

Fourth Grade Assignment Bundle

Name: _____ Class: _____

Strong For Skeena

By Julia Tozier
2015

Julie Tozier has written for Highlights. In this short story, a boy must help his sled dog after she is seriously injured. As you read, take notes on Matt and Skeena's relationship.

- [1] "Uncle Stan said I can choose five dogs for my sled team when I feel I'm strong enough," I say to Skeena, tossing her some suet.¹ Snow swirls around the fifteen other dogs chained to their houses nearby. "I can choose any dogs except Rudy, Uncle Stan's lead dog. If I could choose Rudy, I wouldn't."

I look into Skeena's blue eyes. "You are going to be my lead dog," I say.

I found Skeena last spring, a stray, matted puppy hunkered² under Uncle Stan's steps. The first time we hooked her to Rudy's towline, Rudy snarled and lunged at her. Now she tolerates Skeena on the line, but barely. I tell Rudy that Skeena saves her energy for running, not fighting, but Rudy usually just growls.



"You are going to be my lead dog." by Sandy Rabinowitz is used with permission.

Skeena always listens to me, so I tell her things I don't tell anyone else. "Uncle Stan knows that I'm already strong," I say. "I'm taller than anyone else in seventh grade. But he says being strong means something else, too, and when I have that strength I will know."

- [5] I leave Skeena to chew on that thought along with her suet because I'm freezing and I have six more dogs to feed.

I plan to jog home, a half-mile down the road. I'm barely out of Uncle Stan's driveway when Dr. Saritaka's pickup truck comes rattling down the road. He stops beside me and I jump in, rubbing my hands over the heater.

"Matt," he says, "I hear you are your uncle's dog sitter for the weekend."

I nod. I like Dr. Saritaka, which is just fine because he happens to live smack-dab beside our house. He's a veterinarian, which explains his interest in my uncle's dogs.

"Uncle Stan said to call you if anything happens," I say.

1. the fat of animals used to make food
2. **Hunker (verb):** to squat or crouch down low

[10] "This is a very good weekend to do that, since I'll be home for all of it," he says.

That night I hear the distant barking of Uncle Stan's dogs. I imagine that a deer took a shortcut across his backyard, setting them off. I fall asleep, dreaming of my dog team, with Skeena leading.

In the morning the wind beats our house as I pull on the woolens,³ hat, and coat Mom laid out for me. She knows I hurry and often don't bother with the warm stuff. She tells me I won't look very cool with my frostbitten⁴ ears flopping like a Labrador puppy's.

I jog to Uncle Stan's house and start feeding the dogs. I start with Kyuk but glance toward Skeena's house. I always give her extra attention, telling her what she needs to know to be my lead dog.

Her broken chain is lying like a snake on the frozen snow.

[15] When I see her, lying on her side near the back of her dog-house, I run. My knees hit the ground beside her. Her ears are rags, a gash bleeds freely below her right eye, and her fur is clumped with blood.

I run to the garage and grab the first-aid gear and a blanket. I wrap Skeena in the blanket. I try to bandage her gash, but there's too much blood.

I follow her trail of blood with my eyes. It ends at Rudy. I get up to check Rudy; she has teeth marks on her ears, but nothing serious. A piece of Skeena's broken chain and her collar lie tangled with Rudy's chain. Skeena must have broken her chain to chase the wild animal that crossed the yard last night. When their chains became tangled, Rudy must have battered Skeena until Skeena slipped out of her collar and crawled away.

I tell Skeena that I have to get Dr. Saritaka. She is shaking horribly; I can't leave her on the cold ground.

I tuck the blanket around her and hoist⁵ her into my arms.

[20] I stumble to the road. I count my steps and match my breathing to my counting. It's a half-mile. My arms are strong. The wind whips its icy fingers around my head, and my hat flies off.

My ears are doomed.

The wind flings Dr. Saritaka's door right into him. I don't know if he looks surprised from that or from seeing me.

"Matt!" Dr. Saritaka cries. "Lay her here!"

I look at the floor. "No," I say with a gasp. "She needs something soft."

[25] Dr. Saritaka is as fast as the wind as he snaps out a thick towel. I put her down, my arms trembling. I clutch them to my sides because they're floating to the ceiling.

