Dear Parents/Guardians,

As we approach the end of the school year, we look back and reflect on how much each and every student in fourth grade has grown. They are great examples of how hard work and dedication pay off. With summer approaching, the students will be given a well-deserved break. While these months are a good opportunity for students to relax and celebrate their success, it is also important to continue to immerse your child in activities that will prepare them for the upcoming school year. During the SUMMER we encourage students to continue enforcing all the skills we learned this year. Attached you will find resources and activities that your child can work on. Be sure to also access the IRLA Reading Level Summer Packets for your child's level.

Below you will find a list of websites and online programs that your child can have access to over the summer.

I-ready: <a href="https://login.i-ready.com/">https://login.i-ready.com/</a> - Teachers will assign lessons that hit the essential skills for students to complete. i-Ready lessons will be available from 7/1/20 - 8/10/20.

Epic Reading: <a href="https://www.getepic.com/sign-in">https://www.getepic.com/sign-in</a> Students will have access to online books for independent reading.

LexiaCore: <a href="https://www.lexiacore5.com/register">https://www.lexiacore5.com/register</a> - Students work on individualized reading lessons that target their needs.

Mathletics: <a href="https://login.mathletics.com/">https://login.mathletics.com/</a> - Students can play math games and work on specific skills.

E-spark: <a href="https://student.esparklearning.com/student/login">https://student.esparklearning.com/student/login</a> - Students can complete activities for both ela and math.

NY Public Library: <a href="https://www.nypl.org/">https://www.nypl.org/</a> - Students can have access to independent reading books.

i-Ready family resource page <a href="http://i-readycentral.com/familycenter/">http://i-readycentral.com/familycenter/</a> - You can find additional activity packs for your child to complete.





Here is a 4th grade summer reading list organized by reading level.

Level	Series	Author
Black	Babymouse	Jennifer Holm
Black	Franny K. Stein	Jim Benton
Black	Geronimo Stilton	Elisabetta Dami
Black	Hank Zipzer	Henry Winkler
Black	Goosebumps	R.L. Stine
Black	Time Warp Trio	Jon Scieszka
Black	Diary of a Wimpy Kid	Jeff Kinney
Black	American Girl	Various Authors
Black	Matt Christopher Sports	Matt Christopher
Black	Captain Underpants	Dav Pilkey
Black	I Survived	Lauren Tarshis
Black	Dog Man	Dave Pilkey
Black	Babysitters Club	Raina Telgemeier
Black	Smile, Sisters, Guts	Raina Telgemeier
Orange	Camp Confidential	Melissa Morgan
Orange	Dragon Slayers' Academy	Kate McMullan
Orange	Spiderwick Chronicles	Tony DiTerlizzi
Orange	Dear Dumb Diary	Jim Benton

Orange	Comeback Kids Mike Lupica		
Orange	My Teacher Is an Alien Bruce Coville		
Orange	Julian Rodriguez Alexander Stadler		
Orange	Lost Series	Tod Olson	
Orange	Dork Diaries	Rachel Renee Russell	
Orange	Last Kids on Earth	Max Brallier	
Orange	Mr. Lemoncello	Chris Grabenstein	



Directions: Complete the activities below independently or with an adult. Do five in a row to get B-I-N-G-O!

Find a new or unique place to read, like outside.

Search in a book to find words with these prefixes: mid-, inter-, and fore-.

After you read a fiction book, write about how the story would be different if you changed the setting.

Before you read a nonfiction book or article, brainstorm everything you know about the topic of the book.

Read a book you have never read before.

Read a book or an article that someone in your home picks out for you.

Find one word you don't know the meaning of. Ask someone what it means or look up the definition using a dictionary.

Read to someone who is older than you.

Tell a friend, family member, or teacher about a book you think they would like, too.

Enjoy a favorite snack or listen to your favorite music while you read.

Call a friend or family member and read to them. Ask them to read a story to you, too!

Re-read your favorite book.

Free Space Make a list of three facts you learned from a nonfiction book or article.

Read a fiction book and compare yourself to the main character. Write or tell someone your comparison.

After you read, tell what verb tense is used in the book. Is it past, present, or future?

Find the longest word in a book. In three minutes, write down all the words you can make using the letters in that word.

After you read a book you enjoy, find out if the author has written other books. Research the author or ask an adult.

Read to someone who is younger than you.

Read a fiction story in the voice of your favorite character, athlete, or hero.

After reading, write or tell someone about something that surprised you.

Write or tell someone a summary about what you learned from a book.

Write down something you want to know more about after you read a book.

Read a nonfiction book or article.

After you read, come up with a new title for the book or article.

## Word Learning Routine



#### Say the Word or Phrase Aloud

- Circle the word or phrase that you find confusing.
- · Read the sentence aloud.



#### Look Inside the Word or Phrase

- Try breaking the word into smaller parts.
- Look for familiar word parts, such as prefixes, suffixes, and root words.
- Can you figure out a meaning from the word parts you know?



#### Look Around the Word or Phrase

- Look in nearby words or sentences for clues about meaning.
- Think about the word or phrase in the context of the paragraph.



#### Look Beyond the Word or Phrase

 Look for the meaning in a dictionary, glossary, or thesaurus.



### **Check the Meaning**

 Ask yourself, "Does this meaning make sense in the sentence?"

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#### **Word Learning Routine Bookmark**

#### Help your student learn new words while reading!

As the student reads with you or independently, they will likely encounter unknown words or phrases. Pausing to focus on these words can support comprehension and expands the student's vocabulary.

- Use the Word Learning Routine to give the student concrete ways to determine how to find the meanings of unknown words and phrases.
- Encourage the student to record new words they encounter on the back of the bookmark.
- · Celebrate all the new words the student discovers!



Text Analysis C.028

#### More Incredible Inferences



#### Objective

The student will identify inferences.



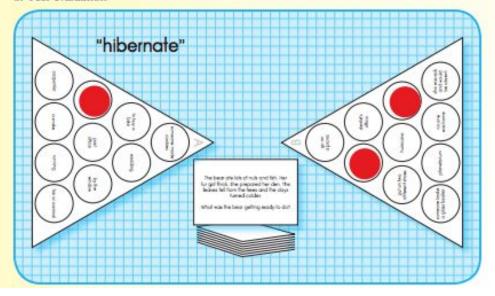
#### Materials

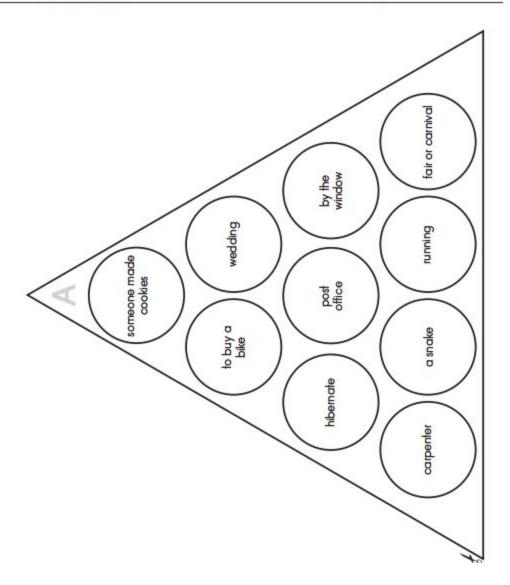
- ▶ Inference triangles (Activity Master C.028.AM1a C.028.AM1b)
- ▶ Inference cards (Activity Master C.028.AM2a C.028.AM2c)
- Answer key (Activity Master C.028.AM3a C.028.AM3b) An answer key is provided for optional use.
- Game pieces (e.g., counters)

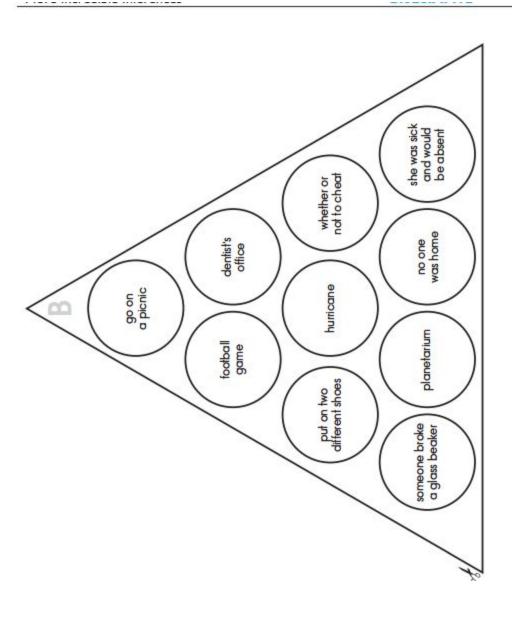


#### Students identify inferences by reading clues.

- 1. Place inference cards face down in a stack. Provide each student with a different inference triangle and game pieces.
- 2. Taking turns, students select a card from the stack and read it.
- 3. Look for phrase on triangle that answers the question. Read phrase and place game piece on that spot. Place inference card in a discard pile.
- 4. If no phrase is found which answers question, place trivia card at the bottom of the stack.
- 5. Continue activity until all matches are made.
- 6. Peer evaluation







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More Incredible Inferences

The room was a mess! Pots and pans were piled in the sink. Drawers and cabinets were flung open. Chocolate chips dotted the floor and empty cartons were on a sticky counter, but the smell was delicious.

Why was the room a mess?

The young woman looked down at her long dress. She felt like a princess. She and the others stood in the hall. They listened to the music. Then she heard the cue. She walked down the aisle as she held her flowers.

What was this event?

The girl saved all her money. It was exactly what she wanted. She imagined gliding down the road pedaling effortlessly. She finally had enough money to make her dream come true.

