. They push, compress, and then spread again, moving in a direct line. Sound waves are longitudinal waves.

Parts of a Wave

When you imagine a picture of a transverse wave, it looks like a rope moving up and down. To talk about this kind of a wave, scientists use special words. Two important words are the amplitude and wavelength.

Imagine a line that goes right through the middle of the wave. This is the resting point. The distance between the resting point and the high points above (the crest) or the low points below (the trough) is the amplitude. The energy of the wave is bigger when the amplitude is bigger. The distance between high points is the wavelength. The wavelength tells you the frequency, or how much energy the wave has.



The device pictured above was used to create messages using Morse Code. Morse Code can be transmitted via electric current, radio waves, visible light, or sound waves. The waves are present when the dash or dot is sent, and then the wave is absent during the pauses between the dots and dashes.

Waves Move Objects

Sometimes, waves can cause objects to move. Waves themselves are energy. However, that energy sometimes moves things like water. This happens when lake or ocean waves move boats and move water that hits beaches.

Another example of waves moving items is sound waves. When you hear really loud music, have you ever felt vibrations? Sometimes a loud bass can cause objects around them to move just a tiny bit. For example, a pencil might move a little bit if it's sitting on a table where a bass speaker is also sitting.

Waves and Patterns

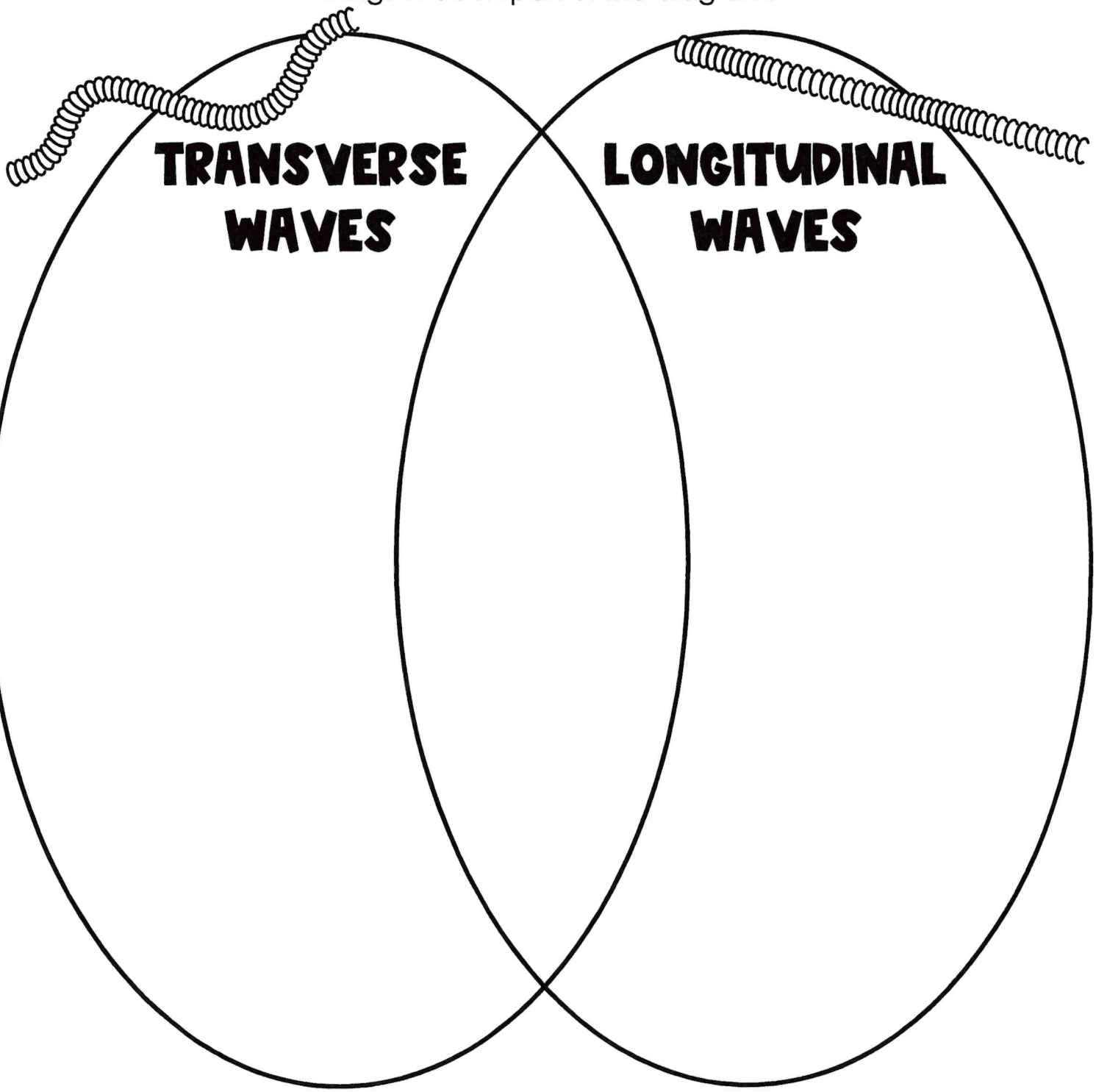
Waves are very useful for making sound, light, and even heating up food. We can also use waves in patterns to communicate. One example of this type of pattern is Morse code. Morse code is a special code that uses sounds or flashes of light that represent letters. The code is a mix of dots and dashes.

The dots are short beeps or flashes. The dashes are longer beeps or flashes. For example, the letter "a" is one dot and one dash. However, the letter "h" is four dots. Then, people listen or watch the code and turn it into letters. Morse code was used with telegraphs for many years. It was also used during WWII to help armies communicate with each other from far away.

Other patterns also help us communicate. For example, computers use patterns of 0s and 1s. Also, music is stored in a pattern of 0s and 1s. Computers, phones, and other digital devices can read the pattern very quickly. They know how to turn the pattern into an image, sound, or an action.

CONCEPT DEVELOPMENT

In the Venn Diagram below, compare and contrast transverse waves and longitudinal waves. Use the pictures included to help you. Try to list at least two things in each part of the diagram.



The Bill of Rights

Written in Modern Language

The Bill of Rights was approved in 1791 and contains the first ten Amendments (changes) to the Constitution. These Amendments protect our rights as Americans.

Amendment 1: This is also called the "First Amendment." Because of this Amendment, we have the right to practice any religion we choose. We have the right to say what we would like (in most cases). We have the freedom to print our opinions in newspapers, books, and magazines. Citizens are allowed to sign petitions and present them to the government. Americans are allowed to join together peacefully in groups of any size.

Amendment 2: We have the right to own guns.

Amendment 3: Americans cannot be forced to let soldiers live in their homes.

Amendment 4: This Amendment protects our privacy. The police cannot search your body or property without a warrant from a judge.

Amendment 5: We have the right to a fair, legal trial if we are accused of a crime. You don't have to say things in court that show you are guilty of a crime.

Amendment 6: We have the right to a speedy and public trial. You should not have to wait many years for your trial to start.

Amendment 7: You have the right to a jury trial in private cases, like when you are suing someone. The amount of damage must be more than $20.

Amendment 8: In this Amendment, cruel and unusual punishment is outlawed. Also, if you are charged with a crime, the judge cannot set an unreasonable bail amount.

Amendment 9: This Amendment tells us that Americans have rights that are not listed in the Constitution.

Amendment 10: Power that was not given to the U.S. Government by the Constitution belongs to the states or to the people.

Scenario 5

Jason Dean is charged with murder in the shooting death of his former friend. The judge tells Jason that he already thinks he is guilty. Also, Jason will have to wait 3 years before his trial starts.

Scenario 6

Citizens of Indiana are very upset about a law that is being considered in the Indiana State Legislature. This law would take away money from the public schools and give it to the Governor as a pay increase. 500,000 citizens of Indiana sign a petition and present it to the Indiana State Legislature. After discussing the options, the Legislature decides to side with the petitioners and leave the money in public schools where it belongs.

Scenario 5

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 6

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 7

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 8

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 9

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 10

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

4th Grade
AMI Day 4

4th Grade
AMI Day Instructions

For each AMI (Alternative Method of Instruction) day, please have your student complete the packet at their own pace. You will receive an email from us to complete the specific day's packet (Ex: Please complete Day 1 worksheets). They may receive help if needed. When finished, please ensure your child returns the completed work to school on our next school day.

If you have any questions, please feel free to contact your child's teacher during our office hours (10:00 am - 2:00 pm) using the email address below or by sending a message through Class Dojo.