3. clothes made of wool

4. Frostbite is injury to body tissue caused by extreme cold.

5. **Hoist (verb):** to raise or lift something

Dr. Saritaka moves quickly. I lose track of what he's doing as Skeena's eyes lock on mine. They are powerful magnets; I lean close to her. I realize that I'm crying. I look hard into her eyes until my brain hurts. "Skeena," I say, "you are going to be my lead dog."

Her eyes close as Dr. Saritaka gives her a shot. He gives me directions, and I clean her while he stitches the wounds.

I ask Dr. Saritaka the question I have been afraid to ask because Dr. Saritaka always tells the truth. "Will Skeena still be my lead dog?"

"She will be the best lead dog, and you deserve her, Matt."

[30] He looks after her while I leave to tend to the other dogs on this bitterly cold day.

I know what I will tell Uncle Stan when he gets home: "I am strong enough now."

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Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: Which statement best expresses the theme of “Strong for Skeena”?
 - A. Inner strength is just as powerful as physical strength.
 - B. Loss is something that everyone must face eventually.
 - C. You have to be physically strong before you can be mentally strong.
 - D. Humans and animals are capable of having close friendship.

2. PART B: Which detail from the text best supports the answer to Part A?
 - A. “‘Uncle Stan said I can choose five dogs for my sled team when I feel I’m strong enough,’ I say to Skeena” (Paragraph 1)
 - B. “‘I’m taller than anyone else in seventh grade. But he says being strong means something else, too, and when I have that strength I will know.’” (Paragraph 4)
 - C. “My knees hit the ground beside her. Her ears are rags, a gash bleeds freely below her right eye, and her fur is clumped with blood.” (Paragraph 15)
 - D. “I lose track of what he’s doing as Skeena’s eyes lock on mine. They are powerful magnets; I lean close to her. I realize that I’m crying.” (Paragraph 26)

3. What does Matt mean when he compares Skeena’s ears to “rags” (Paragraph 15)?
 - A. Skeena’s ears are soft.
 - B. Skeena’s ears are torn.
 - C. Skeena’s ears are clean.
 - D. Skeena’s ears are ugly.

4. How does paragraph 26 contribute to the overall structure of the story?
 - A. It emphasizes how much Matt and Skeena care about each other.
 - B. It reveals that Skeena may not be able to be a lead dog.
 - C. It stresses how serious Skeena’s injuries are.
 - D. It shows that Matt cares more about Skeena being a lead than her health.

5. How does Skeena’s injury change Matt? Cite evidence from the text in your response.

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. In the story, Matt and Skeena are friends. How did their friendship develop? Describe a friendship that you have had with a pet or animal.
2. How does Matt act bravely when he finds Skeena injured? Why was it important for him to be brave in this moment? Describe a time where your bravery helped someone else.
3. Matt's uncle tells him that he will be able to choose dogs for his sled team when he is "strong enough." What does having inner strength mean to you? How do you develop it? Explain a time when you used your inner strength.

Name: _____ Class: _____

Reading to Max

By Heather Klassen
2016

Heather Klassen has written for Highlights. In this short story, a boy reads to a cat at an animal shelter. As you read, take notes on the relationship between the boy and the cat.

- [1] "This Saturday, we'll be visiting cats at the animal shelter. If you'd like to join us, here's a flyer,"¹ said Ms. Delgado, the school librarian.

Ben loved cats, and he had always wanted one. He hurried to grab a flyer. Then Ms. Delgado added, "We'll be reading to the cats." Ben stopped. Reading was hard. Still, he really wanted to visit the cats, so he took a flyer anyway.

After school, Ben showed the flyer to Dad.

"That sounds great," Dad said. On Saturday, Ben and Dad met some of Ben's classmates and their parents at the shelter.



"Ben started reading, and Max purred." by Renee Kurilla is used with permission.

- [5] "This is Max," the shelter worker told Ben as she handed him a gray cat. Ben carried Max to a beanbag chair. When Ben sat down, Max settled onto his lap.

"Here's my book," Ben told Max. He had taken a book he'd been working on. He started reading, and Max purred. After a few minutes, Ben looked up. Some of the cats stayed on his classmates' laps, but other cats roamed² the room while the kids read.

Ben stroked Max's back. *I'm glad Max is staying and listening to me read*, he thought.