What was her dream?

The bear ate lots of nuts and fish. Her fur got thick. She prepared her den. The leaves fell from the trees and the days turned colder.

What was the bear getting ready to do?

Mailboxes are lined up outside the door. There is a long counter inside with scales. You can buy stamps, envelopes, and boxes. There are slots where you can mail a letter and long rows of boxes where some people go to pick up their mail.

What is this place?

The cat stretches and yawns. She strolls over to her favorite spot. The sun shines in and makes it very warm. She watches the birds and squirrels. Sometimes the fresh air blows in on her. She climbs up into her soft bed and looks at the animals for a while. Then she curls up and goes to sleep.

Where is the cat's favorite spot?

The man measures the wood and uses a saw to cut it. He puts the wood in place and hammers nails into it. He continues until the entire wall is built.

What is this man's job?

The boy found it in the middle of the road on his way home from school. It was very tiny so he picked it up. He fed it food for several weeks. Soon, it grew and got very long.

What did the boy find?

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More incredible inferences	C.028.AM2b

These athletes train a great deal. They eat a very healthy diet. Some compete in short races and others compete in long races called marathons.

What is the sport?

There are many things to see. Many farm animals are on display. The midway is full of people playing games and eating food. There is also a place where you can go on many different rides.

What is the place?

The rain was hard and steady. Sue stomped around the room and checked the clock every five minutes. The book that she bought the day before was flung in the corner beside the picnic basket and blanket. She stamped her feet and voiced her displeasure with nature.

What plans did Sue have for the day?

The girl showed the lady her ticket. Then she walked down the stairs and found her seat. The players ran onto the field. They got into their positions. The ball went up in the air and the game began.

Where was the girl?

Even though the man didn't want to do it he knew it had to be done. He picked up the phone and made the necessary arrangements. A few hours later, he found himself in a brightly lit room. He sat down in the movable chair. The person in charge bent over him as he began.

Where was he?

People giggled and pointed at her feet. She didn't understand until she looked down. She turned red with embarrassment. She realized she should not have gotten dressed in the dark.

Why shouldn't she have gotten dressed in the dark?

The waves crashed against the beach.
Thunder cracked and lightning lit the sky.
The wind howled and bent trees over
sideways. People put shutters on their
windows, bought supplies, and were ready.

What were the people expecting?

The decision was difficult. No one would find out. She was the only one that would know. It would guarantee her a good grade, but was it worth it? Would she really feel proud passing this way?

What was her struggle?

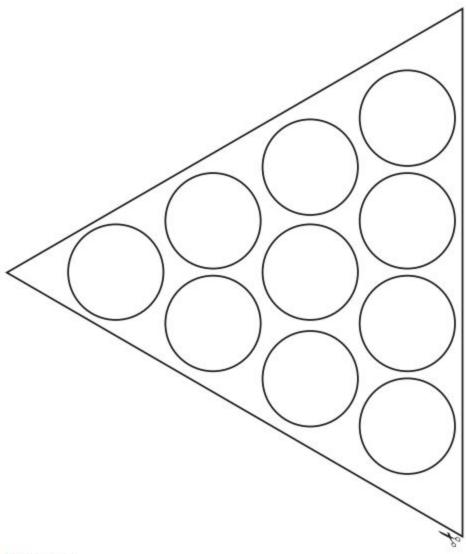
C.028.AM2c	More Incredible Inferences
The students were very quiet when the teacher walked over to the science center. The children sat at their desks and looked down at their hands. No one made a sound. The teacher looked around the classroom. Then she saw the pieces on the floor.	The children looked up at the twinkling lights. The background was pitch black. Although the air was a bit cool they didn't mind. They were busy looking at shapes, designs, and even some streaking lights.  Where were the children?
What happened in the classroom?	where were the children?
The boy rode his bike to his friend's house after dinner. When he got there, he rang the bell. He waited, but no one came to the door. He looked in the driveway. The car was not there. There were no lights on and the windows were all closed. The boy got back on his bike and went home.  What did the boy think?	The girl sneezed. Her dad felt her forehead and took her temperature. She told him her throat hurt. He pulled the blankets over her. He told her to try to sleep while he called her teacher.  Why did he call her teacher?

# Answer Key A

Why was the room a mess?	someone made cookies
What was this event?	wedding
What was her dream?	to buy a bike
What was the bear getting ready to do?	hibernate
What is this place?	post office
Where is the cat's favorite spot?	by the window
What is this man's job?	carpenter
What did the boy find?	a snake
What is the sport?	running
What is the place?	fair or carnival

# Answer Key B

What plans did Sue have for the day?	go on a picnic
Where was the girl?	football game
Where was he?	dentist's office
Why shouldn't she have gotten dressed in the dark?	put on two different shoes
What were the people expecting?	hurricane
What was her struggle?	whether or not to cheat
What happened in the classroom?	someone broke a glass beaker
Where were the children?	planetarium
What did the boy think?	no one was home
Why did he call her teacher?	she was sick and would be absent
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## Lesson 16

# **Using Context Clues**

Introduction Sometimes when you're reading a story or an article, you'll come across a word you don't know. When you don't know the meaning of a word, often you can figure it out by looking at the words and sentences around it. When you do this, you are using context clues.

Kinds of Context Clues	Examples	
Look for a definition in the text.	In high school, Jim Lovell built his first rocket, a jet engine that could fly to great heights.	
Find an example that will give you clues about the word's meaning.	Lovell's first attempt was a <u>failure</u> . His rocket flew into the air but then exploded and crashed.	
Look for a restatement. A restatement happens when the word is discussed in a way that makes its meaning clear.	A rocket is pushed upward by materials that are <u>combustible</u> . These materials burn and release gases.	

## **Guided Practice**

Read the paragraph below with a partner. Circle the context clues that help you understand the meaning of the underlined word. Write the meanings of the underlined words on the space provided.

HINT Sometimes context clues can be found in a sentence before or after the word you're trying to figure out.

Jim Lovell had always been <u>fascinated</u> by rockets. He was interested in learning everything about them and even built his own rocket. Lovell applied to the United States Naval Academy but was <u>rejected</u>. After failing to get into the Academy, Lovell did not give up. He <u>persisted</u>, or kept trying, and finally succeeded.

After the Academy, he joined the NASA space program.

fascinated:	
rejected:	
persisted:	

#### For numbers 1-4, use context clues to figure out the meaning of each underlined word.

NASA chose Lovell to <u>command</u> the *Apollo 13* space mission. Lovell was in charge of two men and of making all final decisions. After they were in space for a little more than two days, Lovell and his crew ran into trouble. One of the oxygen tanks blew up. The <u>explosion</u> caused a leak in another tank, and now there wouldn't be enough oxygen for a moon landing. Lovell and his crew had to return to Earth. Their safe return was due to Lovell's <u>capable</u> leadership.

- What does the word command mean?
  - A to study
  - B to fly with others on
  - C to be at the head of
  - D to be part of
- What words help you understand the meaning of command?
  - A "in charge of"
  - B "two men"
  - C "space mission"
  - D "chose Lovell"

- 3 What does the word explosion mean?
  - A a leak
  - B a bursting of something
  - C a lack of oxygen
  - D leaving outer space
- What does the word <u>capable</u> suggest about Lovell as a leader?
  - A He is a gentle and patient leader.
  - B He is skillful at leading others.
  - C He is harsh to those he leads.
  - D He is weak when leading others.

## **Greek and Latin Word Parts**

Introduction English words come from many languages, including Greek and Latin.

· A root is a word part that usually can't stand alone as a word. Sometimes one root is added to another root to make a word, as in the word photograph.

Root	Meaning	Root	Meaning
graph	"write"	act	"do"
vis, vid	"see"	photo	"light"
phon, phono	"sound, voice"	port	"carry"

· Affixes are word parts, such as prefixes and suffixes, that are added to word roots to make words. You can add the root vis to -ible to make visible.

Prefix	Meaning	Suffix	Meaning
auto-	"self"	-ist, -er, -or	"someone who"
tele-	"distance"	-able, -ible	"able or capable"

· As you learn Greek and Latin roots and affixes, your vocabulary will grow.

#### Guided Practice

Circle the roots in the underlined words. Write the meaning of each root. Then tell a partner the meaning of each underlined word.

HINT Remember, words may have two roots or a root and an affix.

- My favorite actor is Jesse B.
- I have five photographs of Jesse B. on my wall.
- One even has an autograph on it.
- I've asked my mom if I could telephone Jesse B.
- She said I could just watch Jesse B. on television.

#### Independent Practice

#### For numbers 1-4, read each sentence. Then answer the question.

I decided to compose a letter to Jesse B.

The prefix com- means "with," and the root poser means "to put or set down."

What is the meaning of compose as used in the sentence?

- A to think
- B to write
- C to talk
- D to mail
- Dear Jesse B., I just read a biography about you.

The prefix bio- means "life," and the root graph means "write." What is the meaning of biography as used in the sentence?

- A writing about the life of an actor
- B writing about someone else's life
- C writing about the beauty of life
- D writing about how to live your life

Your life story inspires me and many other fans.

The prefix in- can mean "within," and the root spir means "breathe." What is the meaning of inspires as used in the sentence?

- A causes people to become alive
- B causes a heavy wind to blow
- C causes people to faint
- D causes strong lungs
- I hear you are a very benevolent person, giving to many charities.

The prefix bene- means "well," and the root velle means "wish." What is the meaning of benevolent as used in the sentence?