Mrs. Neal: mneal@seymourschool.net

Mrs. Neuroth: jneuroth@seymourschool.net

Mrs. Shelton: rshelton@seymourschool.net

Thank you for your continued support of your child's education!

Fourth Grade Teacher,
Mrs. Neal, Mrs. Neuroth, Mrs. Shelton

4th Grade Snow Day Packet - AMI Day 4

☐ Reading Read the article "Weather and the Scientist Who Study It". Answer the questions on the following pages. Make sure you restate your question in your answers.

☐ Math
Complete the front and back of worksheet 127/125

☐ Science
Review the text All About Waves. Complete the chart using the text.

☐ Social Studies
Read over The Bill of Rights written in modern language. Read scenario 7 and scenario 8. Fill out scenario 7 and 8 boxes on the recording sheet using the directions given.

Please send the completed work to school with your child on our next school day. We will be discussing the work and I will provide feedback to students.

Day 4

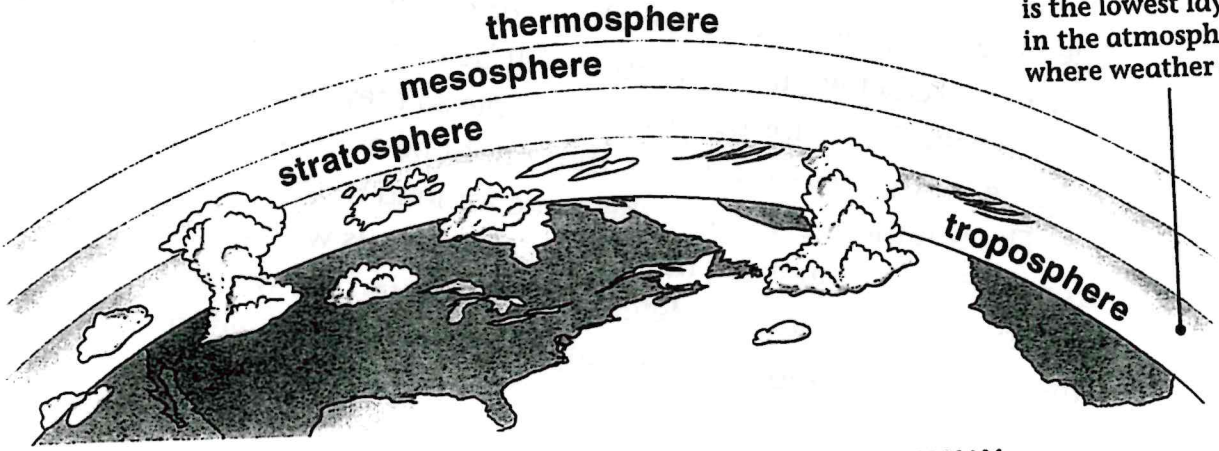
Name: _____

WEATHER
and the Scientists Who Study It

Right this minute, many different types of weather are happening all around the world. Did you ever wonder what causes weather and how we know so much about it? We get weather information from scientists called *meteorologists,* who observe, study, and predict weather.

A thick band of air, called the *atmosphere,* surrounds our planet. It consists of layers of invisible gases. The atmosphere extends hundreds of miles into the sky. The lowest layer—the *troposphere*—is only about 6 to 9 miles (10 to 15 km) thick. The troposphere is where Earth's weather happens because this layer of air contains the most water. You usually can't see this water because it's in the form of an invisible gas called *water vapor.*

Many factors work together to create weather in the troposphere. The three main factors are sunlight, wind, and water. The sun heats up Earth's continents and oceans. Wind moves this heat around, and it also circulates the water vapor in the air.



The troposphere is the lowest layer in the atmosphere, where weather occu

The weather in the troposphere is constantly changing. For instance, water vapor in the air can cool and turn into rain clouds. Wind can later blow the clouds away, leaving clear blue skies. Dark clouds can scoot in, bringing a noisy thunderstorm.

Meteorologists study the effects of sunlight, wind, and water on the troposphere. In addition, they study changes in the weather.

Meteorologists get weather information from many sources. They have weather stations that contain many types of instruments.

- *Thermometers* measure the temperature of the air.
- *Anemometers* measure the speed of the wind.
- *Wind vanes* show from which direction the wind is blowing.
- *Rain gauges* measure rainfall.
- *Barometers* measure atmospheric pressure.

A meteorologist uses information from a computer to understand weather patterns.

Meteorologists use computers to gather information. They get information from weather stations around the world, and they also study weather radar pictures that show rainfall. From space, weather satellites send information about clouds and temperatures.

Meteorologists study all this information. They use it to prepare weather charts and maps so they can predict what the weather will be in the future. The information helps them warn people so they can prepare for any severe weather that might be on its way.

The weather never stays the same for long in the troposphere. Throughout the year, it provides us with an endless variety of shows. Meteorologists around the world are always watching and studying those shows in an effort to better understand Earth's weather.

Name: _____

Dictionary

Content Vocabulary

atmosphere
a layer of air surrounding a planet or other body in space

temperature
a measure of the amount of heat in something

troposphere
the lowest layer of Earth's atmosphere; the layer in which weather happens

water vapor
water in the form of an invisible gas

Academic Vocabulary

observe
to watch and pay careful attention to

predict
to say or estimate what will happen in the future, often after gathering information

instruments
tools, especially for taking or recording measurements

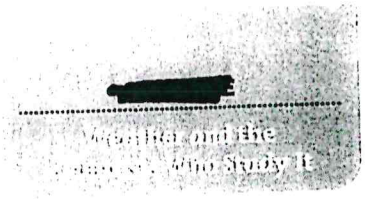
severe
very intense, serious, or bad

Write a sentence that includes at least one vocabulary word.

_____

_____

Name: _____



Answer Questions

Use information from the article to answer each question.

1. _____ is not one of the three main factors that create weather.
   - Ⓐ Water
   - Ⓑ Land
   - Ⓒ Sunlight
   - Ⓓ Wind

2. Meteorologists do not _____ weather.
   - Ⓐ predict
   - Ⓑ study
   - Ⓒ cause
   - Ⓓ observe

3. Why does Earth's weather happen in the troposphere?

   _____

   _____

4. What kind of weather would a meteorologist likely predict after seeing dark clouds?

   _____

   _____

5. Explain why weather stations are important.

   _____

   _____

6. What is the purpose of the weather charts and maps that meteorologists prepare?

   _____

   _____

Name: _____

Apply Vocabulary

Use a word from the word box to complete each sentence.

Word Box

troposphere	severe	water vapor	observe
temperature	predict	instruments	atmosphere

1. _____ turns into rain clouds when it gets cooler.

2. The layer of air in which weather happens is the _____.

3. People can prepare for _____ weather if they know ahead of time that it's coming.

4. Earth's _____ is a blanket of air that is hundreds of miles thick.

5. Anemometers are _____ that measure wind speed.

6. To measure the _____ of the air, a meteorologist uses a thermometer.

7. If you _____ dark clouds in the sky, a thunderstorm is likely to follow.

8. Meteorologists _____ that the weather will be sunny for the next three days.

Name _____ Practice Video Tools Games

Additional Practice 9-8
Add Mixed Numbers

Another Look!

Randy played basketball for $2\frac{5}{6}$ hours on Saturday. He played for $1\frac{3}{6}$ hours on Sunday. How many hours did Randy play basketball on the weekend?

Add Mixed Numbers

a. Add the fractions. $2\frac{5}{6}$

b. Add the whole numbers. $+ 1\frac{3}{6}$

c. Write the fraction as a mixed number. $3\frac{8}{6} = 4\frac{2}{6}$

$3\frac{8}{6} = 3 + \frac{6}{6} + \frac{2}{6} = 4\frac{2}{6}$

Randy played basketball for $4\frac{2}{6}$ hours on the weekend.

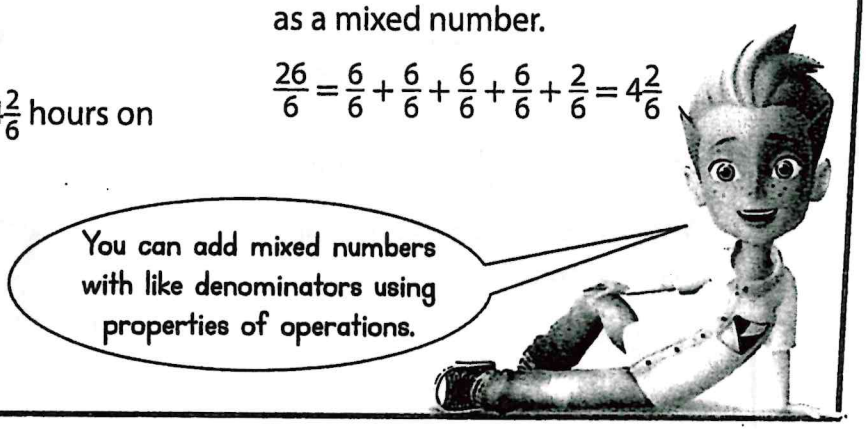
Add Fractions

a. Write the mixed numbers as fractions. $2\frac{5}{6} = \frac{17}{6}$, $+ 1\frac{3}{6} = + \frac{9}{6}$

b. Add the fractions. $\frac{26}{6} = 4\frac{2}{6}$

c. Write the fraction as a mixed number.

