Third Grade

Student Packet

Student Name: _____

School Name: _____

Teacher Name: _____

School District of Osceola County
Instructional Continuity Plan
Elementary K-5

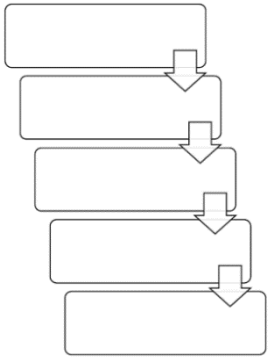
Elementary K-5	Elementary K-5
TEACHER	**STUDENT PAPER PACKETS**
• Please check on students who are using the paper packets via Remind or phone to answer questions regarding the Instructional Continuity Plan (ICP) • Utilize the *attached* **Instructional Curriculum Continuity Plans** to check the packets upon return • Students will be turning their packets in at their home school site.	•Pick up your Instructional Continuity Plan (ICP) for your grade level •Utilize the Instructional Continuity Plan and complete your grade level's Core Content assignments for ELA (reading/writing), math, science and social studies •Students will work on daily tasks provided in the Instructional Continuity Plan •Write your name and your school's name on the front of the packet •Turn in your completed packet at your home school site on or before April 15
Teachers may elect to direct their students to complete other course specific assignments	*Students may be assigned other assignments by teacher*

NOTE: Instructional activities represented on this page reflect core subject areas only. Instruction should not be limited to core content only. Supplemental materials can be used for enhancement, enrichment, or intervention activities. Students should limit the amount of time they spend at the computer without a break. Every 20 minutes, students should get up from the computer.

Enrichment Resources (K-5)

	FootSteps2Brillance	Britannica School	Quaver Music	Safari Montage	Code.org	MackinVia	Gale Digital	Osceola C ounty Library	Hope Student Book	kids.NationalGeographic.com	Starfall.com	PBS.org
	Footsteps2Brillia nce	Britannica School	Quaver Music	Safari Montage	Code.org	MackinVIA	Gale Digital	Osceola County Library	HOPE Student Book	Online Website	Online Website	Online Website
Language Arts/Reading	K-5	K-5				K-5	K-5	K-5		K-5	K-3	K-3
Mathematics		K-5		K-5	K-5			K-5		K-5	K-3	K-3
Science		K-5		K-5	K-5		K-5	K-5		K-5		
Social Studies		K-5					K-5	K-5		K-5		
Music			K-5									
Health/Physical Education									K-5			

March 30, 2020-April, 3, 2020
Third Grade Instructional Continuity Plan

	Monday March 30, 2020	Tuesday March 31, 2020	Wednesday April 1, 2020	Thursday April 2, 2020	Friday April 3, 2020
READING Unit 7 - Animals Students log in and password (the same way you do at school). Think Central	**Reading:** *Bat Loves the Night* (Unit 2, Lesson 6) **Pages 211-225** ❑ Read and annotate the story. ❑ Find the meaning to these words: 1. twitch 2. squeak 3. detail 4. swoops 5. echoes 6. slithers 7. dozen 8. snuggles	**Reading**: *Bat Loves the Night* ❑ Answer the questions: 1. Look at p. 214, how does the illustration help you understand how bats sleeps? Give details in your answer. 2. What word on page 216 are you likely to find only in science-related texts? What does it mean? 3. Reread p. 220, why does Bat need to return to the roost? How does the author use sequence to let you know this?	**Reading**: *Bat Loves the Night* ❑ Answer the questions: 1. What does the picture on page 223 help you understand about batlings? 2. Reread p. 224, what details has the author included to show that a bat is a mammal? 3. Reread p. 225, contrast the daytime life of the bats to the world outside. How do they differ?	**Reading**: *Bat Loves the Night* ❑ Look at p. 218-219. Create the graphic organizer below and fill in the sequence of events of how Bat catches a moth. 	**Reading**: *A Bat is Born* Pages 230-232 ❑ Read and annotate the poem ❑ Using the text and art to draw a diagram of a bat. Include labels that identify characteristics of bats that you find interesting.
20 minutes of daily reading (Your Choice) Student log in using Safari Montage.	☐ Every day you must read for at least 20 minutes. This is your time to read something that you enjoy reading. You may read with your	☐ Read at least 20 minutes! Read Aloud-The Hula-Hoopin Queen	☐ Read at least 20 minutes! Read Aloud- a Bad Case of the Stripes	☐ Read at least 20 minutes! Read Aloud- The Night I Followed the Dog	☐ Read at least 20 minutes! Read Aloud- My Rotten Red-headed Older Brother

Students log in and password (the same way you do at school).	family friend or by yourself, but you should read out loud. You may use a technology book too! Read Aloud-Sylvester and the Magic Pebble				
WRITING	Text: *Bat Loves the Night* ☐ (2 days) Write a paragraph to give your opinion: Should towns in Florida get rid of bats? Why or why not? Use information from this week's passages to support your opinion.	☐ Continue your opinion paragraph from yesterday.	☐ (3 days) Using the information you learned from *Bat Loves the Night* and *A Bat is Born,* write an expository paragraph about bats. Use scientific words such as *echolocation* to tell about bats' special abilities. Include an illustration of a bat with your paragraph.	☐ Continue your expository paragraph about bats.	☐ Finish your paragraph about bats. Be sure to reread, revise, and edit your paragraph.
SOCIAL STUDIES (Unit 4- Government and Citizens) *These links will take you to ConnectED: Students log in and password	❑ Preview Vocabulary Words on p. 136-138 of your Social Studies Book. ❑ Complete p. 139.	❑ Read and complete p. 140-145 of your Social Studies Book. Write a paragraph to explain how a representative democracy works. Use the words *vote*, *government*, and *representative democracy* in your paragraph.	❑ Read and complete p. 146-151 of your Social Studies Book. For each topic below, list 2 examples of how states provide services in that area: Education Transportation Environment Health	❑ Answer the following questions: 1. Why is having a written constitution important? Explain your answer. 2. Write a paragraph to explain how governments keep us safe. Use the words *safety*, *government*, and *laws* in your paragraph.	☐ Compare and contrast your local government with the U.S. government. Use facts and details to support your ideas.

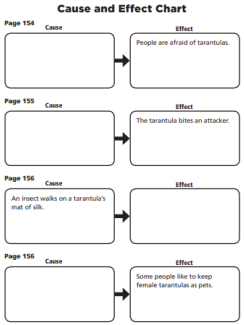
(the same way you do at school).				☐ Make sure to include evidence from yesterday's reading.	
MATH (Solve Time, Mass, and Capacity Problems)) *Your teacher will assign these lessons to you digitally using Pearson: 	**Lesson 14-1** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check. ☐ Draw a clock to show what time you started your schoolwork and an second clock to show what time you finished your schoolwork.	**Lesson 14-2** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Additional Practice. ☐ Teacher may also assign the online Quick Check. ☐ Use the clocks you made yesterday to determine how much time you spent on your schoolwork.	**Lesson 14-3** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Additional Practice. ☐ Teacher may also assign the online Quick Check. ☐ Draw a number line that represents what time you started your schoolwork today, what time you finished, and how much time you spent on schools work.	**Lesson 14-4** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check. ☐ Find items in your kitchen that have capacity written on the labels. Which items have a capacity of more than one liter. Which have a capacity of less than one liter? Hint: mL mean milliliters, there are 1,000 milliliters in 1 liter.	**Lesson 14-5** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check. ☐ Look at the measuring cups and measuring bowls in your kitchen, do they measure capacity in liters? If they don't what unit do, they use?
MATH FLUENCY Practice for 20 minutes each day.	☐ Practice your 3s multiplication facts using one of these methods: make flash cards, make them into a song, write them down or play Math Fact War	☐ Practice your 4s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or use the printable cards you	☐ Practice your 5s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or us the printable Math Cards	☐ Practice your 6s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or play How Close to One Hundred	☐ Practice your 7s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or play Race to One Hundred

		used for Math Fact War.			
SCIENCE (Living Things) *These links will take you to Pearson:  Or Safari Montage:  Students log in and password (the same way you do at school).	☐ Read pg. 166 and 167 in your science pages and complete the following: ☐ Pg.166- answer the Connect question ☐ Pg. 167- *How can you group plants?* If you don't have a printer, write which ones could be grouped together by using the plant's number.	☐ Read pg. 168 and 169 and complete the following: ☐ Pg. 168- complete the Literacy Toolbox. ☐ Pg. 169- answer Reading Check. ☐ Pg. 169- complete Compare and Contrast. ☐ Optional Online: Interactivity: Practice classifying plants	☐ Read pg. 170 and 171 and complete page 172 with the help of the reading pages. ☐ Page 172 discusses plants native to Florida and will ask students to go outside and observe the different types of plants they see. ☐ Optional Online: Explore the United States Botanic Garden Virtually!	☐ Optional online: The Magic School Bus Goes to Seed. ☐ If you are not able to watch, please read the summary provided in the science pages. ☐ Write 5 sentences describing what you learned.	☐ Read pg. 174 and pg. 175 and complete the following: ☐ Pg. 174- Interpret maps. ☐ Pg. 175 *How do animals of the same kind differ?*

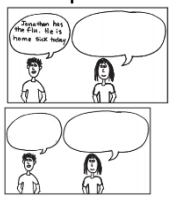
★ My student has worked on the curriculum each day. _____ _____

Parent Signature Date

April 6, 2020-April 10, 2020
Third Grade Instructional Continuity Plan

	Monday April 6, 2020	Tuesday April 7, 2020	Wednesday April 8, 2020	Thursday April 9, 2020	Friday April 10, 2020
READING Unit 7 - Animals Students log in and password (the same way you do at school). Think Central	**Reading**: *A Bat is Born* Pages 230-232 ❑ Reread *A Bat is Born* Pages 230-232 ❑ Answer the following questions: 1. What words does the poet use to describe the bat's movements? In what part if the poem did you find the imagery?	**Reading**: Elevate Science: *Survival* ❑ Read and annotate pages 182-190 ❑ Find the meaning of these words: 1. Adaptation 2. Survive ❑ Complete: How do living things adapt to survive?	**Reading**: Elevate Science: *Survival* ❑ Reread pages 182-190 ❑ Answer the questions: 1. Why would a polar bear be unable to survive in the desert? 2. How has a sandfish lizard adapted to its environment? 3. Suppose a species of chimpanzees were relocated to the Arctic. How would this change affect the chimpanzees?	**Reading**: Support Coach: Tarantulas: Giants of the Spider World ❑ Read and annotate Tarantulas: Giants of the Spider World in your Support Coach Book p. 154-158	**Reading**: Support Coach: Tarantulas: Giants of the Spider World ❑ Reread Tarantulas: Giants of the Spider World in your Support Coach Book p. 154-158 ❑ Draw a cause and effect chart similar to the one below.  ❑ Below is a list of causes and effects. Use them to complete your chart. 1. Effect: Most people are afraid of tarantulas? Write the cause on the chart. 2. Effect: Tarantulas bite their attackers. Write

					the cause on the chart. 3. Cause: An insect walks on a tarantula's mat of silk. Write the effect on the chart. 4. Effect: Some people like to keep female tarantulas as a pet. Write the cause on the chart.
20 minutes of daily reading (Your Choice) Student log in using Safari Montage.  Students log in and password (the same way you do at school).	☐ Read at least 20 minutes! Read Aloud-Thank You Mr Falker	☐ Read at least 20 minutes! Read Aloud-Stellaluna	☐ Read at least 20 minutes! Read Aloud- When the Cousins Came	☐ Read at least 20 minutes! Read Aloud- The True Story of the Three Little Pigs	☐ Read at least 20 minutes! Read Aloud- Enemy Pie
WRITING	Texts: *Busy Moms* and *A Bat is Born* ☐ (3 days) After reading the texts *Busy Moms* and *A Bat is Born,* write to explain how the mother bat in *A Bat is Born* is like the other mothers in the	☐ Continue the paragraph in which you explain how the mother bat from the poem is like the other mothers in *Busy Moms*.	Finish the paragraph in which you explain how the mother bat from the poem is like the other mothers in *Busy Moms*.	☐ (2 days) After reading *Tarantulas: Giants of the Spider World,* write a paragraph explaining what you learned about tarantulas.	Finish the paragraph you began yesterday in which you explain what you learned about tarantulas.

	Busy Moms article. Support your answer with evidence from both texts.				
SOCIAL STUDIES (Unit 4- Governments and Citizens) Students log in and password (the same way you do at school).	❑ Read and complete p. 152-157 of your Social Studies Book. Identify a problem in your classroom, school, or community. Then answer the following questions: 1. What do you know about the problem? 2. What do you need to know to solve the problem? ☐ What is one wat that you can find out more information to help you solve the problem?	☐ Write a letter to your mayor to convince her that recycling is important. Tell her that recycling services should be available to your community. Provide at least three reasons to support your point of view.	❑ Read and complete p. 158-163 of your Social Studies Book. ❑ Write a paragraph that describes how volunteers work together. Use the words *volunteer* and *cooperation* in your paragraph.	☐ Volunteers work because they want to help. Write about a way that you can volunteer at school or in your community.	❑ Look back at your assignment from yesterday about a way you can volunteer at school or in your community. Draw a comic/cartoon to show how you would volunteer. Example: 
MATH Solve Time, Mass, and Capacity Problems And Attributes of Two-Dimensional Shapes *Your teacher will assign	**Lesson 14-6** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.	**Lesson 14-7** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.	**Lesson 14-8** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.	**Lesson 15-1** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.	**Lesson 15-2** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.

these lessons to you digitally using Pearson: 	☐ Find items in your kitchen that have their mass in grams written on the label. For example (255 g). Can you find anything measured in kilograms (kg)? How are the things measure in grams different from the things measured in kilograms?	☐ There are 1,000 grams in one kilogram. Can you find objects in your house that have a combined mass of exactly 1 kilogram? For example: a loaf of bread + a jar of jelly	☐ Find 6 objects in your house that have their mass measured in grams, sort them into two groups based on their mass; more than ½ of a kilogram, less then ½ of a kilogram.	☐ Draw a picture of a room in your home or take a picture with a camera. Circle all the quadrilaterals in the picture. What kind of quadrilateral are they?	☐ With a partner, draw a group of quadrilaterals that all have something in common. Draw a second group, that do not have that attribute. See if your partner can guess your rule.
MATH FLUENCY Practice for 20 minutes each day.	☐ Practice your 8s multiplication facts using one of these methods: make flash cards, make them into a song, write them down or play Math Fact War	☐ Practice your 9s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or use the printable cards you used for Math Fact War.	☐ Practice your 3s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or us the printable Math Cards	☐ Practice your 6s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or play How Close to One Hundred	☐ Practice your 7s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or play Race to One Hundred
SCIENCE (Living Things) *These links will take you to Pearson:  Or Safari Montage:	☐ Read pages 176 and 177 in your science pages and complete the *Question It!* ☐ Read pages 178-179 in your science pages and complete *Lesson 2 Check.*	☐ Using your science pages 176-179, complete the *Identify Invertebrates and Vertebrates* assignment. ☐ Optional online: Practice Classifying Animals	☐ Using your science pages 184-185, complete the drawing in the picture. ☐ Complete the *Evaluate and Lesson 3 Check* on pages 186-187.	☐ Complete the activity *How are Living Things Suited to Their Habitat?* on pages 188-189.	☐ Optional online: The Magic School Bus Hops Home. ☐ If you are not able to watch, please read the summary provided in the science pages. ☐ Draw a picture showing what you learned.

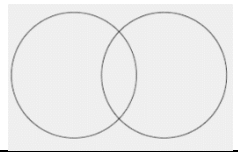
 Students log in and password (the same way you do at school).					

★ My student has worked on the curriculum each day. _____ _____

Parent Signature Date

April 13, 2020-April 17, 2020
Third Grade Instructional Continuity Plan

	Monday April 13, 2020	Tuesday April 14, 2020	Wednesday April 15, 2020	Thursday April 16, 2020	Friday April 17, 2020
READING Unit 7 - Animals Students log in and password (the same way you do at school). 	**Reading**: Support Coach: Tarantulas: Giants of the Spider World ❑ Answer the following questions: 1. Look at the diagram on p. 155, how does a tarantula make itself look frightening? 2. Look at the drawing on p. 157, How long does it take a tarantula to molt? 3. How does the diagram on p. 158 help you understand the life cycle of a tarantula? 4. Look at the diagram on p. 158, what is a tarantula called after it hatches out of its egg?	**Reading**: Support Coach: Tarantulas: Giants of the Spider World ❑ Reread Tarantulas: Giants of the Spider World p.154-156 ❑ Answer the following questions: 1. Why do people use the name tarantula for spiders found outside of Italy? 2. Think about the different places where tarantulas make their homes. What do these places have in common?	**Reading**: Support Coach: Tarantulas: Giants of the Spider World ❑ Reread Tarantulas: Giants of the Spider World p. 157-158 ❑ Answer the following questions: 1. Why do tarantulas molt so many times? 2. Why does the mother tarantula need to guard the egg sac?	**Reading**: Elevate Science: *Survival* ❑ Read and annotate pages 190-195 in your Science Book ❑ Answer the following questions: 1. What other solutions can you think of to save the turtles from being caught in dangerous fishing nets?	**Reading**: Elevate Science: *Survival* ❑ Reread pages 190-195 in your Science Book ❑ Answer the following questions: 1. How might an increase in rainfall affect the plants and animals that live in an environment? 2. Denali National Park wants to decrease the number of mosquitoes in the park. Write how this change can affect the other animals in the park.
20 minutes of daily reading (Your Choice)	☐ Read at least 20 minutes! Read Aloud- If I Ran for President	☐ Read at least 20 minutes! Read Aloud- A Tale of Two Beasts	☐ Read at least 20 minutes! Read Aloud- White Socks Only	☐ Read at least 20 minutes! Read Aloud-Revolutionary Rogues	☐ Read at least 20 minutes! Read Aloud- The Lorax

*These links will take you to Safari Montage: Students log in and password (the same way you do at school).					
WRITING	Texts: *Bat Loves the Night and Tarantulas* ☐ Reread the text *Bat Loves the Night* and p. 155 in *Tarantulas.* On a Venn diagram, compare and contrast the eating habits of bats and tarantulas. You will use the Venn diagram again tomorrow. ☐ Draw a Venn Diagram. Label the circle on the left "Tarantulas." Label the circle on the right "Bats." Put what is the same about their eating habits in the middle. Record what is different under each creature. 	☐ (4 days) Today, you will write a paragraph to compare and contrast the eating habits of bats and tarantulas. Use the sample compare and contrast paragraph guide to help you. ☐ Begin your paragraph with the sentence, "We have learned about the eating habits of the bat and the tarantula." Use the rest of the paragraph guide to finish your response. Add illustrations to your paragraph to help the reader to visualize what you wrote about bats and tarantulas.	☐ Continue the paragraph in which you compare and contrast the eating habits of bats and tarantulas.	☐ Continue the paragraph in which you compare and contrast the eating habits of bats and tarantulas.	☐ After you finish the paragraph in which your compare and contrast the eating habits of bats and tarantulas, be sure to reread it and revise and edit your paragraph.

SOCIAL STUDIES (Unit 4- Governments and Citizens)  Students log in and password (the same way you do at school).	☐ Complete the Unit 4 Wrap on p. 164 of your Social Studies Book.	☐ Begin planning the Unit Project of creating a Class Constitution. Refer to p. 165 in your Social Studies Book for directions.	☐ Continue working on your Class Constitution.	☐ Finish your Class Constitution.	☐ Read and complete p. 166-167 in your Social Studies Book.
MATH Attributes of Two-Dimensional Shapes And Solve Perimeter Problems *Your teacher will assign these lessons to you digitally using Pearson: 	**Lesson 15-3** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check. ☐ Describe a quadrilateral to someone in your house without using its name. See if your partner can guess your quadrilateral.	**Topic 15 Review** ☐ Print the Topic 15 Vocabulary cards and fill in the blanks based on what you have learned, or create your own on paper. ☐ Cut the cards apart, and practice matching the picture to the description. ☐ If you have a partner to play with, use the cards to play Go Fish.	**Lesson 16-1** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check. ☐ Using a ruler, yardstick, or a piece of paper (a piece of paper is 11 ½ inches long so it is a good estimate for 1 foot), measure the perimeter of your bed. Find two more objects and measure their perimeter.	**Lesson 16-2** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.	**Lesson 16-3** ☐ Watch the Visual Learning video ☐ Complete the Practice Buddy Independent Practice. ☐ Teacher may also assign the online Quick Check.

MATH FLUENCY Practice for 20 minutes each day.	☐ Practice your 8s multiplication facts using one of these methods: make flash cards, make them into a song, write them down or play Math Fact War	☐ Practice your 9s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or use the printable cards you used for Math Fact War.	☐ Practice your 6s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or us the printable Math Cards	☐ Practice your 7s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or play How Close to One Hundred	☐ Practice your 8s multiplication facts using one of these methods: make flash cards, make them into a song, write them each three times or play Race to One Hundred
SCIENCE (Living Things) *These links will take you to Pearson: Or Safari Montage: Students log in and password (the same way you do at school).	☐ Read pg. 192 in your science pages and complete the *Infer Question*. ☐ Read pgs. 194-195 in your science pages and complete the following: ☐ Pg. 194- circle one reason butterflies migrate. ☐ Pg. 195- underline the words that tell how hibernating helps bats survive. ☐ Optional online: Camouflage Helps Animals	☐ Read pgs. 196-197 in your science pages and complete the following: ☐ Pg. 196- complete the *Reading Check* and *Quest Connection*. ☐ Pg. 197- answer the *Infer Question* and *Plan It* question.	☐ Complete *Parts 1 and 2* of *Seasonal Changes* activity found in your science pages.	☐ Complete *Part 3* of the *Seasonal Changes* activity found in your science pages. ☐ Optional online: Bear Adaptations	☐ Complete the uEnginner It! *Have Your Fun and Be Considerate To!* Activity found on pages 200 and 201 in your science pages.

★ My student has worked on the curriculum each day. _____ _____

Parent Signature Date

Reading and Writing

Resources

Make Your Mark

✓	**I already knew this**
!	**Surprising or interesting fact**
?	**Confusing or I want to know more**
+	**New learning**

1. **Read** the title and **think about what you know**. What questions do you have about this topic?
2. **Read** the text and **think carefully.**
3. **Write** as many marks as you can.
4. **Discuss** your thinking with your partner. How is your thinking similar and different?

ELLEVATION

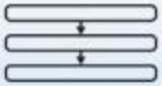
Lesson 6

ANCHOR TEXT

TARGET SKILL

Sequence of Events

Follow the sequence of events. Look for time-order words to help you.



GENRE

Narrative nonfiction

gives information about a topic but is told as a story. As you read, look for:

- factual information that tells a story
- features such as captions and realistic illustrations
- events that are told in time order

Go Digital

MEET THE AUTHOR

Nicola Davies

Nicola Davies has always been interested in animals. As a child, she spent much of her time in the garden, looking at ants and bird nests. After college, Nicola Davies worked as a zoologist. She studied bats, geese, and whales. Now Nicola Davies combines her love of animals and her writing. She has written books about sharks, turtles, and polar bears.

MEET THE ILLUSTRATOR

Sarah Fox-Davies

While Sarah Fox-Davies was making the illustrations for *Bat Loves the Night*, a bat flew into her studio. It landed right on her desk! Fox-Davies likes to draw animals in their natural environments. Her drawings of bats, beavers, bears, and other animals have appeared in many different magazines and children's books. Fox-Davies used pencils and watercolors to create the realistic illustrations for this book.

BAT LOVES THE NIGHT

by Nicola Davies
illustrated by Sarah Fox-Davies

ESSENTIAL QUESTION

What makes bats interesting and useful?

Bat is waking, upside down as usual, hanging by her toenails.

Her beady eyes open.
Her pixie ears twitch.
She shakes her thistledown fur.

She unfurls her wings, made of skin so fine the finger bones inside show through.

The pipistrelle bat's body is no bigger than your thumb.

Now she unhooks her toes and drops into black space. With a sound like a tiny umbrella opening, she flaps her wings.

Bat is flying.

A bat's wing is its arm and hand. Four extra-long fingers support the skin of the wing.

Out!

Out under the broken tile
into the nighttime garden.

Bats can see. But in the dark, good ears
are more useful than eyes.

Over bushes, under trees, between fence posts, through the tangled hedge she swoops untouched. Bat is at home in the darkness as a fish is in the water. She doesn't need to see—she can hear where she is going.

Bat shouts as she flies, louder than a hammer blow, higher than a squeak. She beams her voice around her like a flashlight, and the echoes come singing back. They carry a sound picture of all her voice has touched. Listening hard, Bat can hear every detail, the smallest twigs, the shape of leaves.

Using sound to find your way like this is called echolocation. The noise bats make when they shout is too high for humans to hear.

Gliding and fluttering back and forth, she shouts her torch of sound among the trees, listening for her supper.

All is still. . . .

ANALYZE THE TEXT

Domain-Specific Vocabulary
What word on page 216 are you likely to find only in science-related texts? What does it mean?

Then a fat moth takes flight below her.

A bat can eat dozens of big moths in a single night—
or thousands of tiny flies, gnats, and mosquitoes.

Bat plunges, fast as blinking,
and grabs it in her open mouth.
But the moth's pearly scales are
moon-dust slippery. It slithers
from between her teeth.

Bat dives, nets it with a wing tip,
scoops it to her mouth.
This time she bites hard. Its
wings fall away, like the wrapper
from a candy.

In a moment the
moth is eaten. Bat
sneezes. The dusty
scales got up her
nose.

Most species of bats eat insects, but there are
some that eat fruit, fish, frogs, even blood!

Hunting time has run out. The dark will soon be gone. In the east, the sky is getting light. It's past Bat's bedtime.

Bats are nocturnal. That means they rest by day and come out at night to search for food.

She flies to the roof in the last shadows and swoops in under the broken tile.

ANALYZE THE TEXT

Sequence of Events What sequence of events does this selection tell about?

The place where bats sleep in the day is called a roost. It can be in a building, a cave, or a tree, so long as it's dry and safe.

Inside, there are squeakings. Fifty
hungry batlings hang in a huddle,
hooked to a rafter by oversized feet.
Bat lands and pushes in among them,
toes first, upside down again.

Baby bats can't fly. Sometimes mother bats carry their babies when they go out, but mostly the babies stay behind in the roost and crowd together to keep warm.

Bat knows her baby's voice, and calls to it. The velvet scrap batling climbs aboard and clings to Bat's fur by its coat-hanger feet. Wrapped in her leathery wings, the baby snuggles to sleep.

Baby bats drink mother's milk until they learn to fly at a few weeks old. Then they can leave the roost at night to find their own food.

Outside, the birds are singing. The flowers turn their faces to the sun. But inside the roof hole, the darkness stays. Bat dozes with her batling, waiting.

When the tide of night rises again, Bat will wake and plunge into the blackness, shouting.

Bat loves the night.

Lesson 6

POETRY

GENRE

Poetry uses the sound and rhythm of words to show images and to express feelings.

TEXT FOCUS

Imagery is the use of vivid descriptions that help readers form an image, or picture, in their minds.

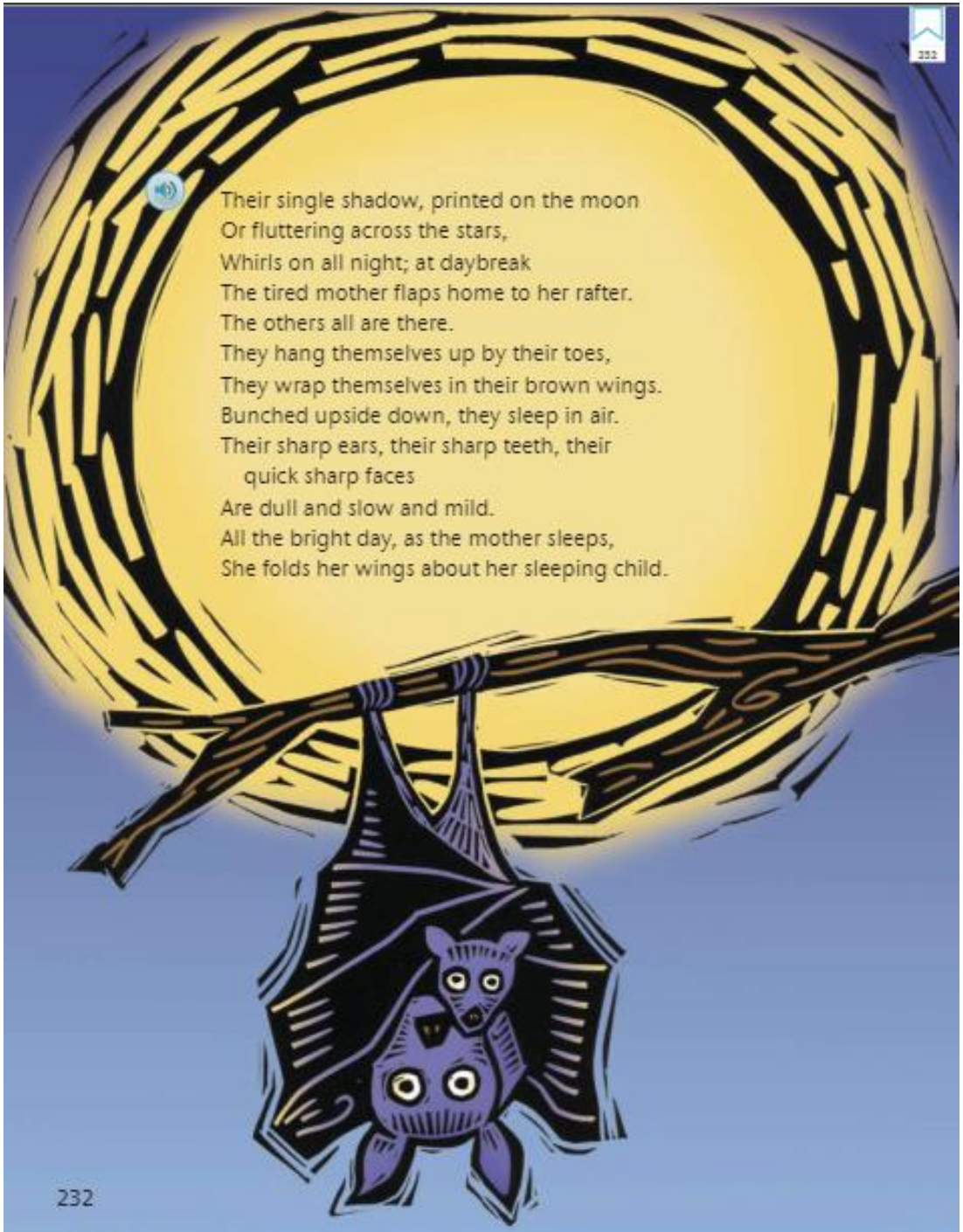
Go Digital

A Bat Is Born

by Randall Jarrell

illustrated by Sue Todd

A bat is born
Naked and blind and pale.
His mother makes a pocket of her tail
And catches him. He clings to her long fur
By his thumbs and toes and teeth.
And then the mother dances through the night
Doubling and looping, soaring, somersaulting—
Her baby hangs on underneath.
All night, in happiness, she hunts and flies.
Her high sharp cries
Like shining needlepoints of sound
Go out into the night and, echoing back,
Tell her what they have touched.
She hears how far it is, how big it is,
Which way it's going:
She lives by hearing.
The mother eats the moths and gnats she catches
In full flight; in full flight
The mother drinks the water of the pond
She skims across. Her baby hangs on tight.
Her baby drinks the milk she makes him
In moonlight or starlight, in mid-air.