- A surrounded by good people
- B showing good will to others
- C liked by many good people
- D hoping others are good

# over Bridge, Under Tunnel

#### by Lloyd Frank

- 1 Mountains, lakes, and rivers can get in the way of people traveling from one place to another. There are structures that help people pass such obstacles. Bridges and tunnels help people overcome such barriers.
- 2 Bridges and tunnels are different in design and placement. A bridge is built over a body of water, a highway, or a railroad track. A tunnel, in contrast, is a passageway under the ground, under a body of water, or through a mountain. Bridges vary in shape and are often placed above ground or water. Some are even famous. The Golden Gate Bridge is one of the most renowned bridges in the world. This celebrated structure crosses over the entrance to San Francisco Bay and connects San Francisco to northern California. The Golden Gate is known for its length and height. But it is best known for its beauty. People come from all over the world not just to cross the Golden Gate but simply to look at it.
- Of course, not even the world's most famous tunnel gets many visitors who just want to look. It's hard to get a good view of a subterranean passage. But since the Channel Tunnel opened in 1994, it has transported millions of people. The Channel Tunnel, or "Chunnel," runs beneath the English Channel and connects France and England. The Chunnel is a rail tunnel. The only automobiles that cross it are carried on special railway cars. The Chunnel is not the longest tunnel in the world, but it is one of the few tunnels that hel

#### Close Reader Habits

How can context clues help you? **Circle** words that are unfamiliar. Reread the article. **Underline** clues that help you figure out the meaning of the words.

- Think Use what you learned from reading the science article to respond to the following questions.
  - What is the meaning of <u>obstacles</u> as it is used in paragraph 1 of the text?
    - A things made below or above ground
    - B things that slow or stop movement
    - C things that help people travel
    - D things built through mountains or over water
  - Underline four context clues in paragraph 2 that best help you understand the meaning of the word renowned.

A bridge is built over a body of water, a highway, or a railroad track. . . . Bridges vary in shape and are often placed above ground or water. Some are even famous. The Golden Gate Bridge is one of the most renowned bridges in the world. This celebrated structure crosses over the entrance to San Francisco Bay and connects San Francisco to northern California. The Golden Gate is known for its length and height. But it is best known for its beauty.



Synonyms are context clues with meanings that are almost like the unfamiliar words. Antonyms are context clues with meanings that are opposite to the unfamiliar words.

#### ▶ Talk

Discuss the meaning of the word <u>subterranean</u> as it is used in this sentence from paragraph 3:

It is hard to get a good view of a subterranean passage.

HINT Use a chart to organize your thoughts about context clues.



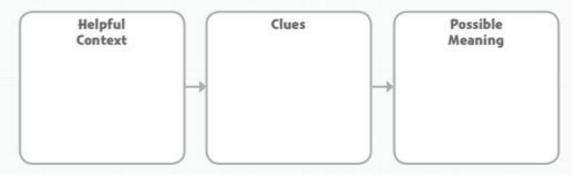
#### Write

Short Response Write a definition of the word <u>subterranean</u>.

Identify the context clues you found. Describe the strategy you used to figure out the meaning of the word. Use details from the text to support your response. Use the space provided on page 19 to write your answer.

# over Bridge, Under Tunnel

Use the chart below to organize your ideas.





Write Use the space below to write your answer to the question on page 18.

word. Use details from the text to support your response.					

This question has two parts. First, answer Part A. Then answer Part B.

#### Part A

What is the meaning of the word bivalve as it is used in paragraph 5?

- A having a hard outer shell
- B having a shell with two pieces
- C having a soft outer shell
- D having a shell that is all one piece

#### Part B

Underline the two phrases in paragraph 5 that best support your answer in Part A.

After univalves, bivalves are the next largest group of mollusks. When a bivalve is alive, the two parts of its shell are hinged. After the animal dies, you may find just one part of the shell lying on the beach.

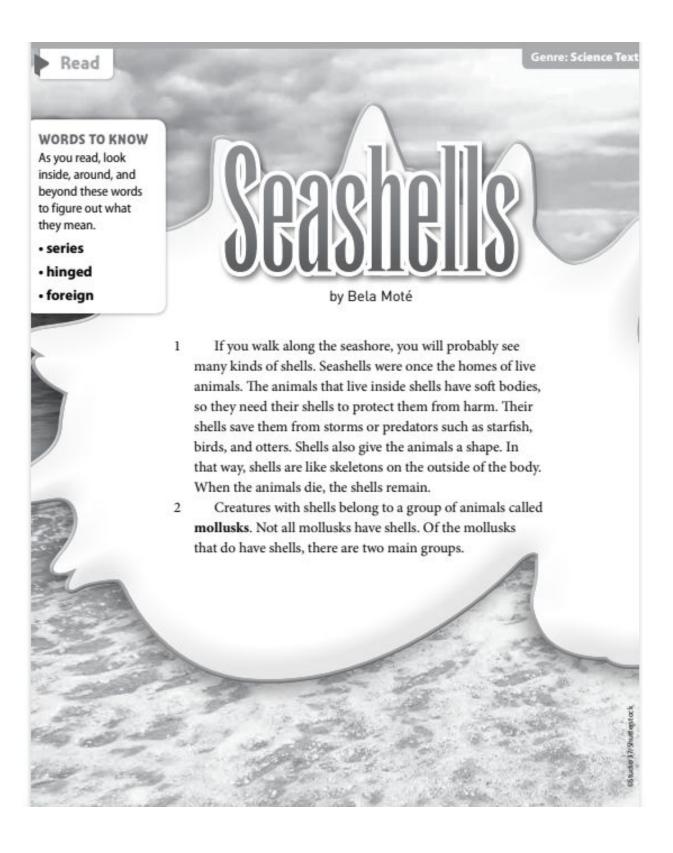
Read the sentence from the passage.

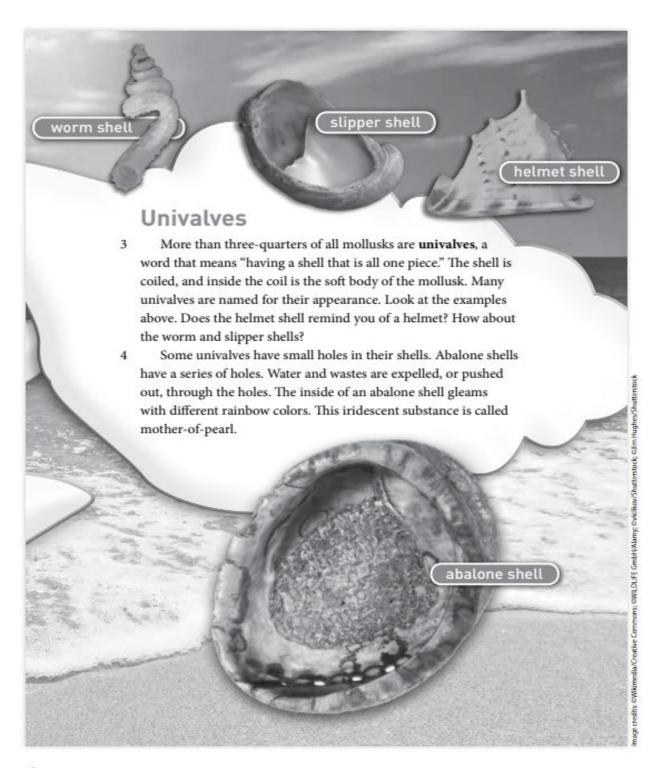
The jackknife clam has an appropriate name because it has about the same shape as a closed jackknife.

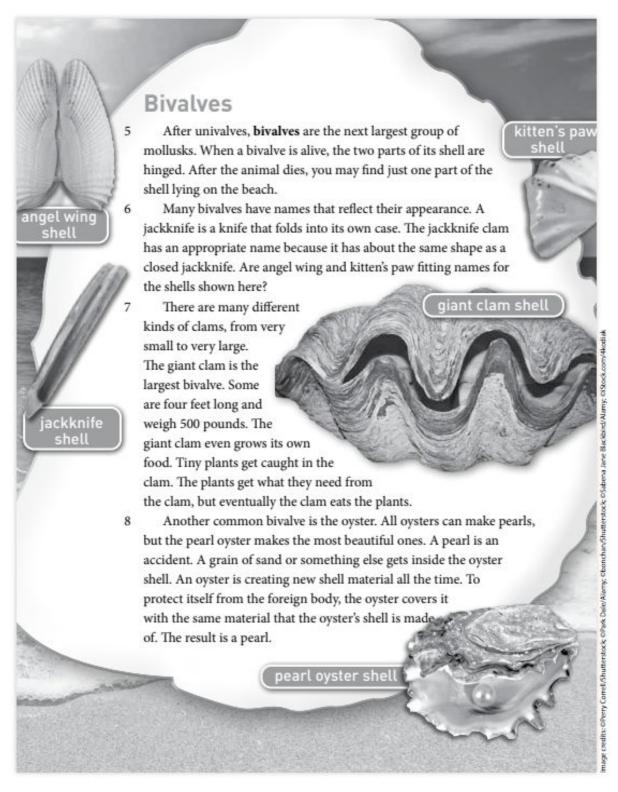
What does the author tell the reader by using the word appropriate? Pick two choices.

- A Bivalves are the largest group of mollusks.
- B Jackknife describes the shape of the clam.
- C An angel wing is a good name for the clam.
- D Jackknife is a good name for the clam.
- E The clam looks like an open jackknife.
- F A jackknife folds into its own case.









- Think Use what you learned from reading the science text to respond to the following questions.
  - Read the sentence from paragraph 1 in the passage.

Their shells save them from storms or <u>predators</u> such as starfish, birds, and otters.

What does the author suggest to the reader by using the word predators? Pick **two** choices.

- A Predators can harm some animals.
- B Predators need to find shelter from storms.
- C An animal's shell helps protect it.
- D All predators have skeletons.
- E When the animal dies, the shell remains.
- 2 This question has two parts. First, answer Part A. Then answer Part B.