$\frac{26}{6} = \frac{6}{6} + \frac{6}{6} + \frac{6}{6} + \frac{6}{6} + \frac{2}{6} = 4\frac{2}{6}$



For **1–12**, find each sum by adding mixed numbers or adding equivalent fractions.

1. $2\frac{10}{12} + 3\frac{3}{12}$

2. $1\frac{3}{8} + 3\frac{6}{8}$

3. $5\frac{4}{10} + 4\frac{2}{10}$

4. $10\frac{2}{6} + \frac{3}{6}$

5. $3\frac{3}{12} + 6\frac{8}{12}$

6. $1\frac{2}{5} + 3\frac{1}{5}$

7. $2\frac{10}{12} + 3\frac{9}{12}$

8. $2\frac{2}{6} + 3\frac{5}{6}$

9. $4\frac{3}{4} + 2\frac{2}{4}$

10. $1\frac{9}{10} + 3\frac{2}{10}$

11. $1\frac{8}{12} + 3\frac{5}{12}$

12. $1\frac{11}{12} + 2\frac{5}{12}$

Name _____ Practice Video Tools Games

Additional Practice 9-7

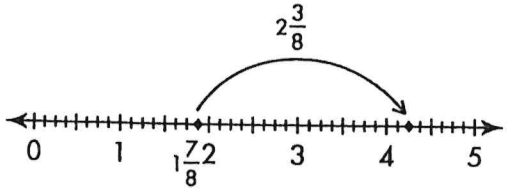
Model Addition and Subtraction of Mixed Numbers

Another Look!

You can use a tool such as fraction strips or number lines to show the addition and subtraction of mixed numbers.

Use a number line to find $1\frac{7}{8} + 2\frac{3}{8}$.

Use a number line for eighths. Start at $1\frac{7}{8}$.



To add, move $2\frac{3}{8}$ to the right.

Write the sum as a fraction or a mixed number.

So, $1\frac{7}{8} + 2\frac{3}{8} = 4\frac{2}{8}$.

Use fraction strips to find $2\frac{1}{5} - 1\frac{2}{5}$.

Model the number you are subtracting from, $2\frac{1}{5}$.

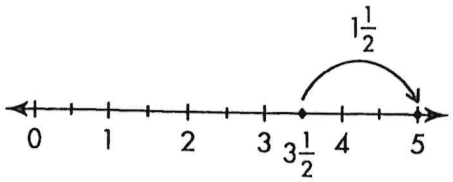
Rename $2\frac{1}{5}$ as $1\frac{6}{5}$. Cross out one whole and $\frac{2}{5}$ to show subtracting $1\frac{2}{5}$.

Write the difference as a fraction.

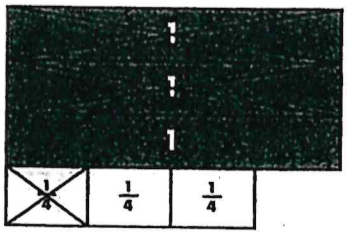
So, $2\frac{1}{5} - 1\frac{2}{5} = \frac{4}{5}$.

For **1–9**, use a tool to find each sum or difference.

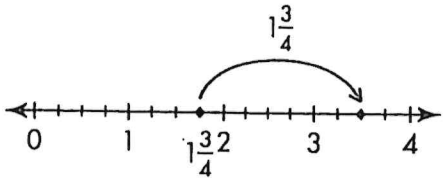
1. $3\frac{1}{2} + 1\frac{1}{2}$



2. $3\frac{3}{4} - 2\frac{1}{4}$



3. $1\frac{3}{4} + 1\frac{3}{4}$



4. $3\frac{4}{5} - 1\frac{2}{5}$

5. $5\frac{2}{6} + 3\frac{5}{6}$

6. $10\frac{2}{8} - 7\frac{5}{8}$

7. $2\frac{5}{12} + 4\frac{3}{12}$

8. $12\frac{1}{3} - 5\frac{2}{3}$

9. $2\frac{2}{4} + 6\frac{3}{4}$

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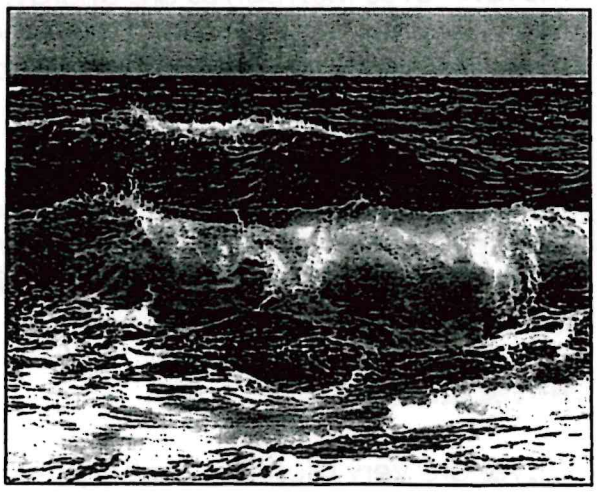

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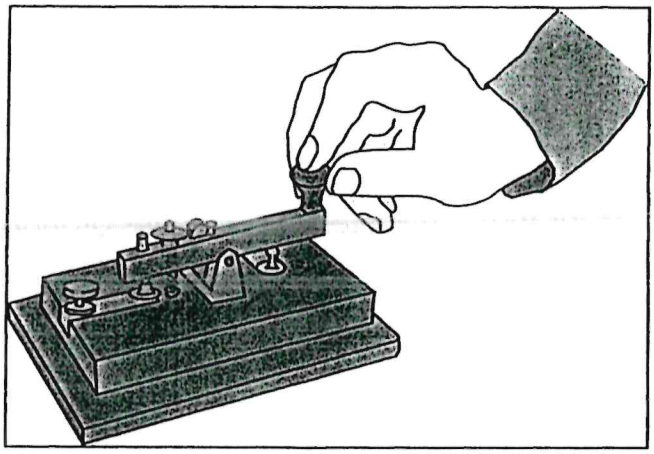

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The dots are short beeps or flashes. The dashes are longer beeps or flashes. For example, the letter "a" is one dot and one dash. However, the letter "h" is four dots. Then, people listen or watch the code and turn it into letters. Morse code was used with telegraphs for many years. It was also used during WWII to help armies communicate with each other from far away.

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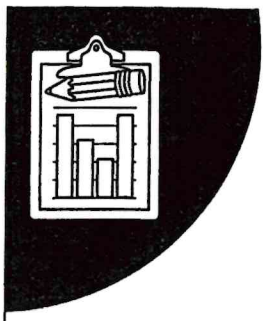

WAVES & movement

Complete the chart below with the correct information about waves. You may use your text to help you, if needed.

What are they?	How do they move?

How do they move objects?	How do they move energy?

The Bill of Rights

Written in Modern Language

The Bill of Rights was approved in 1791 and contains the first ten Amendments (changes) to the Constitution. These Amendments protect our rights as Americans.

Amendment 1: This is also called the "First Amendment." Because of this Amendment, we have the right to practice any religion we choose. We have the right to say what we would like (in most cases). We have the freedom to print our opinions in newspapers, books, and magazines. Citizens are allowed to sign petitions and present them to the government. Americans are allowed to join together peacefully in groups of any size.

Amendment 2: We have the right to own guns.

Amendment 3: Americans cannot be forced to let soldiers live in their homes.

Amendment 4: This Amendment protects our privacy. The police cannot search your body or property without a warrant from a judge.

Amendment 5: We have the right to a fair, legal trial if we are accused of a crime. You don't have to say things in court that show you are guilty of a crime.

Amendment 6: We have the right to a speedy and public trial. You should not have to wait many years for your trial to start.

Amendment 7: You have the right to a jury trial in private cases, like when you are suing someone. The amount of damage must be more than $20.