Their single shadow, printed on the moon
Or fluttering across the stars,
Whirls on all night; at daybreak
The tired mother flaps home to her rafter.
The others all are there.
They hang themselves up by their toes,
They wrap themselves in their brown wings.
Bunched upside down, they sleep in air.
Their sharp ears, their sharp teeth, their
quick sharp faces
Are dull and slow and mild.
All the bright day, as the mother sleeps,
She folds her wings about her sleeping child.

ENGINEERING Connection

Animals come in almost every color you can think of—neon green frogs, bright red fish, and sunny yellow goldfinches. Animals also have many different patterns, such as spots, stripes, or patches. These patterns can help animals blend into their environments. Animals can hide from predators or from the prey they hunt.

When engineers create zoo habitats, they try to mimic the natural habitats of animals that live there. This helps the animal meet its needs, like the animal's wild habitat does.

Write About It Study the frog and its habitat in the photo. If you were the engineer, what would you include in a zoo habitat for that frog?

Name _____ Date _____

uInvestigate...Lab

HANDS-ON LAB

How do sea lions stay warm in cold waters?

Scientists study how some animals, such as sea lions, can survive in cold environments. How can you use evidence to answer the question in the title?

Materials
- petroleum jelly
- cup
- water
- ice
- spoon

⚠ Wash your hands after the lab.

Science Practice

Scientists **use evidence** to explain how things work.

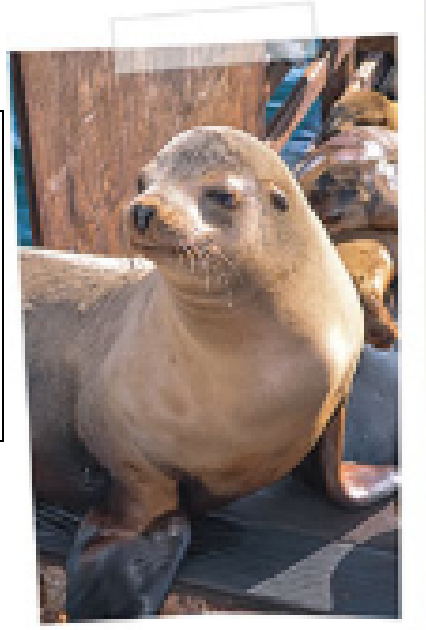
Procedure

☐ **1.** Predict whether a layer of fat will help a sea lion survive in its cold environment.

_____

☐ **2.** Make a plan to test your prediction. Show your plan to your teacher before you start. Record your observations.

Observations



Analyze and Interpret Data

3. **Use Evidence** How does the sea lion survive in its cold environment? Use evidence to explain.

_____

_____

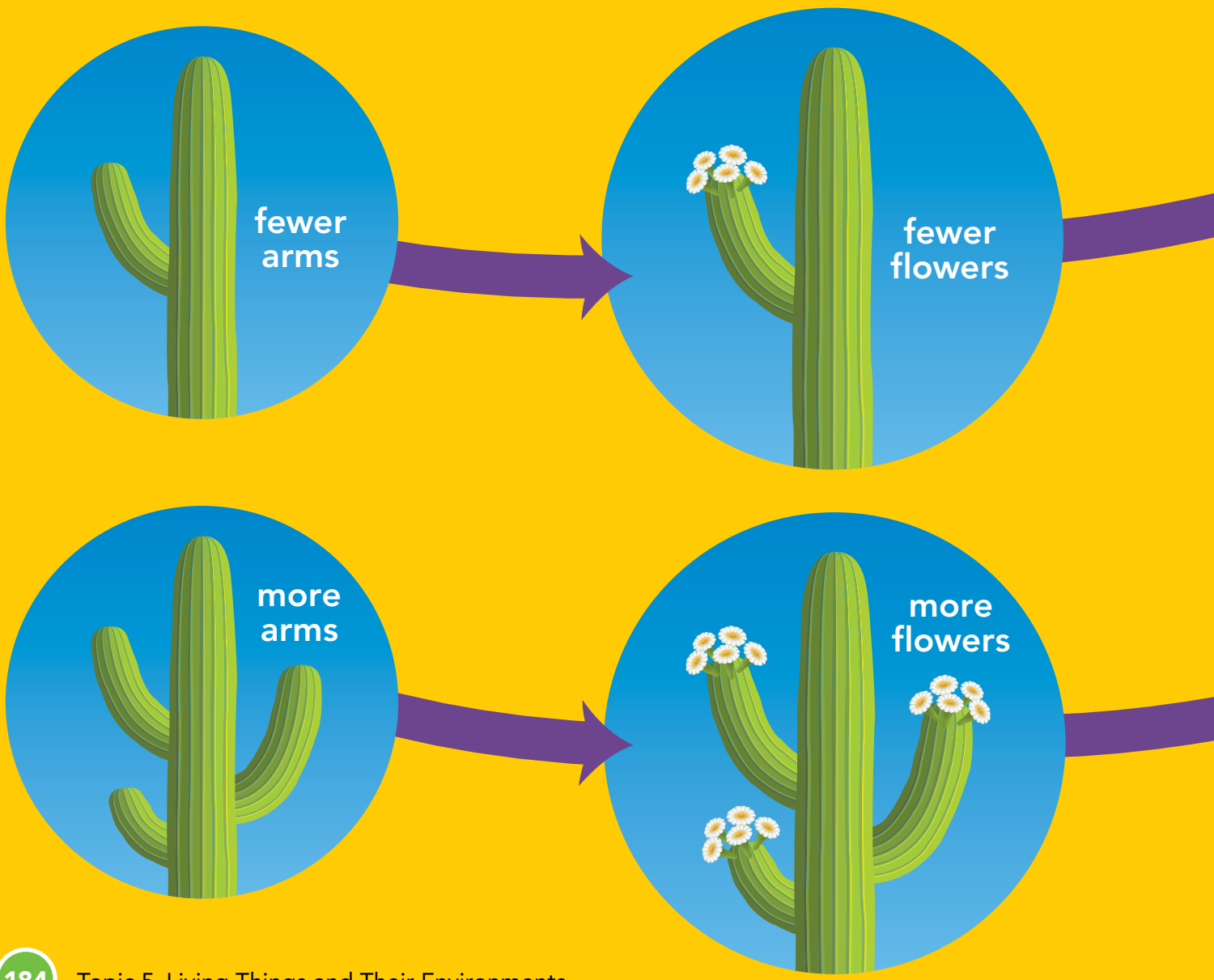
_____

_____

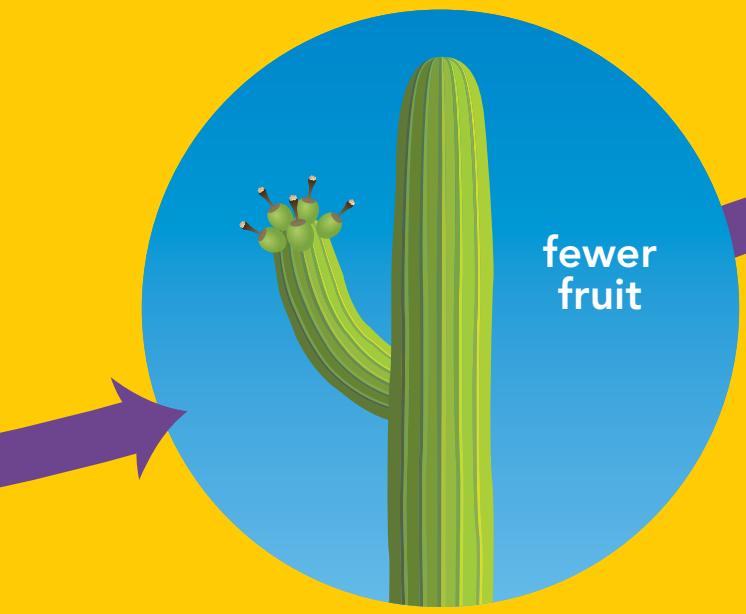
Visual Literacy Connection

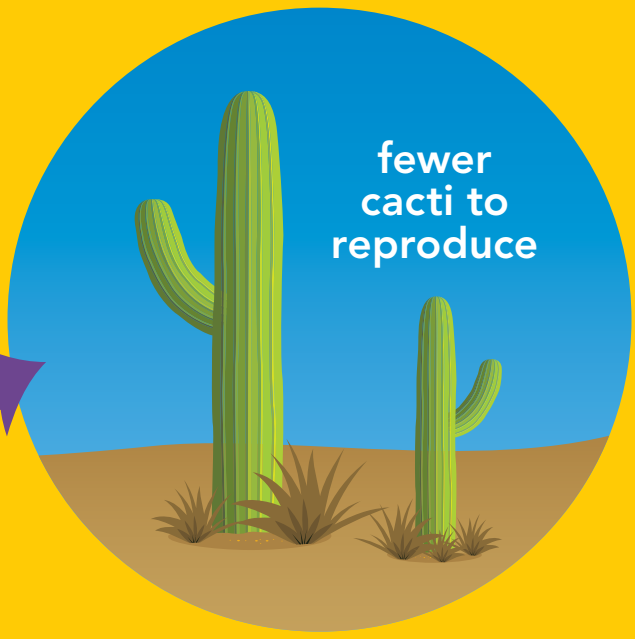
How do living things adapt to survive?

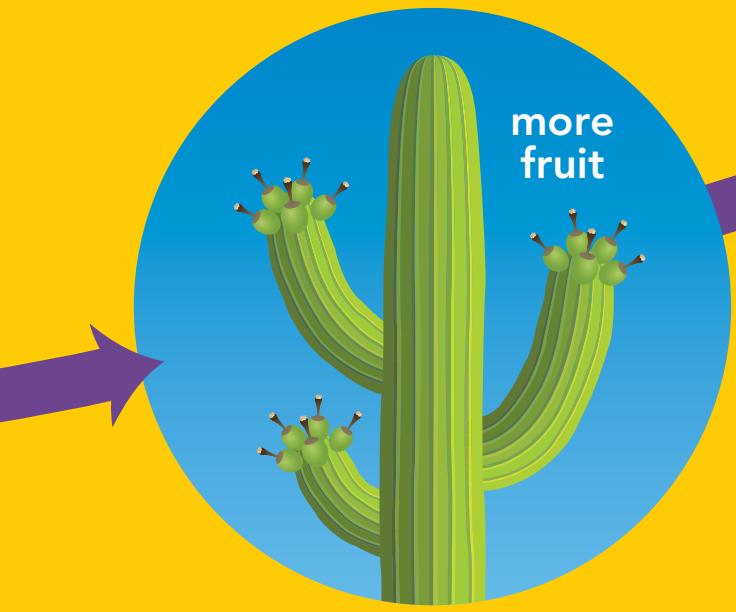
Living things have adaptations to help them stay alive, or **survive**. An **adaptation** is a trait that helps an organism survive, find mates, or reproduce.



Individuals of the same species may have different traits that provide advantages. A saguaro cactus with more arms can produce more offspring.







Draw the results you would expect for the saguaro cactus that has more arms.

Survival in Different Habitats

Each kind of living thing is adapted to live in a certain kind of place. For example, some kinds of plants that grow in cold parts of Earth are covered with hairs. The hairs help keep them warm. A sandfish lizard, a desert animal, digs holes in the sand to avoid predators. The lizard would not survive in the Arctic because there is no sand there.

Evaluate Look at the pictures of the three animals. Write what kind of environment each animal lives in.

Animal Needs for Survival		
polar bear	tree frog	camel
		

Differences Can Help Living Things

A species is a group of living things of the same kind. Each kind of animal and plant is a separate species. Individuals of the same species may have different traits, or adaptations, that help them survive and reproduce. An individual is more likely to have offspring when it has traits that make it better able to attract mates. Finding mates is one way a species can survive. For example, male widowbirds with longer tails attract more females for mating than male widowbirds with shorter tails.

1. READING CHECK **Cause and Effect** Suppose a sea lion cannot eat enough food to keep its thick layer of fat. How might this change affect the sea lion?

2. **Use Evidence** Adaptations are traits that help living organisms survive. Choose a plant or animal and describe two adaptations that help the organism survive in their environment.

Name _____ Date _____

Quest CHECK-IN LAB

How are living things suited to their habitats?

Biologists study living things and their environments to understand how they survive. How do plants and animals of the same kind differ in the same environment?

Materials
- string
- hand lens
- ruler
- craft sticks

⚠ Do not touch any animals.

⚠ Wash your hands when finished.

Science Practice

Scientists **engage in arguments** based on evidence to draw conclusions about scientific data.

Procedure

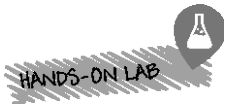
☐ **1.** As a class, select 1 square meter of a habitat to observe outside. Choose one plant species and one animal species that you can observe there.

☐ **2.** Make a plan to observe different members of the plant and animal species. Use the materials.

☐ **3.** Show your plan to your teacher before you begin. Record your observations.

Living Things	Similarities	Differences

Name _____ Date _____



Analyze and Interpret Data

4. **Infer** Based on your observations, which traits do you think are most important for the survival of living things in this environment? Explain why you think so.

5. **Draw Conclusions** The planned construction project may cause the pond to dry up. Choose one pond plant and one pond animal. What traits do you think the plant and animal have that will help them survive if the pond dries up? Explain.

Purpose for Reading

Read along with your teacher. Each time, read for a different purpose.

First Read Focus on looking for cause and effect relationships.

Second Read Focus on using diagrams.

Third Read Focus on evaluating the article critically.

Tarantulas: Giants of the Spider World

Why are most people afraid of tarantulas? Write the cause on the **Cause and Effect Chart**.

1 Most people are frightened of tarantulas. That's not surprising because they are the biggest spiders in the world. These hairy animals can be as big as your hand and as much as twelve inches wide. The Goliath bird-eating spider is the biggest tarantula. It is found in South America.

Why do people use the name *tarantula* for spiders found outside of Italy?

2 Even the name *tarantula* has a frightening history. It comes from a town in Italy called Taranto. People there thought that the local wolf spiders were biting people. They thought the bites caused a disease called tarantism. Tarantism caused people to shake uncontrollably. People thought that the only cure for tarantism was to dance a wild dance they called the tarantella. The name *tarantula* came to be used for large, hairy spiders found in other parts of the world.

What Tarantulas Eat

3 Tarantulas eat almost anything they can catch. They eat beetles, grasshoppers, locusts, other spiders, and small animals. They usually hunt at night.

4 The tarantula has a special way of eating. First, it injects venom, or poison, into the animal. The poison makes the animal unable to move. The poison also breaks down the animal's insides into a liquid form. A tarantula's mouth works like a straw. It sucks up the liquid. The shell of the animal is all that is left.

What causes a tarantula to bite an attacker? Write the causes on the **Cause and Effect Chart**.

How does a tarantula make itself look frightening? Draw a box around the part of the caption that tells you.

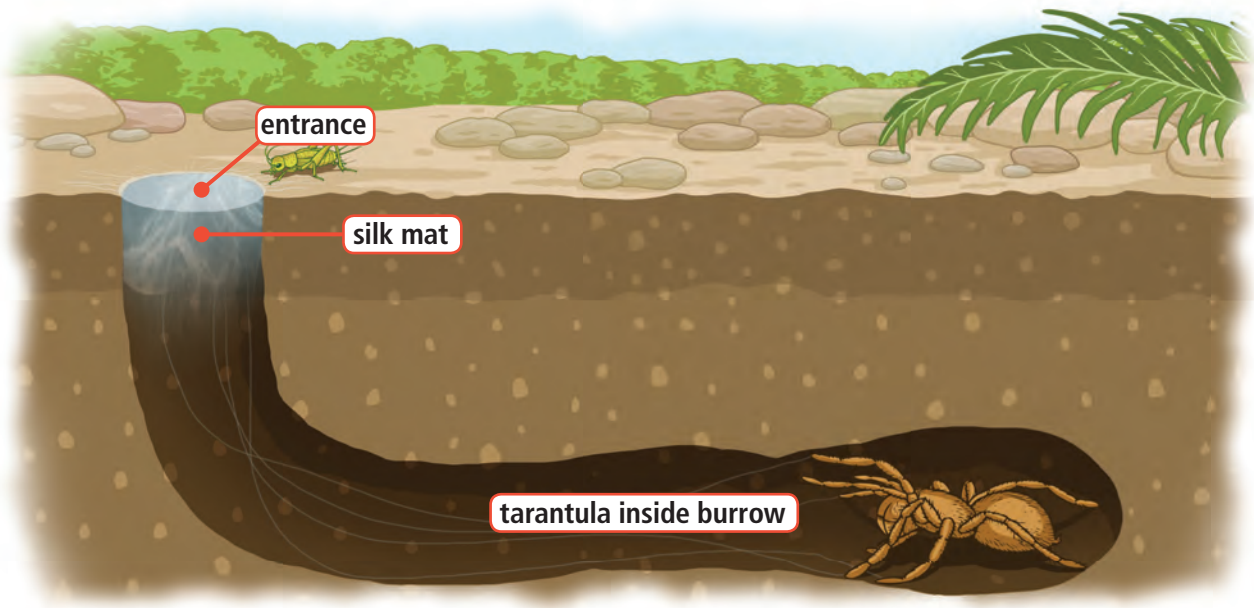
How Tarantulas Protect Themselves

5 Tarantulas are shy. They usually run away if they are attacked or threatened. If they can't run away, they may lift their front legs in the air and make a hissing sound to scare off the attackers. They may slap at the attackers with their front legs. Some tarantulas have hairs that are barbed, or have hooks on the ends. They will use their legs to "kick" these hairs at an enemy's face. The hairs stick in the skin or in the eyes of the enemy and cause irritation. This makes the enemy leave quickly!

6 If tarantulas can't run away or make the enemy run away, they may bite. A tarantula bite is not deadly to humans, but it can be very painful!

A tarantula can make itself look even more frightening by raising its front legs.

Tarantula Burrow



What happens when an insect walks on a tarantula's mat of silk? Write the effect on the **Cause and Effect Chart**.

Why do some people like to keep female tarantulas as pets? Write the cause on the **Cause and Effect Chart**.

Think about the different places where tarantulas make their homes. What do these places have in common?

Where Tarantulas Live

7 Tarantulas live in many different types of nests. Many tarantulas live in burrows, or holes in the ground. Some burrows can be more than three feet deep! A tarantula may dig its burrow itself, or it may use an old rabbit burrow. Tarantulas make their homes in other holes as well. A tarantula may find a safe hole under a log or a rock. It may make its home in the loose bark of a tree trunk. Or it may find a cozy spot between tree roots.

8 Sometimes a tarantula creates a mat of silk around the entrance, or opening, of its hole. This mat moves when an insect walks on it. The tarantula can feel the movement. Out it comes to grab its meal!

Long Live Tarantulas!

9 Female tarantulas are the longest-living spiders in the world. They can live for thirty to forty years. Male tarantulas live for only about one year after they become adults. Spider lovers like to keep female tarantulas as pets because females live for such a long time.

Molting

10 Tarantulas do not have skeletons like people do. A person has a skeleton inside his or her body. A tarantula's skeleton is outside its body. This outside skeleton is called an **exoskeleton**. The exoskeleton is like a shell. It covers the tarantula's body and protects it. The exoskeleton does not grow. So when a tarantula gets bigger, it must grow a new, soft exoskeleton underneath its hard outer exoskeleton. Then it **molts**, or sheds its old exoskeleton.

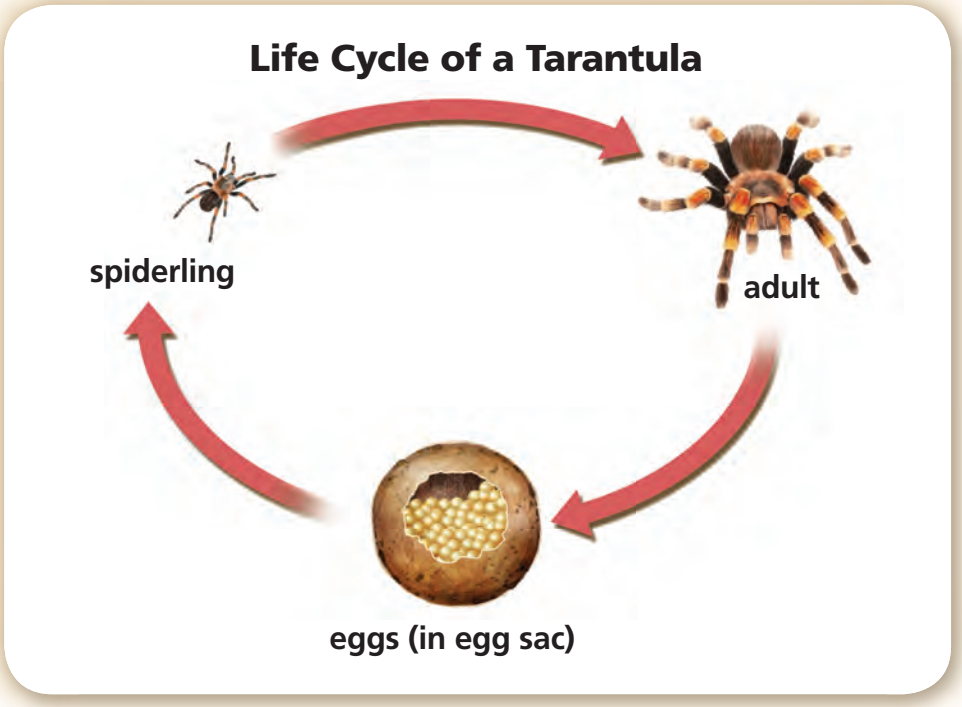
11 A tarantula goes through a few steps when it is ready to molt. First, it spins a silk mat on the ground. Then, it lies on the mat and flips onto its back with its legs in the air. This is a dangerous time for the tarantula. Other insects and animals can attack it. The exoskeleton splits open, and the tarantula wriggles out of it. The new exoskeleton is still soft, so the tarantula has to wait for it to harden before the spider is safe again.

12 A tarantula can molt more than twenty times in its lifetime. A tarantula can grow more than just a new exoskeleton. If a tarantula loses a leg, it can grow a new one during the molt!

How long does it take a tarantula to molt? Draw a box around the part of the caption that tells you.

Why do tarantulas molt so many times?

It can take two to twelve hours for a tarantula to shed its old exoskeleton.



How does the diagram help you understand the life cycle of a tarantula?

What is a tarantula called after it hatches out of its egg? Circle the word in the text and on the diagram.

Why does the mother tarantula need to guard the egg sac?

Judge

Do you think a tarantula's life is dangerous? Why or why not? Use evidence from the text to support your viewpoint.

Life Cycle of a Tarantula

13 Like all spiders, tarantulas go through a **life cycle**. A tarantula goes through three stages, or changes, during its life cycle. It grows from an egg into a young spider, or **spiderling**, into an adult.

14 A tarantula begins as a tiny egg. A female tarantula lays from one hundred to one thousand eggs at a time. She lays the eggs in an egg sac. The mother tarantula guards the egg sac in her burrow. The egg sac protects the eggs from weather and predators, or other animals that might want to eat them.

15 The eggs hatch in forty-five to sixty days. Tiny spiderlings come out. Most spiderlings stay in the burrow for about two weeks after they hatch.

16 A spiderling molts once or twice before it leaves the burrow. Then it molts several more times during its first year. Most tarantula spiderlings take two to five years to become adults, but some can take ten years. Finally, the spiderlings become adults and can have babies of their own. The life cycle begins all over again!

STEM Connection

Think about your favorite animal or plant. Suppose that the animal or plant was no longer anywhere on Earth. How would you feel? Human actions can affect the survival of plants and animals. For example, many turtles are accidentally trapped in fishing nets. This can cause turtles to die if they are not freed from the nets fast enough. Engineers have designed a device that prevents turtles from being tangled in the nets. This piece of technology is called a Turtle Excluder Device, or TED for short. Using technology, engineers discover new ways to help save plants and animals from situations like this.

Construct What other solutions can you think of to save the turtles from being caught in dangerous fishing nets?

Name _____ Date _____

uInvestigate...Lab

HANDS-ON LAB

How will sea levels affect TIGERS?

Conservation biologists study how changing environments affect specific kinds of animals. What will happen to tigers that live near the sea if frozen masses in the sea melt?

Materials
- cake pan
- 250 mL water
- 12 ice cubes
- ruler
- beaker
- safety goggles

Suggested materials
- soil
- leaves
- sticks
- rocks
- spoon

⚠ Wear safety goggles.

Science Practice

Scientists **use models** to make arguments about cause and effect.

Procedure

☐ **1.** Predict how a rising sea level might affect tigers that live near the sea.

_____

_____

☐ **2.** Design a model in the cake pan to investigate your prediction. Choose materials to model the land. Show your plan to your teacher before you begin.

☐ **3.** Add the water and ice. Measure the land from the end of the pan to the edge of the water. Record your data.

☐ **4.** Allow the ice to melt. Measure the amount of land to the edge of the water again.

	How much land is there?
Before the ice melted	
After the ice melted	

Analyze and Interpret Data

5. **Cause and Effect** Use your data to explain how a rising sea level would affect the tigers living near the sea.

_____

_____

_____

Changes in the Environment

Living things depend on the environment to give them the things they need to survive. When the environment changes, plants and animals are affected too. Some changes are fast, such as when a wildfire kills plants. Other changes are slow and take many years to happen. For example, changes in climate over time can cause glaciers to melt and increase sea levels.

Changes in the environment are caused by humans, other organisms, and natural events. For example, humans cut down trees to build new homes or highways. Beavers cut down trees to build dams. Weather and climate changes can result in more or less rainfall. All of these changes affect landscapes, waterways, and the plants and animals living in the area.

Infer How might an increase in rainfall affect the plants and animals that live in an environment?

Science Practice

Argue Using Evidence Polar bears usually live in a habitat with cold temperatures. Discuss with a classmate how well a polar bear will survive if its environment becomes much warmer. Cite evidence for your argument.

Case Study: Denali National Park

Much of Denali National Park in Alaska is covered in glaciers. Earth's climate has become warmer over the years. One result is that there are fewer northern goshawks in the park. These birds feed on animals that do best in cold weather.

Another result is that glaciers now begin to melt much earlier in spring. Mosquitoes lay eggs in the puddles of melting ice. So, there are more mosquitoes now. The mosquitoes feed on caribou blood. More mosquitoes cause greater stress on the caribou. This has resulted in fewer caribou in the national park.

The increase in mosquitoes has an **impact**, or strong effect, on other animals too. Yellow-rumped warblers feed on mosquitoes. Because the warblers have more food, there are more of them now.

Write About It Denali National Park wants to decrease the number of mosquitoes in the park. Write how this change can affect the other animals in the park.

Visual Literacy Connection

How Do Animals respond to SEASONAL CHANGES?

Animals have adaptations that help them survive when seasons change.

MIGRATION

Butterflies **migrate**, or move to another location, when seasons change. Before winter, they may migrate to a warmer place, where they can find food. They return to their original locations during spring.

! Circle one reason butterflies migrate.

HIBERNATION

Bats **hibernate**, or stay in a state of rest, during winter when there is a shortage of food. When bats hibernate, they need less food. In spring, bats can find food easily.

! **Underline the words that tell how hibernating helps bats survive.**

MOLT

As seasons change, bison molt. When animals molt, they shed and grow their body covering. Bison grow thick fur to keep warm during winter. In spring, they shed their fur.