#### Part A

What is the meaning of the word <u>iridescent</u> as it is used in paragraph 4?

- A not letting light through
- B easy to notice or understand
- C shining with many varying colors
- D a small amount of something

#### Part B

Which phrase from the passage helps the reader understand the meaning of <u>iridescent</u>?

- A "next largest group of mollusks"
- B "have small holes in their shells"
- C "the inside of an abalone shell"
- D "gleams with different rainbow colors"



# WORKING ON WRITING: SCROLL THROUGH THE DIFFERENT WRITING PROMPTS AND PICK ONES TO WRITE OR RESPOND TO.

- I wish my teachers knew that . . .
- What's the most beautiful person, place, or thing you've ever seen? Share what makes that person, place, or thing so special.
- Which is better, giant muscles or incredible speed? Why?
- What is your most difficult subject in school? Why is it difficult? What can you do to get better at that subject?
- Rewrite "Hansel and Gretel" from the witch's perspective.
- Describe a scary situation that you've experienced.
- What is your first memory? Describe it.
- You wake up tomorrow with a silly superpower that makes you famous. What is that silly power? How does it lead to your becoming an international superstar?
- Are you a good loser? Explain.
- What are examples of things you want versus things you need?
- Last Friday, you were given one wish by a magical panda. You tried so hard to make the wish positive, but after the whacked-out events that unfolded over the weekend, you regret ever meeting that tricky panda. What did you ask for, and what happened?
- I wish my friends . . .
- Describe a routine that you often or always do (in the morning, when you get home, Friday nights, before a game, etc.).
- What things do all kids know that adults do not?
- What TV or movie characters do you wish were real? Why?
- The best thing to do on a snow day is

- If I was in the circus, I would \_\_\_\_\_
- The best place to play in my neighborhood
- When I grow up
- Inside my backpack
- If I could rename 10 different crayon colors
- If I could be any animal, I would be...
- Riding on Santa's sleigh
- If I were a sprinkle, I would go on \_\_\_\_\_ dessert
- Running through the forest
- Becoming tiny and exploring your bedroom
- Living in an igloo
- The best kinds of bugs
- What makes a good tree house
- Exploring a castle
- Popping out of a toaster
- If I could create a new creature...
- My pets are like my family because...
- Day at the beach
- My favorite thing to play at recess
- If I could learn a new language, I would learn
- The best day of the week
- If I could take any animal on a walk in the park...
- The greatest present I ever received

	My hero
	What I want to be for Halloween
	I was proud when I
	My favorite season
•	One day when I went to the park
•	Something that is important to my family
	What I did last Saturday
	A dream vacation
	If I could only eat one food for the rest of my life, it would be
	What makes a good playground
	If dogs could talk
	If I could have any superpower
•	What if there were no television?
	If I won an award, it would be for
	Jumping on giant sandwiches
•	The best field trip ever
•	My favorite cartoon character
	If I could build anything out of legos
•	Good manners are
•	My grandparents
•	Five things I'm good at are
•	Riding on dinosaurs

- My favorite book character is \_\_\_\_\_
- Something my parents used to do when I was little
- My first memory
- The greatest thing I've learned so far this year is...
- If a genie granted me three wishes
- 1. Something that makes me unique
- 2. Something that always makes me feel better when I'm sad is...
- 3. My favorite holiday
- 4. If I had a thinking cap, it would look like...
- 5. If I was in charge of the weather
- 6. I use computers for...
- 7. My favorite thing about my family
- 8. If I was king or queen of the world for a day, I would...
- 9. I wish someone would build \_\_\_\_\_ by my house
- 10. Would I rather have three arms or three legs?
- 11. If I could make anything grow on trees, it would be...
- 12. My favorite thing to do outside
- 13. If I was invisible, I would...

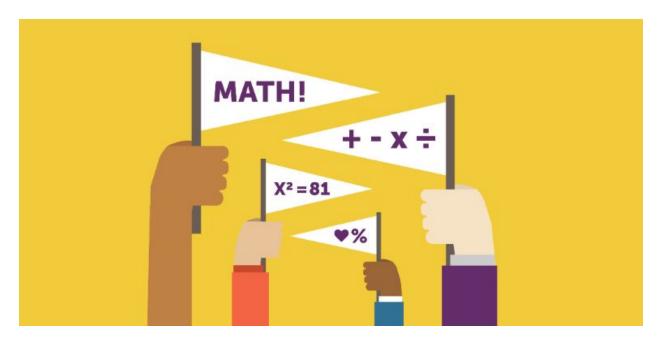
# VIDEO LESSONS ON DIFFERENT TYPES OF WRITING

## REALISTIC FICTION

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HTTPS://WWW.YOUTUBE.COM/WATCH?V=HZUVK-LEHGM - EPISODE 1
HTTPS://WWW.YOUTUBE.COM/WATCH?V=UKNCRBKI3ZY - EPISODE 2
HTTPS://WWW.YOUTUBE.COM/WATCH?V=DO7WYAJDGU4 - EPISODE 3
HTTPS://WWW.YOUTUBE.COM/WATCH?V=S2KNGVOOV1Y&T=20s - EPISODE 4
HTTPS://WWW.YOUTUBE.COM/WATCH?V=F3CWWSWOQOO&T=1s - EPISODE 5
HTTPS://WWW.YOUTUBE.COM/WATCH?V=F3CWWSWOQOO&T=1s - EPISODE 6
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## OPINION WRITING

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HTTPS://WWW.YOUTUBE.COM/WATCH?V=KEK2OGBSSHK - EPISODE 2
HTTPS://WWW.YOUTUBE.COM/WATCH?V=QV4RHG6RRR8 - EPISODE 2
HTTPS://WWW.YOUTUBE.COM/WATCH?V=7KYTKQFXMOG - EPISODE 3
HTTPS://WWW.YOUTUBE.COM/WATCH?V=JMEWPWB85EO - EPISODE 4
HTTPS://WWW.YOUTUBE.COM/WATCH?V=X1E82G-FYGE - EPISODE 5
HTTPS://WWW.YOUTUBE.COM/WATCH?V=3X09C8BXGWE - EPISODE 6
HTTPS://WWW.YOUTUBE.COM/WATCH?V=6SZAO2FUHSW - EPISODE 7
HTTPS://WWW.YOUTUBE.COM/WATCH?V=LSMTKSKAR7O - EPISODE 8
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Fourth Grade Math

In this section, you will find Math work, games and activities that will help you prepare for the fifth grade by practicing the essential skills that we've been working on all year!

Happy Math-ing!

#### **Online Math Games**

Topic	Link
Patterns	https://www.mathgames.com/skill/4.108-patterns-involving-addition-and-multiplication
Patterns	https://www.mathgames.com/skill/4.107-num eric-patterns
Line Plots	https://www.mathgames.com/skill/5.12-interpret-line-plots-with-up-to-5-data-points
Multiplication	https://www.abcya.com/games/clear_it_multip lication
Multiplication Jeopardy	http://www.math-play.com/Multiplicaton-Jeop ardy/multiplication-game_html5.html
Division PacMan	https://www.sheppardsoftware.com/mathgam es/mathman/mathman_division.htm
Division	https://www.mathgames.com/skill/4.81-division-with-divisors-up-to-100
Adding Fraction with Like Denominators	http://www.sheppardsoftware.com/mathgame s/fractions/FruitShootFractionsAddition.htm
Adding Fractions with Like Denominators	https://www.abcya.com/games/adding_fractions
Addition to 1,000,000	https://www.mathgames.com/skill/4.39-numb ers-up-to-5000000
Subtraction to 1,000,000	https://www.splashlearn.com/subtraction-gam es-for-4th-graders
Multiples	https://www.mathplayground.com/multiples.ht ml
Factors and Multiples	https://www.math-play.com/Factors-and-Multiples-Jeopardy/factors-and-multiples-game_html5.html
Prime and Composite Numbers	https://www.sheppardsoftware.com/mathgam

	es/numbers/fruit_shoot_prime.htm
Customary Units of Length	https://www.sheppardsoftware.com/mathgam es/measurement/MeasurementInches.htm
Multiply Fraction by Whole Numbers	https://www.mathgames.com/skill/4.67-multiply-fractions-by-whole-numbers
Add Mixed Numbers with Like Denominators	https://www.splashlearn.com/math-skills/fourt h-grade/fractions/add-mixed-numbers

# Place Value Relationships







Get 10 squares in one color and 10 in another color. Get two number cubes. Take turns with another player or team. Talk about math as you play!

At Your

Toss two number cubes. Add the dots. Find your toss below. Follow the directions. Explain your thinking. Cover the answer. If the answer is taken, lose your turn. Have fun!

Toss	Read the number. Explain how to round the number to the place of the underlined digit.	
2	500,8 <u>2</u> 5	
3	94 <u>,5</u> 68	
4	<u>7</u> 89,246	
5	14 <u>,0</u> 92	
6	9 <u>6</u> 9,025	

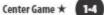
<u>5</u> 99,999	
58 <u>9</u> ,999	
<u>1</u> 49,999	
<u>7</u> 49,999	
500,8 <u>2</u> 4	
9 <u>4</u> ,568	

		T	
95,000	100,000	100,000	590,000
14,100	600,000	500,830	800,000
500,820	970,000	590,000	94,600
600,000	700,000	14,100	970,000



You win if you are the first to get four connected rectangles, like: 







## True or False? - Place Value Sort

237,048	The value of the 4 is 4 tens.

Materials: True or False: Place Value Sort mat and cards

The value of the	
7 is 7,000.	