Amendment 8: In this Amendment, cruel and unusual punishment is outlawed. Also, if you are charged with a crime, the judge cannot set an unreasonable bail amount.

Amendment 9: This Amendment tells us that Americans have rights that are not listed in the Constitution.

Amendment 10: Power that was not given to the U.S. Government by the Constitution belongs to the states or to the people.

Scenario 7

Polly Parker lives alone in her small inner-city apartment. She hears reports of break-ins at other apartments close to where she lives. So, Polly chooses to purchase a gun. However, when Polly applies to get a license for her gun, the official tells her that women should not carry guns. He denies her gun license and takes away her brand new gun.

Scenario 8

Todd Remington is enjoying a nice, quiet evening at home with his family. All of a sudden, he hears loud banging on the door. When he answers the door, 15 policemen burst into his house and say that they are going to look for evidence of a crime. Todd asks for their search warrant, but the officers have no search warrant. They continue to search his entire home.

Scenario 5

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 6

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 7

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 8

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 9

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 10

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

4th Grade
AMI Day 5

4th Grade
AMI Day Instructions

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If you have any questions, please feel free to contact your child's teacher during our office hours (10:00 am - 2:00 pm) using the email address below or by sending a message through Class Dojo.

Mrs. Neal: mneal@seymourschool.net

Mrs. Neuroth: jneuroth@seymourschool.net

Mrs. Shelton: rshelton@seymourschool.net

Thank you for your continued support of your child's education!

Fourth Grade Teacher,
Mrs. Neal, Mrs. Neuroth, Mrs. Shelton

4th Grade Snow Day Packet - AMI Day 5

☐ Reading Read the article "Roald Dahl Master Storyteller". Answer the question on the following pages. Make sure you restate your question in your answers.

☐ Writing Write a letter to your teacher about the life of Doald Dahl.

☐ Math
Complete the front and back of worksheet 137/115

☐ Science
Complete the worksheet over wavelength and amplitude using the chart (p. 19)

☐ Social Studies
Read over The Bill of Rights written in modern language. Read scenario 9 and scenario 10. Fill out scenario 9 and 10 boxes on the recording sheet using the directions given.

Please send the completed work to school with your child on our next school day. We will be discussing the work and I will provide feedback to students.

Day 5

BIOGRAPHY

Name: _____

Roald Dahl
MASTER STORYTELLER

Roald Dahl

Can you imagine riding in a huge peach with a group of magical insects? How about touring the world's most amazing chocolate factory? Well, master storyteller Roald Dahl could. He wrote fantastical children's stories between the years 1943 and 1990. His famous books, many of which have been made into movies, include *James and the Giant Peach, Charlie and the Chocolate Factory, The Witches, Matilda,* and *Fantastic Mr. Fox.* Roald had a great sense of humor and a love of adventure. His writing reflected his adventurous personality.

Roald was born in Wales, Great Britain, in 1916. He had a difficult childhood. His sister died when he was only three years old, and his father died not long after. While Roald was growing up, he had to leave home every year to go to a boys-only boarding school. Between his homesickness and the bullying he endured, he was miserable. His memories of school had a strong influence on his writing. Like Roald, the characters in his stories were bullied, but they figured out clever ways to get even.

Following high school, Roald wanted to travel to a foreign location. At age eighteen, he went with a study group to Newfoundland, Canada. Later, he took a job that sent him to East Africa. He had a great time living in a hot climate, seeing snakes and crocodiles, and going on safaris.

While Roald was working in Africa, World War II began. He joined the Royal Air Force, completed flight training, and flew many missions. After many adventures and several injuries, Roald moved to Washington, D.C., where he started to write short stories. His first children's book, *The Gremlins,* was published in 1943.

Over the next several decades, Roald published other children's stories that were even more popular than the first one. He also wrote stories for adults. Many of his adult stories were in the horror genre because he liked to startle people.

Roald's books are popular because the main characters are odd and behave strangely. These characters lead unusual lives filled with adventure. Most of Roald's characters have a peculiar sense of humor. They are usually quite smart and funny, but they're mean at the same time. Roald's stories are also popular because they have twists and turns, like a real adventure. For example, in his retelling of *Little Red Riding Hood,* the girl is wicked, and she gets the last laugh.

Roald also wrote about things that were totally disgusting. For example, in *The Twits,* Mrs. Twit plays a joke on her husband by serving him worms instead of spaghetti.

Roald Dahl is remembered by both children and adults as a gifted author. When he died in 1990, people all over the world mourned the loss of a man who had one of the greatest imaginations of the twentieth century.

BIOGRAPHY

Name: _____

Dictionary

Content Vocabulary

boarding school
a school where students live during the school year

fantastical
based on highly original and imaginative fantasy

genre
a specific category or type of writing, music, or art

retelling
a new version of a story

safaris
journeys to see or hunt wild animals, especially in East Africa

Academic Vocabulary

endured
lived through or put up with a difficult situation

influence
effect; the power to cause a change

decades
periods of ten years each

mourned
felt very sad, especially about a death or other loss

Write a sentence that includes at least one vocabulary word.

_____

_____

Name: _____

Answer Questions

Use information from the article to answer each question.

1. Roald Dahl was born in _____.
   - Ⓐ East Africa
   - Ⓑ Great Britain
   - Ⓒ Canada
   - Ⓓ Washington, D.C.

2. Roald's children's books do <u>not</u> include _____.
   - Ⓐ *James and the Giant Peach*
   - Ⓑ *The Gremlins*
   - Ⓒ *Where the Wild Things Are*
   - Ⓓ *Charlie and the Chocolate Factory*

3. The best description of Roald Dahl is _____.
   - Ⓐ a struggling children's writer
   - Ⓑ a sad, lonely man
   - Ⓒ a very imaginative children's writer
   - Ⓓ a cruel, wicked man

4. What challenges did Roald face during his childhood?

   _____

   _____

5. How did Roald express his love of adventure in his books?

   _____

   _____

Name: _____

Apply Vocabulary

Use a word from the word box to complete each sentence.

Word Box

decades	genre	mourned
endured	safaris	boarding school
retelling	influence	fantastical

1. Fairy tale and science fiction are each a _____ of writing.

2. Roald Dahl _____ bullying as a child.

3. If you attend a _____, you sleep there instead of going home at night.

4. Roald's mother _____ the deaths of her husband and daughter.

5. Roald's adventurous personality had a strong _____ on his writing.

6. A _____ of a children's story might change the personalities of the characters.

7. If you go on _____ in East Africa, you're likely to see elephants, lions, and giraffes.

8. Roald wrote children's stories for more than four _____.

9. In one of Roald's _____ stories, a girl named Matilda uses her mind to move things.

BIOGRAPHY

Name: _____

Time Order

A text that has a **time order** structure presents the main idea and details in the order in which they happen.

Authors use these signal words to create a **time order** structure:

Signal Words

at	last	while	finally
next	first	later	following
when	after	before	

1. What did Roald Dahl endure in his life before finishing high school?

_____

_____

2. What is one important event that happened in Roald's life after he left East Africa?

_____

3. Write two sentences from the article that use **time order** signal words.

a. _____

_____

b. _____

_____

4. What is the final major idea mentioned in the article? Why is it mentioned last?

_____

_____

Name: _____

Write About It

Write a letter to your teacher about Roald Dahl. Explain who he was and what he did during his life. Include details from the article in your letter.

Roald Dahl's Life and Accomplishments

Name _____ Video Practice Tools Games

Additional Practice 10-3

Multiply a Fraction by a Whole Number: Use Symbols

Another Look!

Maria swims $\frac{3}{5}$ mile across the lake and another $\frac{3}{5}$ mile back. How far does Maria swim?

When all the groups are the same size, you can multiply to find the total.

Find $2 \times \frac{3}{5}$.

One Way

$$2 \times \frac{3}{5} = 2 \times \left(3 \times \frac{1}{5}\right)$$

Write $\frac{3}{5}$ as a multiple of $\frac{1}{5}$: $\frac{3}{5} = 3 \times \frac{1}{5}$.

$$= (2 \times 3) \times \frac{1}{5}$$

Use the Associative Property of Multiplication.

$$= 6 \times \frac{1}{5}$$

$$= \frac{6}{5}$$

$$= \frac{5}{5} + \frac{1}{5} = 1\frac{1}{5}$$

Maria swims $1\frac{1}{5}$ miles.

Another Way

$$2 \times \frac{3}{5} = \frac{2 \times 3}{5}$$

Multiply the whole number and the numerator.

$$= \frac{6}{5}$$

$$= \frac{5}{5} + \frac{1}{5} = 1\frac{1}{5}$$

Maria swims $1\frac{1}{5}$ miles.