On the way home, Ben told Dad, "Max is the best cat ever."

"I'm glad you two are buddies," Dad said. All week, Ben waited for Saturday. When it arrived, Ben got to read to Max again. Ben read and read while Max purred and purred.

- [10] "What if someone adopts Max?" Ben asked Dad later.

"I guess you'd read to a different cat," Dad said.

But I don't want a different cat, Ben thought.

Ben even told his next-door neighbor, Mrs. Patel, about Max.

1. a piece of paper advertising something
2. **Roam (verb):** to go from place to place without purpose

"Max sounds like a special cat," said Mrs. Patel.

[15] Ben agreed.

Every Saturday, Ben read to Max. "I wish we could adopt Max," Ben said to Dad. He knew they couldn't. Mom had allergies.

Dad nodded. "But it's nice you can see Max at the shelter, right?"

"Yeah," said Ben.

One day at school, Ben realized that reading seemed easier. Still, he was surprised when Ms. Delgado gave him the Most Improved Reader award. "I want to show my award to Max," Ben told Dad.

[20] But on Saturday, Ben couldn't find Max at the shelter. "Someone must have adopted Max. What if I never see him again?" Ben said, frowning. Just then, Mrs. Patel walked into the visitors' room, carrying Max.

"Max *is* a special cat," Mrs. Patel said.

"So I'm adopting him. You can come over every day to visit him."

Having Max next door will be almost like having him as my own cat, Ben thought. He smiled at Mrs. Patel.

"Now we can read every day," Ben told Max as he stroked the cat's back.

[25] Max purred.

Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: What is the main theme of the short story?
 - A. There's nothing harder than losing a close friend.
 - B. With enough practice, you can improve at anything.
 - C. It's important to help animals in need, when you can.
 - D. Humans and animals can offer each other support and friendship.

2. PART B: Which detail from the story best supports the answer to Part A?
 - A. "Ben stopped. Reading was hard. Still, he really wanted to visit the cats, so he took a flyer anyway." (Paragraph 2)
 - B. "When it arrived, Ben got to read to Max again. Ben read and read while Max purred and purred." (Paragraph 9)
 - C. "'I wish we could adopt Max,' Ben said to Dad. He knew they couldn't. Mom had allergies." (Paragraph 16)
 - D. "Still, he was surprised when Ms. Delgado gave him the Most Improved Reader award." (Paragraph 19)

3. How does Ben feel about Max getting adopted?
 - A. He doesn't want to lose his reading buddy.
 - B. He wants Max to find a good family.
 - C. He thinks that Max would miss him a lot.
 - D. He doesn't want Max to be taken from the other cats.

4. How does reading to Max affect Ben?
 - A. He learns to develop better social skills.
 - B. He realizes how much he loves animals.
 - C. He decides he wants to work with animals when he grows up.
 - D. He becomes much better at reading.

5. Why is it important to the story that Ben talks to Mrs. Patel about Max?

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. How do you think reading together positively affected both Ben and Max? How did this contribute to their friendship? Do you have an animal that you have a special friendship with? If so, describe it.
2. In the short story, Ben improves in his reading. How did Max contribute to this? What other ways do you think animals could help kids learn?

Selecting Books for Your Child: Finding 'Just Right' Books

By: Kathleen Rogers

How can parents help their children find books that are not "too hard" and not "too easy" but instead are "just right"? Here's some advice.

Five finger rule

1. Choose a book that you think you will enjoy.
2. Read the second page.
3. Hold up a finger for each word you are not sure of, or do not know.
4. If there are five or more words you did not know, you should choose an easier book.
5. Still think it may not be too difficult? Use the five finger rule on two more pages.

Choose a book that is a good fit for you!

Read two or three pages and ask yourself these questions:

Will it be an easy, fun book to read?

- Do I understand what I am reading?
- Do I know almost every word?
- When I read it aloud, can I read it smoothly?
- Do I think the topic will interest me?

If most of your answers were "yes", this will be an easy book to read independently by yourself.

Will this book be too hard for me?

- Are there five or more words on a page that I don't know, or am unsure of?
- Is this book confusing and hard to understand by myself?
- When I read it aloud, does it sound choppy and slow?