Busy Moms

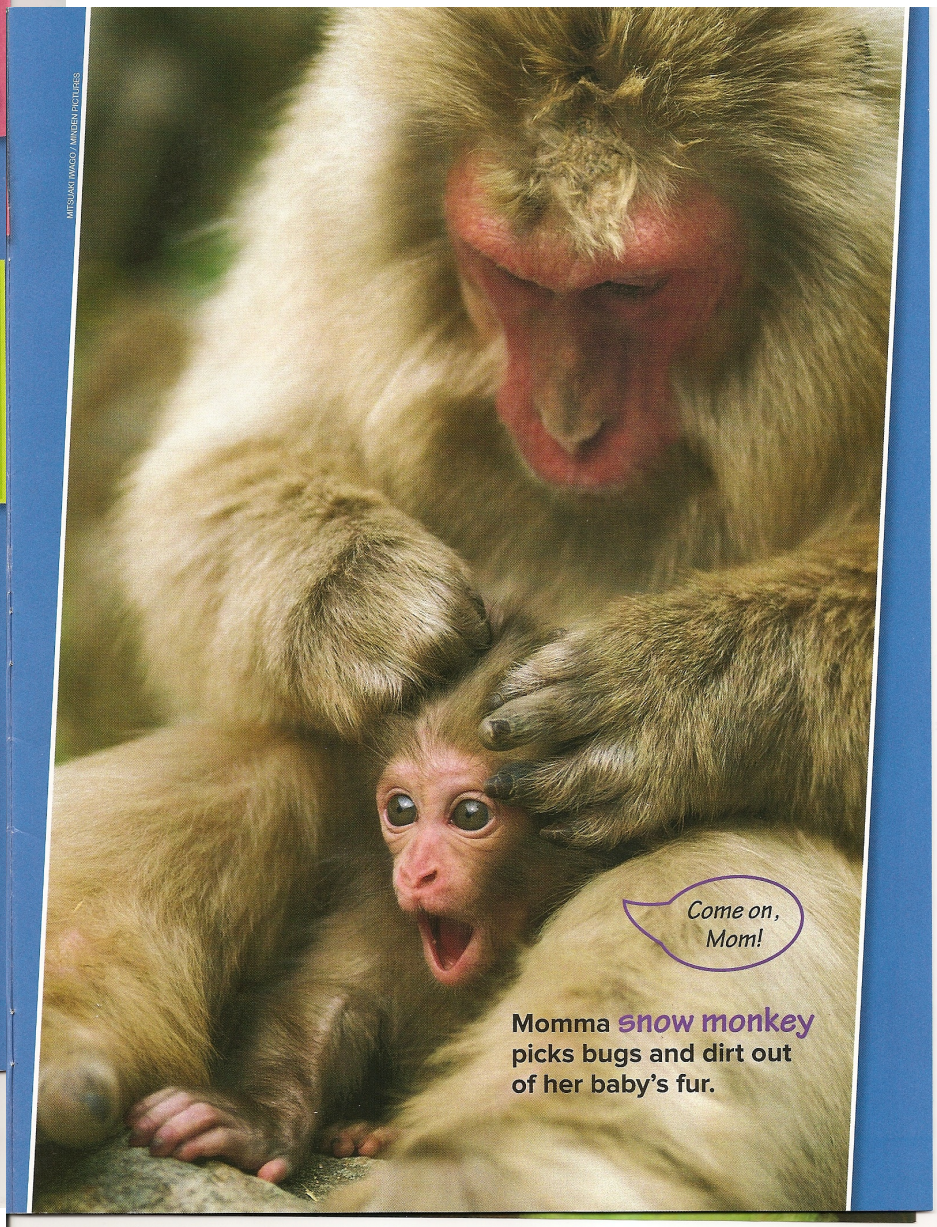
Just like human moms, many animal moms have lots of jobs to do.

Animal moms keep their babies **CLEAN.**

MARTIN HARVEY / PETER ARNOLD, INC.

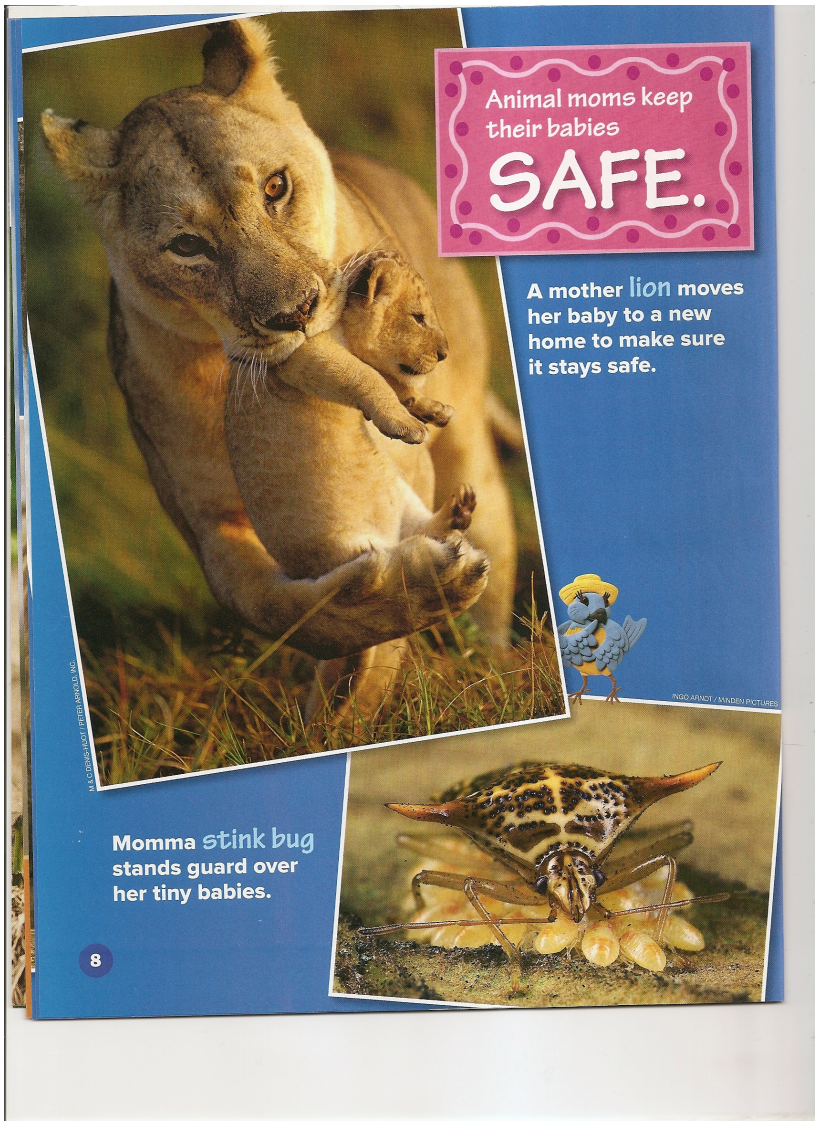
A **spotted hyena** mom licks her baby to wash it.

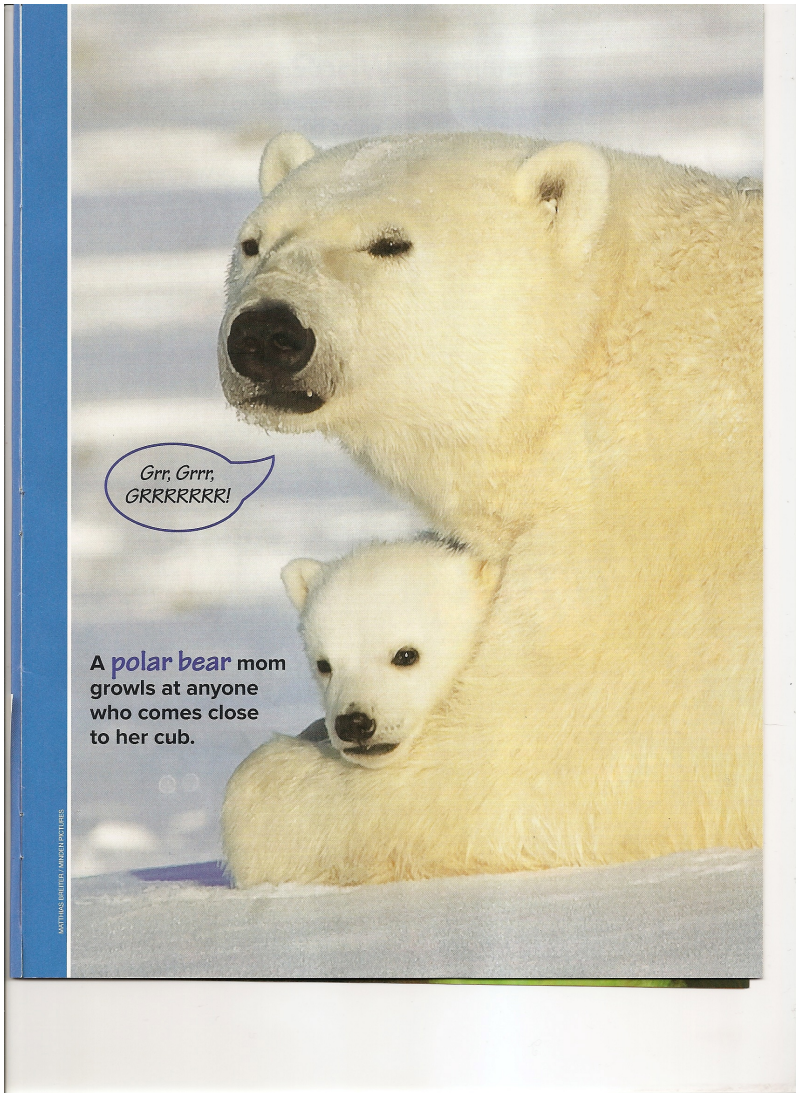
MITSUAKI IWAGO / MINDEN PICTURES



Momma **snow monkey** picks bugs and dirt out of her baby's fur.


SUZI ESZTERHAS
Animal moms keep their babies
FED.
A penguin mom feeds her young chick seafood.
TODD PUSSER / NPL / MINDEN PICTURES
Slurp, slurp. Thanks, Mom!
DANIEL J. COX / NATURALEXPOSURES.COM
A momma bear teaches her cub how to find clams in the mud.
A manatee mother nurses her baby.


Animal moms keep their babies
SAFE.
A mother lion moves her baby to a new home to make sure it stays safe.
Momma stink bug stands guard over her tiny babies.
8

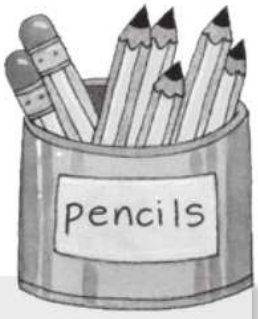

Grr, Grrr, GRRRRRRR!
A polar bear mom growls at anyone who comes close to her cub.

Compare and Contrast Paragraphs

Compare and contrast paragraphs tell how two things are alike and different. Details help explain the similarities and differences.

Parts of Compare and Contrast Paragraphs

- An introduction tells what will be compared and contrasted
- Details tell how the subjects are alike and different
- Linking words connect the ideas
- A conclusion sums up the paragraph



Introduction
Tells the subjects of the paragraph

Details
Show how the subjects are the same and how they are different

Linking Words
Show how ideas are connected

Conclusion
Wraps up the ideas in the paragraph

Earth and Mars

In science today, we learned that Mars is like Earth in some ways but different in other ways.

Both planets orbit, or travel around, the sun. Like Earth, Mars has four seasons. Another way the planets are alike is that Earth and Mars have about the same amount of dry land.

However, Mars is only about half as big around as Earth. So, most of Mars is desert, but most of Earth is covered with water. The biggest difference is that humans can live on Earth. Humans can't breathe the air on Mars, so we can't live there.

So, even though the planets are alike in some ways, there are important differences between Earth and Mars.

Other Words to Compare and Contrast
Alike
Differ from
However
Unlike
Same
Similar
On the other hand

Name _____

Follow your teacher's directions to complete the frame.

Two subjects we have learned about this year are _____

_____ and _____

One thing these have in common is _____

_____

_____

_____. Another _____

_____

_____.

However, _____

_____

_____.

Unlike _____

_____

_____.

So, _____

_____.

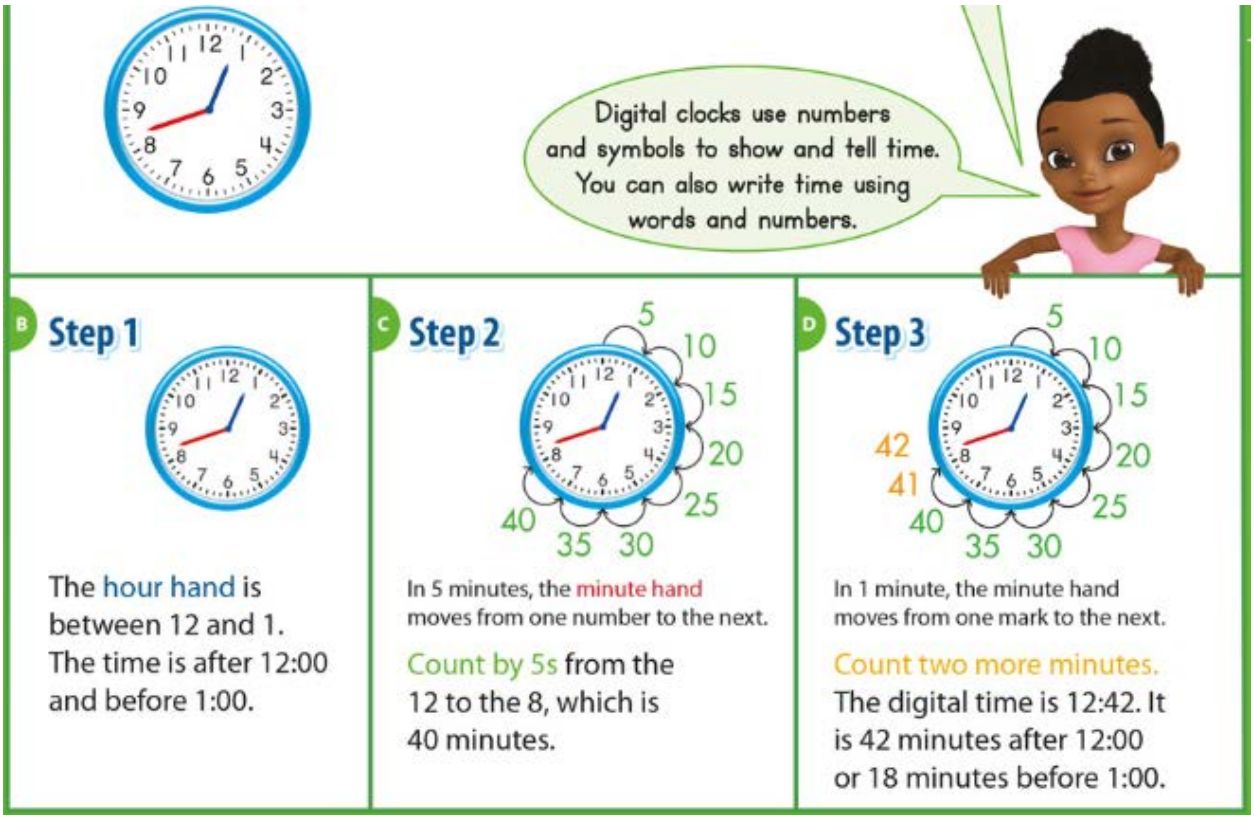
On a separate sheet of paper, write paragraphs that compare and contrast two story characters.

On a separate sheet of paper, use your prewriting plan to write compare and contrast paragraphs, or make a new plan to write about two activities you enjoy.

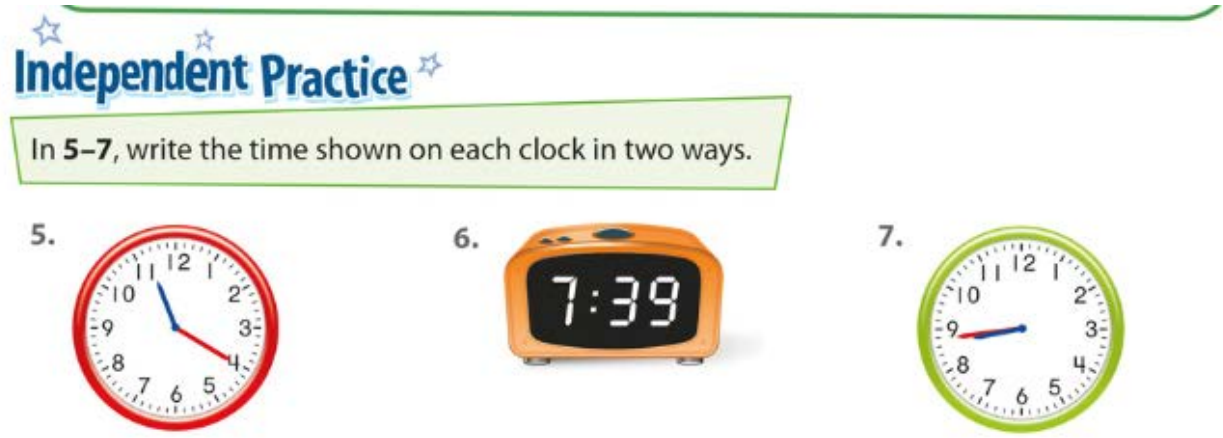
Math

Resources

March 30, Lesson 14-1



One way to write the time is 12:42, another way to say it is 42 minutes after 12:00, a third way is 18 minutes before 1:00.



10. **Be Precise** Mia left her house at 25 minutes before 3 o'clock. Draw hands on the clock to show when she left.

11. **Higher Order Thinking** Sandra's party started at 7:00. Her friends Theo and Lily arrive at 10 minutes after 7 o'clock. Her friend Marcus arrives 35 minutes after Theo and Lily. What time did Marcus arrive? Write this time in two other ways.

Assessment Practice

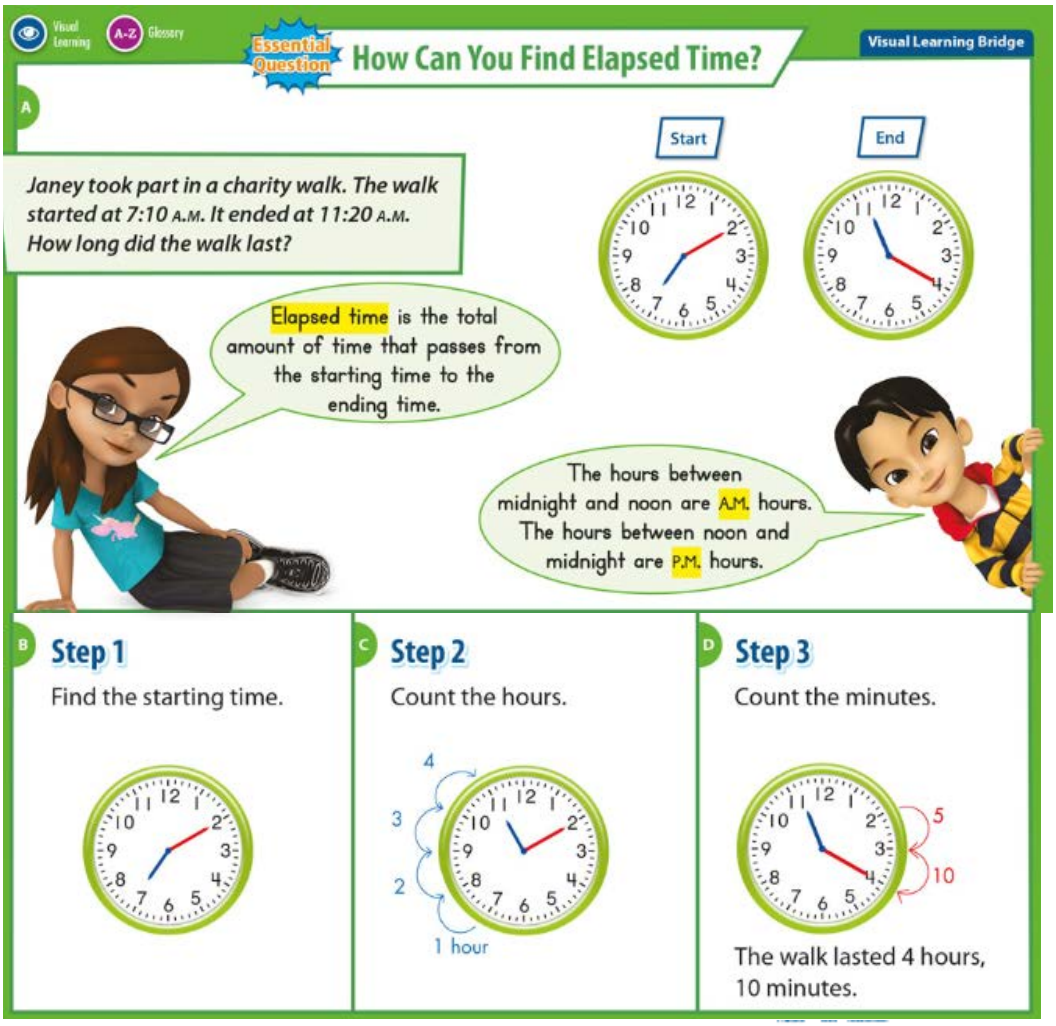
12. Clay and his family sit down to eat dinner at the time shown on the clock. Which of the following are other ways to write that time? Select all that apply. 3.MD.1.1

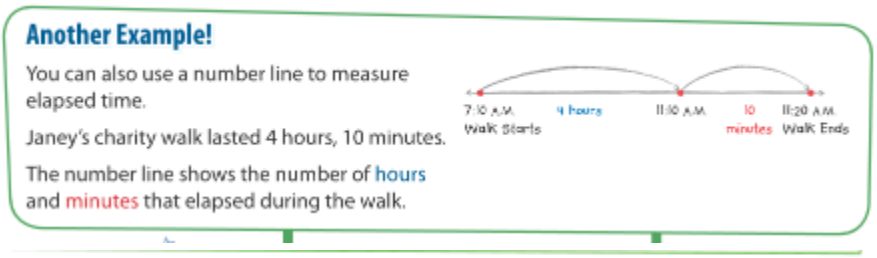
- ☐ 3:25
- ☐ 5:16
- ☐ 16 minutes after 5 o'clock
- ☐ 44 minutes before 5 o'clock
- ☐ 16 minutes before 5 o'clock

13. Mary Ann called her grandmother. She ended the call at the time shown on the clock. Which of the following are **NOT** other ways to write this time? Select all that apply. 3.MD.1.1

- ☐ 14 minutes before 9 o'clock
- ☐ 3:46
- ☐ 46 minutes after 3 o'clock
- ☐ 9:19
- ☐ 14 minutes before 4 o'clock

March 31, Lesson 14-2





4. Start Time: 6:30 P.M. End Time: 9:50 P.M.

Hours from 6:30 P.M. to 9:30 P.M. _____

Minutes from 9:30 P.M. to 9:50 P.M. _____

The elapsed time is __ hours, ___ minutes.

5. Start Time: 10:00 A.M.
   End Time: 3:00 P.M.
   Elapsed Time:
   _____

6. Start Time: 9:15 A.M.
   End Time: 10:45 A.M.
   Elapsed Time:
   _____

7. Start Time: 11:30 A.M.
   Elapsed Time: 5 hours, 25 minutes
   End Time:
   _____

10. Sally finds elapsed time using these clock faces. She counts the hours by 1s, but counts the minutes by 5s. Why does she count the minutes by 5s instead of by 1s?

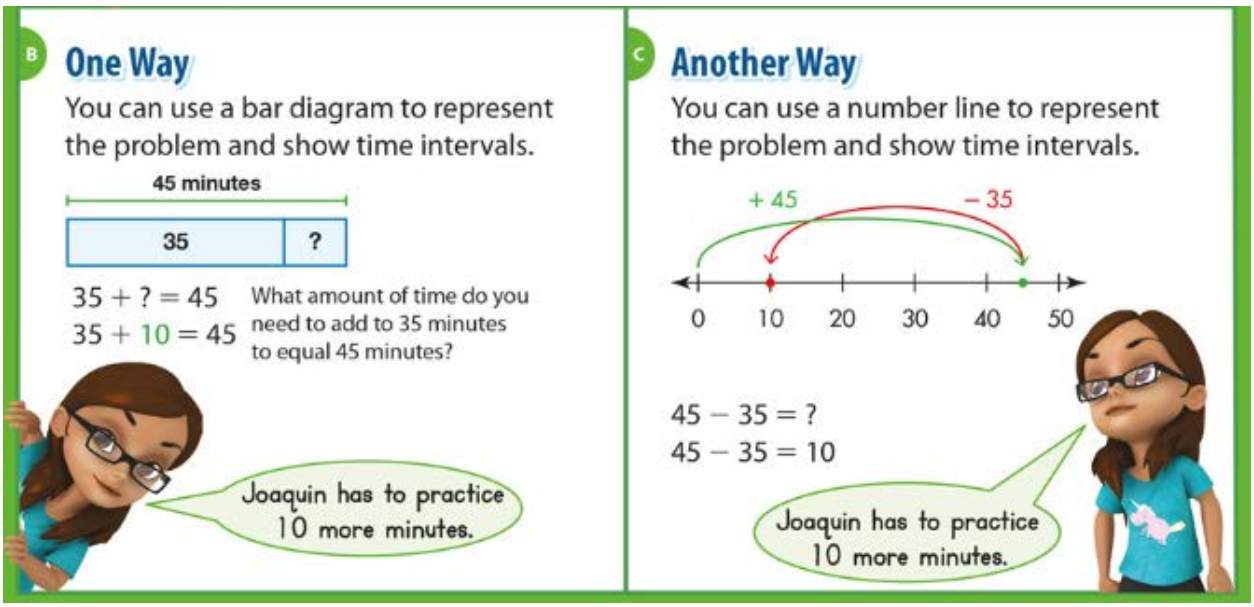
Assessment Practice

13. Geo is taking a train from Carlton to Elgin. The train leaves Carlton at 9:25 A.M. and reaches Elgin at 10:55 A.M. How long does the ride last? Use the number line to help. 1.MD.1.1

Ⓐ 30 minutes Ⓑ 1 hour Ⓒ 1 hour, 30 minutes Ⓓ 2 hours

April 1, Lesson 14-3

Joaquin needs to practice playing piano for 45 minutes. So far he has practiced 35 minutes. How much longer does Joaquin need to practice playing piano?



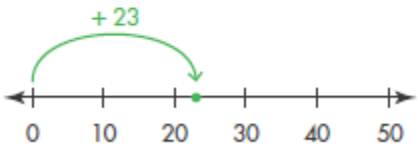
Do You Understand?

In **1** and **2**, complete the bar diagram or number line to solve.

1. Rhody plans to ride his bicycle for 55 minutes. So far, he has ridden for 29 minutes. How many more minutes does he have to ride?

Do You Know How?

2. Ms. Darren spends the reading period working with two different reading groups. She meets with the first group for 23 minutes and meets with the second group for 17 minutes. How long is the reading period?



5. Mr. Hart's class is putting on a play. The play is divided into two acts. Each act lasts 27 minutes. How many minutes long is the play?

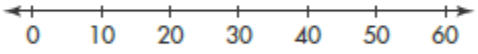
6. A chef wants to bake a dish for 30 minutes. So far, the dish has been baking for 12 minutes. How many more minutes does the dish need to bake?

Assessment Practice

10. Sonya hikes up a mountain. It takes her 25 minutes to hike to a cliff that is partway up the mountain. After that, she hikes for 17 more minutes to the summit. Use the number line and complete the table to show how many total minutes Sonya spends hiking. 3.MD.1.1

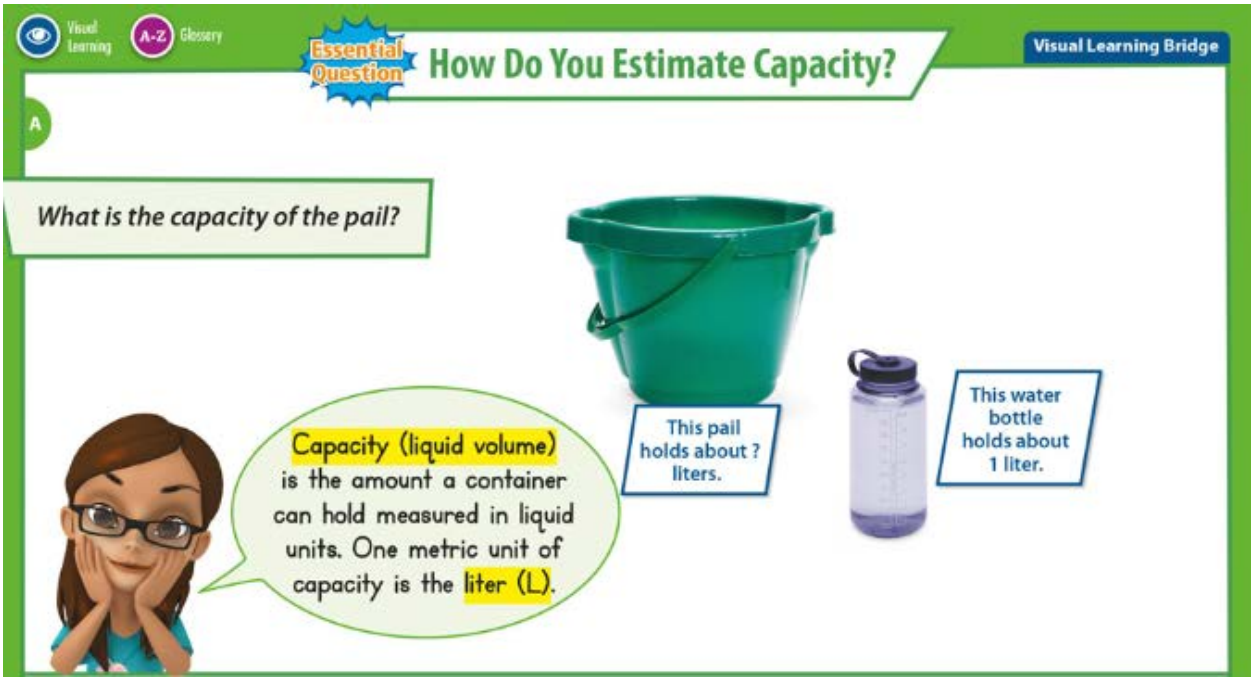
Destination	Time (min)
Hike to Cliff	25
Hike to Summit	
Total	

11. Meg walks a dog named Shep for 12 minutes. Then she walks Sparky. Finally, she walks Brownie for 18 minutes. Meg spends 52 minutes walking all three dogs. Use the number line and complete the table to show how many minutes Meg spends walking each dog. 3.MD.1.1



Dog Walked	Time (min)
Shep	
Sparky	
Brownie	
Total	

April 2, Lesson 14-4



The capacity of the pail is 7 liters; that means you need to empty 7 one-liter water bottles into the pail to fill the pail. Some containers have a capacity less than one liter. We can represent that capacity as a fraction, such as ½ liter water bottle.

Do You Know How?

In **3–6**, circle the better estimate for each.

3. 

$\frac{1}{4}$ L or 2 L

4. 