For **1–6**, multiply.

1. $8 \times \frac{5}{12}$

2. $9 \times \frac{1}{4}$

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

4. $4 \times \frac{2}{3}$

5. $9 \times \frac{3}{10}$

6. $7 \times \frac{1}{3}$

For **7–10**, write and solve a multiplication equation.

7. Calculate the length of a scarf with 5 sections if each section is $\frac{1}{2}$ foot long.

8. Calculate the distance Kris walks in 8 days if she walks $\frac{7}{8}$ mile each day.

9. Calculate the distance Nathan rides his bike if he rides $\frac{9}{12}$ mile each day for 3 days.

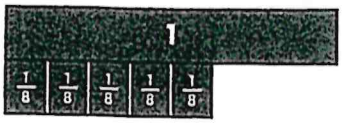
10. Calculate the distance Tarryn drives if she drives $\frac{7}{8}$ mile each way to and from work.

Name _____ Practice Video Tools Games

Additional Practice 9-2
Decompose Fractions

Another Look!

Shannon wants to use $\frac{5}{8}$ of her garden space to plant petunias and marigolds. How can Shannon use the available space?



Write $\frac{5}{8}$ as the sum of fractions in two different ways.

$\frac{5}{8} = \frac{1}{8} + \frac{4}{8}$ $\frac{5}{8} = \frac{2}{8} + \frac{3}{8}$

Shannon could use $\frac{1}{8}$ of the space for petunias and $\frac{4}{8}$ for marigolds, or she could use $\frac{2}{8}$ of the space for petunias and $\frac{3}{8}$ for marigolds.

For **1–8**, decompose each fraction or mixed number in two different ways. Use a tool if needed.

1. $\frac{4}{8} =$

$\frac{4}{8} =$

2. $\frac{7}{10} =$

$\frac{7}{10} =$

3. $\frac{4}{5} =$

$\frac{4}{5} =$

4. $\frac{3}{10} =$

$\frac{3}{10} =$

5. $1\frac{1}{4} =$

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

6. $2\frac{2}{3} =$

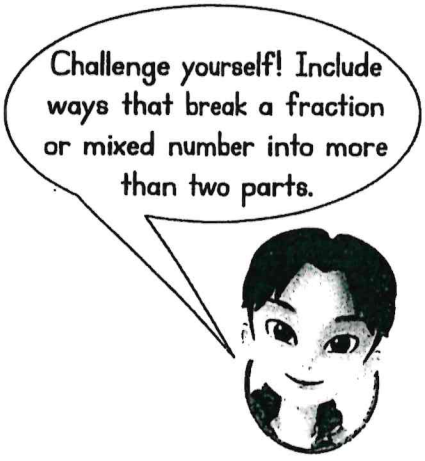
$2\frac{2}{3} =$

7. $1\frac{3}{5} =$

$1\frac{3}{5} =$

8. $1\frac{1}{2} =$

$1\frac{1}{2} =$



ALL ABOUT WAVES

Listen carefully. Can you hear anything right now? Even if you can hear a tiny sound, that means that there are sound waves around you. All kinds of waves are all around us. You can't see most waves. However, they play an important role in life.

What Are Waves?

Waves are the way that matter transfers energy. When energy moves from one place to another, it moves in waves. Sometimes you can see them. Sometimes you can't.

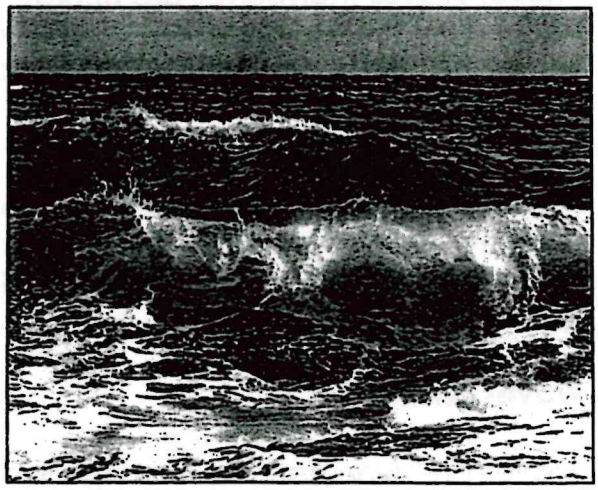
Some examples of waves are waves in water, sound waves, light waves, and even microwaves like the ones used in microwave ovens.

Types of Waves

There are two main types of waves: mechanical and electromagnetic. They are different in one major way. Mechanical waves require a medium in which to move. Some examples of mediums are water and air. This type of wave needs molecules to move through. The molecules bump against each other which helps the wave move.

Electromagnetic waves don't need a medium. That means that they can move even in space, where there is no air. They travel through special electric and magnetic fields. Charged particles generate these fields. Some of these waves are light, microwaves, and radio waves.

Other important types of waves are transverse and longitudinal waves. Transverse waves are like the waves you see in water. They move up and down and left to right or right to left. Electromagnetic waves are transverse waves.



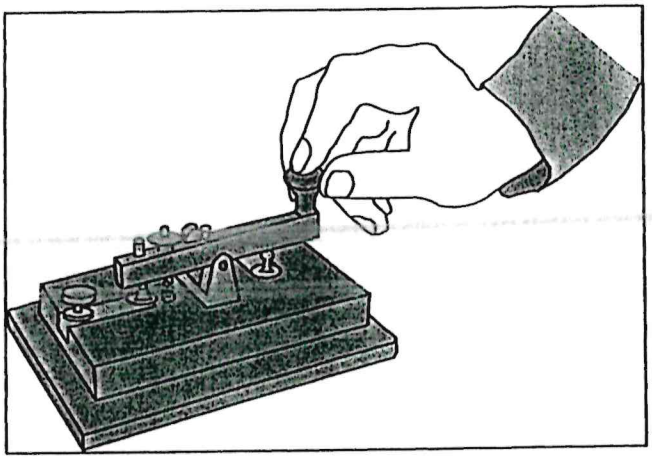
How can you describe the waves shown above? Can they be described in more than one way?

Longitudinal waves are different. They act more like a coil spring. Imagine the spring is laying on the floor. If you pinch together and let go of one end of the spring, the energy will move through the spring in a wave. Another way to describe these waves is that they push. They push, compress, and then spread again, moving in a direct line. Sound waves are longitudinal waves.

Parts of a Wave

When you imagine a picture of a transverse wave, it looks like a rope moving up and down. To talk about this kind of a wave, scientists use special words. Two important words are the amplitude and wavelength.

Imagine a line that goes right through the middle of the wave. This is the resting point. The distance between the resting point and the high points above (the crest) or the low points below (the trough) is the amplitude. The energy of the wave is bigger when the amplitude is bigger. The distance between high points is the wavelength. The wavelength tells you the frequency, or how much energy the wave has.



The device pictured above was used to create messages using Morse Code. Morse Code can be transmitted via electric current, radio waves, visible light, or sound waves. The waves are present when the dash or dot is sent, and then the wave is absent during the pauses between the dots and dashes.

Waves Move Objects

Sometimes, waves can cause objects to move. Waves themselves are energy. However, that energy sometimes moves things like water. This happens when lake or ocean waves move boats and move water that hits beaches.

Another example of waves moving items is sound waves. When you hear really loud music, have you ever felt vibrations? Sometimes a loud bass can cause objects around them to move just a tiny bit. For example, a pencil might move a little bit if it's sitting on a table where a bass speaker is also sitting.

Waves and Patterns

Waves are very useful for making sound, light, and even heating up food. We can also use waves in patterns to communicate. One example of this type of pattern is Morse code. Morse code is a special code that uses sounds or flashes of light that represent letters. The code is a mix of dots and dashes.

The dots are short beeps or flashes. The dashes are longer beeps or flashes. For example, the letter "a" is one dot and one dash. However, the letter "h" is four dots. Then, people listen or watch the code and turn it into letters. Morse code was used with telegraphs for many years. It was also used during WWII to help armies communicate with each other from far away.

