

v & Enrichment

Week of May 18 & 25 4th Grade

Student Name	 		
Teacher Name			

If possible, please return paper copies to drop boxes at food distribution sites or if using online access email teacher upon completion.

Name Name	Date
Warm-Up 1	~~~~

LADYBUGS

Have you ever seen a small, red beetle with black dots on its back? These little insects are called ladybugs. These little insects are harmless to humans. A ladybug does not bite or sting humans. Ladybugs are also harmless to plants, and they do not carry diseases. But how did the ladybug get its name? There are many stories. One of these stories came from the Middle Ages. The crops were being eaten, and the villagers began praying. The red beetles with black dots came and ate the harmful insects. These beetles were named "the Beetles of Our Lady." The name was shortened to lady beetles or ladybugs.

Since then, the ladybug has been known to bring good luck. There are many beliefs about ladybugs from all over the world. It has been said that if a ladybug lands on a young maiden's hand, she will marry soon. In England, it has been said that if a farmer sees a ladybug, he will have a good harvest. Some people believe that the number of spots you see on the ladybug's back will represent the number of children you will have.

Ladybugs today can still bring good fortune. If you have a ladybug in your garden, then you do not need to use insect poison to get rid of aphids. Aphids are tiny insects that are harmful to many plants. They suck the juice from the leaves of the plant. A ladybug can eat as many as 50 aphids in a day. Some people buy ladybugs to fight the aphids.

STORY QUESTIONS

1.	According	to	this	reading	passage,	why	might	someone	want	to	buy	a	ladyt	oug'	?
----	-----------	----	------	---------	----------	-----	-------	---------	------	----	-----	---	-------	------	---

- a. They are more expensive than insecticides.
- b. Ladybugs kill aphids that can be harmful to plants.
- c. Ladybugs bring good luck.
- d. Ladybugs will reproduce.
- 2. This passage is mostly about . . .
 - a. aphids.

c. the anatomy of a ladybug.

b. good farming practices.

d. general information of ladybugs.

3.	According to the passage, what do some people believe will happen when a ladybug lands on the hand of a young maiden?

4.	According	to the	passage,	what	might	ladybugs	first	have	been	called?
----	-----------	--------	----------	------	-------	----------	-------	------	------	---------

a. lady in waiting

c. the Beetles of Our Lady

b. lady buggle

d. bug of a lady

Name Name	Date
Warm-Up 2 Name	~~~~

THE PANDA BEAR

One of the most unusual bears known to man is the panda bear. Panda bears live in southwestern China. They live in misty forests of bamboo. There are two main types of pandas. They are the giant black-and-white panda and the red panda. They weigh anywhere from 175 to 275 pounds. They get anywhere from five to six feet in height. A newborn panda cub is about the size of a chipmunk. They are born blind and are completely helpless. They rely heavily on their mother. Once the baby panda leaves its mother, it will live all alone.

Pandas are active during both the day and at night. The most important plant in the life of a panda bear is bamboo. They spend about 12 hours of their day eating bamboo. That's a lot of bamboo! Pandas have special bones in their wrists that enable them to grab the stalks of the bamboo. Pandas will peel away the outer edge of the stalk and eat the soft inner portion of the bamboo. Their giant molars crush the bamboo stalks. The panda will also eat the bamboo leaves. Pandas have also been known to eat mushrooms, insects, grasses, fish, fruit, and rice.

Pandas move in a very slow, methodical manner. Unlike some bears, the panda bear does not hibernate. They live in a climate where they can be active and eating throughout the year.

STORY QUESTIONS

- 1. A different title for this reading passage could be . . .
 - a. "Panda Paradise."

c. "All You Want to Know About Bears."

b. "China's Bear."

- d. "Illegal Bear Hunting."
- 2. Newborn panda cubs are not born . . .
 - a. being able to see.

c. the size of a chipmunk.

b. blind.

- d. helpless.
- 3. The author wrote this passage to . . .
 - a. justify keeping pandas in captivity.
 - b. inform the reader of how pandas are mistreated.
 - c. share general information about panda bears.
 - d. raise awareness of the shrinking of the panda population.
- 4. If you wanted to find out more about pandas, you could . . .
 - a. read a book about how bears hibernate.
 - b. watch a television program about bamboo.
 - c. meet somebody who lives in China.
 - d. watch a television program about the different types of bears.

Name Name	Date
Warm-Up 1	~~~

WALT DISNEY

Where is "the happiest place on earth"? Some say it is Disneyland! Do you know the person who created this amazing theme park? He was a man named Walt Disney. Walt Disney was a pioneer in motion pictures. He also created Mickey Mouse and the Disney World theme parks. Walt Disney received hundreds of awards from all over the world.

Walt Disney was born in Chicago, Illinois. He was raised on a farm in Missouri with four other siblings. Walt's parents, Flora and Elias Disney, encouraged his creativity and sketches and drawings. Walt sold his first sketches at the age of seven.

After serving some time in the Red Cross, Walt got a job as an advertising cartoonist. This was where he marketed and created his first animated cartoon. In 1925, Walt married Lillian Bounds. They had two daughters. Another important member of the family was brought to life in 1928. That was Mickey Mouse.

Walt perfected the combination of animation and sound. Snow White and the Seven Dwarfs was created in 1937. Since then, the Disney name has gone on to produce hundreds of animated movies.

STORY QUESTIONS

- 1. What are the author's feelings about Walt Disney?
 - a. indifferent

c. unsure

b. disapproves

d. admires

- 2. Which sentence shows how the author feels about Walt Disney?
 - a. Walt married Lilian Bounds.
 - b. Disney was born in Chicago.
 - c. Walt Disney perfected the combination of animation and sound.
 - d. Walt got a job as an advertising cartoonist.
- 3. Which sentence is not an example of the encouragement Disney received through the years?
 - a. He got a job at an advertising agency.
 - b. He invented Mickey Mouse.
 - c. His parents encouraged his creativity.
 - d. He received awards from all over the world.
- 4. What is the meaning of word pioneer in this passage?
 - a. trailblazer of new ideas

c. traveled across the plains

b. worker

d. nomads



HELEN KELLER

Can you imagine what it would be like not to be able to see or hear? When Helen Keller was 19 months old, she became very ill. Doctors expected her to die, but she survived. Helen's mother soon noticed that Helen was not responding when the dinner bell rang or when she waved her hand in front of Helen's face. It then became apparent that Helen's illness had left her blind and deaf. She was born on June 27, 1880 in Alabama, where she lived with her family. She was frustrated and confused. She didn't know what was going on in her world. Her parents knew that they needed help. They hired a tutor for Helen. Her name was Anne Sullivan.

Success didn't happen right away. But one day at the water pump, a breakthrough happened. Anne spelled the word *water* in Helen's hand. Helen began to catch on. Suddenly, her brain was on fire. She reached down to touch the ground, and Anne spelled the word *earth* in her hand. She continued pointing and learning. She learned to spell 30 words on that day.

By the age of 10, Helen had learned to speak by feeling her teacher's mouth when she talked. Some people couldn't understand Helen, but she kept trying. She learned to read French, German, Greek, and Latin in Braille. Braille is a way for people who can't see to read. Raised dots are used to represent letters and words. Soon Helen could read, write, and speak.

Helen Keller went on to give speeches all over the world. Most of the money she earned was given to the American Foundation for the Blind. She met 12 U.S. presidents, wrote a dozen books, and went to college. Helen Keller lived to be 87. She continues to inspire many people worldwide.

STORY QUESTIONS

- 1. Why was Helen Keller so successful in life?
 - a. People felt sorry for her and took pity on her.
 - b. She eventually got her vision and hearing back.
 - c. She learned to overcome obstacles and work hard.
 - d. She was able to meet 12 U.S. presidents and speak worldwide.
- 2. What can you learn about Anne Sullivan from reading this passage?
 - a. She traveled the world to give speeches.
 - b. She was diligent in her efforts with Helen Keller.
 - c. She was blind herself.
 - d. She was placed in an orphanage.
- 3. According to the passage, which of the following statements is true?
 - a. Helen Keller was unable to overcome great obstacles to do great things.
 - b. Helen Keller didn't have to work hard to succeed.
 - c. Helen's parents made the right choice in hiring Anne Sullivan.
 - d. Blind people can be taught how to read Braille, but not deaf people.



MAN ON THE MOON

The space race was on to see which country would be the first to put a man on the moon. The U.S.S.R. had put the first satellite into space. It was called *Sputnik*. The United States was working hard to get a man on the moon. It was a tough goal. This had never been done before. After years and years of hard work, it finally happened.

Neil Armstrong was the first man ever to step on the moon. His famous words were, "That's one small step for man, one giant leap for mankind." The date was July 20, 1969. Pictures and stories of this famous and historic event were found in newspapers around the world. There were pictures of the astronauts' footprints on the moon. Millions of people watched the event on television.

Buzz Aldrin was also with Armstrong on the voyage to the moon. Each of them spent hours on the moon doing tests and taking samples. The surface of the moon was fine and powdery. There is little gravity on the moon, so the two men were able to walk and hop freely on the surface. They also posted the American flag on the moon. There is no wind on the moon, so their footprints might still be there!