100 L or 1 L

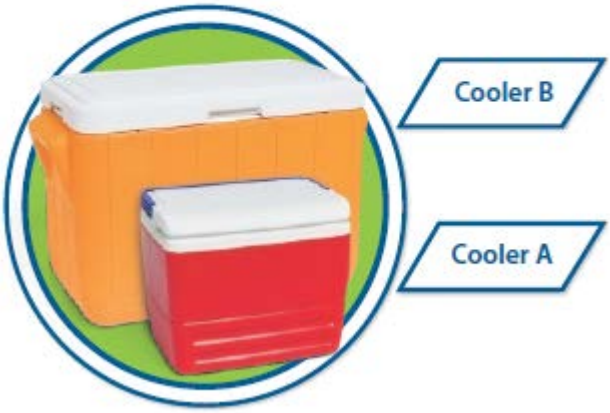
5. Bottle of juice

3 L or 1 L

6. Cereal bowl

$\frac{1}{4}$ L or 3 L

Generalize Which cooler has the greater capacity? Explain your thinking.



21. A sandgrouse can soak up water in its fluffy feathers. It can carry the water a long way to its chicks. Does a sandgrouse carry $\frac{1}{10}$ liter of water or 2 liters of water?

Assessment Practice

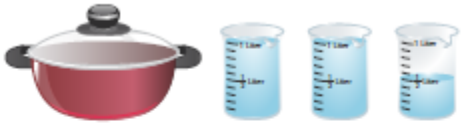
22. Gary is painting a small storage shed. He estimates that he can do the job with one can of paint. Which of the following is the best estimate of the total liquid volume of a can of paint? 3.MD.1.2

Ⓐ $\frac{1}{4}$ liter Ⓑ 4 liters Ⓒ 40 liters Ⓓ 400 liters

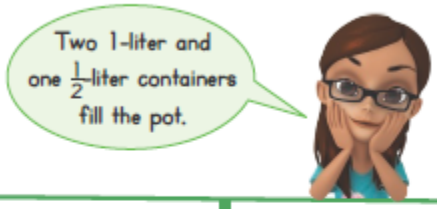
April 3, Lesson 14-5

Another Example!

When only part of the 1-liter container is filled, use fractions of liters.



The capacity of the pot is $2\frac{1}{2}$ liters.



Guided Practice

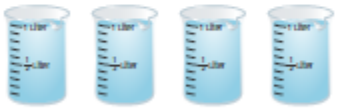
Do You Understand?

1. What is the capacity of 2 pots like the one shown in the Another Example! above?

2. Find a container that you think holds less than a liter. Estimate, and then check your estimate for the capacity of the container.

Do You Know How?

In **3** and **4**, find the total capacity represented in each picture.

3. 

4. 

Lawrence makes jam. He makes 200 Liters of grape jam and 350 liters of strawberry jam. He then sells 135 liters of grape jam. How much jam does Lawrence have left?

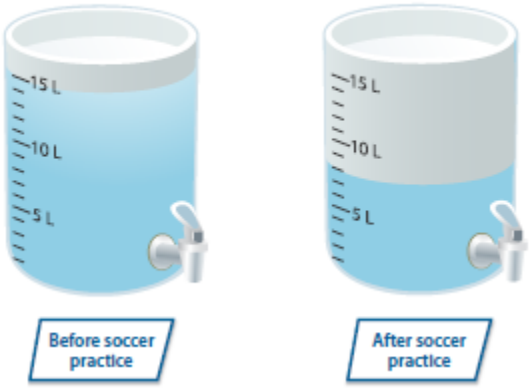
How many 2-liter cartons can be filled with 18 liters of juice?

Emma prepares 72 liters of punch for an event. She pours all of the punch equally into pitchers on 9 different tables. If there are 4 pitchers on each table, how many liters are in each pitcher?

Assessment Practice

13. Use the picture of the water jugs to find the amount of water the team drank during soccer practice. 3.MD.1.2

Ⓐ 6 liters
Ⓑ 7 liters
Ⓒ 8 liters
Ⓓ 23 liters



April 6, Lesson 14-6

Visual Learning A-Z Glossary

Essential Question

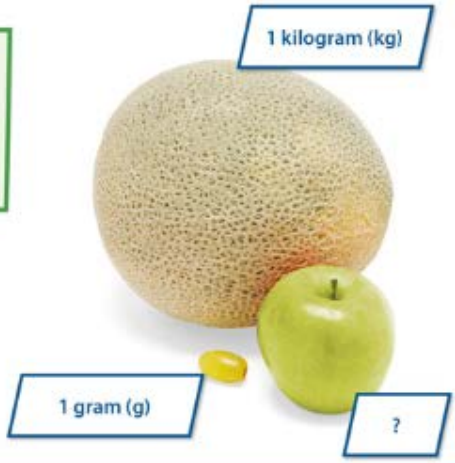
How Can You Use Reasoning to Estimate Mass?

Visual Learning Bridge

A

Stephen and Marissa estimated the mass of an apple. Stephen's estimate is 250 grams. Marissa's estimate is 2 kilograms. Which is the better estimate of the mass of an apple?

Mass is a measure of the amount of matter in an object. Grams and kilograms are two metric units of mass.



B

Step 1

Use known masses and the table to compare grams to kilograms. Select the unit that will give a better estimate.

DATA

Units of Mass
1,000 grams = 1 kilogram

The apple is smaller than the cantaloupe. A kilogram is too large of a unit to estimate the mass of the apple.

The grape is smaller than the apple. Grams are smaller units that can be used to estimate the mass of the apple.

C

Step 2

Use a pan balance to find the mass of the apple. Then evaluate Stephen's estimate.

The apple has a mass of 262 grams.

250 grams is close to 262 grams. Stephen's estimate is reasonable.

250 grams is a better estimate than 2 kilograms.

7. 

100 g or 10 kg

8. 

15 g or 15 kg

9. 

4 g or 400 g

10. 

200 g or 2 kg

11. Bicycle

2 kg or 12 kg

12. Feather

1 g or 1 kg

13. Horse

5 kg or 550 kg

14. Penny

3 g or 300 g

Problem Solving

19. Use Appropriate Tools Choose the best tool to measure each item described. Write the correct letter of the tool on the blank.

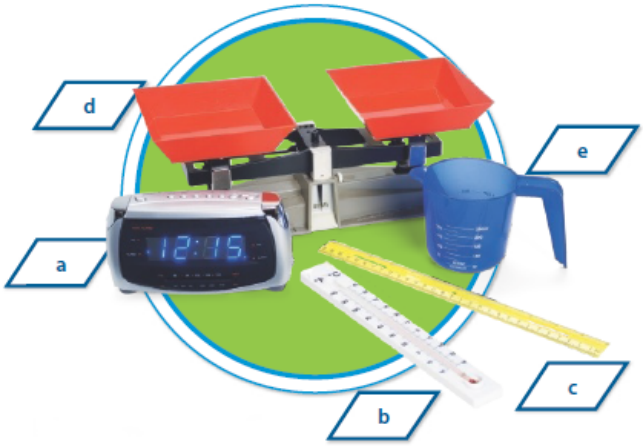
The capacity of a mug ____

The temperature of water ____

The length of a box ____

The mass of a pear ____

The time you finish lunch ____



Assessment Practice

23. Todd is thinking of an animal with a mass greater than 1 kilogram, but less than 20 kilograms. Which animal could Todd be thinking of? 3.MD.1.2

Ⓐ Horse Ⓒ Elephant

Ⓑ Cat Ⓓ Rhinoceros

24. Anna has a bar of soap. She estimates its mass before measuring to find the actual mass. Which units should Anna use for her measure? 3.MD.1.2

Ⓐ Grams Ⓒ Liters

Ⓑ Kilograms Ⓓ Inches

April 7, Lesson 14-7

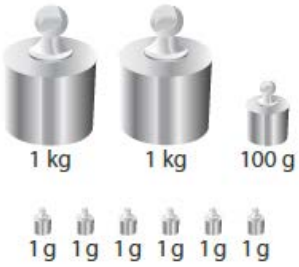
Independent Practice

In **5–7**, write the total mass represented in each picture.

5.

6.

7.



Algebra Olivia put 220 grams of nuts in a bag. Then she added more nuts to the bag. The total mass of Olivia's bag of nuts was 850 grams. Use the expression $220 + a = 850$ to find the mass in grams of the nuts Olivia added to her bag.

9. An adult manatee has a mass of about 450 kilograms. What is the mass of 2 adult manatees?

12. Meg uses 16 kilograms of butter to make 8 large batches of cookies. She uses an equal amount of butter for each batch. How many kilograms of butter are used for each batch?

13. Kalista has 154 grams of glitter. She uses 97 grams to sprinkle the tops of the tables. How many grams of glitter remain?

Assessment Practice

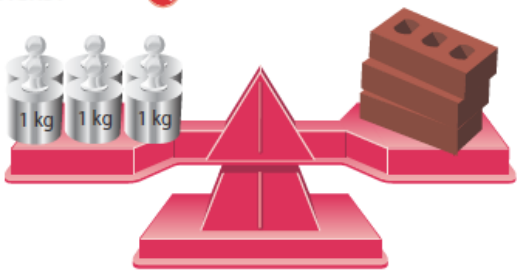
14. Evan used a pan balance and metric weights to measure the total mass of 3 bricks. What is the mass of the 3 bricks? 3.MD.1.2

Ⓐ 6 kilograms

Ⓑ 5 kilograms

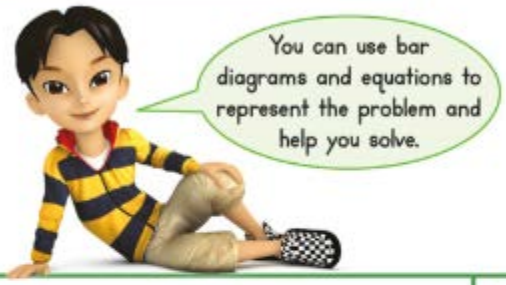
Ⓒ 4 kilograms

Ⓓ 3 kilograms

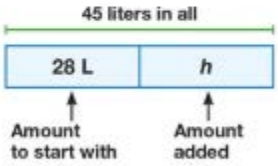


April 8, Lesson 14-8

In a juice factory, one 50-liter container had 28 liters of juice in it. An hour later, it had 45 liters of juice. How many liters of juice were added?

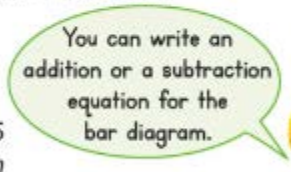


B Use a bar diagram.



You know the total and one part.

C Write and solve equations.



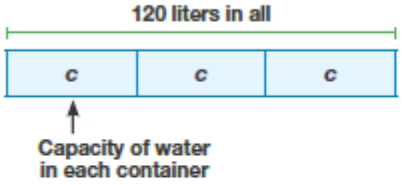
$28 + h = 45$
$45 - 28 = h$

Subtract to solve the problem.

$$\begin{array}{r} 45 \\ -\ 28 \\ \hline 17 \end{array}$$

17 liters of juice were added to the container.

3. Peter divided 120 liters of water equally into 3 containers. How many liters did Peter pour into each container?



4. Adeela pours 235 liters of milk into a blue vat and 497 liters of milk into a red vat. How many liters of milk does she pour in all? Write and solve an equation.

5. Samantha bought 523 grams of grapes. After eating some grapes, she had 458 grams. How many grams did she eat?

6. Omar is shipping 3 boxes. Each has a mass of 8 kilograms. What is the total mass of all of the boxes?

In **7** and **8**, use the table. In **8**, use the bar diagram.

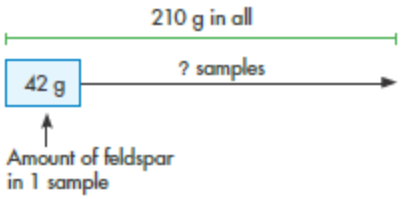
7. Professor Newman has collected a soil sample from the forest preserve in her town. What is the total mass of the 3 minerals in the soil sample?

DATA

Soil Sample

Component	Quantity
Quartz	141 g
Calcite	96 g
Feldspar	42 g

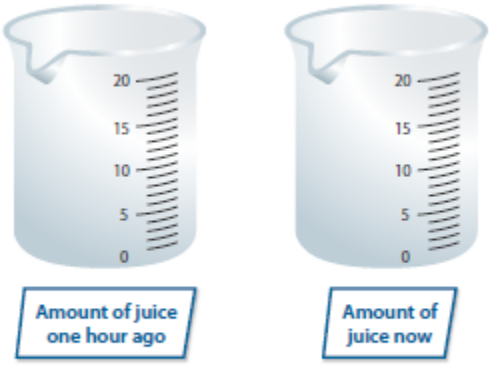
8. **Higher Order Thinking** The professor finds that there is the same amount of feldspar in each of the soil samples that she takes. If there are 210 grams of feldspar in all, how many soil samples does she collect?



Assessment Practice

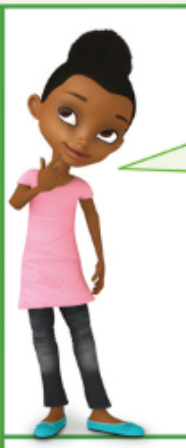
11. Eric filled a container to the 18-liter mark with juice an hour ago. The juice is now at the 15-liter mark. Mark the amount of juice Eric had on the beakers. Then find how many liters of juice have been poured out. 3.MD.1.2

Ⓐ 3 liters
Ⓑ 4 liters
Ⓒ 5 liters
Ⓓ 6 liters



April 9, Lesson 15-1

The welcome to Florida sign is a quadrilateral. How can you describe quadrilaterals?



Remember, a polygon is a closed shape that has only straight sides. A quadrilateral is a polygon with four sides and four angles.

An angle is formed when two sides of a polygon meet.

The point where two sides meet is a vertex.

B Some quadrilaterals have special names.

Trapezoid
Exactly one pair of sides on lines that never cross

Parallelogram
Opposite sides are the same length. Opposite angles are the same size.

Rectangle
Four right angles, or square corners
A *rectangle* is a special *parallelogram*.

Rhombus
All sides the same length
A *rhombus* is a special *parallelogram*.

Square
Four right angles and all sides the same length
A *square* is a special *parallelogram*.

Another Example!

These are convex polygons. All angles point outward.

These are concave polygons. One or more angles point inward.

Guided Practice*

Do You Understand?

1. This figure is a rectangle, but it is NOT a square. Why?

Do You Know How?

In **3–6**, write as many special names as possible for each quadrilateral.

3.

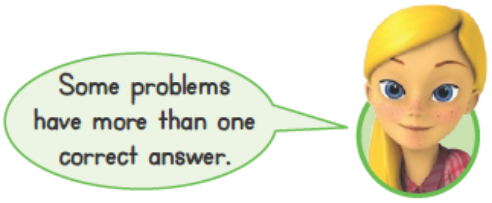
4.

In **11** and **12**, write the name that best describes the quadrilateral. Draw a picture to help.

11. **Vocabulary** A rectangle with all sides the same length is a _____.

12. **Vocabulary** A parallelogram with four right angles is a _____.

13. I am a quadrilateral with opposite sides the same length. Which quadrilaterals could I be?



14. **Higher Order Thinking** Jae says that the figure on the left is a trapezoid. Carmen says that the figure on the right is a trapezoid. Who is correct? Explain.

Assessment Practice

17. A square and a rhombus are shown at the right. Which attributes do these shapes always have in common? Select all that apply.

3.G.1.1

- ☐ Number of sides
- ☐ Side lengths
- ☐ Angle measures
- ☐ Right angles
- ☐ Number of angles

April 10, Lesson 15-2

Ethan made two groups of polygons. How are the groups different? How are the groups alike?

When you classify groups of shapes, you identify the attributes of each and then compare them with other shapes.

Group 1: Rhombuses

Group 2: Trapezoids

B

Here is one way the two groups are different.

In Group 1, each polygon has sides that all are the same length.

In Group 2, each polygon has sides that are not all the same length.

C

Here are some ways the two groups are alike.

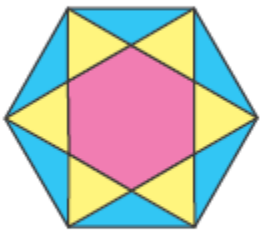
In Group 1 and Group 2, all of the polygons have 4 sides.

In Group 1 and Group 2, all of the polygons have 4 angles.

In Group 1 and Group 2, all of the polygons are quadrilaterals.

Problem Solving

In **12–14**, use the picture at the right.



12. How are the yellow shapes and the blue shapes different? How are they alike?

13. Which larger group of polygons do the yellow and blue shapes belong to?

14. Does the pink shape belong to the group identified in Exercise **13**? Explain.

Assessment Practice

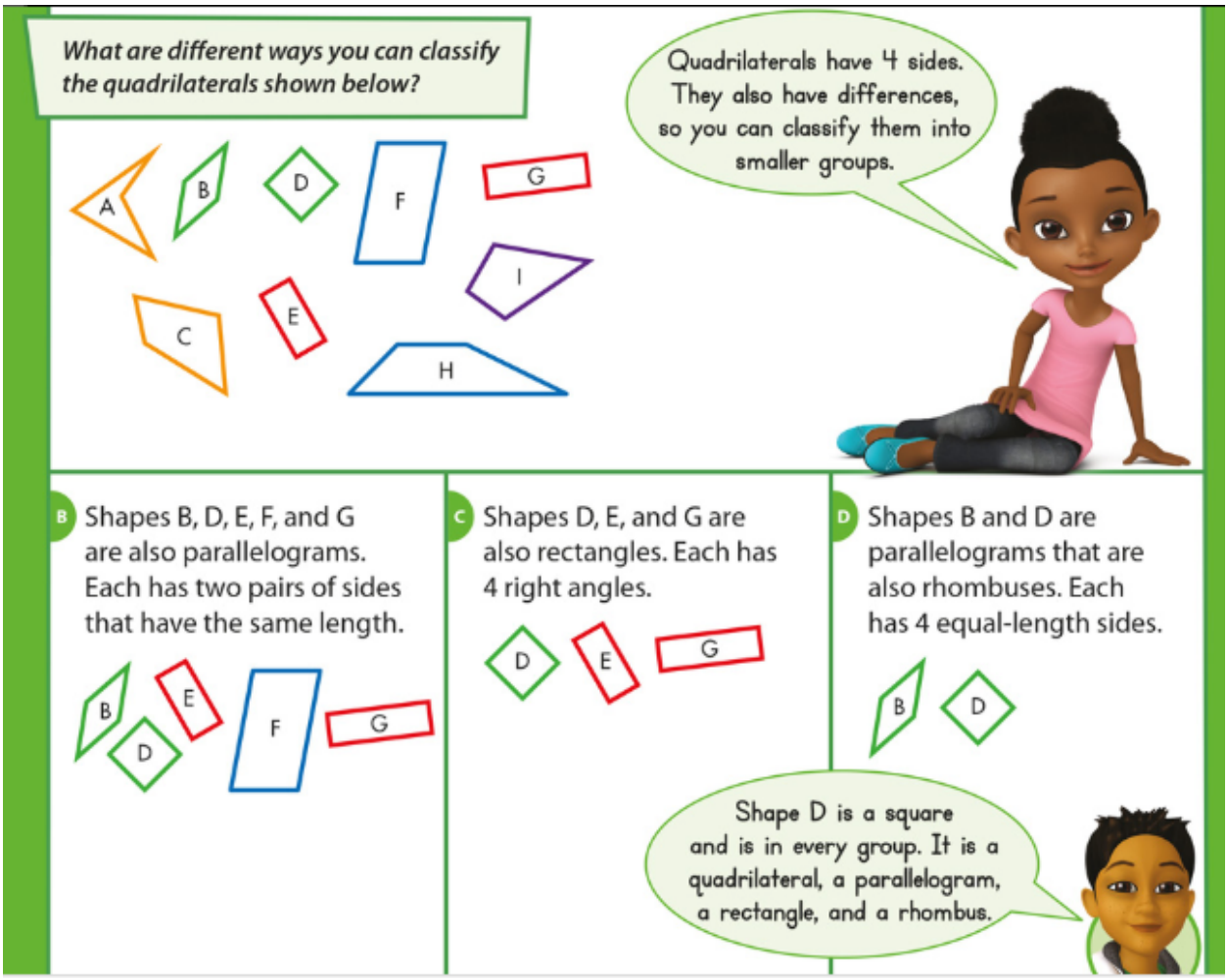
19. What is the name of a shape that is **NOT** always a rectangle, but is a quadrilateral? 3.G.1.1

Ⓐ Square
Ⓑ Triangle
Ⓒ Hexagon
Ⓓ Parallelogram

20. Which shape could be sorted into a group of parallelograms or a group of rhombuses? 3.G.1.1

Ⓐ Square
Ⓑ Rectangle
Ⓒ Trapezoid
Ⓓ Hexagon

April 13, Lesson 15-3



Look at these polygons.

3.G.1.1

Part A

Name one attribute that all 4 polygons have.

Part B

Name an attribute that both A and D have that B and C do not.

Independent Practice

In **5–9**, list all the polygons shown at the right that fit each description. If there could be no such polygon, tell why.

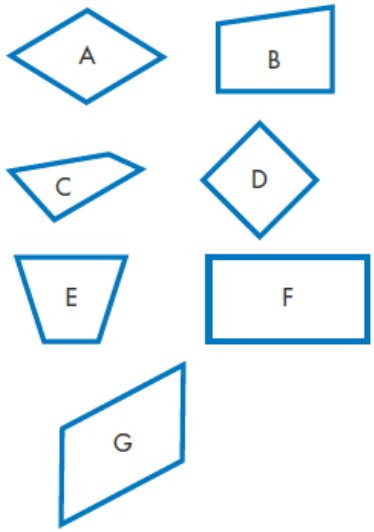
5. Is not a parallelogram

6. Is a quadrilateral but not a parallelogram or trapezoid

7. Is a square and not a parallelogram

8. Is a rhombus and not a rectangle

9. Is a parallelogram and not a rhombus



April 14, Topic 15 Review

Print the Topic 15 Vocabulary cards, fill in the blanks based on what you have learned.

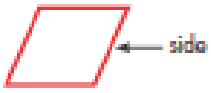
Cut the cards apart, and practice matching the picture to the description.

If you have a partner to play with use the cards to play Go Fish.

polygon

polygons not polygons

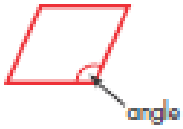
side



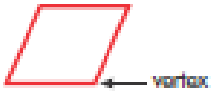
quadrilateral

Examples of quadrilaterals:

angle



vertex



trapezoid

one pair of sides that never cross

parallelogram

opposite sides are the same length

Each _____ of a polygon is straight.

A _____ is a closed figure made up of straight line segments.

An _____ is formed when two sides meet.

A _____ is a polygon with exactly four sides.

A quadrilateral with only one pair of sides on lines that never cross is a _____.

A _____ is the point where two sides meet.

A quadrilateral with two pairs of sides with the same length is a _____.

rectangle

four right angles

right angle

A rectangle has 4 right angles.

rhombus

all sides the same length

square

four right angles

all sides the same length

convex

concave

A _____ forms a square corner.

A _____ is a parallelogram with four right angles.

A _____ is a parallelogram with four right angles and all sides the same length.

A _____ is a parallelogram with all sides the same length.

A _____ polygon has 1 or more angles pointing inward.

All angles in a _____ polygon point outward.

April 15, Lesson 16-1

Visual Learning A-Z Glossary

Essential Question

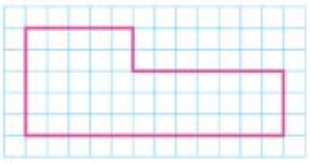
How Do You Find Perimeter?

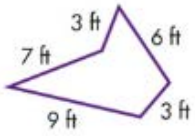
Visual Learning Bridge

A

Gus wants to put up a fence to make a dog park. He made two different designs. What is the perimeter of each dog park design? Which design should Gus use?

scale: ⊢ = 1 ft

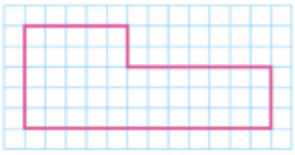




The perimeter of the dog park needs to be at least 30 feet.

B One Way

You can find the perimeter by counting unit segments.

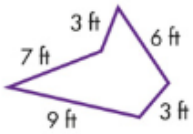


scale: ⊢ = 1 ft

The perimeter is 34 feet.
34 > 30. Gus could use this design.

C Another Way

Add the lengths of the sides to find the perimeter.

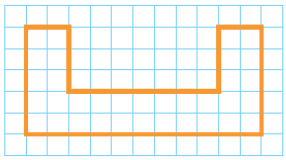


3 + 9 + 7 + 3 + 6 = 28
The perimeter is 28 feet.
28 < 30. Gus could not use this design.

Independent Practice

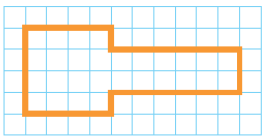
Leveled Practice In **5–7**, find the perimeter of each polygon.

5.



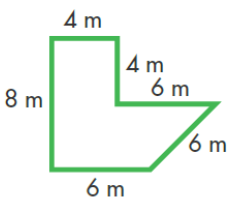
scale: ⊢ = 1 m

6.

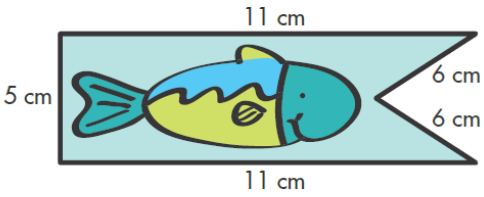


scale: ⊢ = 1 in.

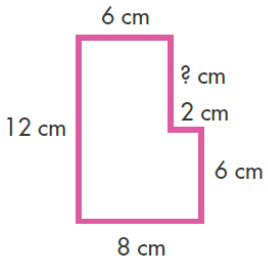
7.



10. Jani put this sticker on his notebook. What is the perimeter of the sticker?

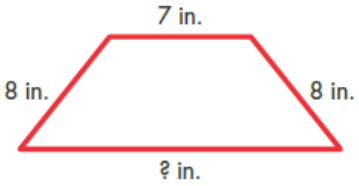


11. Reasoning What is the perimeter of the shape below?



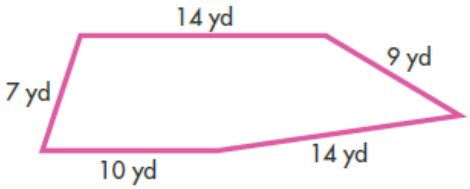
12. Number Sense Jenny needs 425 cubes. There are 275 cubes in a large bag. There are 175 cubes in a small bag. Will one large bag and one small bag together have enough cubes? Explain.

13. Higher Order Thinking The perimeter of this trapezoid is 40 inches. What is the length of the missing side?



Assessment Practice

14. Mr. Karas needs to find the perimeter of the patio shown at the right. What is the perimeter of the patio? 3.MD.4.8



Ⓐ 48 yards

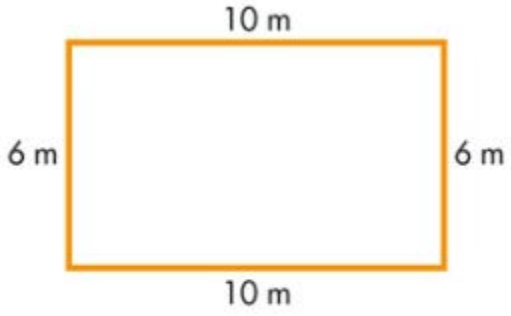
Ⓑ 50 yards

Ⓒ 52 yards

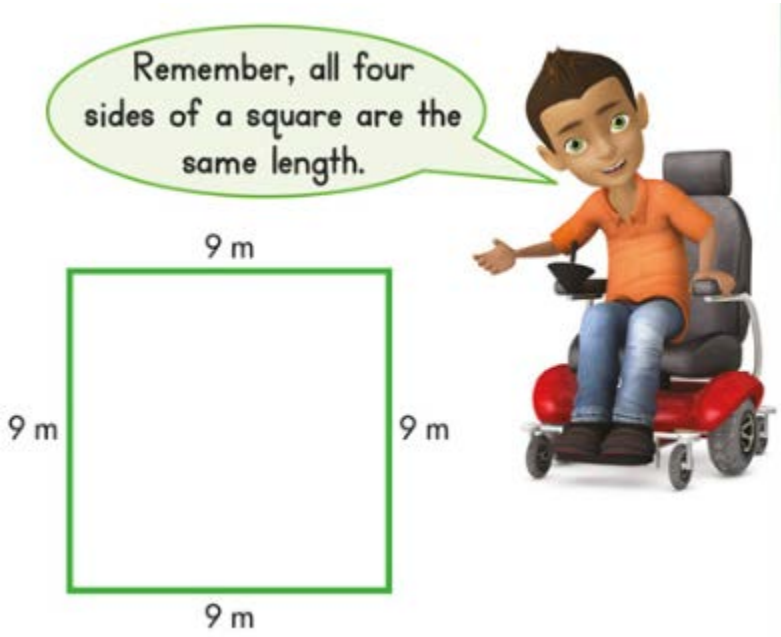
Ⓓ 54 yards

April 16, Lesson 16-2

We when shapes have sides that are the same length we can use multiplication to find the perimeter faster.



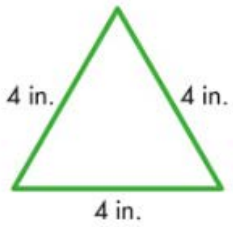
$10 + 6 + 10 + 6 = 32$ or
$(10 \times 2) + (6 \times 2) = 32$



$9 + 9 + 9 + 9 = 36$ or $4 \times 9 = 36$

Another Example!

An **equilateral triangle** has 3 sides that are the same length.

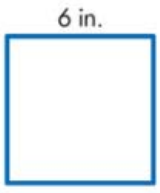


$4 + 4 + 4 = 12$ or $3 \times 4 = 12$.

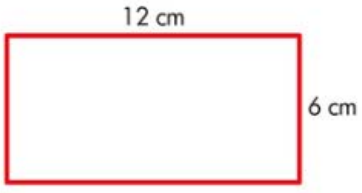
So, the perimeter of this equilateral triangle is 12 inches.