If most of your answers were "yes," this book is too hard. You should wait awhile before you read this book. Give the book another try later, or ask an adult to read the book to you.

Tips on reading with your child

- When they can't read the word, say...
- Can you sound it out?
- Fingertap it.
- Can you think of the word or movement that helps you remember that vowel sound?
- What is the first and last sound? What word would make sense?
- Does it have a pattern that you have seen in other words? (ex-an, ack)
- How does the word begin?
- You said _____. Does that make sense?
- What word would make sense that would start with these sounds?
- Put your finger under the word as you say it.

When they want to read a book that is too hard, say...

- Let's read it together.
- This is a book you will enjoy more if you save it until you are older — or later in the year.
- [Be honest!] When people read books that are too hard for them, they often skip important parts. You will have more fun with this book if you wait until you can read it easily.

HERE'S THE IMPACT OF READING 20 MINUTES PER DAY!

A student who reads

20:00

minutes per day

will be exposed to
1.8 MILLION
words per year
and scores in
90th PERCENTILE
on standardized tests

A student who reads

5:00

minutes per day

will be exposed to
282,000
words per year
and scores in
50th PERCENTILE
on standardized tests

A student who reads

1:00

minute per day

will be exposed to
8,000
words per year
and scores in
10th PERCENTILE
on standardized tests

Source: Nagy, Anderson and Herman, 1987

Home Reading Log

Student Information

Student Name		Grade Level	
School Name		Teacher	

Log

[illegible]

Name _____

Date _____

1. A rectangular porch is 4 feet wide. It is 3 times as long as it is wide.

- a. Label the diagram with the dimensions of the porch.



- b. Find the perimeter of the porch.

2. A narrow rectangular banner is 5 inches wide. It is 6 times as long as it is wide.

- a. Draw a diagram of the banner, and label its dimensions.

- b. Find the perimeter and area of the banner.

3. The area of a rectangle is 42 square centimeters. Its length is 7 centimeters.
- What is the width of the rectangle?
 - Charlie wants to draw a second rectangle that is the same length but is 3 times as wide. Draw and label Charlie's second rectangle.
 - What is the perimeter of Charlie's second rectangle?

4. The area of Betsy's rectangular sandbox is 20 square feet. The longer side measures 5 feet. The sandbox at the park is twice as long and twice as wide as Betsy's.
- a. Draw and label a diagram of Betsy's sandbox. What is its perimeter?
- b. Draw and label a diagram of the sandbox at the park. What is its perimeter?
- c. What is the relationship between the two perimeters?
- d. Find the area of the park's sandbox using the formula $A = l \times w$.

- e. The sandbox at the park has an area that is how many times that of Betsy's sandbox?
- f. Compare how the perimeter changed with how the area changed between the two sandboxes. Explain what you notice using words, pictures, or numbers.

I Get Around!



Building Fluency: build rectangles and find perimeter

Materials: pair of dice, recording sheet per player, and centimeter grid paper for each player

Number of Players: 2

- Directions:**
- 1. Player 1 tosses the dice and constructs a rectangle on the centimeter grid by marking length on a horizontal line according to the number thrown on one die and width according to the number on the other die.
 - 2. The player then outlines the entire rectangle, colors it in and records length, width and perimeter on the score sheet.
 - 3. After four rounds, a total score is determined by the sum of the perimeters.
 - 4. Highest score wins!

Variation/Extension: Teacher could add the area concept to this game. Once students understand the game they can create recording sheets in their math notebook.