STORY QUESTIONS

- 1. What type of accomplishment was putting a man on the moon?
 - a. general accomplishment

c. difficult accomplishment

b. sad accomplishment

- d. disappointing accomplishment
- 2. What conclusions can be drawn about the first trip to the moon?
 - a. It was a mission fraught with arguments and disagreements.
 - b. It was a successful mission.
 - c. It was an experience never to be repeated.
 - d. It was an unorganized mission.
- 3. Which of the following statements about the moon is not supported by information in the passage?
 - a. There is little gravity on the moon.
 - b. There is plenty of water on the moon.
 - c. The surface of the moon is fine and powdery.
 - d. Neil Armstrong was the first man on the moon.
- 4. What is the meaning of the phrase "one giant leap for mankind" as used in the passage?
 - a. It was a huge accomplishment and learning opportunity for humankind.
 - b. It was an example of their willingness to sacrifice for humankind.
 - c. Humankind would soon be making those same steps.
 - d. There was not a lot learned from the experience.



THE GETTYSBURG ADDRESS

Perhaps the most famous battle of the Civil War was the one in Gettysburg, Pennsylvania. At the end of the battle, over 50,000 soldiers were wounded, missing, or killed. The Union and Confederate armies had each lost thousands of men. Many of the bodies were buried in shallow graves along the battlefield. The Union army wanted to do better than that.

The Union army was able to get land for a cemetery in Gettysburg. This cemetery was dedicated in November of that year. Edward Everett was asked to speak at the dedication. He was a great speaker of that time. President Abraham Lincoln was also asked to speak. He was the president during the Civil War.

On the day of the dedication, Mr. Everett spoke for two hours. When it was President Lincoln's turn, he spoke for two minutes. He didn't think it was a very good speech, but it went on to be considered one of the greatest speeches of all time. It became known as the Gettysburg Address. In his speech, Lincoln talked about the "new birth of freedom." His words inspired many people then, and they continue to inspire many people today.

STORY QUESTIONS

- 1. What would be the best title for this reading passage?
 - a. "Mr. Everett's Speech"

- c. "Lincoln's Famous Address"
- b. "The Dedication of the Cemetery"
- d. "Union and Confederate Soldiers"
- 2. What conclusions can be drawn about the battle of Gettysburg?
 - a. It was one of the deadliest battles of the Civil War.
 - b. It was a pivotal battle at the beginning of the war.
 - c. President Lincoln approved of the battle.
 - d. It was fought in a poor location.
- 3. Which statement explains why President Lincoln's speech was so well received?
 - a. It inspired people to keep fighting.
 - b. It inspired people to go home and think.
 - c. It was used to encourage the wounded and dying soldiers.
 - d. It inspired people to think about their freedoms and reasons for fighting.
- 4. What is the meaning of the phrase "new birth of freedom" in the passage?
 - a. It is the idea that we are connected and shouldn't pull apart.
 - b. It is a willingness to sacrifice and stick together.
 - c. It is the idea that there was a new idea of freedom coming to light.
 - d. It is the idea that you should never give up or turn away when times are tough.



COOKING FOR TURKEY

There once was a chicken, a duck, and a goose. These three were the best of friends, but their best friend of all was Mr. Turkey.

One morning, Mr. Turkey awoke with the flu. He was sicker than he had ever been. He could barely breathe, and his feathers were all limp. Mr. Turkey's friends knew that he needed help and he needed it fast.

Each friend independently decided to help Mr. Turkey. The goose got a big pot and put it on the fire. She was going to cook a nice broth for Mr. Turkey.

The chicken also wanted to feed Mr. Turkey, but she had it in her mind to make a turnip pie. She was tickled when she saw the pot on the fire and threw her turnips in to boil.

The duck wanted to help Mr. Turkey as well. He came in and saw the pot on the fire and the turnips inside. He decided to add some cinnamon to the pot to make his sugary cinnamon tea. Each friend, in turn, came and added more ingredients to the pot. It wasn't long before Mr. Turkey hobbled into the room.

"What's that awful smell?" he asked. His three friends entered the room with hurt looks on their faces. They couldn't believe what their friend had said—until they too looked in the pot. With a laugh they all said, "I guess it's true. Too many cooks spoil the broth!"

STORY QUESTIONS

- 1. What does the word independently mean in the story?
 - a. artistic
 - b. separately
 - c. thoughtfully
 - d. organized
- 2. Which paragraph contains Mr. Turkey's response to the boiling pot?
 - a. fifth paragraph

c. third paragraph

b. second paragraph

d. sixth paragraph

- 3. Which of the following would make a good title for the story?
 - a. "Caring for Mr. Turkey"

c. "House Visit"

b. "Turkey, Goose, and Duck"

d. "Turkey Tea"

- 4. Which of the following idioms goes with the story?
 - a. Never count your eggs before they hatch. c. Too many cooks spoil the broth.
 - b. Wash your hands before dinner.



CIVIL LOVE

Sweat was dripping down Mary's neck. It was the year 1864, and Mary was helping the wounded soldiers as they came into camp. It was the saddest thing she had ever seen. Most of the men were very young. Mary spent countless hours helping and healing. The hours were endless.

As Mary walked towards the back of the room, she quickly smiled at little Elizabeth. Elizabeth sat in the corner watching Mary's every move. She had gotten separated from her family. They were nowhere to be found. Mary had taken her in and cared for her like a daughter. She rocked the girl at night as she cried and cried for her momma. During the day, little Elizabeth was Mary's helper. She ran and got things as quickly as she could. She seemed to anticipate Mary's every need.

"Do you want to help me?" Mary asked the little girl.

"Me?" Elizabeth pointed to herself in surprise.

"Yes, you!" replied Mary. Mary asked Elizabeth to gather cloths to wipe the sweat and blood off the soldiers as they came in. Elizabeth hurried to the task, helping the soldiers.

The next morning the captain came in to say that Elizabeth's mother was found but that she wouldn't be able to arrive for few more days. Elizabeth shouted with glee. She was excited to be back with her mom. But for now, she had work to do.

"Come on, Miss Mary. We have work to do," Elizabeth said.

STORY QUESTIONS

- 1. Which sentence contains evidence that the story takes place during the Civil War?
 - a. The hours were endless.
 - b. It was the year 1864, and Mary was helping the wounded soldiers
 - c. The sweat was dripping down Mary's neck.
 - d. Most of the men were so young.
- 2. Which paragraph explains the circumstances in which Mary was living?
 - a. first paragraph

c. fourth paragraph

b. second paragraph

d. third paragraph

- 3. Who is the main character of the story?
 - a. Elizabeth's mother

c. Mary

b. Elizabeth

d. Captain

- 4. What is the meaning of the word *anticipate* as used in the story?
 - a. unbiased and disinterested

c. know in advance

b. impressed and appreciative

d. not care for

Name Name	Date
Warm-Up 5	~~~~

THE GETTYSBURG ADDRESS

On November 19, 1863, President Lincoln had been invited to speak at a dedication of a Civil War cemetery. The Civil War was still in the middle of being fought. Thousands and thousands of soldiers had been killed at Gettysburg, and land had been obtained to bury the dead.

Rebecca had read about the event in a local newspaper. She didn't live far from Gettysburg, and she wanted to go! She begged her parents for a week before they finally relented.

Early on November 19, Rebecca and her father took the quick trip to Gettysburg. She admired Lincoln's bravery and his courage. It had been a dream of hers to one day meet the president. This would be the day.

Rebecca didn't realize how long it would take. Mr. Everett, the first speaker, spoke for two hours. Rebecca thought she was going to die as she sat fidgeting in her seat.

Then it was time for President Lincoln. He rose from his seat and began his speech. Rebecca was enthralled. She loved his words about freedom. President Lincoln spoke for just two minutes. Rebecca couldn't believe it. She jumped out of her seat and ran to the stage. She just had to meet Mr. Lincoln. President Lincoln's bodyguard stopped her, but Mr. Lincoln beckoned her to join him for a minute.

Walking back to the wagon, Rebecca stared at her hand. "I'll never wash it, Dad, never." Her dad smiled and loaded her into the wagon.

STORY QUESTIONS

- 1. What was it specifically that Rebecca liked about Mr. Lincoln?
 - a. She knew that he would remember her.
 - b. She liked him just because he was president.
 - c. She liked his words about freedom.
 - d. She thought he was nice looking.
- 2. What is the main idea of the fifth paragraph?
 - a. Rebecca was finally able to meet President Lincoln.
 - b. Rebecca learned about the Civil War.
 - c. Rebecca was planning a trip to Gettysburg.
 - d. Rebecca begged her parents for permission.
- 3. What is the meaning of the word fidgeting in the fourth paragraph?
 - a. settling

c. bothering

b. unconcerning

d. squirming



SPELLING BEE

Miranda had studied the words for the spelling bee for two weeks straight. Each class in school was to send a student to participate in the school-wide spelling bee. Miranda had always been a good speller. She just had to make it to the school spelling bee.

"Encourage," said her teacher, "encourage."

"
$$E-n-c-o-u-r-a-g-e$$
."

"That's correct," replied the teacher.

Miranda had made it through another round. The room seemed awfully hot. Her friend Patsy had just spelled a word wrong and had to sit down. Miranda gave her a smile across the room. Now it was just Miranda and Kevin. This was going to be close.

Kevin's word was "accommodate." He surprised Miranda and spelled it right. Miranda was up next, and her word was "obstinate." "The boy was acting obstinate when he wouldn't agree to clean his room." Miranda didn't know what the word meant, but she thought she could spell it. She made it through the first part of the word but had to pause for the ending. "Nate." How would this word be spelled? Would it be "nat?" "Nate?" She just wasn't sure.

Just then a picture of her little cousin Nate flashed into her mind. She was pushing him higher and higher on a swing. Before she could think anymore about it, Miranda blurted out the last part, "N-a-t-e."

"That's correct!" yelled her teacher. Everyone was happy that Miranda spelled the word right. Miranda looked up at the ceiling and said, "Thanks, Nate!"