- Work with a partner. Place the two numeral cards in the first column on the True or False sorting mat.
- Take turns to read a statement card and discuss whether it is a true or false statement. Use place value language to explain your reasoning. Make sure that you are both in agreement before placing the statement on the mat.
- Continue reading, discussing and sorting until all cards have been placed on the mat.

**Extension:** Make a 7-digit numeral card. Write 4 true and 4 false statement cards about this number using place value language. Cut out the cards and place them in an envelope for a classmate to sort on the True or False sorting mat.

### True or False? - Place Value Sort

Number	True		False	

8 hundreds 4 tens = 804 tens	570,000 can be renamed as 57 ten-thousands.	7 hundreds 4 tens = 74 hundreds	9 hundreds 3 tens can be renamed as 39 tens.
650 = 65 tens	76,000 can be renamed as 76 thousands.	200,000 can be renamed as 20,000 ones.	6,300 can be renamed as 630 hundreds.
150,000 can be renamed as 15 ten-thousands.	7 thousands 5 hundreds = 75 tens	9 hundreds 3 tens can be renamed as 93 tens.	1,076 can be renamed as 10,076 ones.
4 thousands 9 hundreds can be renamed as 49 hundreds.	33 ten-thousands can be renamed as 330,000.	9 hundreds 3 tens can be renamed as 39 tens	570 hundreds = 57,000

Cut out the cards and sort them onto the True or False board

### **Comparing Digits**

Materials: Comparing Digits board

- 1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally, or diagonally) that you will both solve.
- 2. Solve the problems independently. Show all work.
- 3. After you have both completed the problems check your work by sharing your solutions and strategies.
- 4. Repeat steps 1-3 with another line of four problems.

Ton work the number 55,335 Most easy limes greater is the 5 in the fluxosorie plane flux like 5 in the term place?	Write sat officent running is with the digit to the ran throused place and the running base than close the value of the first the throused place tempera to the value of the first the turning place?	Land write the isomers; 147,000 and 15,210, for reflect resident dises 7 have the greatest value? Explain.	Why stees \$ 325 have a otherson value then \$2,201 Equipm have you know that your allower to comball.
White the value of each digit in the following reproduct as 3 PC RTS DI IS STORY UNIVERSITY OF THE WAY OF THE	5. appears below in 200-008. Like says the 5 on the left is 100 times present than the 5 on the left is 100 times present than the 5 on the option.	Jame wide the numbers (SM, SM) and 48 (24), in which number does the opp of horse the least solar? Explain year throwing.	The digit 3 appears have in 1.40.3 SEL Lines-sept in 1.40.3 SEL Lines-sept in the 2 or the right in 10 in th
Complete the following:  a) Enumerous is 10 times: as creaty as 8 b) is asses to 10 female less 194/0 c) 4 frouterous is 10 female as creaty as 8	new does the verse of the 2 in 70th compare with the verse of the 2 in 7927 Exposs	Victo tax different 5-dipt cumbers in which the 2 on the left in 100 times growth than the 2 on the Jupit.	Expect the following pushes: 1. 50, 500. Describe what fraggines in the value of the number as the justice continues.
Have fours tones greater to the voice of the 4 to the left from the 5 to the self- te 4,004,7567 Expise.	A four digit content has 8 to both the lens place and the thousehold place. The consistent has 3 humbers and 3 cross. White the content and only the four has been designed in the 6 on the field and only to the content and compare the value of the 6 on the field and only to	There are two for suffice. It requires 655,07th Ben sean the Football white 12 trains for value of the 1 are five right. Many dept the calculation of the 1 are the 65th UNIO is account football. UNIO is account football.	A. Have down the value of the S or 615 company with the value of the E in 7811 Explore.

A.  Tom wrote the number 45,358. How many times greater is the 5 in the thousands place, than the 5 in the tens place?	Write two different numbers with the digit 6 in the ten thousands place and the hundreds place. How does the value of the 6 in the tenthousands place compare to the value of the 6 in the hundreds place?	Jane wrote the numbers 147,809 and 78,210. In which number does 7 have the greatest value? Explain.	Why does 9,324 have a different value than 9,234? Explain how you know that your answer is correct.
Write the value of each digit in the following numbers: a) 343,672 b) 25,035,814 Underline and compare the value of the like digits in each number.	5 appears twice in 355,609. Lisa says the 5 on the left is 100 times greater than the 5 on the right. Is Lisa correct? Explain.	Jane wrote the numbers 264,301 and 48,210. In which number does the digit 4 have the least value? Explain your thinking.	H. The digit 3 appears twice in 1,453,308. Lisa says the 3 on the right is 10 times less than the 3 on the right. Is Lisa correct? Explain how you know.
Complete the following: a) 4 hundreds is 10 times as many as 4 b) 6 ones is 10 times less than 6 c) 9 thousands is 10 times as many as 9	J.  How does the value of the 2 in 729 compare with the value of the 2 in 792?  Explain.	Write two different 6-digit numbers in which the 2 on the left is 100 times greater than the 2 on the right.	Extend the following pattern: 3, 30, 300,,,, Describe what happens to the value of the number as the pattern continues.
M. How many times greater is the value of the 4 to the left than the 4 to the right in 4,654,789? Explain.	A four digit number has 6 in both the tens place and the thousands place. The number has 3 hundreds and 9 ones. Write the number and compare the value of the 6 on the left and right.	There are two 5s in the 0. number 655,019. Ben says the 5 on the left is 10 times the value of the 5 on the right. Mary says the 5 on the right is $\frac{1}{10}$ the value of the 5 on the left. Who is correct? Explain.	How does the value of the 9 in 975 compare with the value of the 9 in 795? Explain.

### **Numeral, Word and Expanded Form**

Materials: pack of numeral cards

- Turn over five cards from the top of the stack and make the largest five digit number possible. Repeat three times.
- Create a three column chart. Represent each number you make in numeral, word and expanded form.

Numeral	Word Form	Expanded Form
86,532	eighty-six thousand five hundred thirty two	86,532 = 80,000 + 6,000 + 500 + 30 + 2

- 3. Next, turn over five cards from the top of the stack and make the smallest five digit number possible. Repeat three times.
- 4. Represent each number you make in numeral, word and expanded form.

### What Number am I?

36,875 384,568 472,889

Solve the following place value riddle.

My ones digit is double three.

My hundreds digit is the sum of 8 plus 1.

My tens digit is the difference between 9 and 4.

My ten thousands digit is the same as four groups of two.

My thousands digit is the same as 63 divided by 7.

My hundred thousands digit is half of my ten thousands digit.

What number am I?

- 2. Draft two original place value riddles. Try them out on a friend.
- Publish your riddles neatly on a clean sheet of paper for inclusion in a class riddle book. Write the answer below each riddle and cover it with a sticky note or small index card.

### Add and Subtract Numbers







Put [1] [2] in a bag.

Take turns.

Repeat for Each Round

Choose a, b, c, d, e, f, g, h, or i.

Pick a tile.

Do the jobs listed below in order.

To find your job, find the number that matches the tile you chose.



Break apart numbers to add, or count on to subtract. Explain your mental math.



Use compensation to add or subtract. Explain your mental math. Be sure that you get the same answer as your partner.

	± ± Use	Men	ital Math to Con	nput	9 ± ±
a.	1,048 + 2,245	b.	2,382 – 1,855	c.	3,159 + 224
d.	5,103 – 5,079	e.	6,398 + 1,165	f.	7,450 – 6,360
g.	4,426 + 336	h.	6,500 – 6,483	i.	4,520 + 289
4	* 概· 食	*	¥ + ¼ + ±	食	X + X . +







Each player tosses two number cubes.

If your numbers match another player's numbers, toss again. Decide who will read the first question. Take turns reading and solving the questions in order.

For Each Question Listen to the reader. Subtract. Then discuss and agree on the correct answer. The player who has that answer can remove one cube that shows the answer.

**How to Win** 

The first player who removes both cubes wins. Have fun!

а	Find the difference for 3,203 – 1,830. Which digit is in the ones place?
Ь	Find the difference for 7,029 - 2,664. Which digit is in the ones place?
С	Find the difference for 5,619 - 1,557. Which digit is in the ones place?
d	Find the difference for 7,960 - 5,769. Which digit is in the ones place?
е	Find the difference for 5,680 - 2,118. Which digit is in the tens place?
f	Find the difference for 5,040 - 1,255. Which digit is in the ones place?
g	Find the difference for 5,210 - 3,344. Which digit is in the ones place?
h	Find the difference for 4,807 – 2,215. Which digit is in the ones place?
i	Find the difference for 2,106 - 1,989. Which digit is in the tens place?
j	Find the difference for 34,011 - 11,464. Which digit is in the tens place?
k	Find the difference for 1,105 – 1,051. Which digit is in the ones place?
1	Find the difference for 6,007 – 5,146. Which digit is in the ones place?
m	Find the difference for 7,023 - 2,467. Which digit is in the ones place?

n	Find the difference for 12,062 – 9,435. Which digit is in the tens place?
0	Find the difference for 4,059 - 2,454. Which digit is in the ones place?
Р	Find the difference for 7,702 – 4,785. Which digit is in the tens place?
q	Find the difference for 21,399 - 19,945. Which digit is in the ones place?
r	Find the difference for 3,084 - 2,880. Which digit is in the ones place?
s	Find the difference for 3,006 - 2,964. Which digit is in the ones place?
+	Find the difference for 60,328 - 13,233. Which digit is in the ones place?
u	Find the difference for 6,051 - 2,718.  Which digit is in the ones place?
v	Find the difference for 7,501 - 5,933. Which digit is in the tens place?
w	Find the difference for 2,806 - 2,350. Which digit is in the ones place?
×	Find the different for 70,786 - 41,183. Which digit is in the ones place?
у	Find the difference for 30,472 - 20,829. Which digit is in the ones place?
z	Find the difference for 3,088 - 2,877. Which digit is in the ones place?