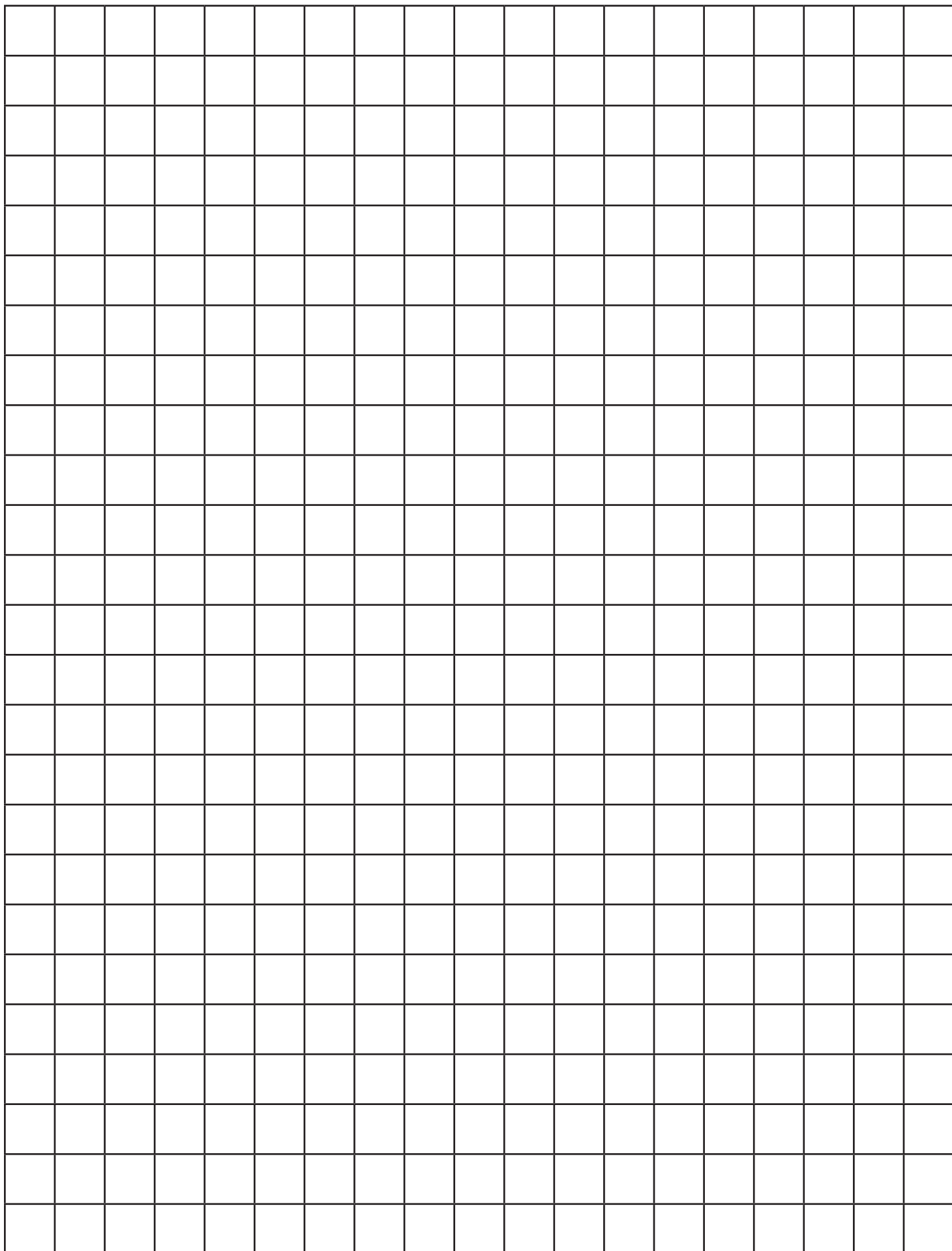
PLAYER 1

Round	Length	Width	Perimeter
1			
2			
3			
4			
Total Score			

PLAYER 2

Round	Length	Width	Perimeter
1			
2			
3			
4			
Total Score			

[illegible]



Raging Rectangles

Building Fluency: area and perimeter

Materials: a pair of dice, gameboard, and crayons or colored pencils

Number of Players: 2

Directions:

1. In turn each player rolls the dices. A player outlines and colors a rectangle on the gameboard to match the dice.
Example: a roll of 6 and 3 = a 6×3 rectangle or a 3×6 rectangle
2. Player writes an equation to represent total number of squares (area) in the center of the rectangle.
3. A player loses a turn when he rolls and cannot fit his rectangle on the gameboard. Game is over when neither player can draw a rectangle. Winner is the player with the most squares colored on the gameboard.

Variation/Extension: Teacher can change the dimensions of the gameboard or let each player have their own gameboard. They could also find the total area of their gameboard. Player with largest area wins.

A blank sheet of graph paper featuring a uniform grid of squares. The grid consists of 20 columns and 20 rows, creating a total of 400 small square units. The lines are thin and black, set against a white background. There are no margins, text, or other markings on the page.