STORY QUESTIONS

- 1. Using the context clues, what does the word obstinate mean?
 - a. surprised

c. stubborn

b. perplexed

d. ferocious

- 2. According to the passage, what trick helped Miranda spell the word correctly?
 - a. She remembered reading the word in a book.
 - b. Someone had missed the word right before she had.
 - c. Her teacher had helped her practice for the test.
 - d. She remembered how to spell her cousin's name.
- 3. What is the theme of the passage?
 - a. Being creative and using many resources can help you accomplish a task.
 - b. If you try hard enough, you can win.
 - c. It's important to knock out your competition.
 - d. Having a large family can be helpful at times.



My Reflection Journal



7 School vs. Home

What are the biggest differences between learning from home compared to learning at school? Which do you prefer?

Home	School
ĺ	

y School vs. Home	
What do you miss most about being in the clas miss least?	sroom? What do you

What are the best things about doing you	r schoolwork at home?
What are the worst things? Why?	

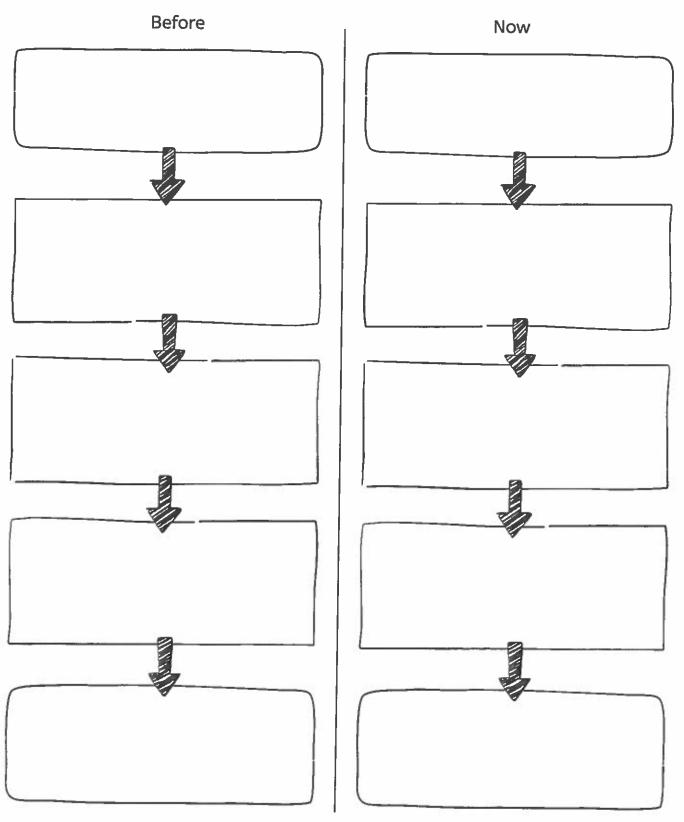
	· · · · · · · · · · · · · · · · · · ·

		·-			
					
	<u> </u>				
 			<u></u>		
	 				
			· · · · · · · · · · · · · · · · · · ·	<u></u>	

	Routine	21.4
volumest si	u like about being home every d	ay? What has surprise
you most ai	bout being home all day?	
		· · · · · · · · · · · · · · · · · · ·
-		

Daily Routine

What was your morning routine like before? How does it compare to your morning routine now?



P Daily R					
What is your do and classmate were before? H	s online? Ar	e your a	ssignme	ı talking v nts simild	with your tec ar to what th
			<u> </u>		
				-	
			<u> </u>		
d de la companya de l					

Free Time		SA E
What other things are you doing in your anything new?	"free" time? Ar	e you trying

7 Free Time

What are some new activities that you would like to try? Cooking? Sewing? Dancing?

6 6	
9	ON TODOE TO DOE
0	
0	
٥	
0	
۵	
۵	

G W	4	
Š (S	Free	Time

What is your favorite thing to do when you get to go outside? What makes this activity so enjoyable?

and the second			
**			

6 Friends	
What would you tell a friend who wa	s scared of the COVID-19 virus?

MAINEW			1 1 1			
f you could inv vould it be?	ent sometnin	g that w	vould ke	eep ever	yone safe	e, wha
			-			
						<u> </u>
						<u> </u>



V & Enrichment

Science Week of May 18 & 25 4th Grade

Student Name	 	
Tooch on Name		
Teacher Name	 	

If possible, please return paper copies to drop boxes at food distribution sites or if using online access email teacher upon completion.

Science, Lessons, Grade 4

The Moon

- 1. Read the article "The Moon: A Natural Satellite. Then, label the page to show the phases of the moon.
- 2. Label the month of May to show which phase of the moon will be on each day.
- 3. Read the article "Our Moon".
- 4. Answer the questions about "Our Moon".
- 5. Cut out the "Cootie Catcher Solar System". Fold the paper to assemble the cootie catcher. Work with a sibling, parent, or other person to learn facts about the Solar System.

Ecosystems, Food Chains & Food Webs

- 1. Use the decoder at the top of the page to break the code of the words listed 1-18. Read the words you discover.
- 2. Solve the crossword puzzle by reading the clues for across & down. Some of the letters have already been filled in for you.
- 3. Find the words related to Ecosystems, Food Chains & Food Webs in the word search.

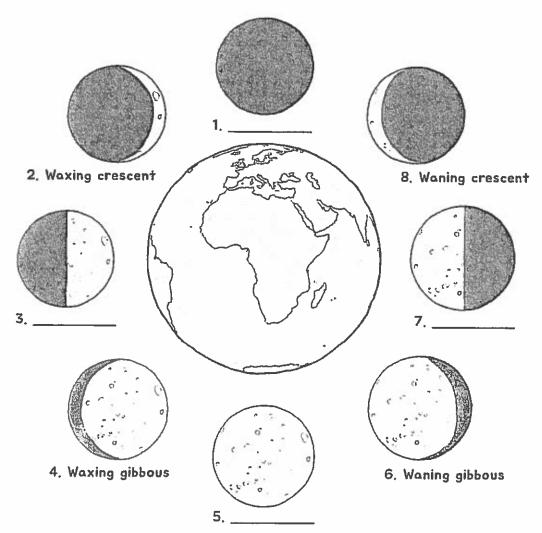
Name Date	Name			
-----------	------	--	--	--

The Moon: A Natural Satellite

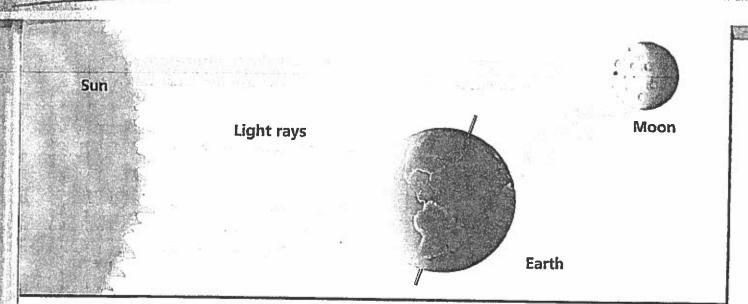
The moon is not a planet, but a natural satellite that circles the earth. The moon reflects light from the sun, like a mirror. As the moon orbits earth, sunlight hits different areas of the moon, making it visible. These changes are called *phases*.

At the New Moon phase, the moon is very hard to see because it's between the earth and the sun, and it is not lit up. The moon becomes visible during the Waxing Crescent phase, but we can only see a small piece of it. During the First Quarter moon, you can see half of the moon. The moon looks like it is almost full in the Waxing Gibbous phase. When there's a Full Moon, it is fully facing the sun causing it to appear fully lit up. Then, the Waning Gibbous phase is when the moon begins shrinking and we can see all but a small sliver. In the Last Quarter, you can see half of the moon again. The last phase before a New Moon is the Waning Crescent phase, which is when the moon appears as a small crescent shape again.

Directions: Label each phase of the moon below using the information from above.



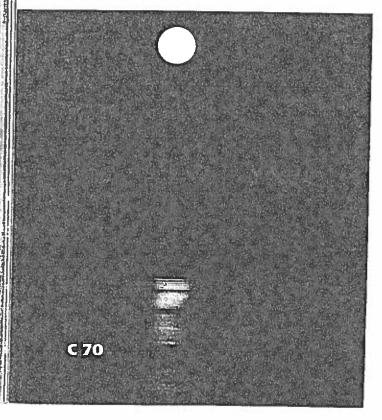




The Moon does not make its own light. It reflects light from the Sun onto Earth.

How Do the Moon and Earth Compare?

The Moon is the biggest and brightest object in the night sky. The Moon is actually smaller than stars and planets. It looks so big and bright because it is Earth's closest neighbor in space.



The Moon is about one-fourth as wide as Earth. If the Moon were the size of a tennis ball, Earth would be the size of a basketball. Not only is it smaller than Earth, but it has less mass, too. Gravity on the Moon is weak compared with Earth because of this.

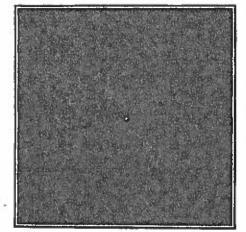
Gravity is the force that holds things on the ground. The pull of gravity between Earth and the Moon keeps the Moon in its orbit around Earth.

Gravity determines how much things weigh. Gravity is six times stronger on Earth than on the Moon. If you stepped on a scale on the Moon, you'd weigh only one sixth of your weight on Earth.

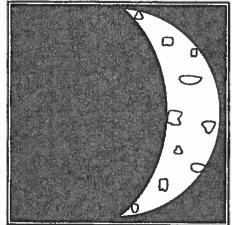
Moonlight seen from Earth is really light from the Sun. Sunlight strikes the Moon and reflects onto Earth.