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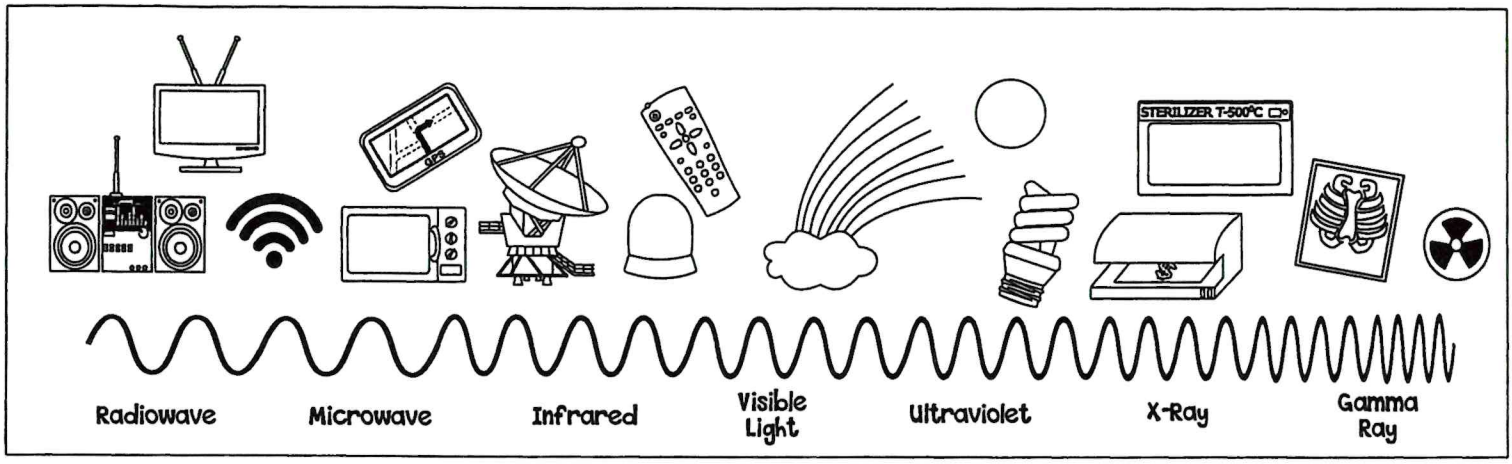
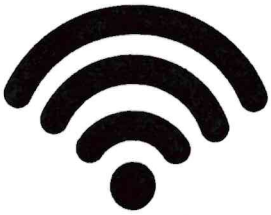
WAVELENGTH AND AMPLITUDE

The diagram below shows various objects that use electromagnetic waves. The objects on the far left use the weakest waves. As the chart moves to the right, the waves become stronger and stronger.



1. What do you notice about the wavelengths shown in this diagram? What does the wavelength tell you about the different objects pictured?

2. Locate the objects below on the diagram above. Then, draw a wave with a longer wavelength and another wave with a shorter wavelength.

Object	Longer Wavelength	Shorter Wavelength
		
		

The Bill of Rights

Written in Modern Language

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Amendment 9: This Amendment tells us that Americans have rights that are not listed in the Constitution.

Amendment 10: Power that was not given to the U.S. Government by the Constitution belongs to the states or to the people.

Scenario 9

Jay Harrison is accused of running from the police. The judge hearing the case does not want to take any chances that Jay will run away again, so he says that one of Jay's feet must be cut off.

Scenario 10

Mario Jackson is accused of stealing his neighbor's car. He says he didn't steal the car. The judge doesn't believe him. The judge threatens to put Mario in jail immediately if he doesn't admit he is guilty of the crime.

Scenario 5

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 6

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 7

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 8

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 9

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

Scenario 10

Amendment # _____

_____ Rights WERE respected
_____ Rights were NOT respected

_____

_____

_____

4th Grade
AMI Day 6

4th Grade
AMI Day Instructions

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Mrs. Neal: mneal@seymourschool.net

Mrs. Neuroth: jneuroth@seymourschool.net

Mrs. Shelton: rshelton@seymourschool.net

Thank you for your continued support of your child's education!

Fourth Grade Teacher,
Mrs. Neal, Mrs. Neuroth, Mrs. Shelton

4th Grade Snow Day Packet - AMI Day 6

☐ Reading Read the article "From Power Plant to Light Bulb". Answer the question on the following pages. Make sure you restate your question in your answers.

☐ Math
Complete the front and back of worksheet 155/157

☐ Science
Complete the worksheet waves in action (p.21). All About Waves article may be used.

☐ Social Studies
Complete the worksheet

Please send the completed work to school with your child on our next school day. We will be discussing the work and I will provide feedback to students.

Day 6

Name: _____

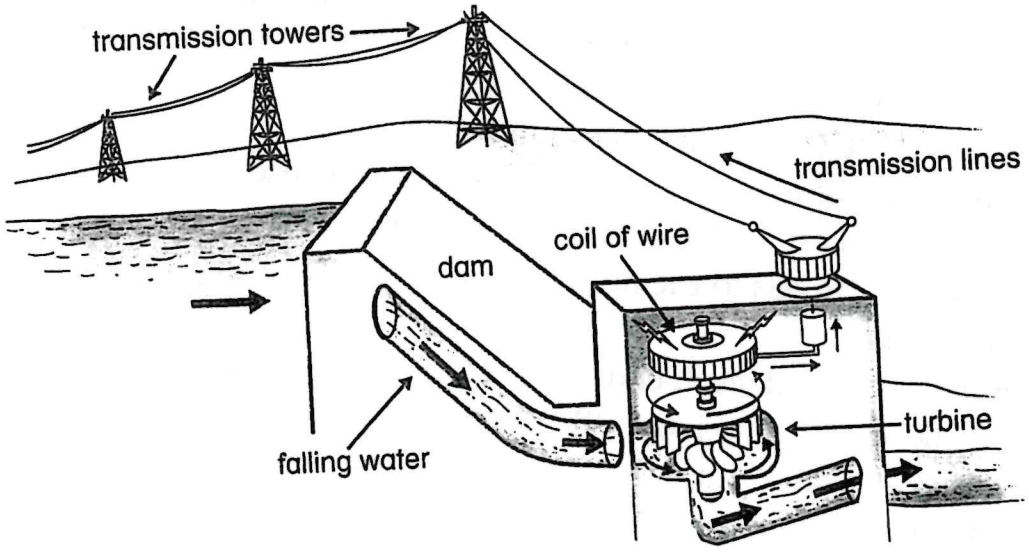
From POWER PLANT to LIGHT BULB

You walk into your bedroom and flick on a light switch. A light bulb instantly glows overhead. How did electricity do that?

It begins at a power plant, where electricity is created. There are three main types of power plants. A hydroelectric power plant uses the energy of falling water to make electricity. Coal-fired and nuclear power plants use steam.

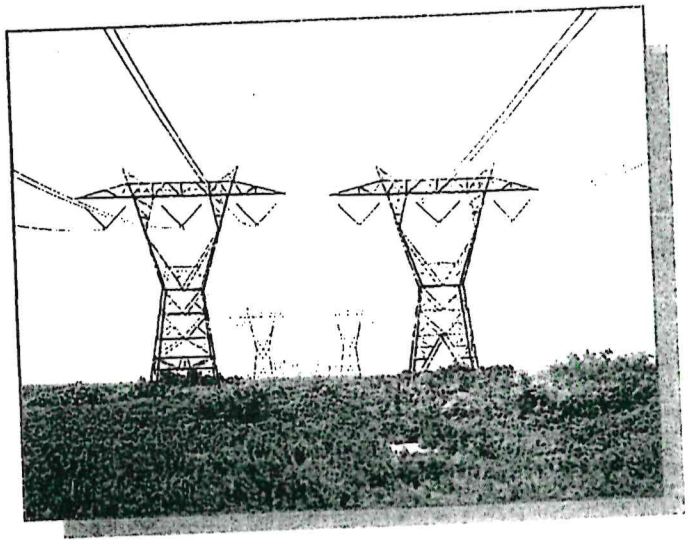
At the hydroelectric power plant, the falling water spins a machine called a *turbine*. Next, the spinning turbine moves a coil of wire between magnets, which causes an electric current to flow through the coil of wire. Then this current leaves the power plant.

Hydroelectric Power Plant



The current passes through a piece of equipment called a *transformer,* which increases the current's power. This high-powered current travels through transmission lines that stretch long distances. Tall metal towers hold them up.

When the transmission lines reach your town, the current passes through a substation, where a transformer decreases the power. After that, the current flows through distribution lines strung between electric poles. The distribution lines carry the electricity around town.



These tall towers hold up transmission lines. Transmission lines carry electricity from power plants to cities and towns.

From an electric pole in your neighborhood, a service line brings the current directly to your home. Next, the current passes through an electrical meter that measures how much electricity you use. Then the current passes through a breaker box where switches (called *breakers*) can stop the current if there is a problem.

Wires leave the breaker box and bring the current to different places in your home. Because you just turned on a light switch, the current travels there. Then it travels to the light fixture and flows into the light bulb.