In **5–7**, find the perimeter of each polygon.

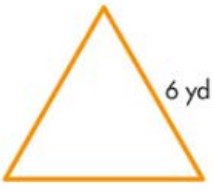
5. Square



6. Rectangle



7. Equilateral triangle



Higher Order Thinking Dan drew the trapezoid at the right. The top is 3 inches long. The bottom is twice as long as the top. The length of each side is 5 inches. How can you find the perimeter of the trapezoid? Label the lengths of the sides.

Mikayla draws a rectangle with side lengths of 4 feet and 8 feet. What is the perimeter, in feet, of Mikayla's rectangle?

3.MD.4.8

Ⓐ 12 feet

Ⓑ 16 feet

Ⓒ 20 feet

Ⓓ 24 feet

14. Emma draws an equilateral triangle with side lengths of 5 inches each. What is the perimeter, in inches, of Emma's triangle?

3.MD.4.8

Ⓐ 5 inches

Ⓑ 10 inches

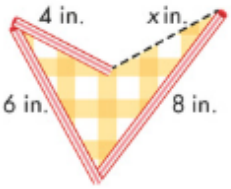
Ⓒ 15 inches

Ⓓ 20 inches

April 17, Lesson 16-3

Lilia is making a decoration out of straws and cloth, with lace around the outside. How long should she cut the fourth straw to use all of the lace?

Lilia needs to find the length that will give the shape a perimeter of 22 inches.

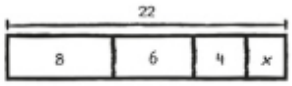


Lilia has 22 inches of lace

B Draw a bar diagram and write an equation.

Let x = the length of the missing side.

The perimeter of the shape is 22 inches.



$8 + 6 + 4 + x = 22$

$18 + x = 22$

C Solve.

$18 + x = 22$

Think: 18 plus what equals 22?

$18 + 4 = 22$, so $x = 4$.

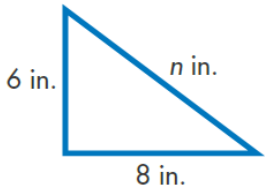
So, the fourth side should be 4 inches long.

You can also use subtraction to find $22 - 18 = 4$.

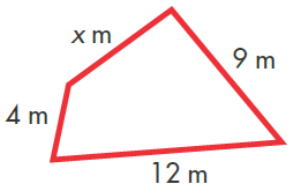
Independent Practice

In **5–10**, find the length of the missing side for each polygon so it has the perimeter given.

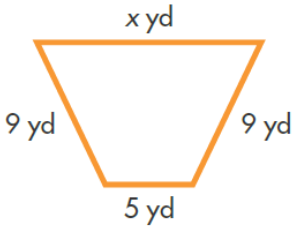
5. perimeter = 24 in.



6. perimeter = 30 m



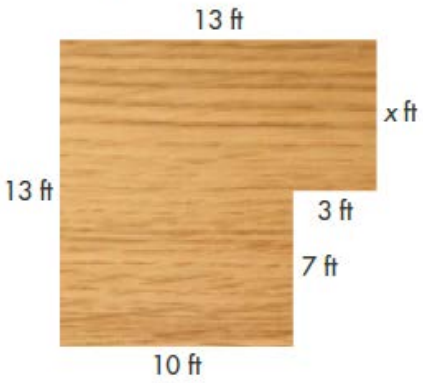
7. perimeter = 37 yd



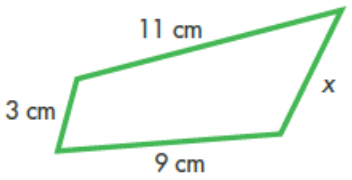
These plane figures each have equal sides that are whole numbers. One figure has a perimeter of 25 inches. Which could it be? Explain.

Make Sense and Persevere Mason has 18 feet of wood to frame a rectangular window. He wants the window to be 3 feet wide. What should be the length? Show how you know your answer is correct.

The floor of Novak's room is shown below. It has a perimeter of 52 feet. Write an equation to find the missing side length in Novak's room.



Mark draws the quadrilateral at the right with a perimeter of 28 cm. Select numbers from the box to write and solve an equation to find the missing side length. 3.MD.4.8



0	1	2	3	4	5	6	7	8	9

$x +$ ☐☐ $+$ ☐ $+$ ☐ $=$ ☐☐

$x =$ ☐ centimeters

Math Fact Fluency Activities

Fluency Cards

Cut the cards apart and draw them randomly to practice math facts.

0	1	2	3	4
5	6	7	8	9

3	4	5	6	7
8	9	10	11	12

Math Fact War

Task Instructions

1. Either remove all face cards (Kings, Queens, Jacks, Jokers) or assign them a value (for example Jacks=11, Queens = 12, Kings =13, Jokers = zero).
2. Deal out the whole deck between two players.
3. Each player flips a card at the same time.
4. The first player to correctly call out the product of the two cards wins the round and keeps the cards.
5. Play continues until one player has all of the cards.

Materials

- Playing Cards
- Math Fluency Cards

Directions for Math Fluency Activities from YouCubed.org

Math Cards

Task Instructions

1. The aim of the activity is to match cards with the same numerical answer, shown through different representations.
2. Lay all the cards down on a table and ask children to take turns picking them; pick as many as they find with the same answer (shown through any representation).
   For example 9 and 4 can be shown with an area model, sets of objects such as dominoes, and the number sentence. When students match the cards they should explain how they know that the different cards are equivalent. This activity encourages an understanding of multiplication as well as rehearsal of math facts.

Materials

One deck of math cards

How Close to One Hundred

Task Instructions

- This game is played in partners. Two children share a blank 100 grid.
- The first partner rolls two number dice.
- The numbers that come up are the numbers the child uses to make an array on the 100 grid.
- They can put the array anywhere on the grid, but the goal is to fill up the grid to get it as full as possible.
- After the player draws the array on the grid, she writes in the number sentence that describes the grid.
- The second player then rolls the dice, draws the number grid and records their number sentence.
- The game ends when both players have rolled the dice and cannot put any more arrays on the grid.
- How close to 100 can you get?
  Variation
  Each child can have their own number grid. Play moves forward to see who can get closest to 100.

Materials

- Two dice
- Recording sheet

Race to One Hundred

Task Instructions

- Each player takes turns rolling the two dice. Markers are placed at zero.
- Player 1 may choose to calculate the sum, difference, product or quotient of the two numbers displayed on the dice.
- Player 1 then moves their marker to that number on the chart.
- Player 2 takes their turn.
- For player 1's second turn they determine the sum, difference, product or quotient. This number is then added to the number under their marker and the marker is moved to this sum.
- Play ends when one player reaches one hundred.
- If a player rolls and computes a number that cannot be added to the last number without going over 100 they lose their turn.
- If player 1 reaches 100 first, player 2 finishes the round to see if they can tie the game.

  Variation

  Players can choose to include negative number achieved through taking the difference of two numbers where the number subtracted is greater than the starting number.

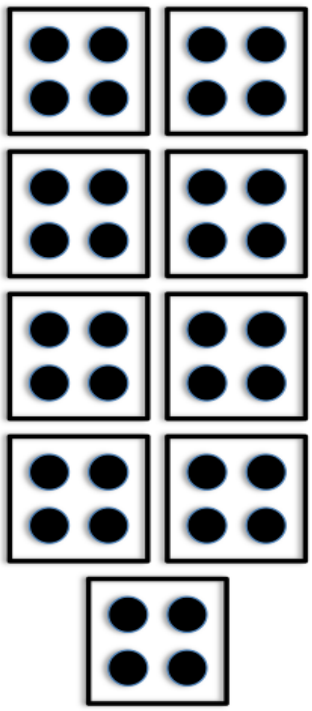
Materials

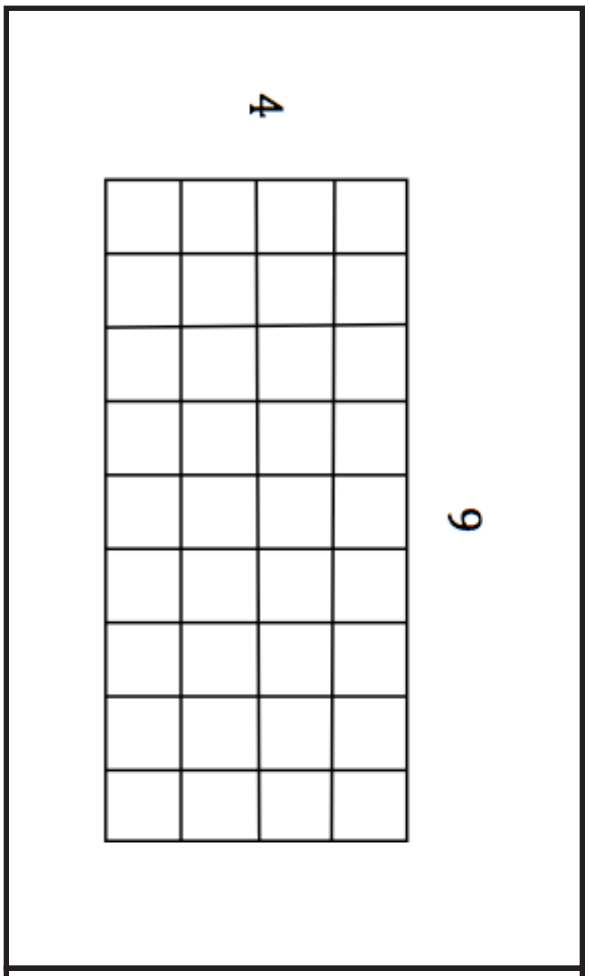
- Two dice
- One hundred chart
- Two markers
- Pencils and scratch paper

9 × 4

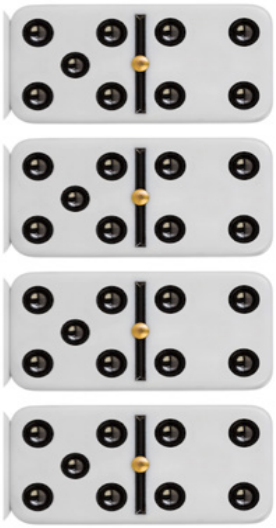
36

4 × 9



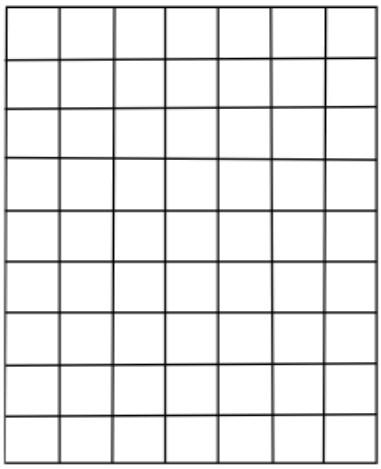


7×9



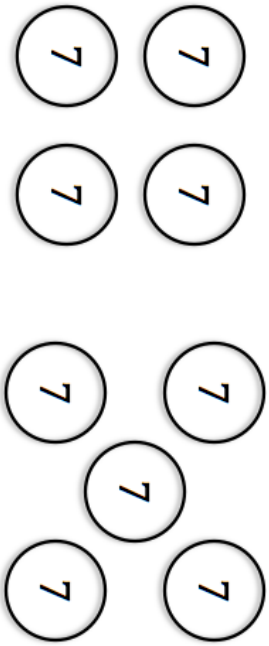
9×7

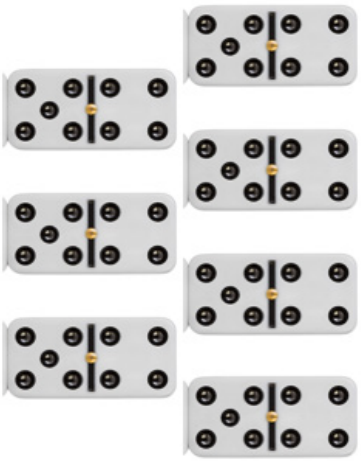
7



9

63

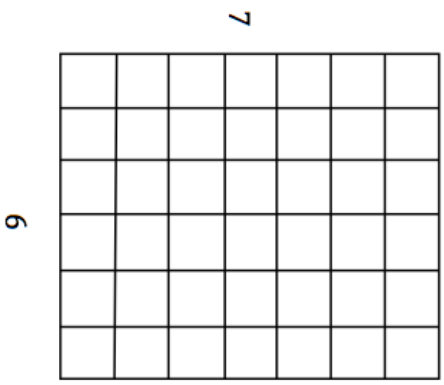




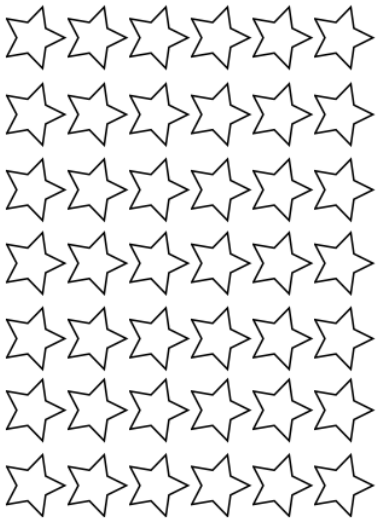
7×9

42

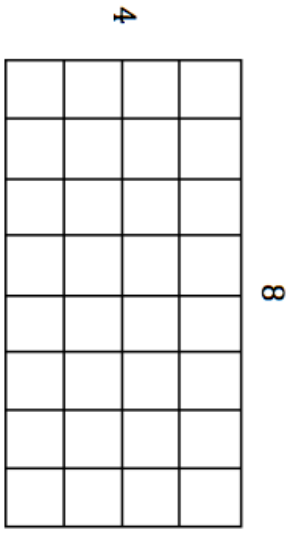
9×7

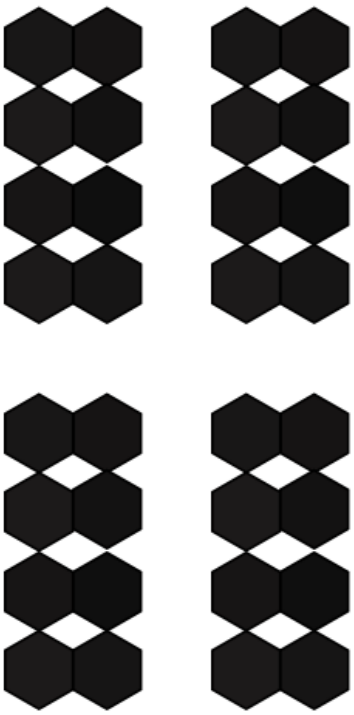


8 × 4



4 × 8





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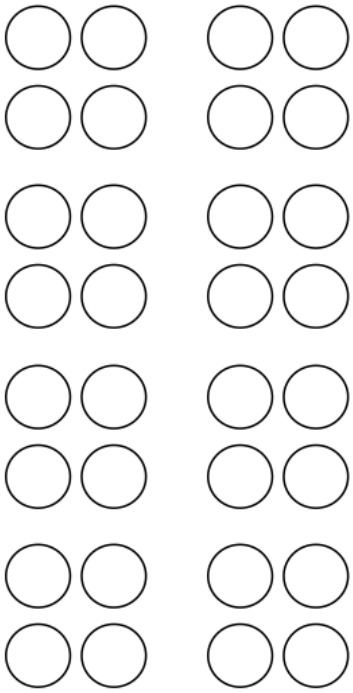
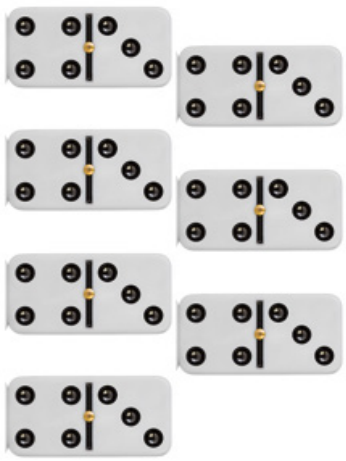


7×7

49

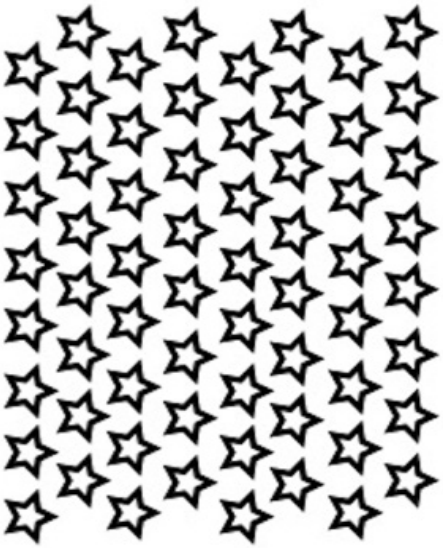
27

8 × 8



49

8



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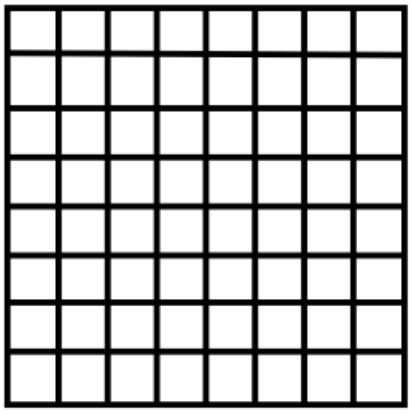

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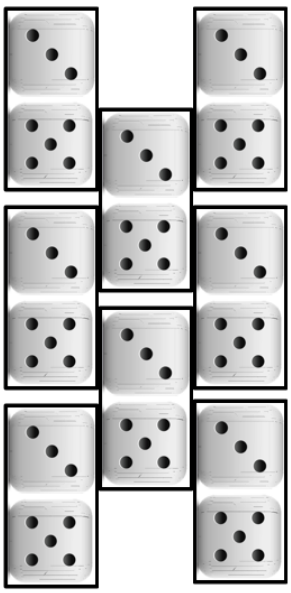
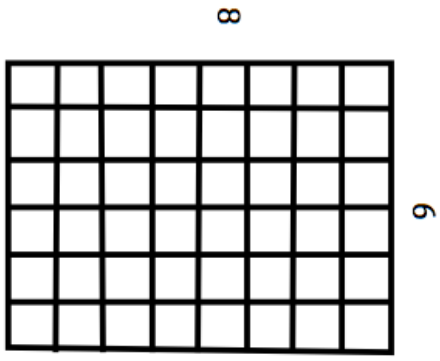
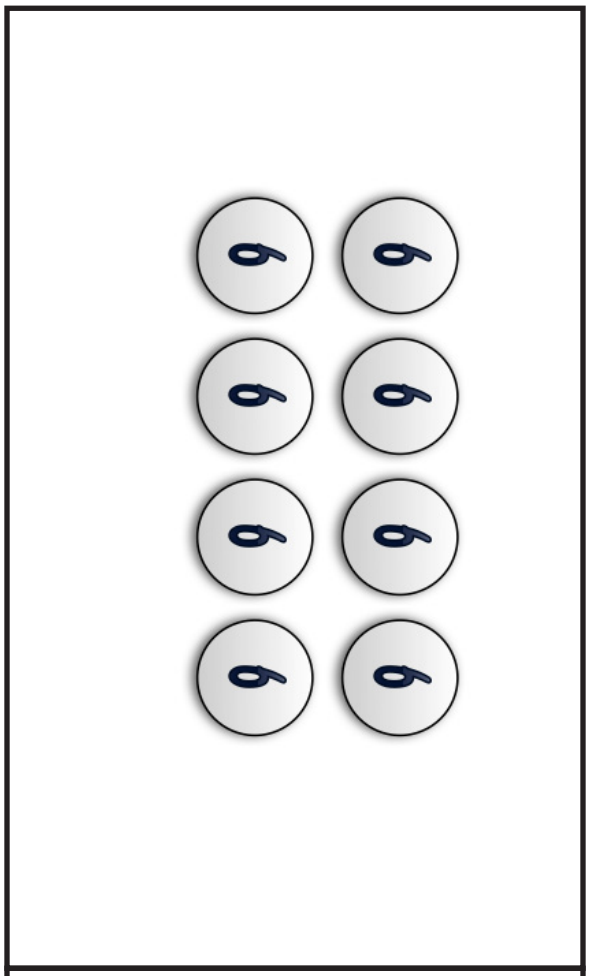


9 × 8

84

9 × 8

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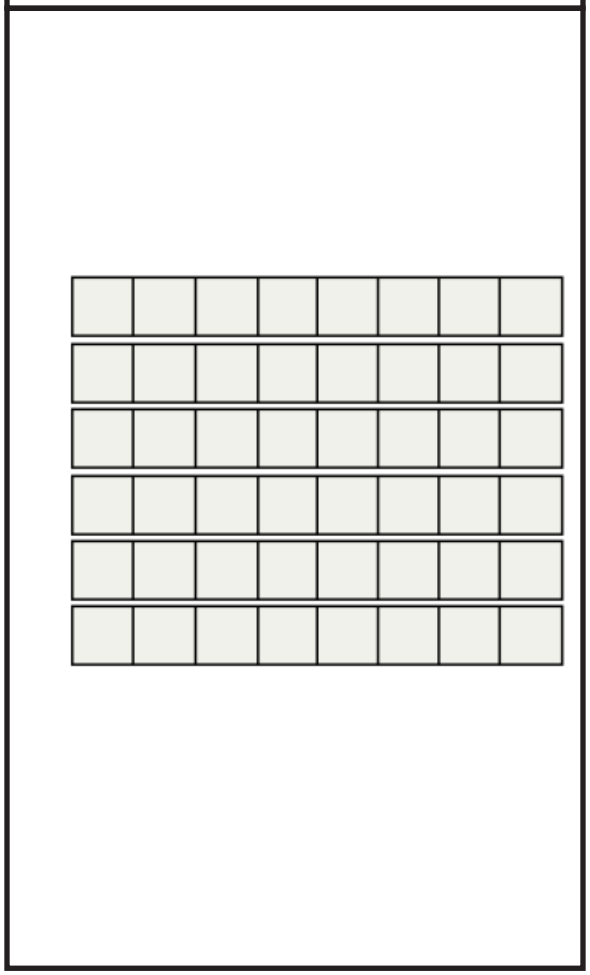

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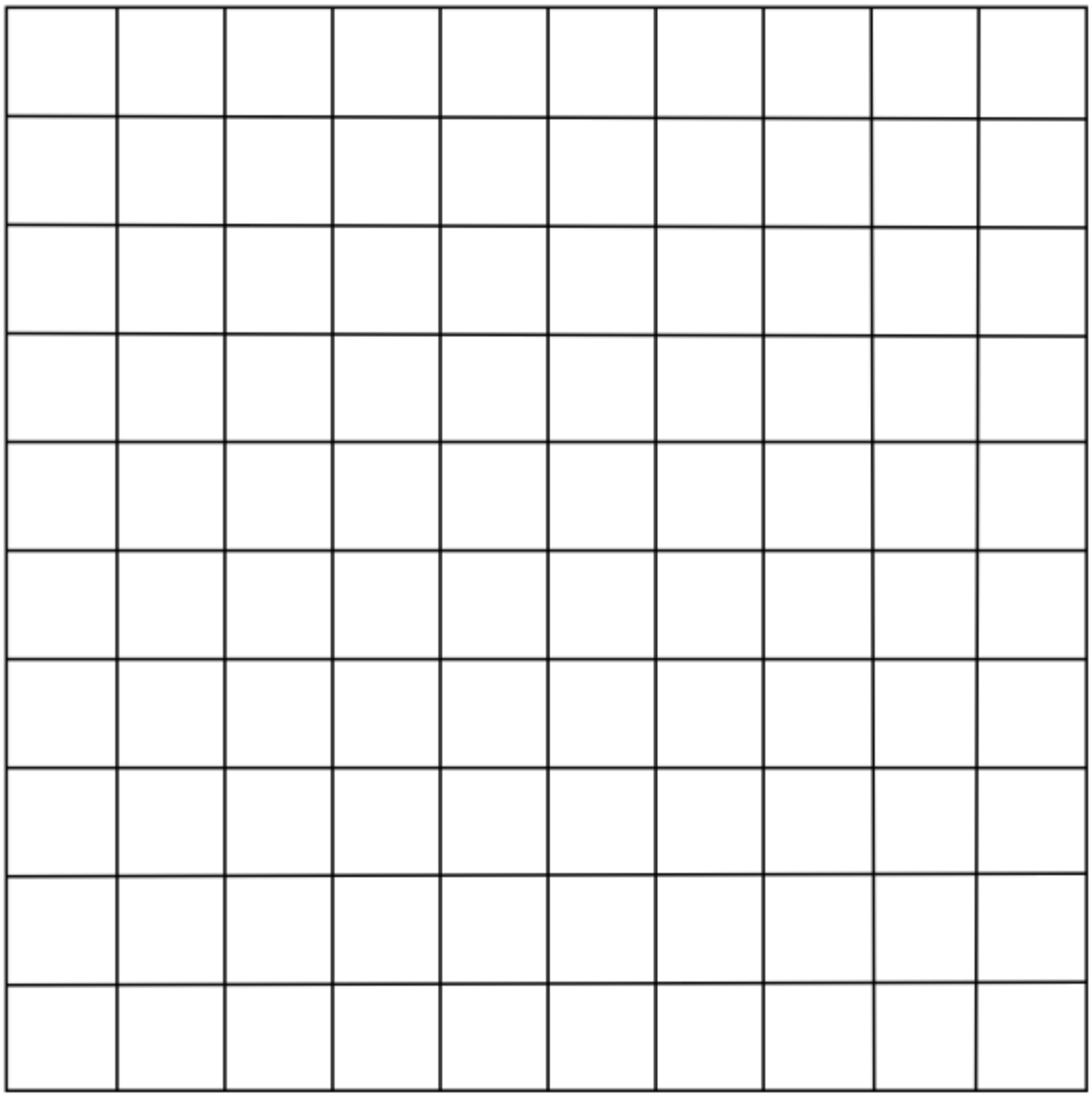
How Close to 100?



1. _____ x _____= _____
2. _____ x _____= _____
3. _____ x _____= _____
4. _____ x _____= _____
5. _____ x _____= _____
6. _____ x _____= _____
7. _____ x _____= _____
8. _____ x _____= _____
9. _____ x _____= _____
10. _____ x _____= _____

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Race to One Hundred

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Science

Resources

Community gardens are becoming more popular across the United States. They provide people with the chance to grow fresh fruits and vegetables for their families and to share with others in the community.

In Denver, Colorado, schools can take part in the "Garden to Cafeteria" program. Students grow fruits and vegetables in school gardens. When these foods are harvested, they are used in the cafeteria for lunches.

Connect If your school were to start a community garden, what kinds of decisions would you have to make to plan your garden?

Name _____ Date _____

uInvestigate...Lab

HANDS-ON LAB

How can you group plants?

Scientists group plants based on how they are alike or different. How can you sort plants?

Materials
- scissors
- Plant Pictures sheet

⚠ Be careful when using scissors.

Science Practice

Scientists **sort** objects when they put like objects in groups.

Procedure

☐ **1.** Cut out the pictures on the Plant Pictures sheet.

☐ **2.** Identify how the plants are alike or different. Decide what features you will use to sort the plants. Then place the plants into groups.

Plant Groups

Analyze and Interpret Data

3. **Compare and Contrast** Compare your plant grouping with those of your classmates. How was the way everyone sorted the plants alike? How was it different?

_____

_____

_____

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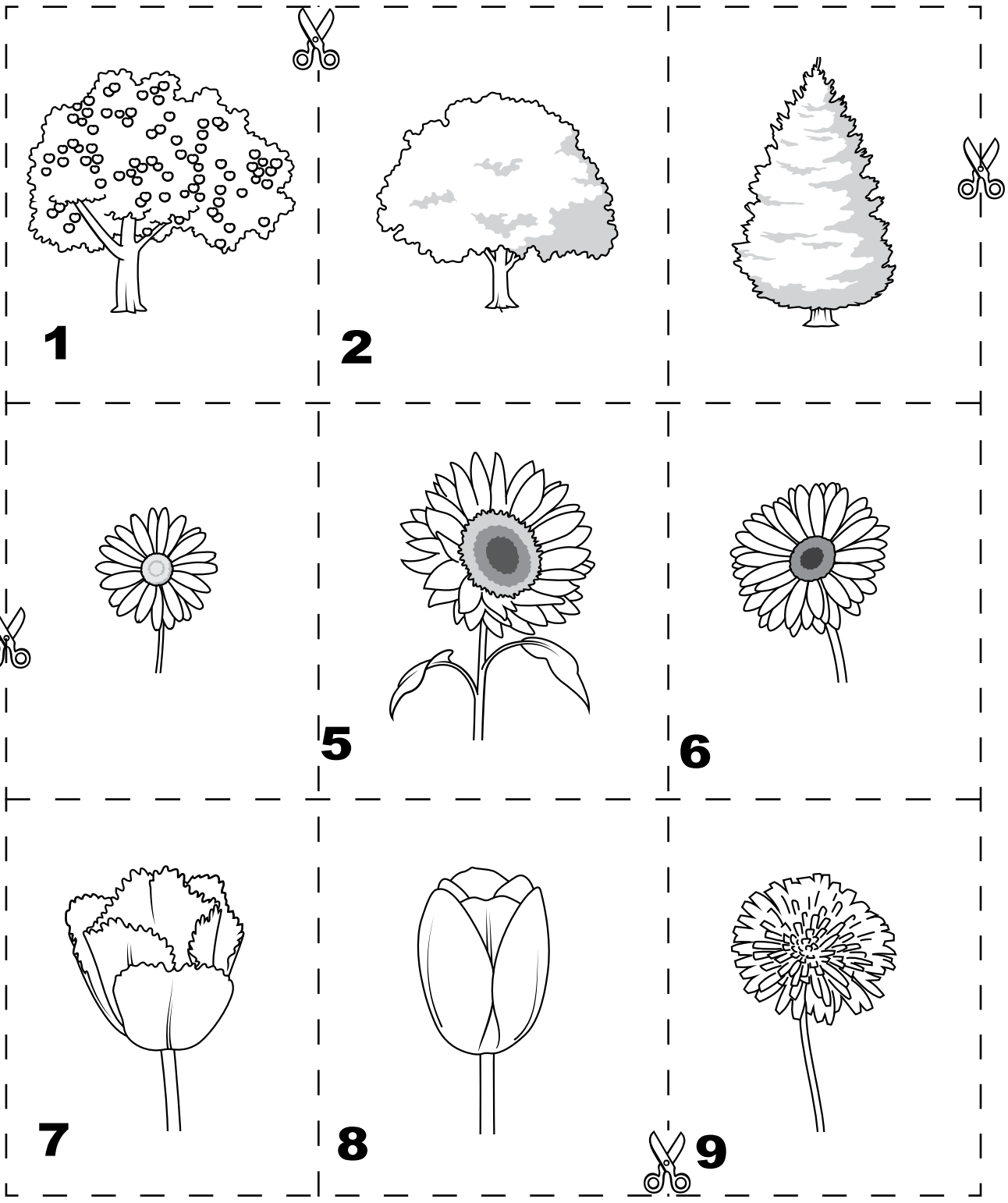
_____

Plant Pictures sheet

g

Be careful using scissors.