The Moon is Earth's nearest neighbor in space. It is about 384 thousand kilometers (240 thousand miles) away.

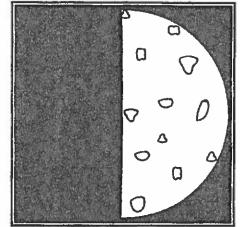
Moon Phases



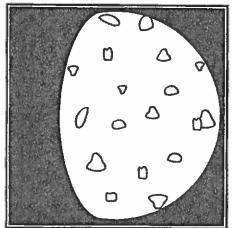
New Moon



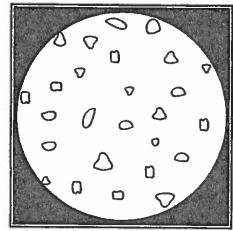
Waxing Crescent



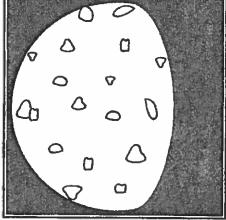
First Quarter



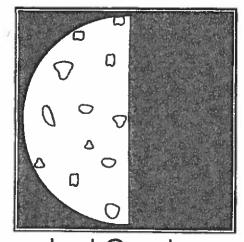
Waxing Gibbous



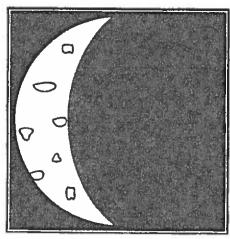
Full Moon



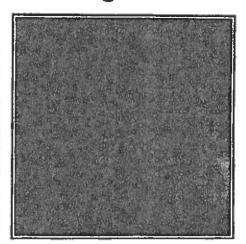
Waning Gibbous



Last Quarter



Waning Crescent



New Moon

Name____

May 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Waxing Gibbous	11	5 Waxing Gibbous	6	Full	Waxing Gibbous	Waxing Gibbous Wanis
	Waning Gibbous			Last	Waning Crescent	Wanny
Waning Crescent	18	19	Waning Cresin	21	New New	Waxirg Crescent
Waxing Crescent	25	Waxing Crescent	27	28	29	First
Waxing Gibbous			Waxing is a light of the property of the prope	Market Service	Wanney is getting Smaller	nenda ira alima d istribumura. Sen di _{Ammur}

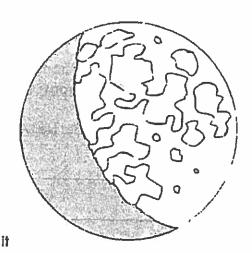
Name:	
-------	--

Our Meen

by Cynthia Sherwood

Jupiter and Saturn have more than sixty moons each. Neptune has thirteen. Mars has two. But if somebody says "the moon," we know exactly what they're talking about. It's Earth's moon, our closest neighbor in outer space.

The moon is the second brightest spot in the sky, after the sun. It orbits around the Earth once a month, going through "lunar phases." Sometimes the moon will look like a skinny curved sliver called a "crescent." Later, it



becomes a glowing full moon. These phases are caused by the changing angles of where the Earth, moon, and sun are relative to one another.

The moon might be the closest thing to us in space, but it's still far, far away—about a quarter of a million miles away! It's also much smaller. About fifty moons could fit inside Earth. Temperatures can be extreme — as hot as 250°F or as cold as minus 250°F.

That's why astronauts had to wear special spacesuits when they first landed on the moon. Besides protecting them from the extreme temperatures, the suits provided enough oxygen for the astronauts to breathe.



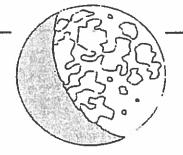
July 20, 1969 is one of the most important dates in history. It's when America's Apollo 11 astronauts landed on the moon. The first man to walk on the moon was Neil Armstrong. Right afterward, he said some of the most famous words ever: "That's one small step for man, one giant leap for mankind."

You might ask your parents, grandparents, or teachers where they were when we first landed on the moon. If they were born and weren't too young, they'll remember. Life has never been quite the same here on Earth now that we've explored our closest neighbor in space.

Name:	
-------	--

Our Meen

by Cynthia Sherwood



- 1. The moon is about...
 - a. 500,000 miles from Earth
 - c. 25,000 miles from Earth
- b. 250,000 miles from Earth
- d. 100,000 miles from Earth

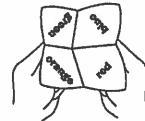
<u></u>		40
According to the the moon need	e information in the article, name two realed to wear special space suits.	asons astronauts who lande
	•	

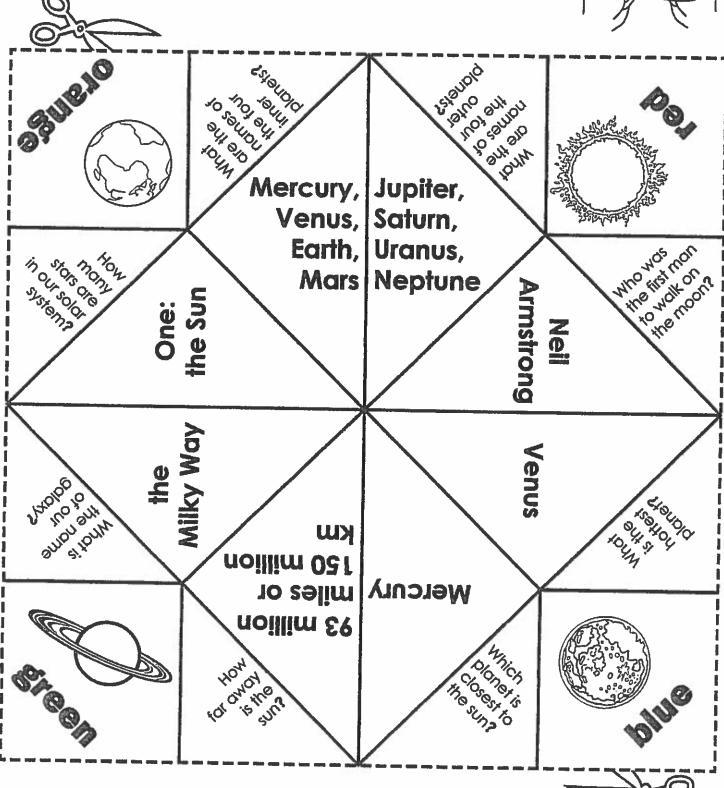
4. Chelsea's mom was born in 1968. When Chelsea asked her mom where she was when Neil Armstrong first landed on the moon, her mom said, "I'm not sure."

Why do you think Chelsea's mom said this?

- a. Chelsea's mom wasn't born yet.
- b. Television had not been invented yet.
- c. Chelsea's mom was too old to remember it.
- d. Chelsea's mom was too young to remember it.
- 5. Which statement is true?
 - a. Saturn has fewer moons than Mars.
 - b. Earth has more moons than Neptune.
 - c. Neptune has fewer moons than Jupiter.
 - d. Mars has more moons than any other planet.

Cootie Catcher Solar System





Ν	а	m	e
1.4	Q	611	C

Crack the Code -Ecosystems. Food Chains. + Food Webs

predator

The words below have been written in code. Use the hints in the decoder at the top of the page to help break the code (the letters on top are the correct answers, the letters on the bottom are the code).

Write the correct word on the line provided beside each code word. You may need to add spaces to separate the words.

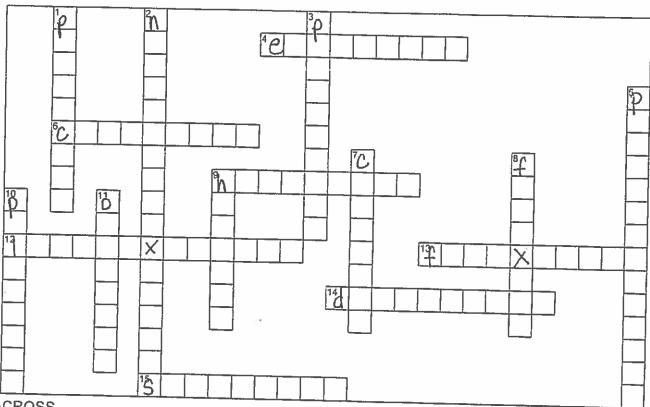


ABCDE	V Q S B Y D F G H I J K	NOFZATMXLGW LMNOPQRSTU	V E J C R V W X Y Z
 azwkpqmz)	11. wymhjhqwr12. amttdqcml	
5 vozlofornu			
7 405-10-0-1		15. ymlhdrwz	
8. Imitofoluqeoluh		17. azwj	
9. hypfwluwz			
pollution ecosystem population living things food chain	scavenger herbivore habitat decomposer	carnivore non-living consumer food web prey producers omnivore photosynti	· ·

ECOSYSTEMS. FOOD CHAINS. + FOOD WEBS



Solve the puzzle below by using the science words in the box below. Count the squares if needed. Leave a the box blank if there is a space between two words (Example: food chain).



ACROSS

- 4. A place where living things and non-living things interact
- 6. An animal that only eats other animals
- 9. An animal that only eats producers (plants)
- 12. Any organism that is capable of growth and reproduction
- 13. Shows the flow of energy from the sun, to a producer, to consumers
- 14. An organism that breaks down dead plant and animal material
- 15. Any animal that will eat animals that it did not kill

DOWN

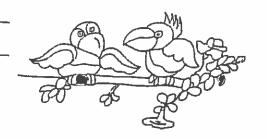
- 1. A living thing uses sunlight to make sugar (plants)
- 2. Anything that is not alive and never was alive
- 3. The number of specific organisms found in an ecosystem or community
- 5. The process plants use to make food (sugar) by using light, water, and carbon dioxide
- 7. Any organism that needs to find food in order to survive
- 8. Shows the flow of energy through all living things in an ecosystem
- An animal's natural home
- 10. Substances found in the air, water, or soil which are harmful to living things
- 11. An animal that eats both producers and other consumers

carnivore	food chain			
consumer	food web	living things	pollution	
decomposer	habitat	non-living things	population	ĺ
ecosystem	herbivore	omnivore	producers	
	neibivore	photosynthesis	scavenger	

B 1	_			
IM	2	m		•
9 W	44	4 1 1	C	

Ecosystems, Food Chains, + Food Webs

Find words relating to ecosystems below. They may be hidden vertically or horizontally.