But electricity doesn't end there. An electric current must make a complete loop. While the bulb glows, current is also flowing back out. It returns to the power plant. The current keeps traveling back and forth between the bulb and the power plant. You don't notice because it happens at the speed of light!

Name: _____

Dictionary

Content Vocabulary

breaker box
a box with switches that, in case of a problem, can stop an electric current from flowing to a place or piece of equipment

current
a flow of something, such as electricity or water, in a certain direction

electricity
a form of energy, carried through wires, that is needed to operate many lights, appliances, and machines

power plant
a building where a large amount of electricity is produced

transformer
a device that changes the power level of an electric current

turbine
a machine that spins as a result of moving air, water, or steam

Academic Vocabulary

increases
makes stronger, higher, larger, or greater in number

decreases
makes weaker, lower, smaller, or fewer in number

distribution
the act of delivering something to a place

Write a sentence that includes at least one vocabulary word.

_____

_____

Name: _____

Answer Questions

Use information from the article to answer each question.

1. _____ is not a type of power plant.
   - Ⓐ Nuclear
   - Ⓑ Coal-fired
   - Ⓒ Substation
   - Ⓓ Hydroelectric

2. According to the article, a spinning turbine _____.
   - Ⓐ increases the energy of falling water
   - Ⓑ moves a coil of wire between magnets
   - Ⓒ carries electricity to homes in your town
   - Ⓓ stops the flow of electricity if there is a problem

3. What materials listed in the article can power plants use to create electricity?

   _____

   _____

4. What is the purpose of transmission lines?

   _____

   _____

5. Explain the purpose of a breaker box.

   _____

   _____

6. According to the article, what is the complete loop made by an electric current?

   _____

   _____

Name: _____

Apply Vocabulary

Use a word from the word box to complete each sentence.

Word Box

power plant	transformer	increases
decreases	electricity	current
turbine	breaker box	distribution

1. Steam or falling water at a power plant makes a _____ spin.

2. The switches in a _____ stop electric current in case of a problem.

3. A _____ changes the power level of an electric current.

4. _____ powers a light bulb and causes it to glow.

5. When an electric current _____, it has more power than before.

6. After electricity leaves a substation, _____ lines carry it to your neighborhood.

7. At a substation, a transformer _____ power before electricity travels to your home.

8. A hydroelectric _____ uses the force of falling water to produce electricity.

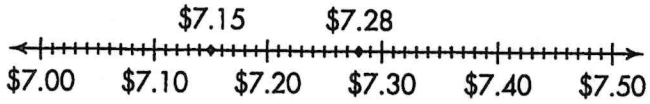
9. Transmission lines carry a high-powered _____ of electricity.

Name _____ Practice Video Tools Games

Additional Practice 12-3
Compare Decimals

Another Look!

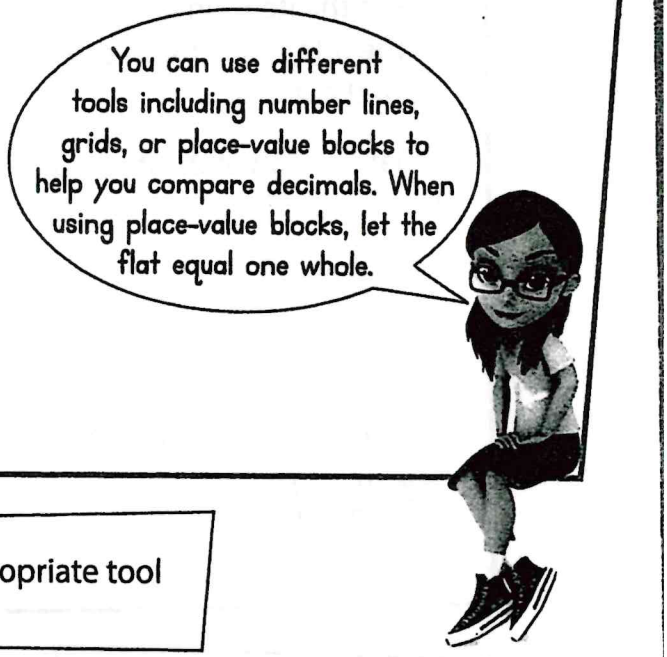
Patrick collected change for charity. On Friday, he collected $7.28. On Saturday, he collected $7.15. On which day did Patrick collect more money? Use a number line to compare the amounts.



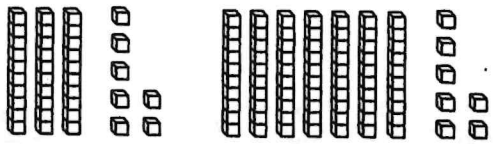
Because $7.28 is farther to the right on the number line, it is the greater number.

So, $7.28 > $7.15.

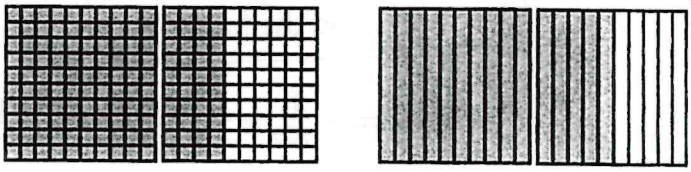
Patrick collected more money on Friday.



For **1–11**, write >, <, or = in each ◯. Use an appropriate tool as needed to compare.

1. 

0.37 ◯ 0.77

2. 

1.40 ◯ 1.5

3. 0.6 ◯ 0.55

4. 0.2 ◯ 0.20

5. 0.68 ◯ 0.59

6. $10.45 ◯ $10.54

7. 0.99 ◯ 1.0

8. 0.05 ◯ 0.04

9. 4.1 ◯ 4.10

10. 6.44 ◯ 6.4

11. $0.93 ◯ $0.39

For **12–20**, write a decimal to make each comparison true.

12. _____ > 1.45

13. 7.8 = _____

14. _____ > 4.42

15. 29.20 > _____

16. 8.99 < _____

17. 13.40 = _____

18. 22.18 < _____

19. _____ > 3.48

20. 9.4 > _____

Name _____ Practice Video Tools Games

Additional Practice 12-4

Add Fractions with Denominators of 10 and 100

Another Look!

In the morning, Duncan sold $\frac{27}{100}$ of the items in his yard sale. In the afternoon, he sold another $\frac{6}{10}$ of the items.

What fraction of the items did Duncan sell?

Find $\frac{27}{100} + \frac{6}{10}$.

Use equivalent fractions to find how many of the items Duncan sold.

Rename one of the fractions to have a common denominator.

$\frac{6 \times 10}{10 \times 10} = \frac{60}{100}$

Add

$\frac{27}{100} + \frac{60}{100} = \frac{87}{100}$

Duncan sold $\frac{87}{100}$ of the items.

For **1–15**, add the fractions.

1. $\frac{31}{100} + \frac{4}{10} = \frac{31}{100} + \frac{\square}{100} = \frac{\square}{100}$

2. $\frac{17}{100} + \frac{9}{10} = \frac{17}{100} + \frac{\square}{\square} = 1\frac{7}{100}$

3. $\frac{\square}{100} + \frac{3}{\square} = \frac{2}{\square} + \frac{\square}{10} = \frac{5}{10}$

4. $\frac{6}{10} + \frac{39}{100}$

5. $\frac{7}{10} + \frac{22}{100}$

6. $\frac{9}{100} + \frac{3}{10} + \frac{5}{10}$

7. $2\frac{4}{10} + \frac{33}{100}$

8. $\frac{19}{100} + \frac{21}{100} + \frac{3}{10}$

9. $\frac{9}{10} + \frac{30}{100}$

10. $\frac{1}{100} + \frac{25}{10}$

11. $1\frac{3}{10} + 2\frac{8}{100}$

12. $\frac{27}{100} + \frac{2}{10}$

13. $\frac{3}{10} + \frac{4}{10} + \frac{53}{100}$

14. $\frac{64}{100} + \frac{33}{100}$

15. $3\frac{3}{10} + \frac{42}{100} + \frac{33}{100}$

ALL ABOUT WAVES

Listen carefully. Can you hear anything right now? Even if you can hear a tiny sound, that means that there are sound waves around you. All kinds of waves are all around us. You can't see most waves. However, they play an important role in life.

What Are Waves?

Waves are the way that matter transfers energy. When energy moves from one place to another, it moves in waves. Sometimes you can see them. Sometimes you can't.