Classify Plants

Scientists sort plants to study them. The plants in each group are alike in some way. Scientists group all living things in a similar way. When you **classify** living things, you place them into groups according to how they are alike. You can classify plants by color, size, shape, and many other ways. These features are called **characteristics.** Classifying plants can help you identify and understand them.

Classify How would you classify the five plants in the picture into two groups? Explain your choice.

Literacy Toolbox

Cause and Effect An effect is what happens. If scientists grow a plant that has a blooming flower in a new color, what effect could this have on how a group of plants is classified?

Plants with Flowers

Most plants produce seeds. Seeds can grow into new plants. Scientists classify plants with seeds into two main groups according to whether they grow flowers. A **flowering plant** is a plant with flowers that make seeds. An orange tree and a tulip plant are examples of flowering plants.

READING CHECK **Cause and Effect** An orange tree blossoms. Oranges grow. What will happen if the seeds of an orange are planted?

Plants with Cones

Some kinds of plants do not grow flowers to make seeds. Coniferous trees grow cones to make seeds. Seeds grow inside each cone. The hard cone protects the seed. When cones fall from coniferous trees, the seeds spread out. These seeds can make new plants. Cypress and pine trees are types of coniferous trees.

Compare and Contrast How are flowers and cones alike? How are they different?

Pg. 1699

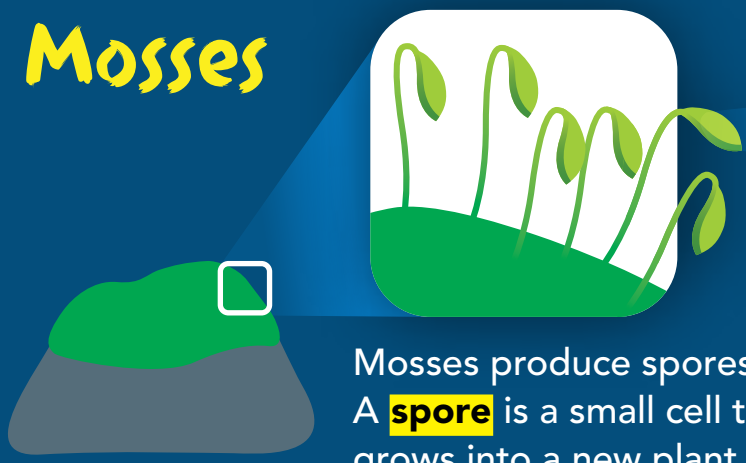
Visual Literacy Connection

How do plants REPRODUCE?

Some plants reproduce using seeds. Others reproduce using spores.

! **Circle the parts of the plants that make seeds or spores.**

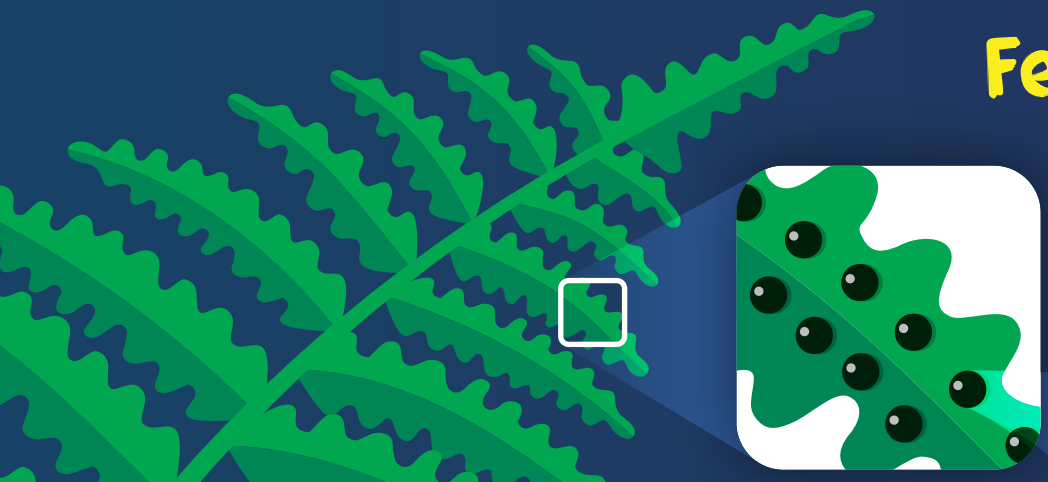
Mosses



Mosses produce spores. A **spore** is a small cell that grows into a new plant.

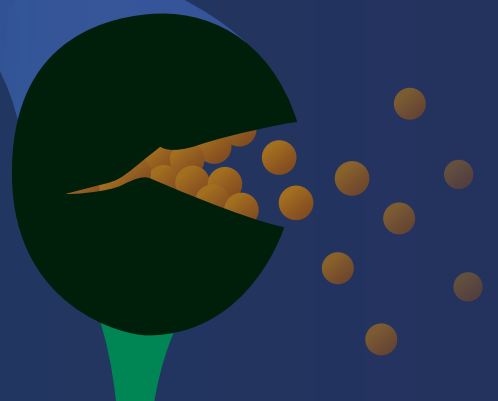
The spores burst out of the spore case and spread.

Ferns



Clusters of spores grow on the underside of a fern's leaves.

Spores are released and spread by wind or water.



Coniferous Plants

INTERACTIVITY
Complete an activity about classifying plants.

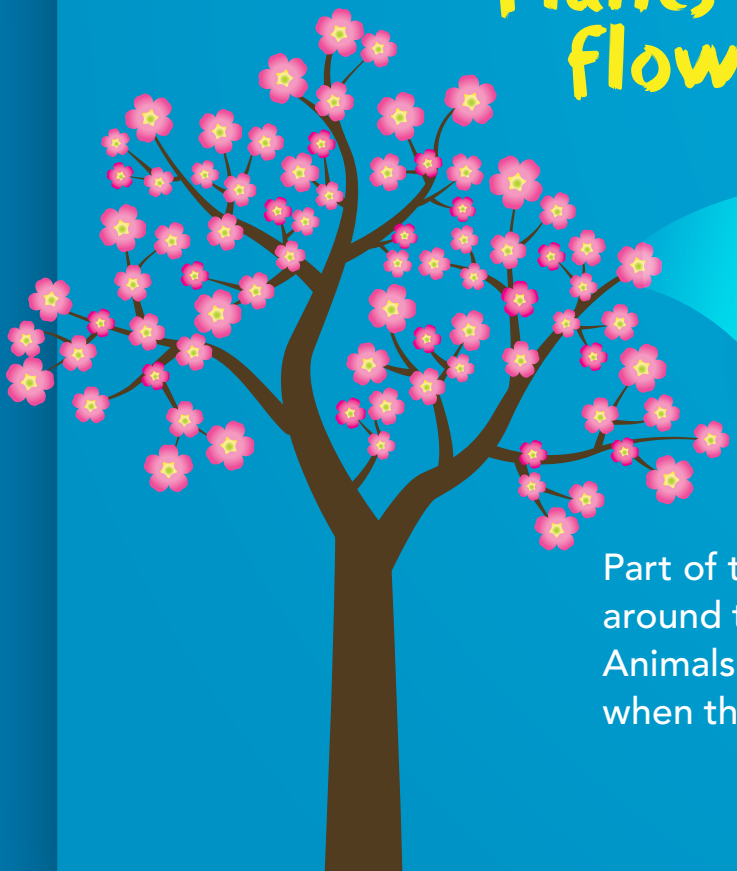
Coniferous plants, such as pine trees, reproduce with seeds made in their cones. Small grains of pollen are inside the cones.

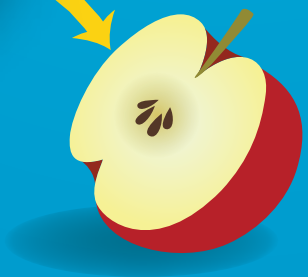
The male cone releases the pollen.

The female cone produces seeds when the pollen lands inside the cone.

Plants with flowers

In plants with flowers, such as apple trees, pollen joins with an egg inside the flower of the plant.



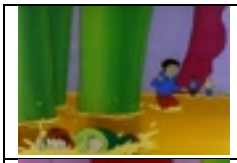
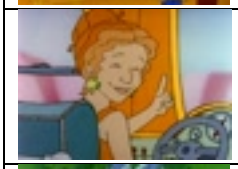
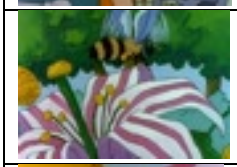
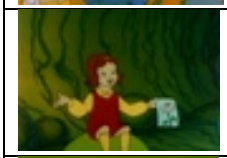
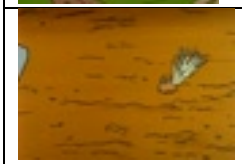


Part of the flower grows around the seed into a fruit. Animals spread the seeds when they eat the fruit.

Florida Plants

Florida is home to many different types of plants. These plants grow best in hot, humid environments. Many plants produce tropical fruits, such as papaya, guava, and mango. Groves of orange trees supply juicy oranges. In fact, the orange blossom is Florida's state flower. Other beautiful flowering plants, such as hibiscus, bloom year-round in gardens and parks.

Plant Scavenger Hunt On your way home from school, count as many types of plants as you can in each of these three groups: plants with flowers, plants with cones, and plants with spores. Which type did you observe the most? What plant parts helped you to classify each type?

	Nectar is a sweet liquid that can be found at the bottom of flowers; bees use a proboscis to drink nectar.
	Bees are attracted to flowers that have lines on them; the lines function as arrows, and help bees to locate nectar.
	Anthers are stems that hold a flower's pollen; when an insect lands on an anther, pollen is released; pollen is also released into the air when the wind blows
	Insects transfer pollen from the male part of the flower, the anther, to the female part of the flower, the stigma. (
	Once pollen lands on the stigma, a pollen tube grows down into the flower.
	One flower's egg combines with another flower's pollen to make a seed; pollen tubes transport the pollen to the egg.
	Birds, insects, people and the wind all transport seeds from the flowers where they are formed to the soil.
	Seeds need soil, water, light and time in order for them to grow into plants.
	Plants produce seeds; time-lapse photography shows events happening faster than they really do

Lesson 2

Classify Animals

I can...

Classify animals based on their physical characteristics and behaviors.

Literacy Skill

Cause and Effect

Vocabulary

vertebrate
amphibian
invertebrate
arthropod

Academic Vocabulary

explain

SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors. (Also, **SC.3.N.1.7**)

LOCAL-TO-GLOBAL Connection

Animals have characteristics that help them survive in different environments. The roseate spoonbill, for example, lives in warm tropical areas. In Florida, this bird wades in swamps to catch its food. The rhinoceros lives in Africa. It hunts for its food in the hot grasslands. The Arctic fox lives in extremely cold environments, such as in Greenland. It hunts for its food in the snow and ice. The numbat lives in Australia. It finds its food in woodlands.

Interpret Maps Draw a line from each animal's photo to the map where each one lives.


Arctic fox


numbat


roseate spoonbill


rhinoceros

Name _____ Date _____

uInvestigate...Lab

HANDS-ON LAB

How do animals of the same kind differ?

Scientists make measurements to compare and contrast animals of the same kind. How can you measure animals that are the same kind but have different characteristics?

Suggested materials

- ruler
- string
- paper clips

Science Practice

Scientists **obtain information** when they make observations.

Procedure

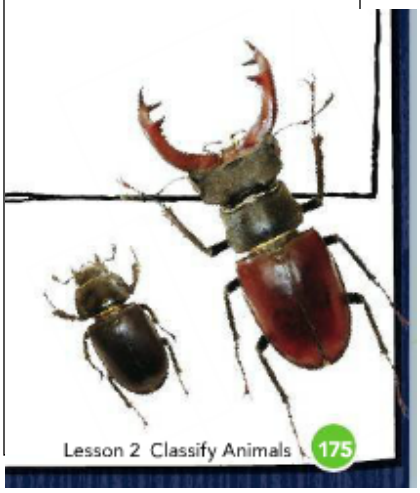
☐ **1.** The photos show a male beetle on the right and a female of the same kind of beetle on the left. What differences do you observe?

_____

_____

☐ **2.** Choose a tool to measure the beetles. Record your observations.

Observations



Analyze and Interpret Data

3. **Use Evidence** How can animals of the same kind be different? Use your observations to support your answer.

_____

_____

_____

_____

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Be a Scientist

Looking for Vertebrates

With an adult, look for vertebrate animals in your neighborhood. Which vertebrates did you find? Why do you think they are vertebrates?

Animals with Backbones

One characteristic scientists use to classify animals is whether the animals have a backbone. An animal with a backbone and other bones is called a **vertebrate**. There are five types of vertebrates: mammals, reptiles, birds, fish, and amphibians. Read about each type.

Knowing that an animal is a vertebrate helps scientists explain how the animal moves. When scientists **explain**, they give a reason for something.

Identify Circle a cold-blooded animal that breathes with lungs.

Mammals

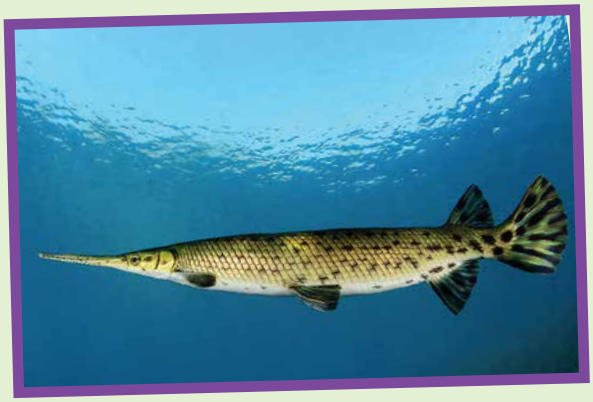
Dogs, cats, deer, and humans are mammals. Mammals are warm-blooded. This means that their body temperatures stay about the same even if their environment is cold. Mammals usually have hair. They breathe air through their lungs and feed milk to their young.

Birds

Pelicans, egrets, and seagulls are birds. Birds are warm-blooded. All birds have feathers and beaks. Feathers help birds stay warm. Wings and light bones help most birds fly. Birds breathe air through lungs.

Fish

Sharks, tuna, salmon, and longnose gar are fish. Fish are cold-blooded. Their body temperatures vary with the temperatures of their surroundings. They live in water. Most fish have slippery scales and breathe through gills. Fish have fins and tails to help them swim.



Amphibians

Frogs, toads, and salamanders are amphibians. An **amphibian** is a cold-blooded animal with smooth, moist skin. Young amphibians begin life in water and breathe with gills. Adult amphibians breathe with lungs.

Reptiles

Snakes, lizards, turtles, and crocodiles are reptiles. Reptiles are cold-blooded. They have dry, scaly skin. They breathe air through lungs.

Question It!

Scientists have discovered a new vertebrate. What questions would you ask in order to classify this new animal?

Animals Without Backbones

Most animals do not have a backbone or other bones inside their body. An animal without a backbone is called an **invertebrate**. Invertebrates have soft bodies. Body parts other than bones give them their shapes. Examples of invertebrates include jellyfish like the one in the photo, worms, mollusks, and arthropods.

An **arthropod** is an invertebrate that has legs with joints and a hard covering on the outside of its body. The inside of the arthropod's body is soft. The insect in the picture, spiders, and crabs are arthropods.

Mollusks also have soft bodies. Examples include octopuses, squids, clams, and snails. Many mollusks have eyes and hard shells.

Animal Birth

Another way that scientists classify animals is how they give birth. Animals give birth in one of two ways. All birds and most fish, amphibians, and reptiles hatch from eggs. The snake in the picture is hatching from an egg. Most mammals have live births. This means that the young animal is born instead of hatching from an egg.

List With a partner, name as many animals that you can that lay eggs. Then name as many animals that have live births.

Lesson 2 Check

1. **Investigate** A rattlesnake and a black widow spider both make poison. Plan an investigation to identify evidence that can be used to classify the rattlesnake and the spider.

READING CHECK **Cause and Effect** Like all snakes, a python has dry, scaly skin and a forked tongue. What characteristics might cause someone to group the python with a turtle?

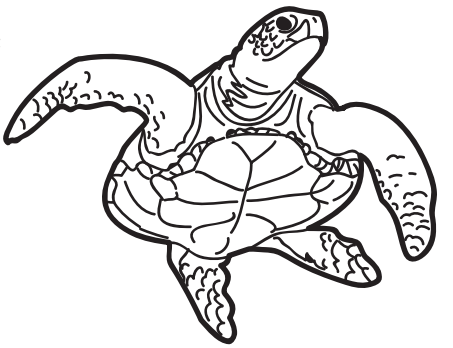
Name Date

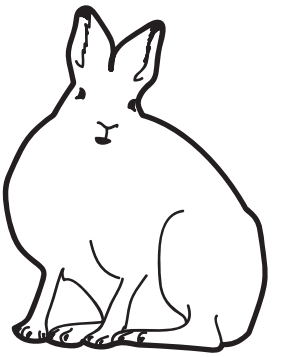
IDENTIFY INVERTEBRATES AND VERTEBRATES

Many different animals share our planet with us. Many are alike, and many are different. Scientists **classify** animals based on their similarities. One way scientists group animals is whether or not those animals have a backbone.

Some animals, like dogs, cats, birds, lizards, fish, and even humans have backbones - Scientists classify backboned animals as **vertebrate**.

Other animals, such as squid, worms, bugs, and clams do not have backbones. Scientists call these animals **invertebrates.**





Choose **five animals** from the list below. Write the animal's name, whether it is a vertebrate or invertebrate, and two important traits in the spreadsheet. An example has been provided for you.

Scorpion **Fox** **Octopus** **Snail** ~~**Rabbit**~~ **Wolf** **Deer**

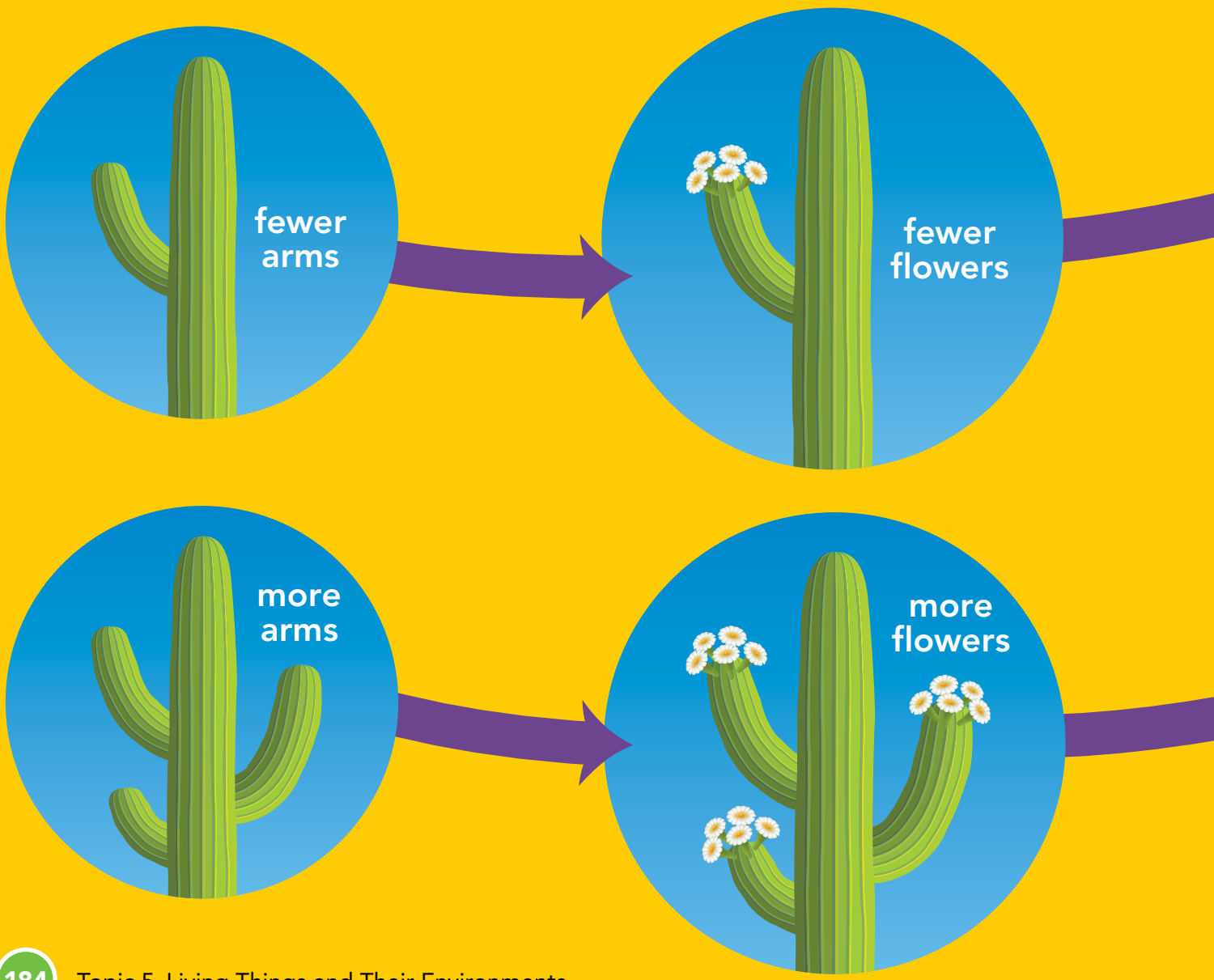
T-Rex **Spider** **Fish** **Jellyfish** **Turtle** **Beetle** **Hawk**

Animal	Vertebrate / Invertebrate	Two important traits
Rabbit	Vertebrate	1. A rabbit has long ears. 2. A rabbit is a mammal.

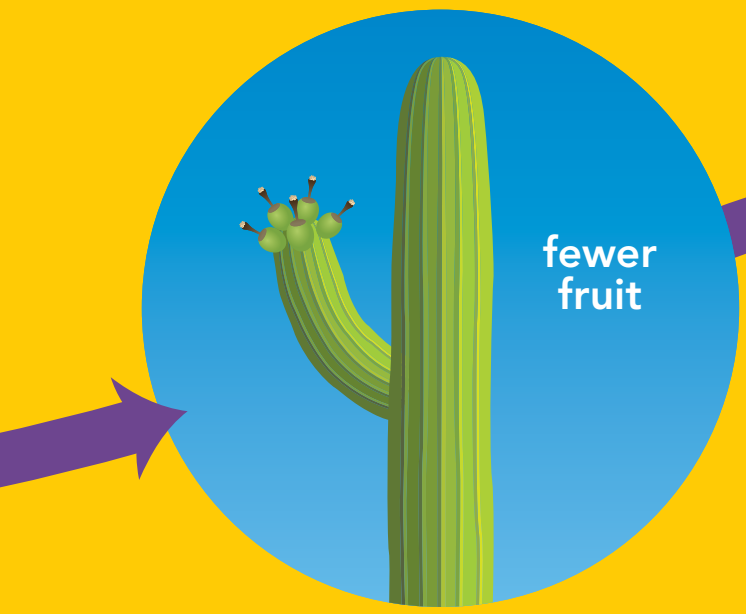
Visual Literacy Connection

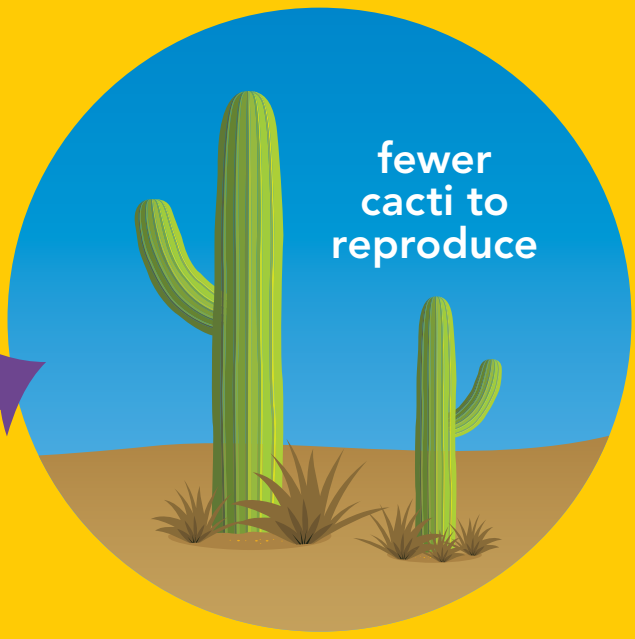
How do living things adapt to survive?

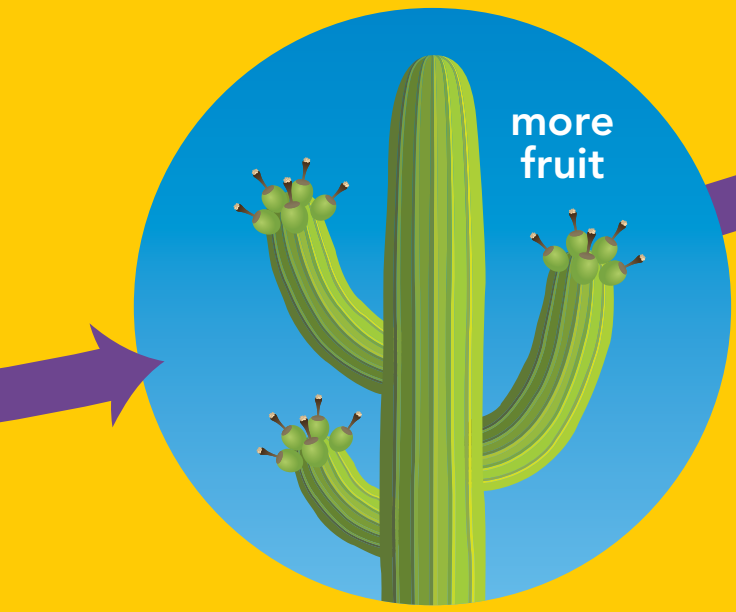
Living things have adaptations to help them stay alive, or **survive**. An **adaptation** is a trait that helps an organism survive, find mates, or reproduce.



Individuals of the same species may have different traits that provide advantages. A saguaro cactus with more arms can produce more offspring.







Draw the results you would expect for the saguaro cactus that has more arms.

Survival in Different Habitats

Each kind of living thing is adapted to live in a certain kind of place. For example, some kinds of plants that grow in cold parts of Earth are covered with hairs. The hairs help keep them warm. A sandfish lizard, a desert animal, digs holes in the sand to avoid predators. The lizard would not survive in the Arctic because there is no sand there.

Evaluate Look at the pictures of the three animals. Write what kind of environment each animal lives in.

Animal Needs for Survival		
polar bear	tree frog	camel
		

Differences Can Help Living Things

A species is a group of living things of the same kind. Each kind of animal and plant is a separate species. Individuals of the same species may have different traits, or adaptations, that help them survive and reproduce. An individual is more likely to have offspring when it has traits that make it better able to attract mates. Finding mates is one way a species can survive. For example, male widowbirds with longer tails attract more females for mating than male widowbirds with shorter tails.

1. READING CHECK **Cause and Effect** Suppose a sea lion cannot eat enough food to keep its thick layer of fat. How might this change affect the sea lion?

2. **Use Evidence** Adaptations are traits that help living organisms survive. Choose a plant or animal and describe two adaptations that help the organism survive in their environment.

Name _____ Date _____

Quest CHECK-IN LAB

How are living things suited to their habitats?

Biologists study living things and their environments to understand how they survive. How do plants and animals of the same kind differ in the same environment?

Materials
- string
- hand lens
- ruler
- craft sticks

⚠ Do not touch any animals.

⚠ Wash your hands when finished.

Science Practice

Scientists **engage in arguments** based on evidence to draw conclusions about scientific data.

Procedure

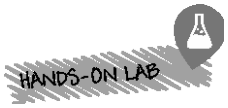
☐ **1.** As a class, select 1 square meter of a habitat to observe outside. Choose one plant species and one animal species that you can observe there.

☐ **2.** Make a plan to observe different members of the plant and animal species. Use the materials.

☐ **3.** Show your plan to your teacher before you begin. Record your observations.

Living Things	Similarities	Differences

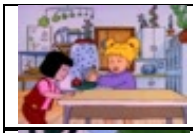
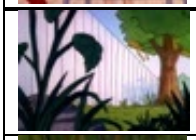
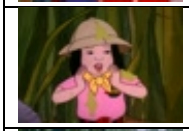
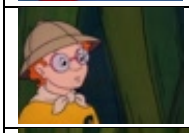
Name _____ Date _____



Analyze and Interpret Data

4. **Infer** Based on your observations, which traits do you think are most important for the survival of living things in this environment? Explain why you think so.

5. **Draw Conclusions** The planned construction project may cause the pond to dry up. Choose one pond plant and one pond animal. What traits do you think the plant and animal have that will help them survive if the pond dries up? Explain.