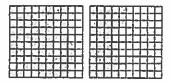
g	e	C	C) 8	<u>y</u>	' s	t	е	m	ı y	t	T u	ı a	V		i	S		Τ,
h	u	i	j	C	a	r	n	l	V	0	r	е	1.	1-	 .	u		+-	
С	У	j	∫n	C	S	С	а	V	е	n	g	e	-	d	+-	-	+-	-	-
h	k	p	f	W	′ у	d	е	С	0	m		0	+-	e	+-	+	10	+:`	+-
W	С	t	n	p	h	а	e	е	m	р	r	Г	e	-	+-	+	n	+ : `	1
р	r	е	У	0	е	0	m	le	k	r	0	<u>'</u>	- i	u	<u>g</u>	V	 !	a	10
h	а	q	r	р	r	m	i	V	d	е	d	·	 	m f	+		1	p	S
р	1	r	s	u	b	n	n	V	m	d	-	n	С	 	a	n	V	0	У
h	У	b	V	1	$\frac{1}{i}$	i	e	S	-	-	u	<u> r</u>	V	р	b	9	<u> </u>		n
s	t	h	n	а	V	v	h	f	S	a	С		1	S	Į į	t	n		t
V	р	m	t	t	 	 	-	-	n	t	е	h	C	9	t	h	g	u	h
w	z	m	k	;	0	0	S	0	е	0	r	k	е	g	а	i	t	t	е
	k	k			r	r	р	k	<u>q</u>	r	S	е	X	V	t	n	h	i	S
$\frac{\cdot}{\cdot}$			g	0	e	e	u	W	r	S	У	С	h	h	h	g	j	0	i
C	e	У	k	n	f	0	0	d	С	h	а	i	n	r	f	S	n	n	s
Z	C	의	а	j	X	С	0	n	s	u	m	е	r	j	Z	р	g	V	f
<u>t </u>	s	r	а	р	0	f	0	0	d	w	e	b	е	v	m	f	S	p	n

carnivore	habitat		
consumer decomposer ecosystem food chain food web	herbivore living things non-living things omnivore photosynthesis	pollution population predator prey producers scavenger	

Topic 16 & Topic 14 Math Instructions

- 1. Pick two assignments (Daily Common Core, Reteach, Practice, Enrichment) from each lesson to complete.
- 2. Topic 16 begins with Lesson 2 because Lesson 1 was included in the FID Math Lesson 5.
- 3. If your classroom started with Topic 16, you can continue on to the next lesson and complete 2 of the Step-Up lessons daily.
- 4. Just do your Best☺

- 1. Tom has 12 compartments in his tackle box. In each compartment he has 5 fishing lures. How many fishing lures does he have in his tackle box?
 - A 72
 - **B** 60
 - C 48
 - D 17
- 2. Nick has \$0.88 in his left pocket and \$0.43 in his right pocket. How much money does he have in both pockets? Use the decimal grids shown below to help you add.



- A \$0.31
- **B** \$0.45
- C \$1.21
- **D** \$1.31
- 3. Mental Math Paula has picked 360 blueberries. She plans to make 12 blueberry muffins and wants to have the same number of blueberries in each muffin. How many blueberries should she put into each muffin?
 - A 120
 - **B** 90
 - **C** 60
 - **D** 30

- 4. Jessica has two sticks. The sticks are the same distance apart at every point. How would you best describe the sticks?
- 5. Shade in the circle to show a fraction equivalent to $\frac{4}{8}$.



6. What is a geometric term for the lines below?



Line Segments, Rays, and Angles

Here are some important geometric terms.





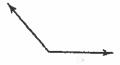


Line segment

A line segment is part of a line. It has two endpoints. This is line segment XY.

A ray is part of a line. It has one endpoint and goes on and on in one direction. This is ray AB. Right angle

A right angle is a square corner, or 90 degrees.



Obtuse angle

An obtuse angle is greater than a right angle.



Acute angle

An acute angle is less than a right angle.



Straight angle

A straight angle is 180 degrees.

Use geometric terms to describe what is shown. Be as specific as possible.

1.

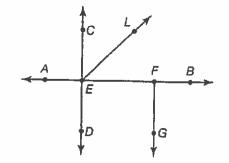






4. Name three different rays.

5. Name two different line segments.

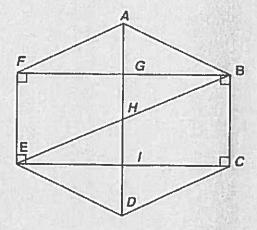


Shapes in Shapes

Study the figure. Then answer each question.

How many triangles
 are there in the figure?

Use the capital letters at the vertices to name them.

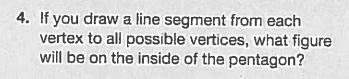


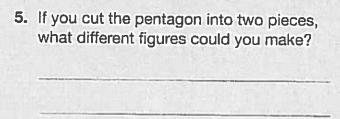
- 2. How many rectangles are there in the figure?

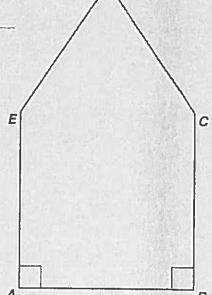
 Name them.

Use the figure at the right to answer Exercises 3 through 5.

How many of each type of angle are in the polygon?
 acute _____ obtuse ____ right _____







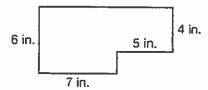
6. What is the name of the figure that is 36 inches around and that has equal sides, each 6 inches long?

Choose the best answer.

- 1. Fran has 3 flowers growing in the window. They are $\frac{3}{4}$ foot, $\frac{2}{3}$ foot, and $\frac{5}{6}$ foot. Write the heights of the three flowers in order from least to greatest.

 - A 23, 56, 34 B 23, 6, 34 C 56, 34 C 56, 34

Use the figure shown for items 2 and 3.



- 2. What is the area of the figure?
 - A 12 square inches
 - B 42 square inches
 - C 62 square inches
 - D 72 square inches
- 3. What is the perimeter of the figure?
 - A 20 inches
 - B 28 inches
 - C 30 inches
 - D 36 inches

4. Find the product.

4,619

× 7

5. Estimation Mr. Robbins has \$2,730 in his checking account and \$11,019 in his savings account. Round to the nearest hundred and add to find about how much money he has in both accounts combined.

Understanding Angles and Unit Angles

In 1-3, find the measure of each angle.

1. The angle is $\frac{1}{12}$ of the circle.



_____ degrees

2. A circle is divided into 20 equal parts. What is the angle measure of three of those parts?



____ degrees

3. A circle is divided into 9 equal parts. What is the angle measure of two of those parts?



_____ degrees

4. Reasoning Kurt cut pizzas into wedges measuring 40 degrees. If each person eats one piece of pizza, how many people could he feed with two whole pizzas?

5. Sam cut a pie into equal slices. There are only 3 slices left. The angle measure for the three slices is 72°. How many slices did Sam cut the pie into?

- 6. Writing to Explain A circle is divided into 18 equal parts. How many degrees is the angle for each part? How many degrees is the angle for 5 parts? Explain.
- 7. Brian cut an extra large round pizza into 12 pieces. Seven of the pieces were eaten. What angle measure of pizza is left?

A 30°

B 120°

C 150°

D 210°

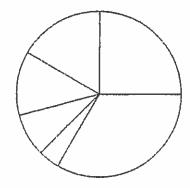
Understand Angles and Unit Angles

Mr. Mason has a circular garden. He plants a different kind of plant in each section of his garden.

Find the angle measure for each section of the garden.

Fra	ction Part of Garden	Angle Measure
1.	¹ / ₄ strawberries	degrees
2.	$\frac{1}{6}$ raspberries	degrees
3.	$\frac{1}{12}$ peas	degrees
4.	$\frac{1}{3}$ flowers	degrees
5.	½ tomatoes	degrees
6.	$\frac{1}{24}$ peppers	degrees
7.	What is the sum of all the a	ngles of the garden sections?
	degrees	

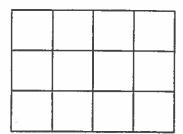
8. Label the angles in the circle with the name of the plant in that section.



Choose the best answer.

- 1. Juana walks 2 miles every day. If she does this for all 52 weeks this year, how many miles will she walk?
 - 54 miles
 - B 104 miles
 - C 364 miles
 - D 728 miles

Use the figure shown for items 2 and 3.



- 2. What fraction is equivalent to $\frac{8}{12}$?

 - A ½ 2 3 3 C 3 4
- 3. What fraction is equivalent to $\frac{9}{12}$?
 - A $\frac{2}{8}$

4. Find the quotient of $2,568 \div 6$. Show your work.

5. Estimation A local minor league baseball team had 458,673 people show up to its games last summer. Round this number to the nearest hundred thousand.

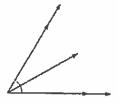
Measuring with Unit Angles

You can use an angle you know to find the measure of an angle you do not know. Use the smaller angle of the beige pattern block. It has a measure of 30°.