Toss two number cubes again. Play another game. Begin with the next question in the list.

#### **Addition and Subtraction Board**

Materials: Addition and Subtraction board

- 1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally, or diagonally)that you will both solve.
- 2. Solve the problems. Show your work.
- After you have both completed the problems check your work by sharing your solutions and strategies.
- 4. Repeat steps 1-3 with another line of four problems.

PLDH I runner's bask part in a 28 electromic impaction (SET runners disapped asl before the front one. Nove thesis runners completed the manufact?	from subtracted 6,000 from 37,170 and said fire of fire of the subtract of the subtract of fire subtract of	Studies in the recently transcent of the published of the	First the sum of 1,155 ° 100 ° 250. Stone past work.
Mind in the emoing (suitable or this processor)  60,762 + 57,862  Explain from you'riness	1,500 ballions were conti- to decimals a half-for a party. By receipt 600 ballions half-popiet. Place many failures sense half?	Sam addoct z*1.876 and 1.674 for a sum of 20.764. Learn addoct for atms numbers for a sum of 22.744. Settle is compet?* Explain.	Vital is the message runiber in the addition probability in the addition probability in 1,000 and 1,000 an
Line subtracted 7.000 - 1.400 and get a difference of 5.405. What mention do Line make? Explain.	Phint's the rossing senter is the protected of the protected ————————————————————————————————————	A service parmened 1,879 black, 2,739 blue and 400 cell petra. The violaty pend do the school purchase in all?	Peder added 2,273 4 50 s fits until get A sum of 3,100 to Physic demost? State paid with.
What is the crossing function in this problem?  > 00.307 = 47.000  Explain from you terms	Sen subtracted 7,756— 1,276 and get a difference of 5,225. O'Not include dir Sen makeri Englan.	Jack second 12,43th and 764-for a query of 12,500. Amir selfided fine harms suitform and get 11,600. Why six received part what making one one that provides making one find provision makes?	Chi The products (1) is origin 1,000 military of spales 2 size mark 1,175es (in 166,166, fune much until did the disk on livering?

9,041 runners took part in a 25 kilometer marathon. 387 runners dropped out before the finish line. How many runners completed the marathon?	Sam subtracted 8,368 from 31,112 and said the difference was 27,844. Laura did the same problem and said the difference was 22,744. Who is correct? Explain.	C. What is the missing number in this problem?  15,308 + = 31,052  Explain how you know.	Find the sum of 1,115 + 906 + 254. Show your work.
What is the missing number in this problem?  69,702 = 57,063  Explain how you know.	1,500 balloons were used to decorate a hall for a party. By midnight 608 balloons had popped. How many balloons were left?	Sam added 21,678 and 1,076 for a sum of 22,754. Laura added the same numbers for a sum of 22,744. Who is correct? Explain.	What is the missing number in the addition problem?  3,575 + 1,276 4,871
Lisa subtracted 7,000 – 1,485 and got a difference of 6,485. What mistake did Lisa make? Explain.	What is the missing number in this problem?  29,307 = 41,363  Explain how you know.	A school purchased 1,678 black, 2,739 blue and 400 red pens. How many pens did the school purchase in all?	L. Peter added 2,213 + 89 + 791 and got a sum of 3,193. Is Peter correct? Show your work.
What is the missing number in this problem?  + 32,307 = 47,563  Explain how you know.	N. Ben subtracted 7,736 – 1,259 and got a difference of 6,523. What mistake did Ben make? Explain.	Jack added 12,638 and 794 for a sum of 12,322. Jane added the same numbers and got 13,432. Who is incorrect and what mistake did that person make?	P. On the weekend Lia drank 5,000 milliliters of water. If she drank 2,375ml on Saturday, how much water did she drink on Sunday?  ©K-5MathTeachingResources.com

#### Write and Solve



- 1. Choose two 4-digit numbers.
- 2. Write an addition word problem using these numbers.
- 3. Write a subtraction word problem using these numbers.
- 4. Solve both problems using a standard algorithm.
- Round the numbers in each problem and use estimation to show that your answers are reasonable.
- 6. Explain the procedural steps you took to solve each problem. Include details about composing and decomposing place values (regrouping).

### Multiplication Fact Fluency

**Directions:** Complete the following SOLVE problem with your teacher.

Ms. Martin bakes cookies for the local bakery. She bakes them on rectangular cookie pans in straight rows. She puts six cookies in each row, and there are eight rows of cookies on each pan. How many cookies can she bake on one pan? Draw a picture of one cookie pan to help you solve this problem.
S Underline the question. This problem is asking me to find
O Identify the facts. Eliminate the unnecessary facts. List the necessary facts.
L Choose an operation or operations. Write in words what your plan of action will be.
V Estimate your answer. Carry out your plan.
<b>E</b> Does your answer make sense? (Compare your answer to the question.)
Is your answer reasonable? (Compare your answer to the estimate.)
Is your answer accurate? (Check your work.)
Write your answer in a complete sentence.

#### Word Problems: Multiplicative Comparison

Materials: Word Problems: Multiplicative Comparison cards

- 1. Work with a partner. Choose five word problems that you will both solve.
- 2. Solve the word problems independently. For each problem:
  - a) write an equation with a symbol for the unknown number.
  - b) use a drawing, or diagram, to represent the problem.
  - c) carry out the operations in the equation to solve the problem.
  - d) answer the question in a complete sentence. e) check your work. Is your answer reasonable?
- After completing five problems share your work with a partner. Explain how you solved each problem using accurate mathematical vocabulary.
- 4. Repeat with another five problems from the set.

There are 20 monkeys in a zoo. There are 4 times as many monkeys as lions. How many lions are there?

Word Problems: Multiplicative Comparison

A red umbrella costs \$8.00. A blue umbrella costs 3 times as much as the red umbrella. How much does the blue umbrella cost?

Δ

Tom ran 4 laps of the football field. Sam ran 5 times as many laps of the football field. How many laps did Sam run?

R

A pack of six pencils costs five times as much as a single pencil. A single pencil costs 9 cents. How much does the pack of pencils cost?

Sue ate 30 cherries. She ate 5 times as many cherries as Bob. How many cherries did Bob eat?

Ε

There are 20 monkeys in a zoo. There are 4 times as many monkeys as lions. How many lions are there?

F

Frankie and Tony went fishing. Tony caught 24 fish. He caught 6 times as many fish as Frankie. How many fish did Frankie catch?



G

This month Jane saved 6 times as much money as she did last month. If she saved \$42 this month, how much did she save last month?

## Multiplication Fluency 2's

## Multiplication Fluency 3's

## Multiplication Fluency 4's

4 x \_\_\_\_ = \_\_\_\_

4 x \_\_\_\_ = \_\_\_\_

4 x \_\_\_ = \_\_\_\_

4 x \_\_\_\_ = \_\_\_\_

# Multiplication Fluency 5's

5 x \_\_\_\_ = \_\_\_\_

5 x \_\_\_\_ = \_\_\_\_

5 x =

5 x \_\_\_\_ = \_\_\_\_

5 x \_\_\_ = \_\_\_\_

5 x \_\_\_\_ = \_\_\_\_

5 x \_\_\_ = \_\_\_\_

5 x \_\_\_\_ = \_\_\_\_

# Multiplication Fluency 6's

6 x \_\_\_\_ = \_\_\_\_

## Multiplication Fluency 7's

7 x \_\_\_\_ = \_\_\_\_

7 x \_\_\_ = \_\_\_\_

7 x \_\_\_\_ = \_\_\_\_

## Multiplication Fluency 8's

8 x \_\_\_ = \_\_\_

8 x \_\_\_ = \_\_\_\_

8 x \_\_\_\_ = \_\_\_\_

8 x \_\_\_\_ = \_\_\_\_

8 x \_\_\_ = \_\_\_

8 x \_\_\_ = \_\_\_

8 x \_\_\_ = \_\_\_

8 x \_\_\_ = \_\_\_\_

8 x =

8 x \_\_\_\_ = \_\_\_\_

8 x \_\_\_ = \_\_\_

## Multiplication Fluency 9's

# Multiplication Fluency 10's

## Multiplication Fluency 11's

11 x \_\_\_\_ = \_\_\_\_

11 x \_\_\_ = \_\_\_\_

11 x \_\_\_\_ = \_\_\_\_

11 x \_\_\_ = \_\_\_\_

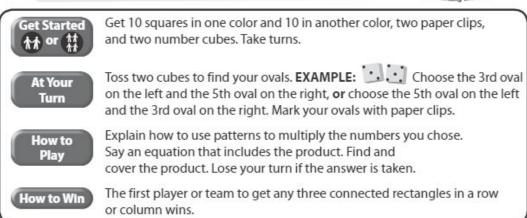
11 x \_\_\_\_ = \_\_\_\_

### Multiplication Fluency 12's

## Multiplication Fluency Mixed

### Multiply One-Digit Numbers by up to Four-Digit Numbers & Multiply Two, Two-Digit Numbers





					F.000
8	200	160	80	4,000	5,000
5	2,000	40,000	2,000	10,000	40
2	1,600	1,000	320	25,000	500
8	3,200	2,500	800	20,000	400





<b>Get Started</b>	h
AA or th	
111	y

Get 10 squares in one color and 10 in another color, one paper clip, and one number cube. Take turns.

At Your Turn Toss the cube to find your oval. **EXAMPLE:** Choose the 3rd oval on the left, **or** choose the 3rd oval on the right. Mark your oval with a paper clip.