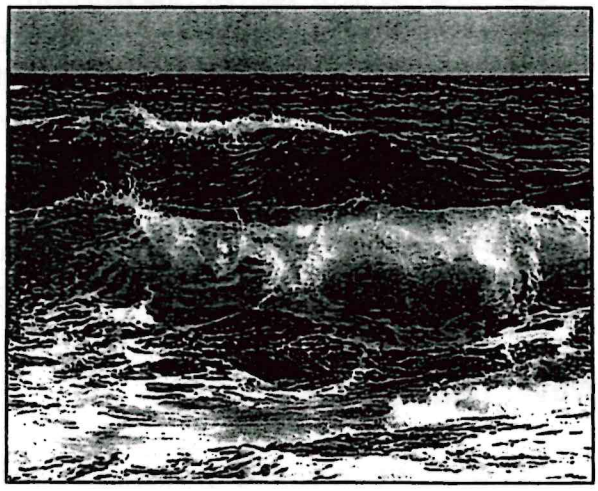
Some examples of waves are waves in water, sound waves, light waves, and even microwaves like the ones used in microwave ovens.

Types of Waves

There are two main types of waves: mechanical and electromagnetic. They are different in one major way. Mechanical waves require a medium in which to move. Some examples of mediums are water and air. This type of wave needs molecules to move through. The molecules bump against each other which helps the wave move.

Electromagnetic waves don't need a medium. That means that they can move even in space, where there is no air. They travel through special electric and magnetic fields. Charged particles generate these fields. Some of these waves are light, microwaves, and radio waves.

Other important types of waves are transverse and longitudinal waves. Transverse waves are like the waves you see in water. They move up and down and left to right or right to left. Electromagnetic waves are transverse waves.



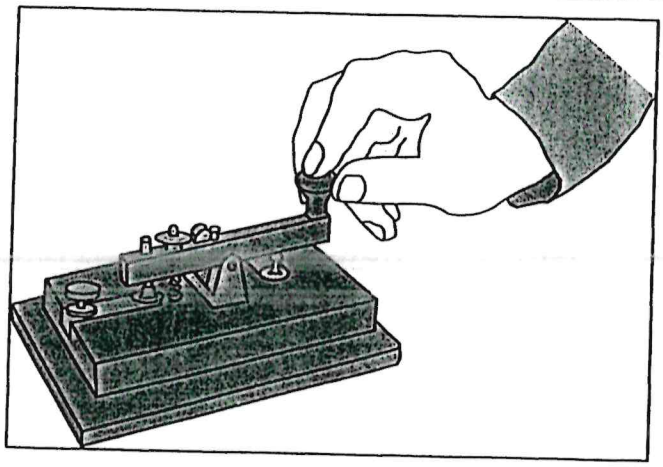
How can you describe the waves shown above? Can they be described in more than one way?

Longitudinal waves are different. They act more like a coil spring. Imagine the spring is laying on the floor. If you pinch together and let go of one end of the spring, the energy will move through the spring in a wave. Another way to describe these waves is that they push. They push, compress, and then spread again, moving in a direct line. Sound waves are longitudinal waves.

Parts of a Wave

When you imagine a picture of a transverse wave, it looks like a rope moving up and down. To talk about this kind of a wave, scientists use special words. Two important words are the amplitude and wavelength.

Imagine a line that goes right through the middle of the wave. This is the resting point. The distance between the resting point and the high points above (the crest) or the low points below (the trough) is the amplitude. The energy of the wave is bigger when the amplitude is bigger. The distance between high points is the wavelength. The wavelength tells you the frequency, or how much energy the wave has.



The device pictured above was used to create messages using Morse Code. Morse Code can be transmitted via electric current, radio waves, visible light, or sound waves. The waves are present when the dash or dot is sent, and then the wave is absent during the pauses between the dots and dashes.

Waves Move Objects

Sometimes, waves can cause objects to move. Waves themselves are energy. However, that energy sometimes moves things like water. This happens when lake or ocean waves move boats and move water that hits beaches.

Another example of waves moving items is sound waves. When you hear really loud music, have you ever felt vibrations? Sometimes a loud bass can cause objects around them to move just a tiny bit. For example, a pencil might move a little bit if it's sitting on a table where a bass speaker is also sitting.

Waves and Patterns

Waves are very useful for making sound, light, and even heating up food. We can also use waves in patterns to communicate. One example of this type of pattern is Morse code. Morse code is a special code that uses sounds or flashes of light that represent letters. The code is a mix of dots and dashes.

The dots are short beeps or flashes. The dashes are longer beeps or flashes. For example, the letter "a" is one dot and one dash. However, the letter "h" is four dots. Then, people listen or watch the code and turn it into letters. Morse code was used with telegraphs for many years. It was also used during WWII to help armies communicate with each other from far away.

Other patterns also help us communicate. For example, computers use patterns of 0s and 1s. Also, music is stored in a pattern of 0s and 1s. Computers, phones, and other digital devices can read the pattern very quickly. They know how to turn the pattern into an image, sound, or an action.

WAVES IN ACTION

For the statements below, select "True" if you agree with it or "False" if you disagree. If the statement is false, rewrite it to make the statement true. If the statement is true, explain why it's true.

Waves are only found in the ocean. TRUE FALSE	
Waves can cause objects to move. TRUE FALSE	
All ocean waves have the same amplitude. TRUE FALSE	
Waves are not very useful in daily life because nobody uses Morse Code anymore. TRUE FALSE	

Name: ______________________________ Date: ____________________

Bill of Rights

Instruction: Search for the hidden words. Make sure to look in all directions – straight across, up, down, diagonally, and backward.

T	B	P	R	O	H	I	B	I	T	I	O	N	M	L	N	U	M	U	W
V	W	C	O	N	S	T	I	T	U	T	I	O	N	B	U	P	D	P	R
Q	F	F	T	O	H	R	L	R	G	P	T	R	Z	R	A	T	I	F	Y
P	R	O	T	E	C	T	L	A	V	N	Y	H	S	E	I	Z	U	R	E
I	**T**	H	E	R	E	W	O	E	A	V	I	O	L	A	T	I	O	N	D
R	U	E	P	T	W	E	F	R	G	O	V	E	R	N	M	E	N	T	U
L	N	N	R	V	E	P	R	R	O	P	O	S	Y	E	D	A	M	E	E
N	R	D	I	M	E	A	I	N	T	S	B	L	S	U	T	O	N	T	P
L	E	Y	V	T	W	T	G	E	N	W	B	L	E	P	R	E	N	R	R
A	A	T	A	I	E	F	H	I	C	M	A	L	F	E	E	E	D	A	O
E	S	T	T	N	J	D	T	D	E	I	A	A	B	R	M	E	E	C	C
S	O	R	E	A	U	M	S	S	R	U	T	G	M	D	E	E	C	P	E
T	N	O	H	A	R	R	S	T	D	C	R	I	N	E	T	E	O	H	S
A	A	O	O	F	Y	A	Y	I	A	T	O	E	Z	A	R	H	D	E	S
B	B	P	U	C	O	D	V	N	S	T	M	N	L	E	C	I	T	O	I
L	L	S	S	T	E	I	U	T	I	A	E	O	G	I	N	A	C	N	M
I	E	E	E	E	D	L	I	M	I	T	S	S	Q	R	G	S	R	A	R
S	D	D	P	N	Z	J	U	Z	T	H	W	Z	A	W	E	I	R	T	P
H	D	S	I	J	A	M	E	S	M	A	D	I	S	O	N	S	O	L	A
B	Q	C	I	C	B	E	A	R	A	R	M	S	H	P	B	V	S	N	D

AMENDMENT
AMERICA
ASSEMBLY
BEAR ARMS
BILL OF RIGHTS
CITIZENS
CONGRESS
CONSTITUTION
DUE PROCESS
ESTABLISH
FREEDOM
GOVERNMENT
INDIVIDUAL
JAMES MADISON
JURY
LIMITS
MAGNA CARTA
PRIVATE HOUSE
PROHIBITION
PROTECT
RATIFY
RELIGION
SEIZURE
SPEECH
SPEEDY TRIAL
TROOPS
UNITED STATES
UNREASONABLE
VIOLATION
WARRANT

SECRET MESSAGE:

After finding all the words, write the unused letters on the blank spaces below. Start from the underlined letter and move from left to right through each row, going down.

_ _ _ _ _   _ _ _ _   _ _ _ _ _ _

_ _ _ _ _ _ _ _   _ _ _ _ _ _ _ _ _ _ _ ,   _ _ _

_ _ _ _   _ _ _   _ _ _ _   _ _ _ _ _ _ _ _

_ _ _   _ _ _ _ _ _   _ _ _ _   _ _   _ _ _

_ _ _ _ _ _ _ _ _ _ _ _ _ .