Find the measure of the angle below.



Two of the 30° angles will fit into the angle.



Add: $30^{\circ} + 30^{\circ} = 60^{\circ}$. The measure of this angle is 60° .

Use the beige pattern block to find the measure of the angle.

Draw lines to show how many 30° angles fit into the angle.

1.



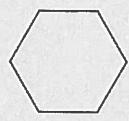
2. Be Precise Explain how you found the measure of the angle.

Measuring with Unit Angles

Find the measure of the angles in each letter, using pattern blocks. Tell which pattern blocks you used, and which angles of the blocks you used.







1. Letter A

2. Letter T

3. Letter O

4. Make your own design using pattern blocks. Find the angles in your design.

1. How much change would you get for a purchase of \$7.67 if you paid with a \$20 bill?

2. Find 600 - 443.

3. Zoe had 10 cookies and made 6 more. Then she gave 8 away. Which expression indicates how many cookies Zoe has left?

$$A 10 + (6 + 8)$$

$$B (10 + 6) - 8$$

$$C (12 - 10) + 8$$

4. Mental Math Which multiplication fact can help you find 32 ÷ 4?

- 5. Folger Elementary School had 236 students. Then, 7 more students came. Write a number sentence that shows the new number of students.
- 6. Write the word form for the decimal that is shaded below.



7. Write the missing numbers.

8. Compare 102,732 103,832.

Measuring Angles

An angle is formed by two rays that meet at a common endpoint called the vertex. The angle is measured in degrees (°).

An angle can be measured or created using a protractor.

To measure an angle:

Place the protractor's center on the vertex of the angle, and the 0° mark on one of the angle's rays. Read the number in degrees where the other ray of the angle crosses the protractor.

To create an angle:

Draw a dot to show the vertex of the angle. Place the center of the protractor on the vertex point. Draw another point at the 0° mark and another point at the angle degree mark. Draw rays from the vertex through the other points.

CONTRACTOR CONTRACTOR REPORTS AND A CONTRACTOR OF CONTRACTOR CONTR

For Exercises 1 through 3, measure the angles.

1.



2.



3.



For Exercises 4 through 9, draw the angles.

4. 65°

5. 90°

6. 145°

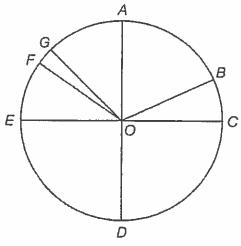
7.75°

8. 135°

9.180°

Name that Angle

Below is a circle with center point O. Each point on the outside of the circle connected to point O creates a line segment. Using point O as the vertex, many angles are created. Use a protractor and the diagram to answer the following questions.



- What is the measurement of ∠COD?
- 2. What is the measurement of ∠FOG? _____
- 3. What is the measurement of ∠COF? _____
- 4. What is the measurement of ∠EOC? _____
- **5.** Does $\angle EOC = \angle COE$? What are their measurements?
- **6.** Does $\angle COA = \angle EOD$? What are their measurements?
- 7. What is ∠*EOG* + ∠*AOB*?
- 8. What is $\angle FOG + \angle COD$?
- 9. Name the 3 angles that $\angle EOD$ is equal to.

Choose the best answer.

- 1. Kris is making a bowl of punch. He adds 5 quarts of cranberry juice, 1½ gallons of orange juice, and 6 pints of pineapple juice. How much punch does Kris make?
 - A 14 pints
 - B 14 quarts
 - C 17 quarts
 - D 20 pints
- 2. What fraction is equivalent to 0.7?
 - $A \frac{3}{5}$
 - $B \frac{7}{10}$
 - $C \frac{3}{4}$
 - $D \frac{4}{6}$
- Which number sentence is part of the same fact family as 7 × 9 = 63?

A
$$63 \div 7 = \Box$$

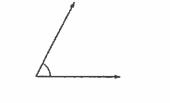
$$B 9 \times 63 = \square$$

C
$$7 + \square = 63$$

D
$$\Box$$
 ÷ 63 = 9

- 4. Rory has 3 rows of vegetables in his garden. Each row has 14 plants. How many plants does Rory have in his vegetable garden?
- 5. Mental Math What number comes next in this pattern: 5, 11, 17, 23, 29, ...?

6. What is the measure of the angle shown?



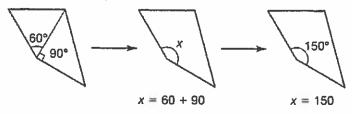
Name _____

Reteaching

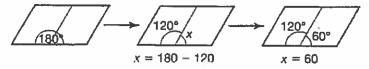
16-6

Adding and Subtracting Angle Measures

You can add to find angle measures.



You can subtract to find angle measures.

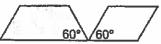


Angles *TUW* and *WUV*, together, make the larger angle, *TUV*. Add or subtract. Write the missing angle measure.

Angle Measure (*)

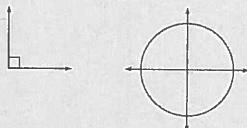
	∠TUW	∠WUV	∠TUV
1.	120	45	
2.	105		155
3.	100		170
4.		25	150
5.	112	36	

6. Reason Use the picture at the right. Jody is making a mosaic. She places two pieces along an edge as shown. She needs a third piece to fill the space between these two pieces. What size corner-angle does the third piece need to have in order to fill the space with no gaps?



Angles in Circles

A circle can be divided into equal-size parts, or angles, many different ways. When you multiply the angle measure by the number of parts, the product is 360°.



90° angles divide a circle into 4 equal parts: $90^{\circ} \times 4 = 360^{\circ}$.

Use a protractor. Write the missing information in rows 1 and 2. Then draw some angles of your own to complete the table.

Angle	Number in a Circle	Number Sentence
	4	90° × 4 = 360°
1. 40°		40° × 9 = 360°
2. /30°		
3.		
4.		
5.		

- 1. Mental Math A bowling alley has 10 pins in each lane. There are 24 lanes. How many pins are in the bowling alley?
 - A 24
 - B 240
 - C 2,400
 - D 24,000
- 2. William has 143 books. How many books does he have, rounded to the nearest ten?
 - A 200
 - **B** 140
 - C 110
 - **D** 100
- 3. Juan drew the picture of a house shown below.



Which part of the house appears to have an obtuse angle?

- A roof
- B walls
- C door
- **D** windows

- 4. At a camp there are 39 cabins. Each cabin has 6 windows. How many windows are there total?
- **5.** Give the value of the underlined digit.

697,002

6. Betty has 131 roses. She put 6 roses in each of 21 vases. How many roses does Betty have left over?

Polygons

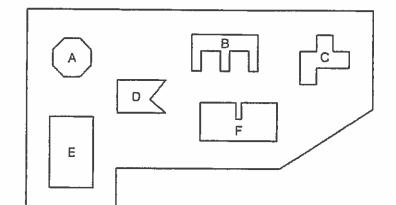
Draw an example of each polygon. How many sides and vertices does each one have?

- 1. Quadrilateral
- 2. Octagon
- 3. Hexagon

The map shows the shapes of buildings in Polygon Park. Identify the polygons that are lettered.

4. A

5. D



6. C

7. B

8. E

9. F

10. Which is the point where sides meet in a polygon?

A edge

B endpoint

C side

D vertex

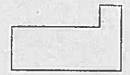
11. Writing to Explain Describe two polygons by the number of vertices and sides each has.

16-7

Poly Shapes

Each figure is made of at least 2 polygons. Draw a line or lines to show the figures. Name each figure. Be specific.

7.



2



3.



4.



5.



1. Luke bought a keychain for \$0.58. He gave the cashier \$1.00. How much change should he get back?

A \$0.52

B \$0.42

C \$0.32

D \$0.12

2. Mrs. Pierce has 100 coins in her collection. She keeps the coins in 5 boxes. Each box has the same number of coins. How many coins are in each box?

A 20

B 25

C 30

D 35

3. Lynette drew the figure shown below.



What figure did Lynette draw?

A pentagon

B triangle

C quadrilateral

D hexagon

4. Estimation A restaurant bought 13 boxes of ketchup. Each box has 32 bottles of ketchup. Write and solve a number sentence using compatible numbers to estimate the number of bottles the restaurant purchased.

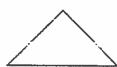
5. Which digit is in the hundreds place of 1,236?

6. A spider has 8 legs. How many legs do 6 spiders have?

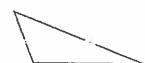
Triangles



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.



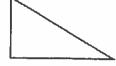
Acute triangle
All three angles
are acute angles.



Obtuse triangle One angle is an obtuse angle.

Classify each triangle by its sides and then by its angles.

1.



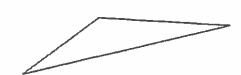
2.



3.



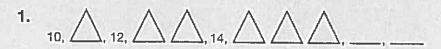
4.

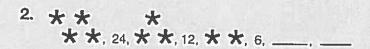


16-8

The Mixed Up Patterns

Draw or write what comes next in the patterns below.





1. Estimation Mrs. Jackson has 806 CDs. How many CDs does she have rounded to the nearest ten?

A 800

B 805

C 810

D 900

2. Harvey can read 17 pages in one hour. In one month, he spent 12 hours reading. How many pages did Harvey read that month?

A 204

B 194

C 104

D 51

3. John has \$0.72. His sister has \$0.21. How much do they have together?

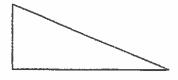
A \$0.63

B \$0.73

C \$0.83

D \$0.93

4. What type of triangle is shown?



5. Wendell has 213 popsicle sticks. He uses 114 popsicle sticks to make a model house. How many does he have left over?

6. Draw a hexagon.

Name_

Quadrilaterals

Square
There are four right angles. All sides are the same length.