How to Play Find two factors that you can multiply to get the number you chose. Use patterns to explain why your answer is correct. Cover the factors. Lose your turn if the answer is taken.

How to Win

The first player or team to get any three connected rectangles in a row or column wins.

3,000					36,000
5,600	7 × 800	5 × 8,000	90 × 8	6 × 6,000	4,800
4,200	6 × 500	6,000 × 9	5 × 60	600 × 7	54,000
720	7 × 8,000	9 × 80	5,000 × 8	9 × 800	7,200
56,000	5 × 600	800 × 6	9 × 6,000	60 × 7	40,000





Get Started かか or ## Get 10 squares in one color and 10 in another color, two paper clips, and two number cubes. Take turns.

At Your Turn Toss two cubes to find your ovals. **EXAMPLE:** Choose the 3rd oval on the left and the 5th oval on the right, **or** choose the 5th oval on the left and the 3rd oval on the right. Mark your ovals with paper clips.

How to Play The number in each oval is a factor. Explain how to use mental math to multiply the numbers. Say a multiplication sentence that includes the product. Find and cover the product. Lose your turn if the answer is taken.

**How to Win** 

The first player or team to get any three connected rectangles in a row or column wins.

20	3,200	4,500	1,000	5,400	30
90	2,700	1,600	1,200	4,200	60
40	1,200	7,200	2,400	2,100	50
90	3,500	2,000	5,600	600	30

# Think Together





Put 回回国国 in a bag.

For Each Round Choose A, B, C, D, E, or F. Ask someone to read the directions.

Pick a tile. Pick two tiles if your group has only two students.

Estimate the product next to your number.

**Discuss:** Which three expressions have the same estimate? Why?

Decide: Which expression has a different estimate? Why?

5946	
	Explain how to estimate
	each product using
$\wedge$	compatible numbers.

1 51 >	49
--------	----

	Explain how to estimate
	each product using
u	compatible numbers.

~			
11	11		03
11	44	X	92

Explain how to estimate
each product using
compatible numbers.

1 :	32	×	7	6
-----	----	---	---	---

# Explain how to estimate each product using compatible numbers.

1	83	×	83

-			
12	0.1	X	21
W Z	1 31	- X	41

## Explain how to estimate each product using

1	49 ×	29
٠.	1 72 ^	23

-			
2	51	×	32

## Explain how to estimate each product using compatible numbers.

12		20		
1	1	26	×	42

# Think Together





Put [12] [2] [4] in a bag.

For Each Round Choose A, B, or C.

**Pick** a tile. Pick two tiles if your group has only two students. **Follow** the directions next to your number. Do the steps in order.

Discuss: How did the group members estimate to answer your question?

Decide: Does every group member have a reasonable estimate?

Α	Number of Minutes Spent Doing Chores Each Day
Jill	55
Caren	45
Larry	25
Eric	75

В	Number of Minutes Writing in a Journal in One Week
Howard	75
Quinn	83
Anne	69
Reece	95

C	Number of Minutes Practicing Piano Each Day
Bill	45
Tim	88
Geena	85
Dona	72

### Do These Steps in Order



Write a question. To answer your question, group members should estimate a product.



Write a second question. To answer your question, group members should estimate a different product.



Write a third question. To answer your question, group members should estimate a different product.



Write a fourth question. To answer your question, group members should estimate a different product.

# Toss and Talk





Get 10 squares in one color and 10 in another color. Get two number cubes. Take turns with another player or team. Talk about math as you play!

At Your Turn Toss two number cubes. Add the dots. Find your toss below. Follow the directions. Explain your thinking. Cover the answer. If the answer is taken, lose your turn. Have fun!

Toss	Read what is given. Find an expression that is equivalent to the given expression. Explain your choice.
2	$(40 + 6) \times (50 + 9)$
3	(20 + 3) × 20 + (20 + 3) × 4
4	$(80 \times 40) + (1 \times 40) + (80 \times 9) + (1 \times 9)$
5	$(60 + 3) \times (40 + 7)$
6	(20 + 4) × 40 + (20 + 4) × 5

7	$(30 \times 20) + (6 \times 20) + (30 \times 1) + (6 \times 1)$
8	$(50 + 8) \times (30 + 2)$
9	(10 + 8) × 50 + (10 + 8) × 1
10	$(30 \times 90) + (2 \times 90) + (30 \times 4) + (2 \times 4)$
11	$(50 + 8) \times (30 + 5)$
12	$(80 \times 30) + (4 \times 30) + (80 \times 3) + (4 \times 3)$

36 × 21	58 × 32	24 × 45	63 × 47
81 × 49	18 × 51	46 × 59	84 × 33
63 × 47	32 × 94	58 × 35	46 × 59
23 × 24	18 × 51	36 × 21	58 × 32







Get 20 squares in one color and 20 in another color. Get two number cubes for players to share. Get paper and a pencil. Take turns.

For Each Round Toss one cube. That is the number of tens in a two-digit number. Toss the other cube. That is the number of ones in the same two-digit number. **Explain how to multiply that two-digit number by 26.**Cover that product. If the answer is taken, lose your turn.

Example

3 tens 5 ones

Find  $35 \times 26$ . Explain how to find each partial product, and how to add the partial products.

How to Win

The first player or team to cover a row, column, or diagonal in one of the four sections of the game board wins.

624	1,430	884	806	1,326	598
1,144	286	1,638	1,378	364	858
1,066	1,612	416	1,664	1,118	1,170
312	1,196	910	1,092	1,586	650
312 1,352	1,196 572	910 1,404	1,092 338	1,586 832	650 1,690

# Tic Tac Toe





Get 20 squares in one color and 20 in another color. Get two number cubes for players to share. Get paper and a pencil. Take turns.

For Each Round Toss one cube. That is the number of tens in a two-digit number. Toss the other cube. That is the number of ones in the same two-digit number. If that number is less than 30, multiply by 57. If that number is between 30 and 50, multiply by 68. If that number is greater than 50, multiply by 79. Cover that product. If the answer is taken, lose your turn.

Example

3 tens 5 ones 35 is between 30 and 50. Multiply by 68. Find 35 × 68. Explain each step.

How to Win

The first player or team to cover a row, column, or diagonal in one of the four sections of the game board wins.

1,197	5,056	2,924	2,312	4,108	855
4,345	2,108	4,187	4,819	<i>7</i> 41	2,448
2,856	627	912	5,135	1,425	5,214
1,311	2,380	2,788	1,254	4,424	3,128
2,176	3,060	1,368	4,029	798	2,992
4,266	684	4,898	2,244	4,977	1,482

### **Use an Area Model to Multiply**

Materials: Multiplication Equations Board (1 x 2-digit or 1 x 3-digit)

- 1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally or diagonally) that you will both solve.
- Solve each problem by drawing a rectangle to represent the problem and decomposing the greater factor into tens and ones. Divide the rectangle into smaller rectangles to show the factors.
- 3. Use mental math to find the product of each of the smaller rectangles. Then, find the sum of the partial products.
- 4. Check your work with your partner. Then repeat with another line of problems.

Examples: 
$$6 \times 24 =$$

$$20 \qquad 4$$

$$6 \qquad 120 \qquad 24$$

$$120 + 24 = 144$$

4 x 23	5 x 52	6 x 29	7 x 54
21 x 8	32 x 9	43 x 3	34 x 6
9 x 19	4 x 16	4 x 23	4 x 35
32 x 7	85 x 4	47 x 3	39 x 6

### **Use an Area Model to Multiply**

Materials: Multiplication Equations Board (1 x 4-digit)

- 1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally or diagonally) that you will both solve.
- Solve each problem by drawing a rectangle to represent the problem and decomposing the greater factor into tens and ones. Divide the rectangle into smaller rectangles to show the factors.
- 3. Use mental math to find the product of each of the smaller rectangles. Then, find the sum of the partial products.
- 4. Check your work with your partner. Then repeat with another line of problems.

4 x 1,245	3 x 1, 257	4 x 1,282	3 x 1,578
5 x 2,478	2 x 1,894	5 x 2,201	3 x 2,083
4 x 2,677	6 x 2,993	4 x 2,787	6 x 3,742
7 x 5,678	8 x 3,444	7 x 3,531	8 x 6,547

### **Multiplication Race**

Materials: gameboard, number cube, one counter per player, calculator No. of Players: 2-3

\_\_\_\_\_

- 1. Each player places a counter on the box marked 'Start'.
- Take turns to roll a number cube and move forward that number of spaces along the path. Solve the multiplication problem you land on <u>or</u> follow the instruction given.
- 3. Partners use a calculator to check each other's work. A player who gives an incorrect product must miss a turn.
- 4. Continue until one player reaches the box marked 'End'.