	Different species of pets have different needs; pet frogs need space to hop around, fresh air, food and water; pet rabbits need a habitat which provides food, water and shelter
	Animals often move to new habitats to find a new food source.
	All plants and animals need to obtain food from their habitats.
	Trees are wonderful habitats for birds, squirrels and other animals
	Frogs need habitats where food, space and slow-moving water are abundant.
	Great blue herons, beavers and frogs live in the same habitat, a beaver pond.
	A student on the Magic School Bus deliberates over whether to re-capture her pet frog or allow it to remain in its natural habitat.
	A student on the Magic School Bus describes a food chain consisting of animals found in a pond.
	Students on the Magic School Bus discuss whether to re-capture a pet frog or leave it in its natural habitat.
	In addition to meeting its basic needs, a frog's natural habitat must also provide it with places to hide from predators.
	Streams take between weeks and years to turn into ponds; humans and some animals build their own habitats.

Changes in the Environment

Living things depend on the environment to give them the things they need to survive. When the environment changes, plants and animals are affected too. Some changes are fast, such as when a wildfire kills plants. Other changes are slow and take many years to happen. For example, changes in climate over time can cause glaciers to melt and increase sea levels.

Changes in the environment are caused by humans, other organisms, and natural events. For example, humans cut down trees to build new homes or highways. Beavers cut down trees to build dams. Weather and climate changes can result in more or less rainfall. All of these changes affect landscapes, waterways, and the plants and animals living in the area.

Infer How might an increase in rainfall affect the plants and animals that live in an environment?

Visual Literacy Connection

How Do Animals respond to SEASONAL CHANGES?

Animals have adaptations that help them survive when seasons change.

MIGRATION

Butterflies **migrate**, or move to another location, when seasons change. Before winter, they may migrate to a warmer place, where they can find food. They return to their original locations during spring.

! Circle one reason butterflies migrate.

HIBERNATION

Bats **hibernate**, or stay in a state of rest, during winter when there is a shortage of food. When bats hibernate, they need less food. In spring, bats can find food easily.

! **Underline the words that tell how hibernating helps bats survive.**

MOLT

As seasons change, bison molt. When animals molt, they shed and grow their body covering. Bison grow thick fur to keep warm during winter. In spring, they shed their fur.

Plants Respond to Seasonal Changes

Like animals, plants have adaptations that help them survive seasonal changes in their environments.

The plant in the picture is a caladium. During the dry season, caladiums become **dormant**, or go into a state of rest. This adaptation helps protect the plant when less water is available in its environment. The roots of these caladiums store food and water to help the plant survive while it is dormant.

READING CHECK **Cause and Effect** What causes caladiums to go dormant? How does that help the plants survive?

Quest Connection

Suppose the construction project will take place during the winter months. How do you think the pond plants will respond as the top part of the pond freezes?

Plants Respond to Seasonal Changes (cont.)

Plants also respond to differences in temperature as the seasons change. Some flowering plants, such as these camellia bushes, lose their leaves when temperatures become colder. First, the plants stop making the substance they need to make food. Then, the leaves change color. Finally, the leaves fall from the plant. The leaves grow back in spring. Some trees, such as firs and pine trees, keep their leaves when temperatures become colder.

Infer Suppose a plant begins to grow leaves in spring. Then an unusual period of cold weather occurs. What do you think will happen to the plant?

Plan It!

Freezing rain has covered the peach trees with ice. These trees do not have an adaptation that protects them from this type of weather. Ice can kill the flowers. How can you protect the trees from ice? Begin by listing three criteria, or desired features, of your solution.

Part 1:
Color the Seasonal Changes flip book and read and underline what happens to plants and animals during each season.

Part 2:

1. Color the four seasons page and identify each season illustrated.
2. Identify the animals in the picture and what they are doing as well as describing the plants and their appearance.
3. Compare how the plants and each of the animals' behaviors have changed, and discuss how the change of the season might have encouraged the change.

Part 3:
Answer the connected learning questions.

1

8

During the year, the seasons change. Plants and animals change too.

2

By September, summer is over. The cooler weather returns. The seasonal cycle continues.

7

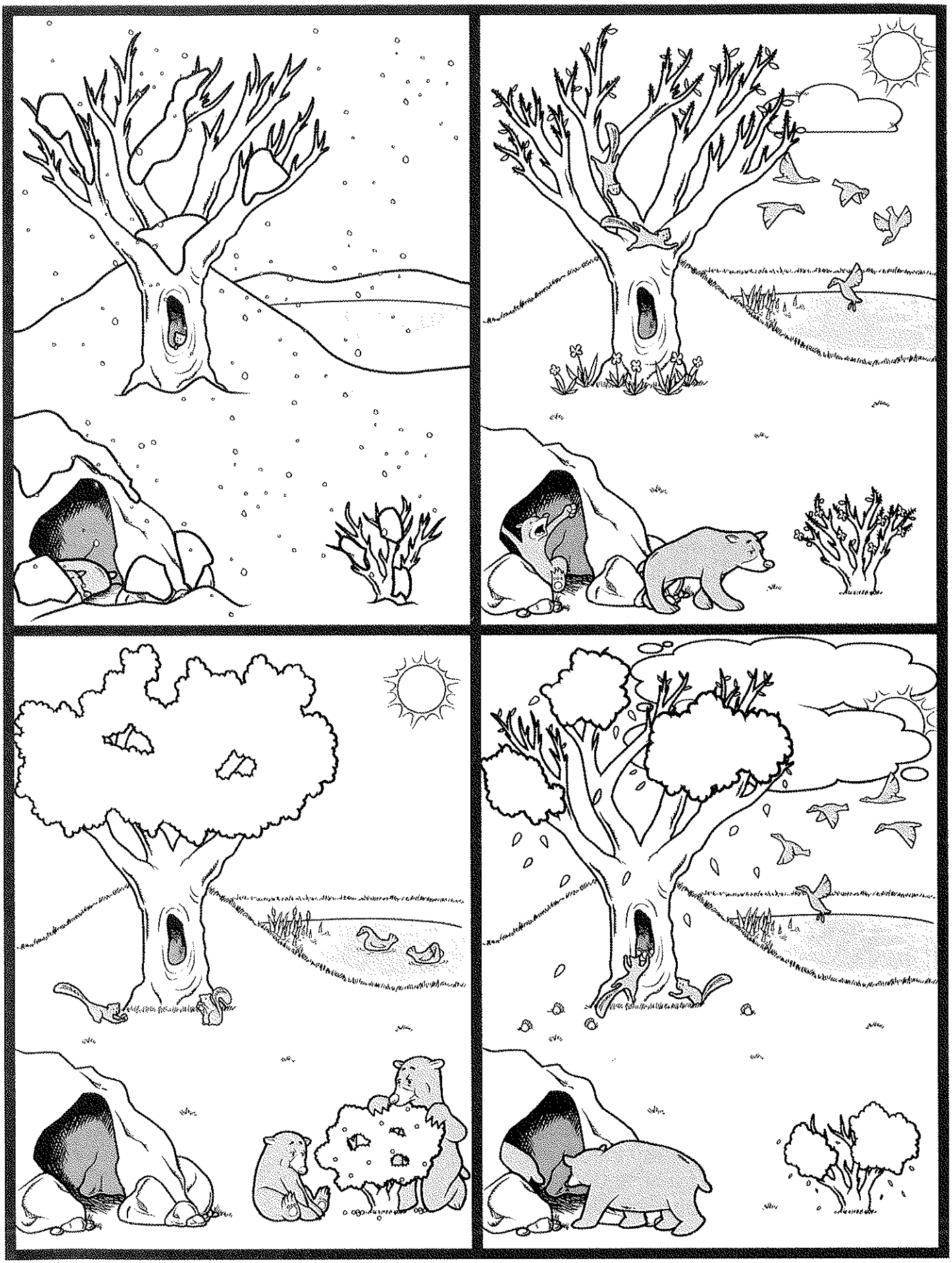
The start of fall brings cooler weather. The days get shorter. Leaves on some trees change color and fall from the trees. Some animals gather food for the winter. Other animals migrate. They move south to warmer weather.

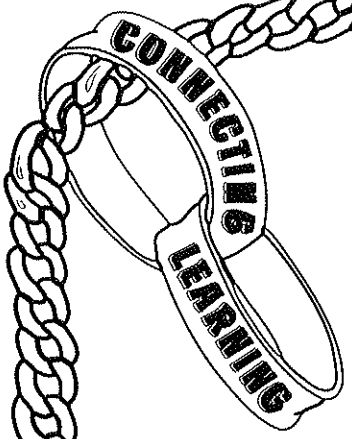
Summer means warm weather. The days are long. Animals have migrated north to the places they left in fall. Plants are producing food. Young animals are growing and learning to survive.

Winter begins at the end of December. In many places, this means snow. Food is harder for animals to find. Many animals hibernate. They are inactive all winter. Some animals stay active. They have special features to help them survive.

Spring begins in March. The weather warms up. The days get longer. The snow melts. Flowers start to bloom. Plants start to grow again. Animals become active again.

Four Seasons Page





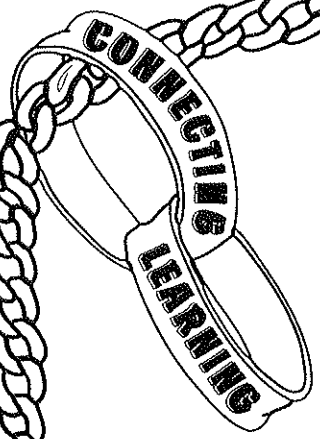
Connecting Learning

1. What are the ducks (squirrels, bears) doing in this picture?

2. Why during this season might the ducks (squirrels, bears) be doing what they are doing?

3. How do the plants look in this picture? How does that help you identify the season?

4. How has what the ducks (squirrels, bears) are doing in this picture changed from what they were doing during the season before this one?



Connecting Learning

5. What changed in the season to make the ducks (squirrels, bears) change what they are doing?

6. How have the plants changed? What does this tell you?

7. What did you do to illustrate the seasons in your own pictures?

8. Was the other person able to tell which season was represented by each of your pictures? Why or why not?

9. What are you wondering now?

Have Your Fun, and Be Considerate Too!

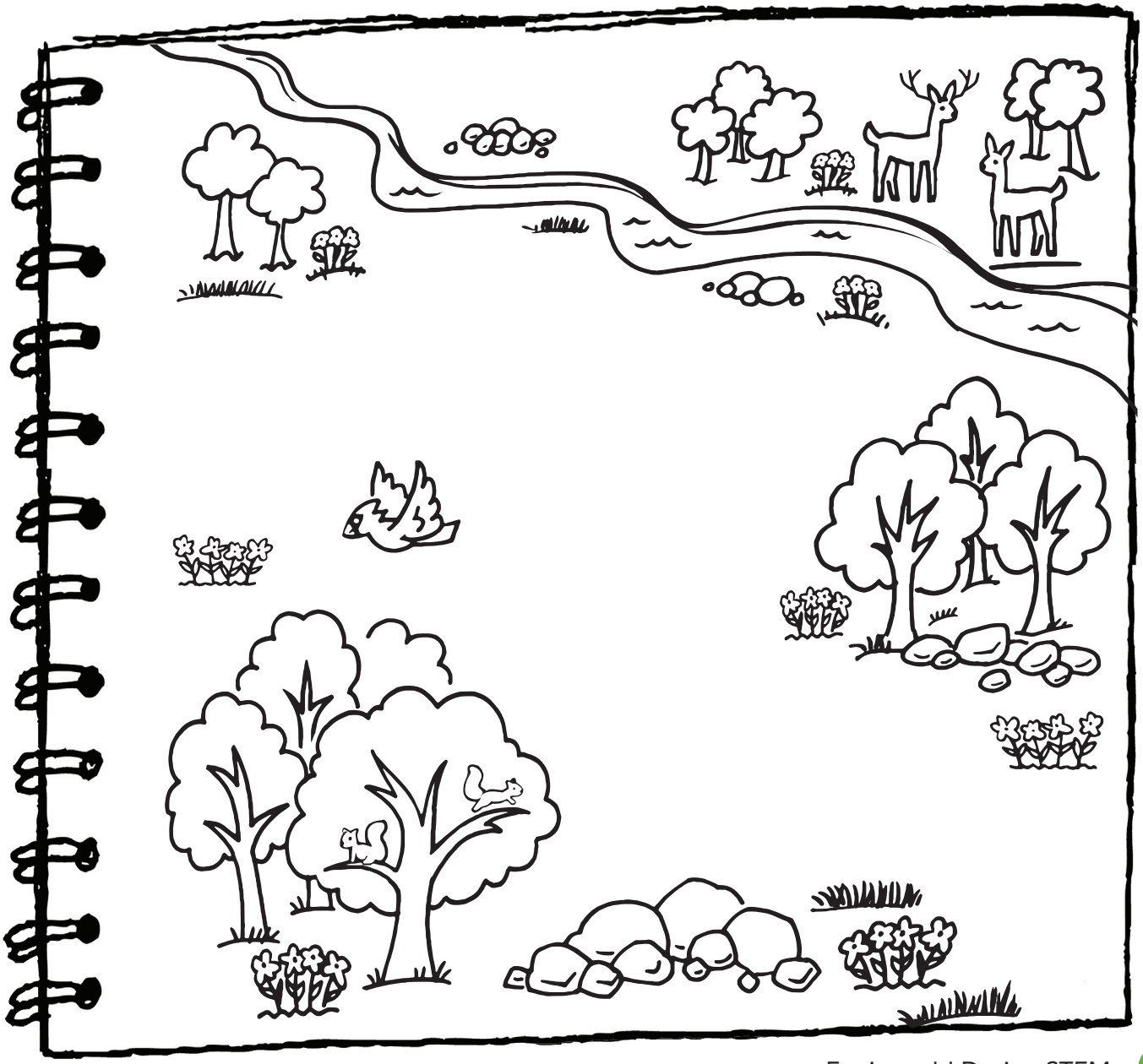
People use outdoor parks and recreation areas as a place to have fun or to enjoy nature. This ski and snowboard park is in a natural environment. Skiers zip past snow-covered trees. The park is home to various plants and animals. Many parks are designed to protect the natural environment. The plants and animals that live there are an important part of the park.

Design It

littleBits CHALLENGE

Design a recreation area to fit the natural environment shown in the picture. Make sure your recreation area protects the plants and animals that live there. Draw your design on the picture. Label the parts.

? How does your design protect the plants and animals that live in the environment?



Social Studies

Resources

Words to Know

FOLDABLES®

Common Core Standards
RI.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.

The list below shows some important words you will learn in this unit. Their definitions can be found on the next page. Read the words.

government (GUH • vuhrn • muhnt) (p. 141)

Constitution (kahn • stuh • TOO • shuhn) (p. 147)

President (PREH • zuh • duhnt) (p. 147)

mayor (MAY • uhr) (p. 150)

citizen (SIH • tuh • zuhn) (p. 152)

civility (suh • VIH • luh • tee) (p. 158)

volunteer (vah • luhn • TIHR) (p. 160)

cooperation (koh • ah • puh • RAY • shuhn) (p. 162)

The **Foldable** on the next page will help you learn these important words. Follow the steps below to make your Foldable.

Step 1  Fold along the solid red line.

Step 2  Cut along the dotted lines.

Step 3 Read the words and their definitions.

Step 4  Complete the activities on each tab.

Step 5 Look at the back of your Foldable. Choose ONE of these activities for each word to help you remember its meaning:

- Draw a picture of the word.
- Write a description of the word.
- Write how the word is related to something you know.

(t) John Neubauer / PhotoEdit, (b) Jon Helgason/Alamy

FOLD

A **government** is all the people who run a community, state, or country.

Write a sentence using the word *government*.

The **President** is the leader of our country.

Circle the words that belong with the word *President*.

map	nation	street
metal	cause	leader

The **Constitution** is the plan for our nation's government.

Write a sentence using the word *Constitution*.

A **mayor** is the leader of a local government.

Write a sentence using the word *mayor*.

A **citizen** is a person who is a member of a community, state, or country.

Describe a citizen in your own words.

Civility is showing respect and kindness.

Write a synonym for the word *civility*.

A **volunteer** is a person who chooses to do a job without getting paid.

List two places in a community where people volunteer.

_____ _____

Cooperation is working together to meet goals.

Write about a time you used cooperation.

government	government
CUT HERE	
President	President
Constitution	Constitution
mayor	mayor
citizen	citizen
civility	civility
volunteer	volunteer
cooperation	cooperation

Primary Sources

NGSS Standards
SS.3.A.1.1 Analyze primary and secondary sources.

Documents

Documents are important primary sources. They tell us about the laws and agreements people made in the past. You can use documents to understand more about our laws and our government. One way to study documents is to read them. You can also use video or audio recordings to listen to what was written in a document.

In this unit, you will learn about our government's documents. One of these documents is the Preamble—the beginning of the U.S. Constitution. It is important because it explains what our government is supposed to do. As you read, think about when and why the Preamble was written. Why do you think it is an important document?

Primary Source

We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.

—The Preamble of the U.S. Constitution

DBQ Document-Based Questions

Read the Preamble on the right. Then complete the activities below.

1. **Circle the words that explain who wrote the Preamble to the Constitution.**

2. **How can reading documents help you learn more about our laws?**

Lesson 1

Government

Essential Question

Why is government important?

What do you think?

Words To Know

Draw a symbol on each line to show how much you know about the meaning of each word.

? = I have no idea!
▲ = I know a little.
★ = I know a lot!

____ **government**

____ **representative democracy**

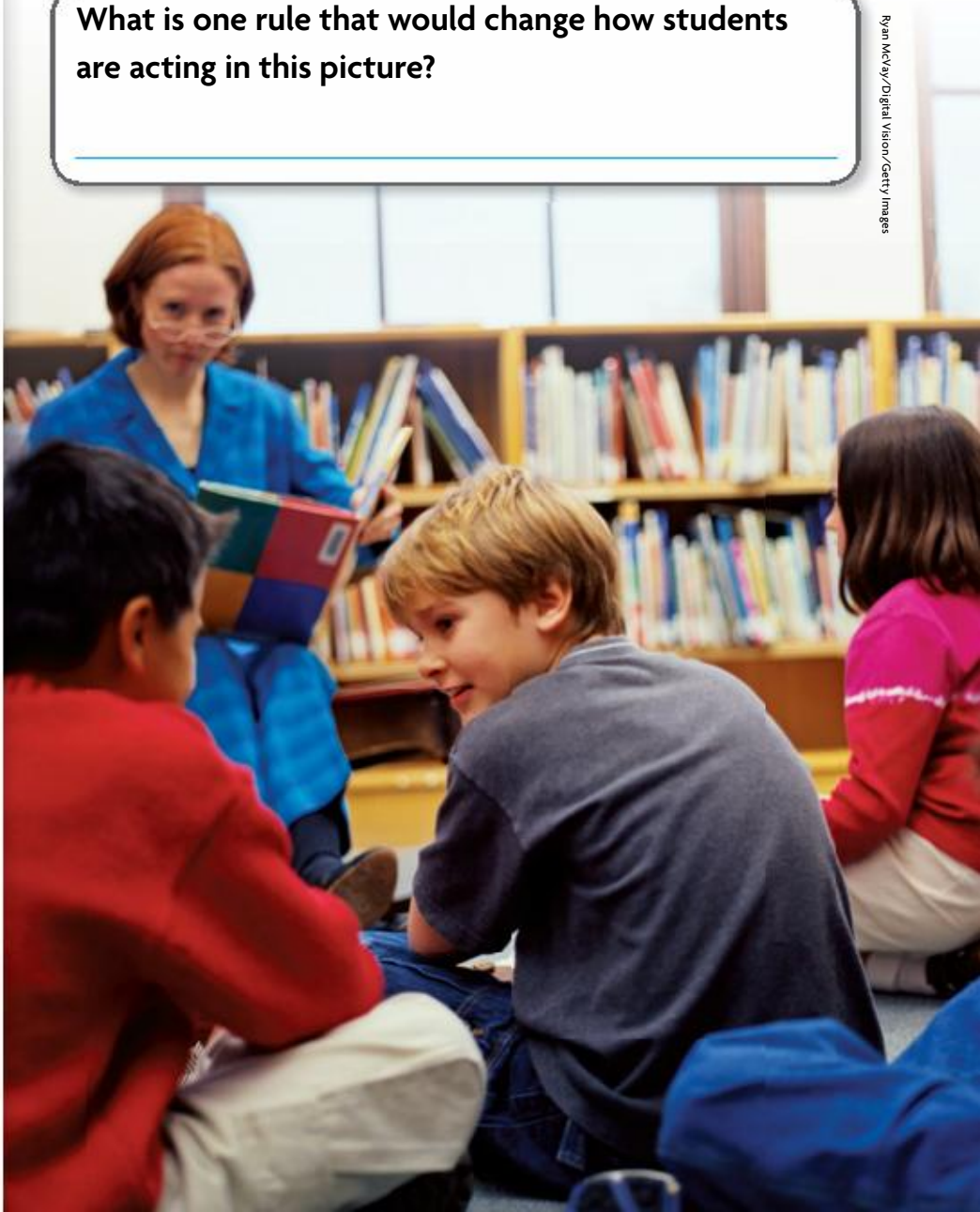
____ ***establish**

NGSS Standards
SS.3.A.1.3 Define terms related to the social sciences.
SS.3.C.1.1 Explain the purpose and need for government.

Rules and Laws

Have you ever been in a classroom discussion where everyone was talking at once? Maybe you had something you wanted to say, but nobody was listening. Or maybe you couldn't hear because of all the noise. It's hard to pay attention when we all talk at once. It is a lot easier to discuss things when people take turns speaking. Classroom rules help us have better discussions. They also help us get along in other ways at school.

What is one rule that would change how students are acting in this picture?



Ryan McVay/Digital Vision/Getty Images

Communities have rules, too. These rules are called laws. Laws come from our **government**. A government is all the people who run a community, state, or country. Governments make laws to keep communities safe, healthy, and organized. What rules do you follow to stay organized at school?

The people pictured on this page are following laws. Write why each law is needed below each picture.

Draw a picture of you following a law.

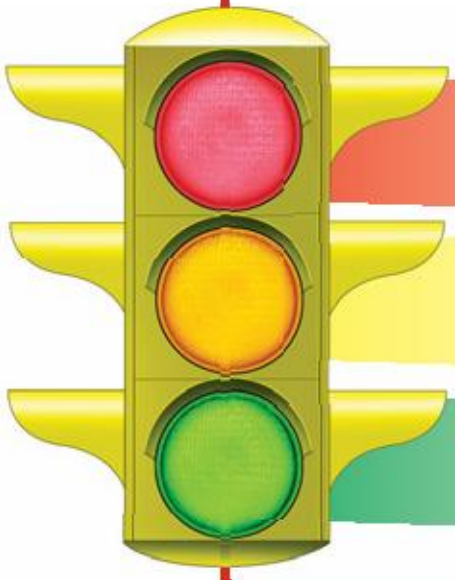
NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government.

Safety and Services

You know that cars must stop at red lights and may only drive ahead on green lights. That's a law the government created. What would happen if drivers did not obey this important law? People might have accidents and get hurt.

Traffic signs show laws, too. A driver must stop his or her car at a red stop sign. A yellow sign with a person in a crosswalk shows drivers that people may be crossing the road ahead. Our government creates these signs and laws to help protect people. These laws promote safety and organization.

Traffic Light Facts!



Driving through a red light can cost a driver over $300!

How long a yellow light stays lit depends on the speed limit.

Green doesn't mean "go"—it means "cross with caution."

THINK • PAIR • SHARE
Think about how your street sign would keep people safe and organized. Share your ideas with a partner.

Like traffic lights, street signs help us stay safe. Design your own street sign below.

Our government doesn't just promote safety and organization by creating laws. It also provides many different services. Police officers keep streets, highways, and neighborhoods safe. Firefighters protect us and our property from fire damage. City workers clean our streets and collect garbage, which helps to keep us healthy. Just imagine what our lives would be like if trash piled up in the street!

Some government services help people do work or improve their lives. The United States Postal Service delivers our mail all over the world. Public libraries across our country provide access to information. They are paid for by our government. Public schools are provided by the government, too, to make sure everyone gets an education!

Write the service that is being provided on the line below each picture.

Reading Skill

Meaning of Words

Promote is a word that means to support or put forward. What is one rule you could promote in your school?

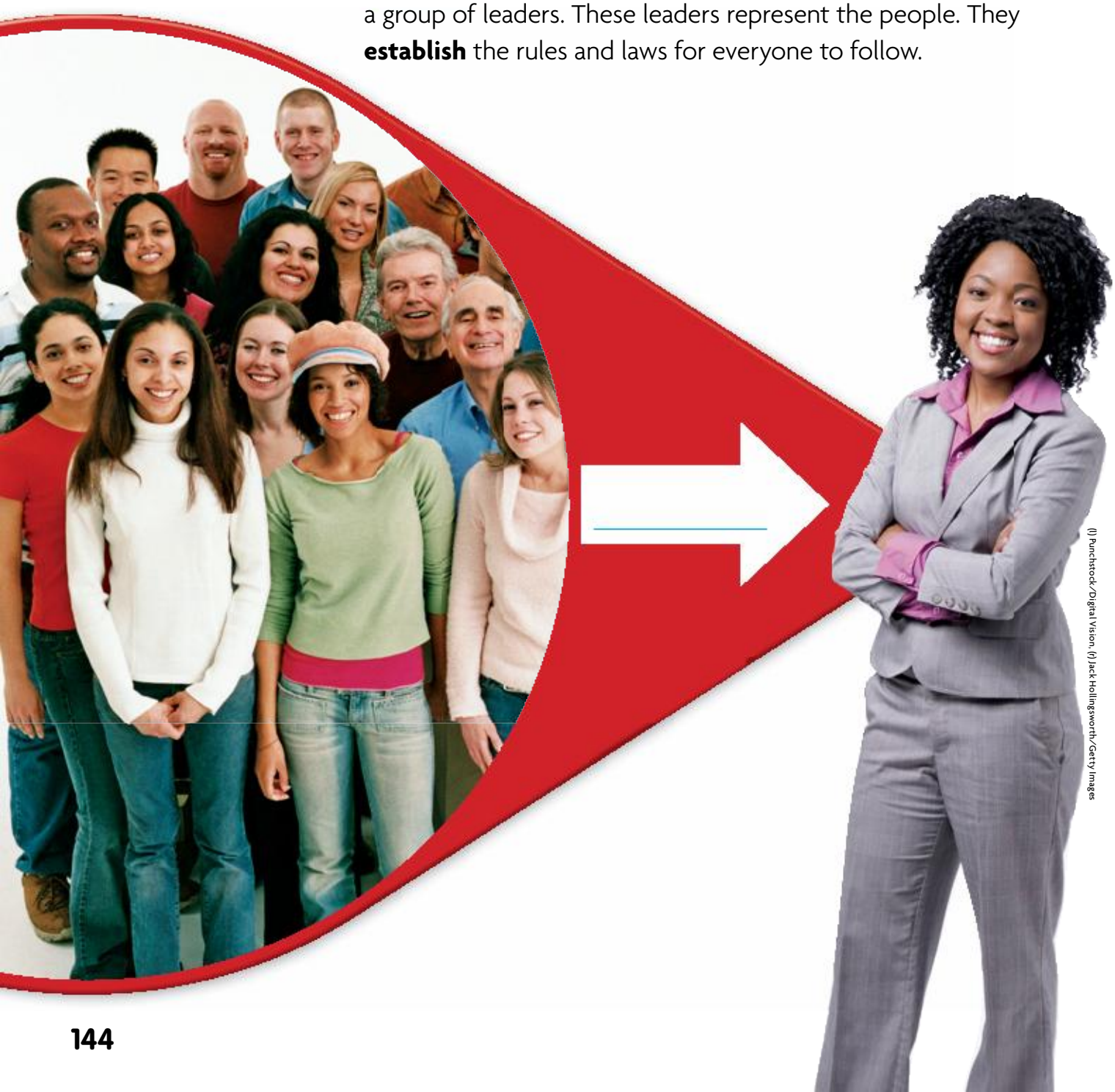
NGSS Standards
SS.3.C.1.2 Describe how government gains its power from the people.

People Power

It might seem like our government makes all the laws, and the people don't have any say. But that isn't true! In our country, the government gains its power from the people. How does this work?

When the Founders of the United States were creating a new government, they decided the government should be run by the people. The government they created is a **representative democracy**. In a representative democracy, the people vote for a group of leaders. These leaders represent the people. They **establish** the rules and laws for everyone to follow.

How do the people choose their leaders? Write it on the arrow!



(l) Punchstock/Digital Vision, (r) Jack Hollingsworth/Getty Images

Get Out and Vote

Now we know that government leaders are elected by the people. But how do they keep their jobs as leaders? If people think their leaders are doing a good job, they vote for them again. If people think their leaders are doing a bad job, they vote for someone else. One day, you will be able to vote. The people you vote for will make laws that affect you!

What would our government be like if the people didn't elect their leaders?

▲ **Today almost every legal resident of the United States who is 18 or older can vote.**

(l) Bob Daemmrich/PhotoEdit, (r) TongRo Image Stock/Jupiter Images

Lesson 1

Essential Question **Why is government important?**

Go back to *Show As You Go!* on pages 132–133.

Lesson 2

Three Levels of Government

Essential Question

How are people governed?

What do you think?

Words To Know

Circle the words you know. Put a **?** next to the words you don't know.

Constitution

***entire**

President

supreme

governor

mayor

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government.
SS.3.C.3.1 Identify the levels of government (local, state, federal).

Working for the People

In the United States, there are three levels of government. We have local government, state government, and federal government, which is government for the whole country. Each level of government has its own leaders who are elected by the people.

Local governments are needed to make laws for our communities. Local governments include counties, such as Broward, or cities, such as Tampa. Like Florida, every state has its own state government. Florida's state government is found in our state capital—Tallahassee. The federal government is in our nation's capital—Washington, D.C.

Draw a line to match each level of government to its correct location.

Federal Government •	• **Tampa**
Local Government •	• **Florida**
State Government •	• **Washington, D.C.**

A Plan for Government

Our country's first leaders wanted to establish a plan for our national government that would keep people safe and free. So, they wrote the United States **Constitution**. This document contains the most important laws that everyone in our country must follow. It also explains how the government is organized. The Constitution says that our **entire** country is to be led by a leader called the **President**. The laws in the Constitution also protect our basic freedoms, or rights. Here are some of our rights found in the Constitution:

DID YOU KNOW?
The U.S. Constitution was written in 1787. It is the oldest Constitution still in use by any country in the world.