Rhombus
Opposite
sides are
parallel and all
sides are the
same length.



AND CONTROL OF THE SECURITY AND CONTROL OF THE SECURITY OF THE

Rectangle There are four right angles.



Trapezoid
There is only
one pair of
parallel sides.



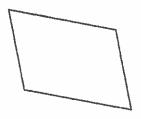
Parallelogram Opposite sides are parallel.



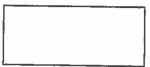
Quadrilateral A polygon with 4 sides.

Write the name of each quadrilateral.

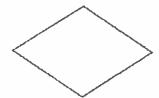
1.



2.



3.



4.

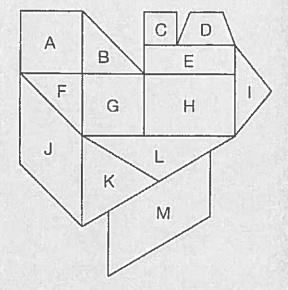


M

16-9

Doodles

Darius made this doodle while talking on the phone. Name each shape Darius drew. Be as specific as possible.



Α		
В		
С		
D		
E		
F		•
G		
н		
1 ,		
J.		
K		
L.		
		THE RESIDENCE OF THE PARTY OF T

- 1. Estimation What is 530,938 rounded to the nearest thousand?
 - A 530,000
 - B 530,900
 - C 531,000
 - **D** 500,000
- 2. Gavin is 48 inches tall. How many feet is this? Remember, there are 12 inches in 1 foot.
 - A 4 feet
 - B 12 feet
 - C 16 feet
 - **D** 144 feet
- 3. Seth has a stamp collection. His mother is going to give him 4 stamps. What can Seth do to find out how many stamps he will have after getting stamps from his mother?
 - A Add 4 to the number of stamps he has now.
 - B Multiply the number of stamps he has now by 4.
 - C Divide the number of stamps he has now by 4.
 - D Subtract 4 from the number of stamps he has now.
- 4. Jan has five \$1 bills, 3 quarters, and 4 dimes. How much money does she have?
 - A \$6.45
 - **B** \$6.35
 - C \$6.25
 - D \$6.15

5. Draw a line to separate the figure below into two separate shapes. Name the two figures that your line creates. Use specific names.

6. A camper has 6 storage compartments. Each compartment can hold 3 sleeping bags. If there are 17 sleeping bags to be stored, how many compartments will be used? How many sleeping bags will be in the compartment that is not completely filled?

7. Juan bought a sweater for \$15.95 and two shirts for \$9.00 each. How much did Juan spend on clothes?



Line Symmetry

Symmetric figures are figures that can be folded to make two halves that match each other. The lines that divide a symmetric figure into matching parts are called lines of symmetry.

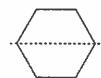
This square has 4 lines of symmetry. If you fold the square along any of the 4 dashed lines, the two halves will lie on top of each other.

Tell if each line is a line of symmetry.

1.



2.



3.



4.



Tell how many lines of symmetry each figure has.

5.



6.



7



8.

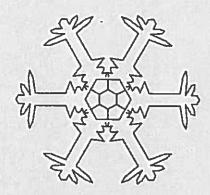


- 9. Reasoning How many lines of symmetry does the letter R have?
- 10. Complete the drawing so that the figure is symmetric.

Let It Snow!

Snow crystals usually form as 6-sided stars, but are different in detailed appearance.

- 1. Draw all lines of symmetry on the snow crystal to the right.
- 2. Draw your own snow crystal design. Make sure it has symmetry.



3. Draw your own snow crystal design, but this time make sure it has NO symmetry.

4. Decide which design you like best. Explain why you chose that design. Give specific reasons.

1. The table below shows how much money four family members spent on their vacation.

Name	Amount Spent
Brenda	\$16.70
Kirk	\$17.76
Allison	\$61.70
Lee	\$17.60

Which of the following shows the money amounts in order from greatest to least?

- A \$17.60, \$16.70, \$61.70, \$17.76
- **B** \$61.70, \$17.76, \$16.70, \$17.60
- C \$16.70, \$17.60, \$17.76, \$61.70
- **D** \$61.70, \$17.76, \$17.60, \$16.70
- 2. Mental Math Tyler drew a line that was 5 feet long. How many inches are in five feet?
 - A 12 inches
 - B 36 inches
 - C 48 inches
 - D 60 inches
- 3. Where would placing the number 7 make the number sentence true?

A
$$9 \times \square = 72$$

$$B \times 8 = 56$$

$$C \overline{4 \times 1} = 48$$

$$D \quad \boxed{} \times 7 = 77$$

4. What is $\frac{4}{12}$ in simplest form?

5.	Taryn cuts a triangle, a square,
	and a pentagon out of wood. The
	first shape she cuts has more
	sides than the second but fewer
	sides than the third. In what order
	does she cut the shapes?

6. The Kings County school district has 487 fourth-grade students. Of these, 251 are girls. How many fourth graders are boys?

Problem Solving: Make and Test Generalizations

When you make a generalization, you make a broad statement about something that a group has in common. A generalization helps you find patterns. When you make a generalization, it is important to test it to be sure it is correct.

Example: $1 \times 24 = 24$ $1 \times 93 = 93$ $1 \times 126 = 126$

Generalization: A number multiplied by 1 is itself.

Test: If I multiply a different number by 1, it is also equal to itself. For example, $1 \times 2 = 2$; $1 \times 3 = 3$; $1 \times 4 = 4$, etc.; any number multiplied by 1 is itself. My generalization is correct.

in some cases, it is possible to find more than one correct generalization:

Example: Jessica found a red pencil, 3 red pens, and 2 red markers in her backpack.

Generalization #1: The things Jessica found are all writing instruments.

Generalization #2: The things Jessica found are all red.

Test: I can write with a pencil, a pen, and a marker. Also, the pencil, the pens, and the markers are all red. My generalizations are correct.

 Randy has 2 tennis balls, 6 marbles, and 1 orange in his desk drawer. What generalization can you make about these things?

THE PRINTED REPORTED THE REPORT OF THE PROPERTY OF SECURE CONTRACTOR OF THE PROPERTY OF THE PR

- 2. This week, Sandy was out sick on Monday and Tuesday. Last week, Jared was out sick on Thursday and Friday. The week before, Elisa was out sick on Wednesday and Thursday. What generalization can you make about these three students' absences? Can you make a second generalization?
- 3. Write down the first three multiples of 15, 20, and 25. What generalization can you make about all multiples of 5?

Make Hundreds

When you add, use mental math. Mental math helps find tens and hundreds.

Look at each number in the puzzle board. Find two numbers in the box whose sum equals that number. You can use each number only once. Do not use pencil and paper to do the calculations.

115	79	253	374	305	66	189	172	485
128	326	34	495	85	421	415	147	411

	Puzzle Board						
100		200		300			
+			+		+		
400		500		600			
+			.+		+		
700		800		900			
			+		+		

What clues did you use to solve this puzzle?

Name

Step-Up 1

Reteaching

The Distributive Property

You can use the Distributive Property to multiply mentally.

Example A. Evaluate 7 × 53.

7 × 53

Break 53 apart into 50 + 3.

Then distribute the 7 to each part.

Multiply.

Add the products.

 $7 \times (50 + 3)$

 $(7\times50)+(7\times3)$

350 + 21

371

Example B. Evaluate 5(42) - 5(2). Remember 5(42) means 5×42 .

Use the Distributive Property in reverse.

5(42) - 5(2)

Join 42 and 2 using the minus sign.

Subtract.

Multiply the difference by 5.

5(42 - 2)

 5×40

200

Find each missing number.

1.
$$8 \times (30 + 2) = (8 \times ____) + (8 \times 2)$$
 2. $(6 \times ___) - (6 \times 7) = 6 \times (37 - 7)$

3.
$$8(28) = 8(20) + 8($$

4.
$$3(22) + 3(4) = 3(9) + 3(6)$$

Use the Distributive Property and mental math to evaluate.

11. Number Sense What are two other ways to write 9(46)?

Name	

Step-Up 2

Reteaching

Using Variables to Write Expressions

A variable represents a quantity that can change. To use a variable to write an algebraic expression, you need to decide which operation is appropriate. To help you, some words and phrases are listed below.

Word phrase	Variable	Operation	Algebraic Expression
ten more than a number b	b		b + 10
the sum of 8 and a number c	С	Addition	8 + c
five less than a number d	d		d-5
15 decreased by a number e	е	Subtraction	15 – e
the product of 8 and a number f	f		8 <i>f</i>
19 times a number <i>g</i>	g	Multiplication	
the quotient of a number h divided by 2			19 <i>g</i>
a number i divided it to se	h	Division	$h \div 2$
a number i divided into 50	i		50 ÷ <i>i</i>

Write each algebraic expression.	The course of th
1. a number m divided by 6	
2. the sum of 4 and a number n	3. 4 times a number p
4. a number n divided into 7	5. 3 less than a number r
6. a fewer grapes than 12	7. q sandwiches at \$8 each
8. Each fourth grader has 5 notebooks. I represent the number of notebooks the	Write an algebraic expression to ne entire class has.
Identify the operation.	Write the expression
Writing to Explain Write an algebraic below. Explain how the expression rela	expression to represent the situation ates to the situation.
Some monkeys share 7 bananas equa	ally among themselves.

Practice

Using Patterns to Divide

In 1 through 4, find each quotient. Use mental math.

1.
$$160 \div 40 = 16 \text{ tens} \div 4 \text{ tens} =$$

3.
$$140 \div 70 = 14 \text{ tens} \div 7 \text{ tens} =$$

Use mental math to answer the following questions.