## **Multiplication Race**

Go back 5	3 x 765	4 x 651	Roll again		End		Start
2 x 654			5 x 345		5 x 296		3 x 123
9 x 765		Miss a turn	6 x 890		Go back 8		2 x 245
8 x 987		7 x 356			4 x 699		4 x 654
7 x 888		8 x 314			3 x 778		5 x 678
5 x 655		Go back 5	9 x 469	2 x 566	Roll again		6 x 511
Go back 4							Go back 3
4 x 578	3 x 707	Roll again	2 x 776	9 x 348	Miss a turn	8 x 503	7 x 498

## **Multiplication Race**

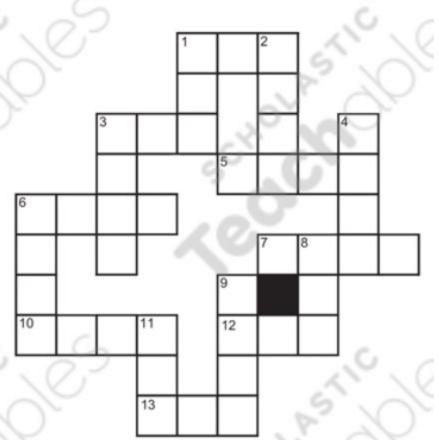
Go back 5	83 x 76	94 x 65	Roll again		End		Start
72 x 65			25 x 34		25 x 29		13 x 12
69 x 76		Miss a turn	36 x 89		Go back 8		21 x 24
58 x 98		47 x 35		5.5	94 x 69		34 x 65
47 x 88		58 x 31			83 x 77		45 x 67
35 x 65		Go back 5	69 x 46	72 x 56	Roll again		56 x 51
Go back 4							Go back 3
24 x 57	13 x 70	Roll again	92 x 77	89 x 34	Miss a turn	78 x 52	67 x 49

Multiply the numbers and fill in the cross-number puzzle with the answers.

#### Across

# Down





### 2-Digit by 2-Digit Multiplication (A)

Name: \_\_\_\_\_ Date: \_\_\_\_

Calculate each product.

$$\begin{array}{c} 13 \\ \times 90 \end{array}$$

$$\begin{array}{c} 46 \\ \times 16 \end{array}$$

$$ilde{ iny 10}$$

$$\begin{array}{c} 97 \\ \times 41 \end{array}$$

$$\begin{array}{c} 77 \\ \times 88 \end{array}$$

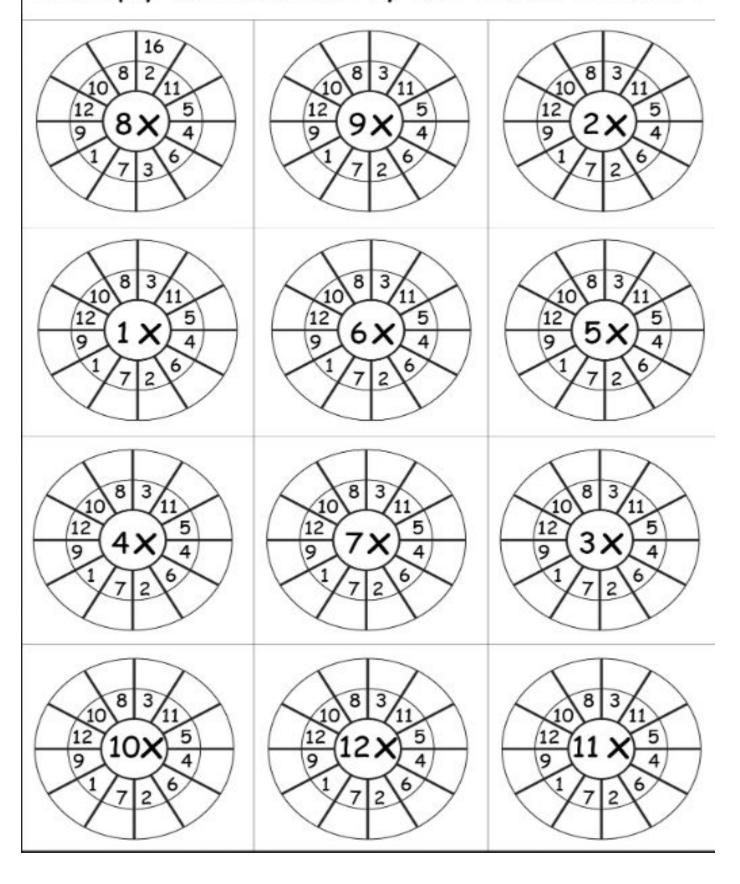
$$\begin{array}{c} 28 \\ \times 25 \end{array}$$

$$\begin{array}{c} 81 \\ \times 30 \end{array}$$

$$\begin{array}{r} 57 \\ \times 51 \end{array}$$

$$34 \times 45$$

## Multiply the numbers by the center number.



# Divide Up to Four-Digit Numbers by a One-Digit Number





Get Started

Get 10 squares in one color and 10 in another color, two paper clips, and two number cubes. Take turns.

At Your Turn Toss two cubes to find your ovals. **EXAMPLE:** Choose the 3rd oval on the left and the 5th oval on the right, **or** choose the 5th oval on the left and the 3rd oval on the right. Mark your ovals with paper clips.

How to Play Explain how to divide the number on the left by the number on the right. Find and cover the quotient and remainder.

Lose your turn if the answer is taken.

How to Win

The first player or team to get any three connected rectangles in a row or column wins.

27/					
794	125 R1	264 R2	89 R2	62 R4	6
583	132 R2	97 R1	94 R0	194 R1	4
269	145 R3	44 R5	158 R4	53 R4	3
376 583	<i>7</i> 5 R1	67 R1	198 R2	116 R3	5

If you have more time

Play again! Talk about how to check your results.





Get Started 分分 or 竹 Get 10 squares in one color and 10 in another color, one paper clip, and one number cube. Take turns.

At Your Turn Toss one cube to find your oval. **EXAMPLE:** Choose the 3rd oval on the left, **or** choose the 3rd oval on the right. Mark your oval with a paper clip.

How to Play Explain how to divide. Find a way to check the quotient and the remainder for the division expression that you chose.

Cover the answer. Lose your turn if the answer is taken.

How to Win

The first player or team to get any three connected rectangles in a row or column wins.

270 . 2					1254 . 2
379 ÷ 3 693 ÷ 3	126 × 3 + 1	521 × 3 + 2	223 × 3 + 1	421 × 3 + 1	1,254 ÷ 3
659 ÷ 3	219 × 3 + 2	329 × 3 + 1	422 × 3 + 2	418 × 3 + 0	1,264 ÷ 3
1,268÷3	418 × 3 + 0	231 × 3 + 0	542 × 3 + 1	219×3+2	984 ÷ 3
670 ÷ 3	277 × 3 + 2	329 × 3 + 1	126 × 3 + 1	328 × 3 + 0	1,627÷3
1,555 1 5					133 1 3

If you have more time

Play again! Talk about your strategies as you play.





Get Started

Each player tosses two number cubes.

If your numbers match another player's numbers, toss again.

Decide who will read the first question. Take turns.

For Each Question Listen to the reader.

Discuss and agree on the correct answer.

Every player who has that answer can remove

one cube that shows the answer.

**How to Win** 

The first player who removes both cubes wins. Have fun!

a	When you divide 280 by 7, which digit is in the tens place in the quotient?
Ь	When you divide 450 by 9, which digit is in the tens place in the quotient?
С	When you divide 210 by 7, which digit is in the tens place in the quotient?
d	When you divide 90 by 9, which digit is in the tens place in the quotient?
е	When you divide 180 by 3, which digit is in the tens place in the quotient?
f	When you divide 160 by 8, which digit is in the tens place in the quotient?
9	When you divide 320 by 8, which digit is in the tens place in the quotient?
h	When you divide 150 by 3, which digit is in the tens place in the quotient?
i	When you divide 80 by 8, which digit is in the tens place in the quotient?
j	When you divide 160 by 4, which digit is in the tens place in the quotient?
k	When you divide 140 by 7, which digit is in the tens place in the quotient?
1	When you divide 360 by 9, which digit is in the tens place in the quotient?
m	When you divide 240 by 8, which digit is in the tens place in the quotient?

n	When you divide 120 by 6, which digit is in the tens place in the quotient?
0	When you divide 180 by 6, which digit is in the tens place in the quotient?
Р	When you divide 240 by 4, which digit is in the tens place in the quotient?
9	When you divide 70 by 7, which digit is in the tens place in the quotient?
r	When you divide 240 by 6, which digit is in the tens place in the quotient?
s	When you divide 270 by 9, which digit is in the tens place in the quotient?
t	When you divide 180 by 9, which digit is in the tens place in the quotient?
u	When you divide 400 by 8, which digit is in the tens place in the quotient?
v	When you divide 360 by 6, which digit is in the tens place in the quotient?
w	When you divide 60 by 6, which digit is in the tens place in the quotient?
x	When you divide 420 by 7, which digit is in the tens place in the quotient?
у	When you divide 150 by 5, which digit is in the tens place in the quotient?
z	When you divide 350 by 7, which digit is in the tens place in the quotient?

### **Division Strategy: Partial Quotients**

Materials: Division Equations Board (4 digit dividend, one digit divisor)

- Work with a partner. Choose a line of four problems from the board (vertically, horizontally or diagonally) that you will both solve. Solve each problem using the partial quotients strategy.
  - Step 1: Write a list of easy facts for the divisor.
  - Step 2: Subtract from the dividend an easy multiple of the divisor (e.g. 10x, 100x, 200x, 500x etc.) Record the partial quotient in a column to the right of the problem.
  - Step 3: Repeat until the dividend has been reduced to zero or the remainder is less than the divisor.
  - Step 4: Add the partial quotients to find the quotient.

3192 ÷ 6	7724 ÷ 7	6155 ÷ 5	4429 ÷ 4
7357 ÷ 7	6373 ÷ 3	2436 ÷ 6	1919 ÷ 9
2491 ÷ 5	2432 ÷ 6	1828 ÷ 9	2280 ÷ 5
6684 ÷ 6	1463 ÷ 7	1831 ÷ 6	8168 ÷ 8

101 ÷ 9	91 ÷ 7	104 ÷ 8	125 ÷ 5
64 ÷ 4	58 ÷ 4	48 ÷ 3	79 ÷ 6
73 ÷ 6	97 ÷ 8	67 ÷ 5	41 ÷ 3
49 ÷ 3	120 ÷ 9	72 ÷ 5	84 ÷ 6