- *The right to practice any religion.*
- *The right to meet peacefully in groups.*
- *The right to say what we think.*
- *The right to write what we think.*
- *The right to be treated fairly under the law.*

(bkgd) Jon Helgason/Alamy

Local and state governments must protect these rights. This is because the U.S. Constitution is the **supreme** law of the land. The word *supreme* means the most important. This means the U.S. Constitution includes laws that everyone in the United States must follow.

Reading Skill

Ask and Answer Questions **How was the government of the United States established?**

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government. **SS.3.C.1.3** Explain how government was established through a written Constitution. **SS.3.C.3.4** Recognize that the Constitution of the United States is the supreme law of the land.

State Government

NGSS Standards
SS.3.C.3.1 Identify the levels of government (local, state, federal). SS.**3.C.3.3** Recognize that every state has a state constitution.

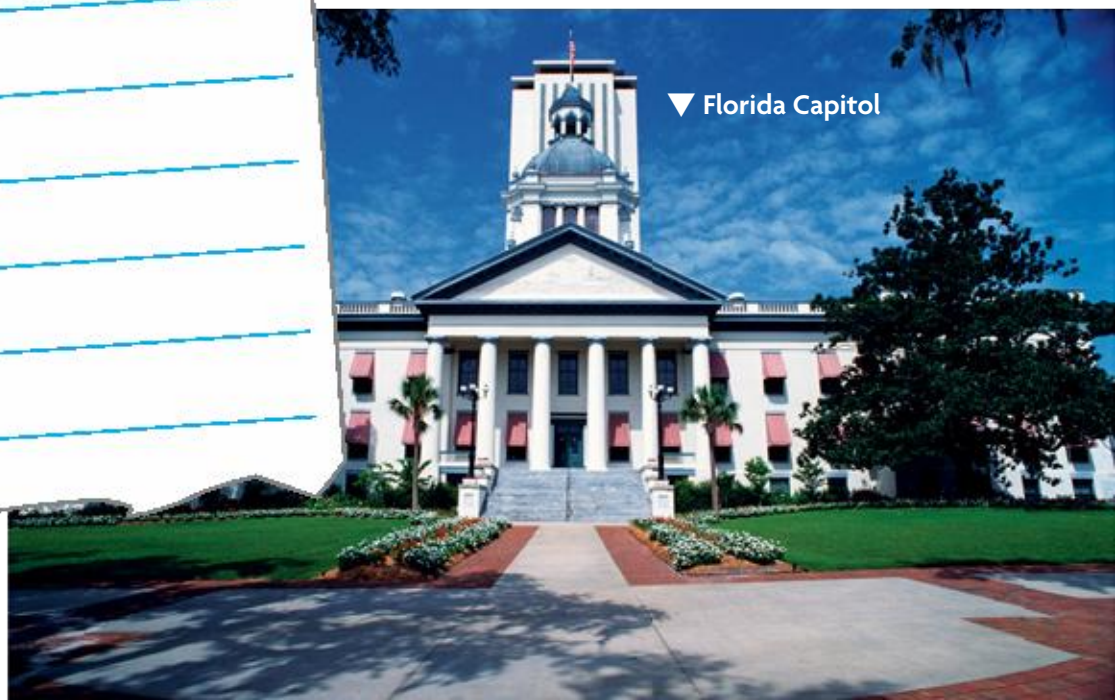
Each state has its own constitution, too. State constitutions are a lot like the U.S. Constitution. All state constitutions have to follow the laws in the U.S. Constitution. However, each state has its own needs that might be different from the needs of the country. Because of this, each state constitution has rules and laws that are special for that state. For example, the Florida Constitution has special rules about the Everglades.

State constitutions say that every state should have a **governor**. The governor is the leader of a state and has many different jobs to do. The governor of Florida makes sure Florida's state laws are followed and decides how to spend state money. The governor decides how much money to spend on programs that help make Florida a better place to live, work, and play.

Office of the
Governor of Florida

Today's Date _____

Make a list of the governor's responsibilities on the note paper.



▼ Florida Capitol

Photodisc / Getty Images

People in communities pay taxes. A tax is money paid to the government. State governments collect taxes, too. This money pays for services provided by Florida's government. These include keeping highways safe and clean. States also run health programs and state colleges. We are lucky because the state also gives cities and towns money to help buy books and software for their local schools!

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government.

State governments also work to protect the environment. States set aside land to preserve natural resources or to protect plants and animals. This means houses or other buildings cannot be built on the land. Florida's state parks, such as the Suwannee River Wilderness Trail, are places where visitors can see wildlife and enjoy the outdoors. State parks are run and paid for by state governments.

Match the numbers on each picture with the correct Florida state service.

Highway Maintenance _____

State Parks _____

Public Education _____

(tr) Florida Photographic Collections, (mr) Dennis MacDonald / Alamy, (br) Digital Vision / Getty Images

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government. **SS.3.C.3.1** Identify the levels of government (local, state, federal). **SS.3.C.3.2** Describe how government is organized at the local level.

Local Government

Who hires fire fighters and police officers? And who makes sure that the trash is picked up and checks that the traffic lights work? Your local government does all these things! Local governments are made up of the people who run a county, city, or town. Local government is the level of government that most closely affects our everyday lives.

The leader of a city or town is usually called a **mayor**. Mayors make sure that local laws are followed. They work to solve problems that affect their community. With the help of others in local government, they also decide how a community's tax money is spent. People who live and work in a community pay taxes to local governments. Local governments then use the tax money to pay for the services the community needs. They hire people to pave roads, collect trash and recyclables, and run libraries and parks.

Reading Skill
Cause and Effect **Underline** the effect of paying taxes to local government.

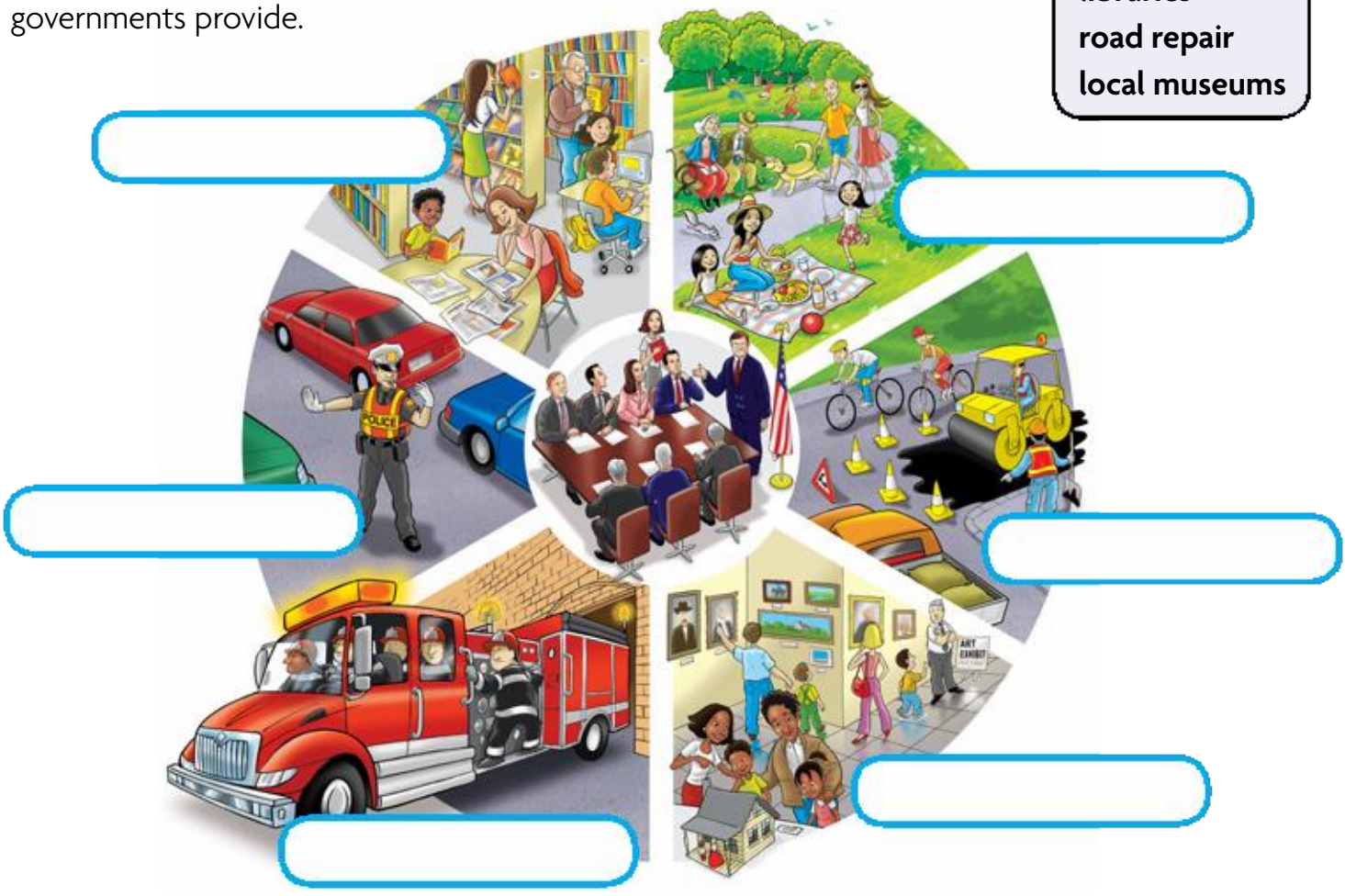
Stockbyte/Getty Images

Local Government in Action

The mayor and other city leaders decide how money should be spent. This diagram shows some of the services local governments provide.

Use these words to label the diagram.

traffic safety
parks
fire protection
libraries
road repair
local museums



Lesson 2

Essential Question How are people governed?

Go back to *Show As You Go!* on pages 132–133.

Lesson 3

Local Government in Florida

Essential Question

How are people governed?

What do you think?

Words To Know

Circle the words you know. Underline the words you don't know.

citizen

***method**

council

legislative branch

executive branch

judicial branch

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government. **SS.3.C.3.1** Identify the levels of government (local, state, federal). **SS.3.C.3.2** Describe how government is organized at the local level.

Solving Problems

This is Jill. She is a third-grade student who lives in Tampa, Florida. Tampa is one of the largest cities in our state. Jill is a **citizen** of Tampa. A citizen is a person who is a member of a community, state, or country. Citizens often work with their local government to solve problems in their city.

Jill has a problem that only the local government can fix. Read her story and see how each branch of Tampa's local government helps her with her concern.

Traffic laws help keep this intersection safe.

Reading Skill

Analyze Visuals

What details in the picture show traffic laws?

Like the intersection above, the corner where Jill's school bus stops is very busy. Jill thinks her bus stop is not safe. Cars drive by without stopping. Crossing the street near her bus stop is very dangerous.

Jill talks about the problem with her father. Jill and her father think a stop sign will make the corner safer. It is a law that cars must stop at a stop sign. But Jill and her father cannot put a stop sign up on their own. One **method** for improving community safety is to talk to local government.

Draw a picture to show what happens next.

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government.
SS.3.C.3.2 Describe how government is organized at the local level.

What the People Want

First, Jill and her father talk to their neighbors. They explain the problem. They ask their neighbors to sign a petition to give to the local government. A petition is a special letter that many people sign. The petition says that people want a stop sign at the corner near Jill's bus stop.

Write the beginning of Jill's petition.

Next, Jill and her father go to a city **council** meeting in Tampa. A council is a group of people who make the laws for a community. The city council is the **legislative branch** of local government. The legislative branch makes the laws. Some cities have a city commission instead of a council, but they do the same kind of work.

The city council often meets to talk about city problems. The council makes laws to help solve these problems. The people of the city must follow the laws.

Citizens may speak about problems at council meetings. Jill is going to speak at today's council meeting. She wants to explain the problem in her neighborhood and ask the council for a stop sign.

▲ **Like Tampa, Miami Beach has a city council.**

Reading Skill

Point of View

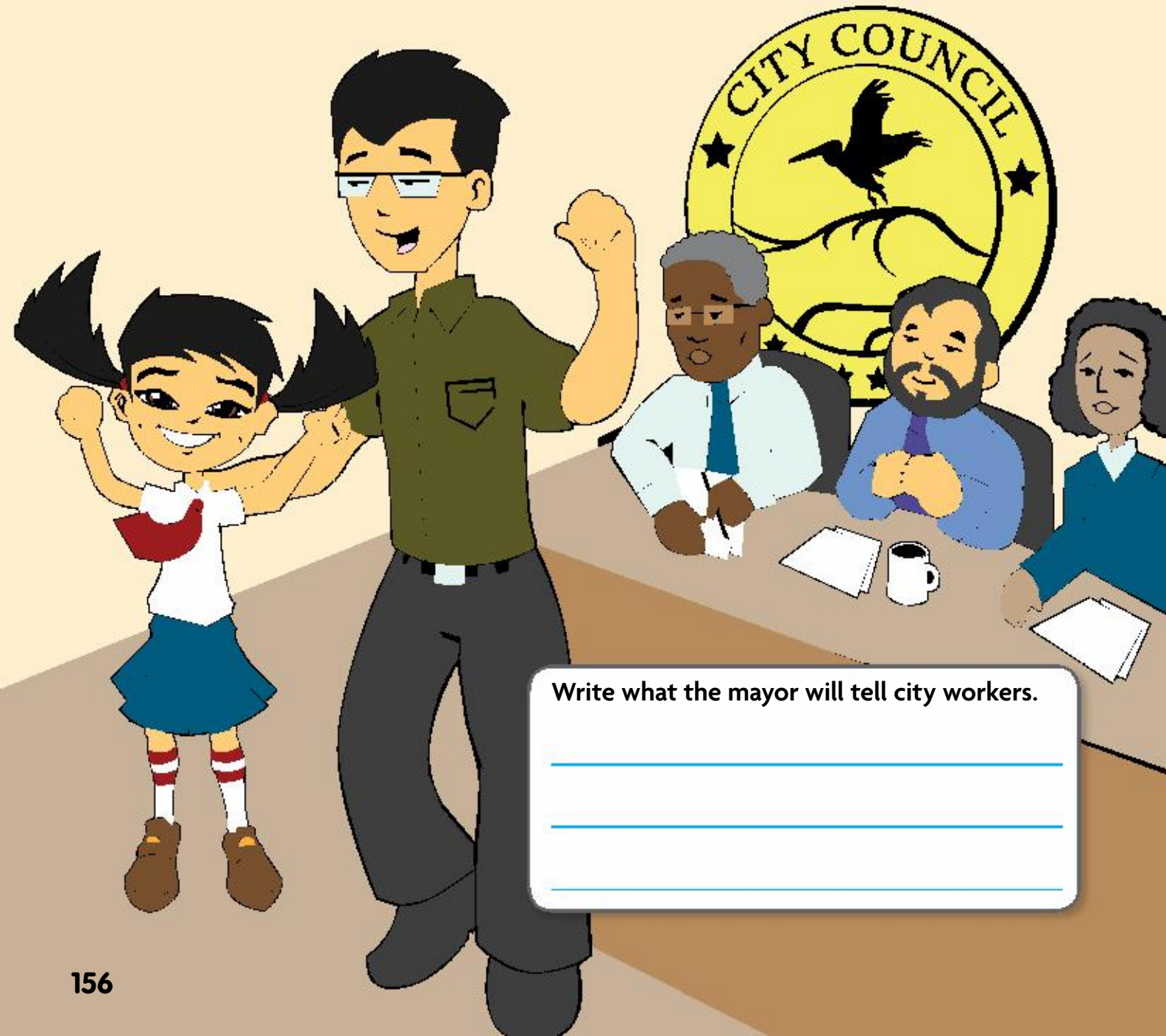
A point of view is what the author is trying to explain or describe. Sometimes our opinion can be different from that of another person. Write the point of view of someone who does not agree with Jill.

NGSS Standards
SS.3.C.1.1 Explain the purpose and need for government.
SS.3.C.3.2 Describe how government is organized at the local level.

Getting Things Done

The city council listens to Jill's speech. They read the petition other citizens have signed. Then they talk about the problem. The city council decides to hold a vote on the new stop sign. Every member of the council votes to approve Jill's plan!

The mayor is at the city council meeting. As you learned in Lesson 2, mayors carry out local laws. Mayors are in the **executive branch** of local government. The executive branch makes sure laws are followed. After Jill's plan is approved, the mayor makes sure the new stop sign is placed.



Write what the mayor will tell city workers.

Today, cars must stop at the stop sign by Jill's bus stop. People who don't stop are breaking a law. They must pay a fine or go to court. Courts are part of a local government's **judicial branch**. The judicial branch decides if a law has been carried out fairly.

Courts are run by judges. Each county, like Hillsborough in Florida, has a county court. If a police officer stops a car for driving by Jill's stop sign without stopping, the court will decide if the driver was breaking the law. The state of Florida has courts, too. State courts are called circuit courts.

Thanks to Jill, it is now safer to cross the street by her bus stop. Jill is glad that her local government helped her solve a problem in her community. What problems can you help solve in your community?

In the chart, write the main task of each branch of government.

Branches of Government

	**Legislative**
	**Executive**
	**Judicial**

Lesson 3

Essential Question **How are people governed?**

Go back to *Show As You Go!* on pages 132–133.

Lesson 4

Good Citizens

Essential Question

How do people affect communities?

What do you think?

Words To Know

Draw the symbol next to each word to show how much you know about the meaning of the word.

? = I have no idea!
▲ = I know a little.
★ = I know a lot.

___ **civility**

___ ***conduct**

___ **volunteer**

___ **cooperation**

___ **civic virtue**

NGSS Standards
SS.3.C.2.1 Identify group and individual actions of citizens that demonstrate civility, cooperation, volunteerism, and other civic virtues.

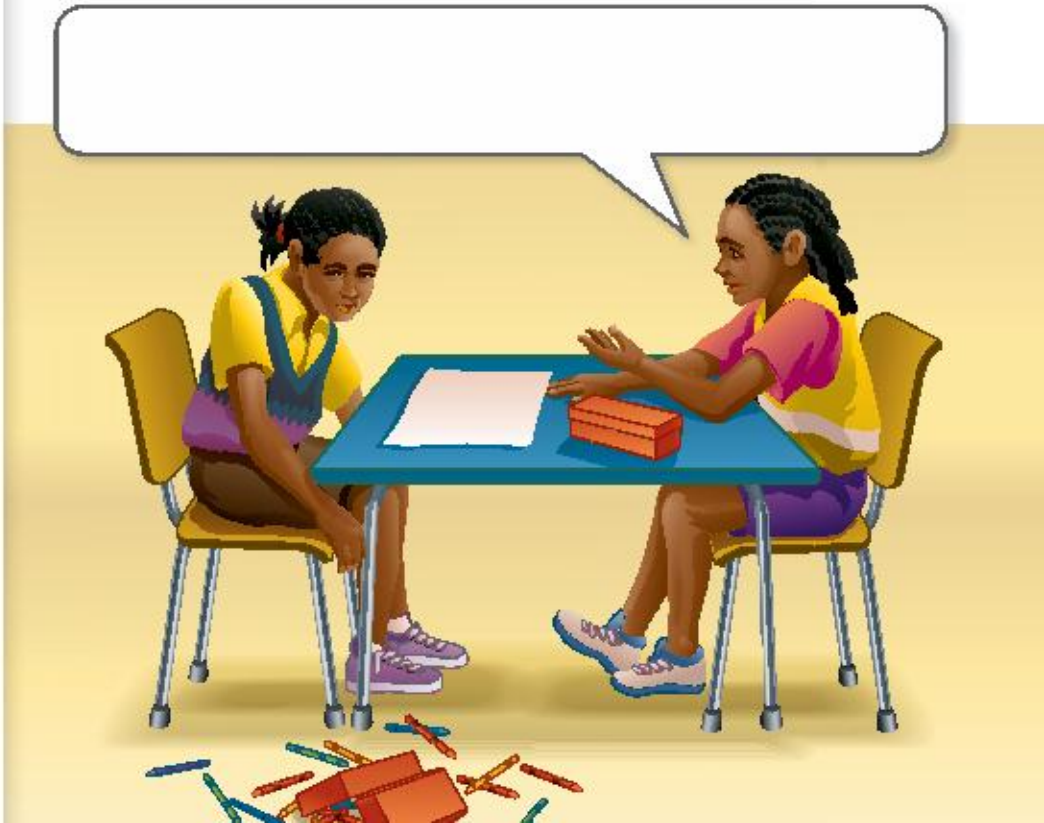
Being a Good Citizen

In the last lesson, you read about how Jill is a good citizen. She helped get a new law passed in her community. The new law will keep people safe. People in her community must obey the new law. Obeying laws is one way to be a good citizen.

Good citizens can help people in many other ways. We can help others at home, at school, or in our communities. You will learn more about helping others in this lesson.

1. **Think about the picture below. Fill in the speech bubble with what a good citizen might say.**

2. **Civility means showing respect and kindness. How does your conduct show civility?**



Responsibility

When citizens follow rules and laws, they are showing responsibility. You are responsible when you follow rules at home or in school. Some rules and laws are made to keep us and others safe. It is everyone's responsibility to follow laws in their communities.

Andrew listens carefully when his teacher asks a question. He raises his hand when he knows the answer. Andrew is showing responsibility by following classroom rules.

Jenna walks her dog in the dog park. She keeps her dog on a leash. Jenna is showing responsibility by following park rules.

Look at this sign about skateboarding. Explain how this law keeps people in the community safe.

These citizens are helping their community.

Leland Bobbe/Digital Vision/Getty Images

Making a Difference

You can make a difference at home, at school, or in your community. As you learned, showing responsibility is one way to be a good citizen. Voting for our leaders is a way to be a good citizen, too! Voting is a way for people to be involved and to make a difference. If you are a citizen, you will be able to vote one day. Remember, the people you vote for will make the laws that affect you.

Underline who will make the laws that affect you.

Another way people can be involved and make a difference is to **volunteer**. A volunteer is a person who chooses to do a job without getting paid. People can volunteer to do many different things. Volunteers clean up neighborhoods and parks. Some volunteers collect canned food for local food banks. A food bank is a place that helps people who don't have enough to eat.

NGSS Standards
SS.3.C.2.1 Identify group and individual actions of citizens that demonstrate civility, cooperation, volunteerism, and other civic virtues.

Make a list of ways you can volunteer.

1. _____

2. _____

3. _____

Maya wanted to volunteer to make a difference in her community. Read below to find out how Maya organized a book drive to collect books for a local hospital.

First, I asked the principal if I could organize a book drive at school. Together we decided our slogan for the book drive would be "A Good Book Is Good Medicine."

Next, my friends and I made posters and decorated boxes. We wanted people to know we were collecting books for Children's Hospital.

Finally, I sorted the books and took them to Children's Hospital. I made a big sign to say thank you to everyone who donated books to my book drive.

Draw a picture that shows Maya giving books to children at the hospital. Write how Maya feels about being a volunteer.

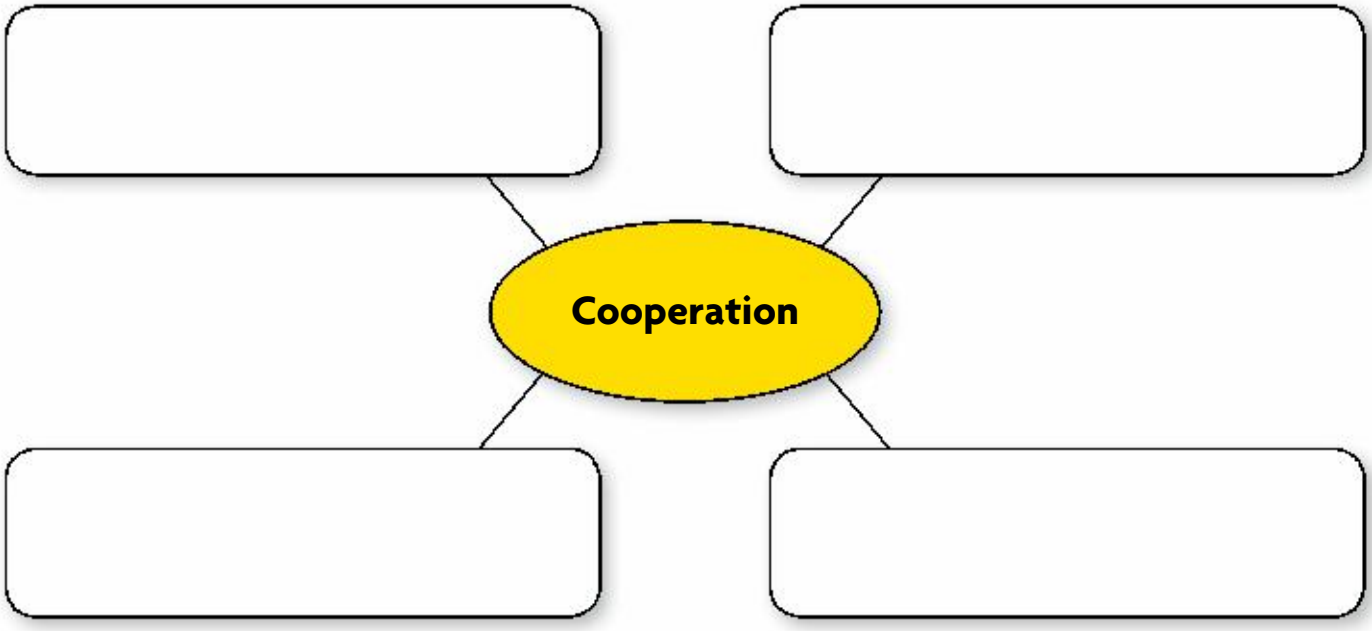
Royalty Free / Corbis

▲ We cooperate by taking turns.

Working Together

Think about Maya's book drive. Maya and her principal shared their ideas to create a slogan for the book drive. To make posters and decorate boxes, Maya and her friends had to share glue and markers. Sharing ideas and supplies are examples of **cooperation**. Cooperation means working together to meet goals.

Fill in the word web with examples of how people cooperate.



In this lesson, you learned about **civic virtues**. Civic virtues are people's actions that show civility, responsibility, and cooperation. As you have learned, being a volunteer is a civic virtue, too.

There are groups in Florida that work with volunteers. Habitat for Humanity Orlando is a volunteer organization that builds houses. Families who do not have the money to build their own house help the volunteers. The family and the volunteers cooperate to build the new house together.

Reading Skill

Cause and Effect

Underline some effects of people working together.

What civic virtues do you have?

Volunteers work together for Habitat for Humanity. ▼

John Neubauer / PhotoEdit

NGSS Standards

SS.3.A.1.3 Define terms related to the social sciences. **SS.3.C.2.1** Identify group and individual actions of citizens that demonstrate civility, cooperation, volunteerism, and other civic virtues.

Lesson 4

Essential Question **How do people affect communities?**

Go back to *Show As You Go!* on pages 132–133.

UNIT 4

Wrap Up

networks

There's More Online!
Games Assessment

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Write a letter on each line to match the words and phrases with their descriptions. Then write each word or phrase in the correct box it belongs in below.

____ **1.** legislative branch	**A.** a form of government where people vote for their leaders
____ **2.** civility	**B.** the group of government leaders who make laws
____ **3.** state constitution	**C.** working together to meet goals
____ **4.** government services	**D.** someone who does a job without being paid
____ **5.** representative democracy	**E.** to show respect and kindness
____ **6.** local government	**F.** the people who run a county, city, or town
____ **7.** cooperation	**G.** police officers, firefighters, public libraries, and public schools
____ **8.** volunteer	**H.** document which contains the rules and laws for Florida

Government	Good Citizens

BIG IDEA

Unit Project

Imagine that you have been elected to the class government. Your job is to write a new constitution for your class. What rules will you include? Who are the leaders, and what are their roles? Use the information you learned in this unit to help you write your constitution. Before you begin writing, look back at pages 132 and 133 to review your notes. As you work, check off each task.

Your constitution should...	Yes, it does!
explain why rules are needed.	☐
identify the leaders in your school.	☐
describe the roles of those leaders.	☐
explain the rights of administrators, teachers, and students.	☐
explain how those rights are protected.	☐
promote civility, volunteerism, and cooperation.	☐

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Think about the Big Idea

BIG IDEA Rules provide order.

What have you learned about how rules provide order?

Read the passage "Checks and Balances" and then answer Numbers 1 through 3.

Checks and Balances

1 THE government of the United States is divided into three branches. Each branch has its own job to do. The legislative branch (Congress) is in charge of making laws. The executive branch (the President) is in charge of carrying out the laws. The judicial branch (Supreme Court) makes sure the laws follow the Constitution.

2 But each branch also has some power over the other branches. This system, called "checks and balances," was set up by the Founders to ensure that all parts of the government work together for the good of the American people.

3 How does this system work? Each branch is checked by the other two in different ways. For example, the President can say "no" to a bill passed by Congress. This is called a veto. But, Congress can override that veto if they have enough votes. In addition, the Supreme Court may check Congress by stating that a law is unconstitutional. The power is balanced because members of the Supreme Court are selected by the President. In addition, Congress has to approve the President's choices for the Supreme Court.

Now answer Numbers 1 and 2. Base your answers on the passage "Checks and Balances."

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

Part A Why does the U.S. government have a system of checks and balances?

Ⓐ to prevent the government from spending too much money

Ⓑ to make sure each branch works together

Ⓒ to keep the executive branch from carrying out laws

Ⓓ to make sure the judicial branch has the most power

Part B How does the legislative branch check the executive branch?

Ⓐ It can say "no" to a bill passed by the judicial branch.

Ⓑ It can state that a law is unconstitutional.

Ⓒ It can select someone to serve on the Supreme Court.

Ⓓ It can override a veto.

2 What is the meaning of unconstitutional?

"In addition, the Supreme Court may check Congress by stating that a law is unconstitutional." (paragraph 3)

Ⓐ illegal

Ⓑ broken

Ⓒ allowed

Ⓓ extreme