5. If the cans are divided evenly among the shelves, how many cans are on each shelf?

Supermarket Storage			
Cans for sale	1,200		
Shelves of cans	10		
Rows per shelf	6		

- 6. If the cans are divided evenly among the rows on each shelf, how many cans are in each row?
- 7. Estimation Suppose there are 387 balls in the gym. If each bin can hold 48 balls, estimate the number of bins that will be needed to hold all the balls.
- 8. Algebra if $300,000 \div h = 6$, what is the value of h?
 - **A** 50
- **B** 500
- **C** 5,000
- **D** 50,000
- 9. Solve the equation $n \times 50 = 5{,}000$. Explain your solution.

Name ____

Step-Up 4

Practice

Connecting Decimal and Whole Number Numeration

Write the place value for the underlined digit.

- **1.** 5,009.94<u>1</u>
- **2.** 456.<u>9</u>6

3. 3,116.<u>8</u>52

- **4.** 2,440.50<u>4</u>
- **5.** 599.0<u>4</u>

6. 387.5<u>6</u>9

7. <u>6</u>98.07

8. <u>4</u>,456.87

9. 986.54

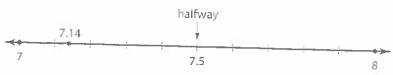
- 10. Which decimal has the same digit in the hundredths place and the hundreds place?
 - A 145.54
- **C** 965.439
- **B** 783.38
- **D** 5,486.649
- 11. Donna bought 4.356 pounds of cheese. What is the value of each of the digits in 4.356?

- 12. Which is equal to 30 hundredths?
 - A 3 thousandths C 3 tens
 - B 3 tenths
- D 3 thousands
- 13. Bill's average speed in the bicycle race was 29.215 miles per hour. What is the place value of the 1 in that number?
- 14. Kathy has 2 tenths of a dollar. Tom has 10 hundredths of a dollar. Is Kathy's amount or is Tom's amount more?

Reteaching

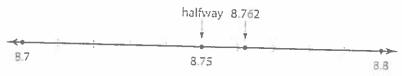
Rounding Decimals

You can use the number line below to help you round 7.14 to the nearest whole number. Is 7.14 closer to 7 or 8?



7.14 is less than halfway to 8. So, 7.14 is closer to 7.

A number line can help you round 8.762 to the nearest tenth. Is 8.762 closer to 8.7 or 8.8?



8.762 is more than halfway to 8.8. So, 8.762 is closer to 8.8.

Round each number to the place of the underlined digit.

1. 0.<u>7</u>234

2. 4.526

3. 3.86<u>2</u>9

4. 25.147

For 5 and 6, use the table at the right.

5. Round the number of inches of precipitation in Tallahassee to the nearest tenth.

Inches of Precipitation in 2007

Daytona	45.02
Tallahassee	44.47
Orlando	38.49

- 6. Round the number of inches of precipitation in Orlando to the nearest whole number.
- 7. Number Sense Marc earned \$8.76 per hour working at the library. Round his wage to the nearest ten cents.

Name

Step-Up 6

Reteaching

Estimating Quotients with 2-Digit Divisors

You can use compatible numbers to estimate a quotient.

Estimate 228 ÷ 19.

Step 1: Find compatible numbers for 228 and 19.

Think: 20 can be divided evenly by 2.

200 is close to 228 and 20 is close to 19.

200 and 20 are compatible numbers.

Step 2: Divide. Use patterns to help you, if possible.

Think: 200 \div 20 is the same as 20 tens \div 2 tens.

$$20 \div 2 = 10$$

So, $200 \div 20 = 10$.

Estimate each quotient using compatible numbers.

1.
$$540 \div 91$$

5.
$$1,784 \div 32$$

At Cambridge Elementary School, fourth-grade students are saving money for a summer trip to a theme park.

7. The amount Aubrey has saved is about how many times as great as the amount Joe has saved?

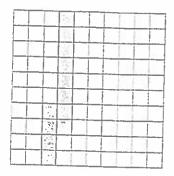
Amount Saved
\$110
\$ 92
\$225
\$ 53
\$189

Reteaching

Modeling Addition and Subtraction of Decimals

Adding decimals using a hundredths grid:

Add 0.26 + 0.12.

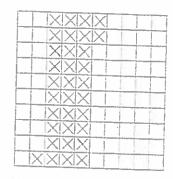


Step 1: Shade 26 squares to show 0.26.

Step 2: Use a different color. Shade 12 squares to show 0.12.

Step 3: Count all the squares that are shaded. How many hundredths are shaded in all? Write the decimal for the total shaded squares: 0.38. Subtracting decimals using a hundredths grid:

Subtract 0.52 - 0.33.



Step 1: Shade 52 squares to show 0.52.

Step 2: Cross out 33 squares to show 0.33.

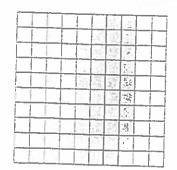
Step 3: Count the squares that are shaded but not crossed out. Write the decimal: 0.19.

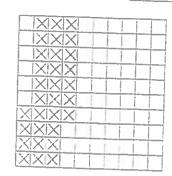
So, 0.52 - 0.33 = 0.19.

So, $0.26 \div 0.12 = 0.38$.

Add or subtract. You may use hundredths grids to help.

1.
$$0.42 + 0.37 =$$





Practice

Relating Division to Multiplication of Fractions

in 1 and 2, use the picture to find each quotient.



- 1. How many thirds are in 1?
- 2. How many thirds are in 7?

In 3 and 4, draw a picture to find each quotient.

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

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

In 5 and 6, use multiplication to find each quotient.

5.
$$6 \div \frac{1}{3}$$

6.
$$5 \div \frac{1}{10}$$

- 7. Julie bought 3 yards of cloth to make holiday napkin rings. If she needs ³/₄ of a yard to make each ring, how many rings can she make?
- 8. When you divide a whole number by a fraction with a numerator of 1, explain how you can find the quotient.

Name_

Step-Up 9

Practice

Multiplying Fractions and Whole Numbers

Find each product.

1.
$$\frac{1}{2}$$
 of 96 =

1.
$$\frac{1}{2}$$
 of 96 = 2. $\frac{3}{7}$ of 28 = _____

3.
$$\frac{3}{4} \times 36 =$$

4.
$$45 \times \frac{4}{9} =$$

5.
$$56 \times \frac{7}{8} =$$

4.
$$45 \times \frac{4}{9} =$$
 5. $56 \times \frac{7}{8} =$ 6. $42 \times \frac{3}{7} =$

7.
$$\frac{1}{2}$$
 of 76 = _____

8.
$$\frac{3}{8}$$
 of 56 =

7.
$$\frac{1}{2}$$
 of 76 = _____ 8. $\frac{3}{8}$ of 56 = _____ 9. $\frac{1}{10} \times 200 = _____$

10.
$$84 \times \frac{1}{4} =$$

11.
$$64 \times \frac{5}{8}$$

10.
$$84 \times \frac{1}{4} =$$
 ____ 11. $64 \times \frac{5}{8}$ ____ 12. $20 \times \frac{11}{20} =$ ____

13.
$$\frac{3}{8}$$
 of 48 = ____

13.
$$\frac{3}{8}$$
 of 48 = _____ 14. $\frac{1}{6}$ of 66 = _____

15.
$$\frac{4}{5} \times 30 =$$

16.
$$42 \times \frac{3}{6} =$$
 ____ 17. $72 \times \frac{5}{8} =$ ____

17.
$$72 \times \frac{5}{8} =$$

18.
$$18 \times \frac{1}{3} =$$

19.
$$\frac{5}{6} \times 66 =$$

20.
$$\frac{11}{12} \times 72 =$$

19.
$$\frac{5}{6} \times 66 =$$
 20. $\frac{11}{12} \times 72 =$ 21. $\frac{6}{7} \times 35 =$

22. Complete the table by writing the product of each expression in the box below it. Use a pattern to find each product. Explain the pattern.

$\frac{1}{2} \times 64$	$\frac{1}{4} \times 64$	1/8 × 64	$\frac{1}{16} \times 64$
		1	

- 23. Reasoning If $\frac{1}{3}$ of 1 is $\frac{1}{3}$, what is $\frac{1}{2}$ of 2, 3, and 4?
- 24. Which is \(\frac{1}{2} \) of 225?
 - A 75
- 113
- C 150
- **D** 450
- 25. Explain why $\frac{1}{4}$ of 4 equals one whole.

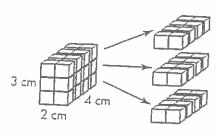
Reteaching

Volume

Volume is a measure of the space inside a solid figure. It is measured in cubic units. A cubic unit is the volume of a cube which has edges that are 1 unit.

How to find the volume of a rectangular prism:

Counting unit cubes



Count the cubes in each layer: 8 cubes. Multiply by the number of layers.

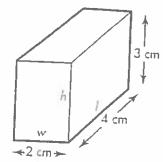
 $8 \text{ cubes} \times 3 = 24 \text{ cubes}$

The volume of each cube is 1 cm³.

The volume of the prism is 24 cm³.

Using a formula

You know the length, l, the width, w, and the height, h. Calculate the volume, V, using the formula $V = l \times w \times h$.



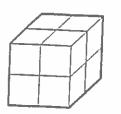
$$V = 2 \text{ cm} \times 4 \text{ cm} \times 3 \text{ cm}$$

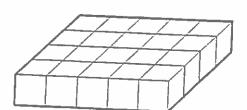
$$V = 24 \text{ cm}^3$$

Find the volume of each rectangular prism.

1.

2.





3.