Name _____

Date _____

Solve the following problems. Use pictures, numbers, or words to show your work.

1. The rectangular projection screen in the school auditorium is 5 times as long and 5 times as wide as the rectangular screen in the library. The screen in the library is 4 feet long with a perimeter of 14 feet. What is the perimeter of the screen in the auditorium?
2. The width of David's rectangular tent is 5 feet. The length is twice the width. David's rectangular air mattress measures 3 feet by 6 feet. If David puts the air mattress in the tent, how many square feet of floor space will be available for the rest of his things?

3. Jackson's rectangular bedroom has an area of 90 square feet. The area of his bedroom is 9 times that of his rectangular closet. If the closet is 2 feet wide, what is its length?
4. The length of a rectangular deck is 4 times its width. If the deck's perimeter is 30 feet, what is the deck's area?

A

Number Correct: _____

Squares and Unknown Factors

1.	$2 \times 2 =$	
2.	$2 \times \underline{\quad} = 4$	
3.	$3 \times 3 =$	
4.	$3 \times \underline{\quad} = 9$	
5.	$5 \times 5 =$	
6.	$5 \times \underline{\quad} = 25$	
7.	$1 \times \underline{\quad} = 1$	
8.	$1 \times 1 =$	
9.	$4 \times \underline{\quad} = 16$	
10.	$4 \times 4 =$	
11.	$7 \times \underline{\quad} = 49$	
12.	$7 \times 7 =$	
13.	$8 \times 8 =$	
14.	$8 \times \underline{\quad} = 64$	
15.	$10 \times 10 =$	
16.	$10 \times \underline{\quad} = 100$	
17.	$9 \times \underline{\quad} = 81$	
18.	$9 \times 9 =$	
19.	$2 \times \underline{\quad} = 10$	
20.	$2 \times \underline{\quad} = 18$	
21.	$2 \times 2 =$	
22.	$3 \times \underline{\quad} = 12$	

23.	$3 \times \underline{\quad} = 21$	
24.	$3 \times 3 =$	
25.	$4 \times \underline{\quad} = 20$	
26.	$4 \times \underline{\quad} = 32$	
27.	$4 \times 4 =$	
28.	$5 \times \underline{\quad} = 20$	
29.	$5 \times \underline{\quad} = 40$	
30.	$5 \times 5 =$	
31.	$6 \times \underline{\quad} = 18$	
32.	$6 \times \underline{\quad} = 54$	
33.	$6 \times 6 =$	
34.	$7 \times \underline{\quad} = 28$	
35.	$7 \times \underline{\quad} = 56$	
36.	$7 \times 7 =$	
37.	$8 \times \underline{\quad} = 24$	
38.	$8 \times \underline{\quad} = 72$	
39.	$8 \times 8 =$	
40.	$9 \times \underline{\quad} = 36$	
41.	$9 \times \underline{\quad} = 63$	
42.	$9 \times 9 =$	
43.	$9 \times \underline{\quad} = 54$	
44.	$10 \times 10 =$	

B

Number Correct: _____

Improvement: _____

Squares and Unknown Factors

1.	$5 \times 5 =$	
2.	$5 \times \underline{\quad} = 25$	
3.	$2 \times 2 =$	
4.	$2 \times \underline{\quad} = 4$	
5.	$3 \times 3 =$	
6.	$3 \times \underline{\quad} = 9$	
7.	$1 \times 1 =$	
8.	$1 \times \underline{\quad} = 1$	
9.	$4 \times \underline{\quad} = 16$	
10.	$4 \times 4 =$	
11.	$6 \times \underline{\quad} = 36$	
12.	$6 \times 6 =$	
13.	$9 \times 9 =$	
14.	$9 \times \underline{\quad} = 81$	
15.	$10 \times 10 =$	
16.	$10 \times \underline{\quad} = 100$	
17.	$7 \times \underline{\quad} = 49$	
18.	$7 \times 7 =$	
19.	$2 \times \underline{\quad} = 8$	
20.	$2 \times \underline{\quad} = 16$	
21.	$2 \times 2 =$	
22.	$3 \times \underline{\quad} = 15$	

23.	$3 \times \underline{\quad} = 24$	
24.	$3 \times 3 =$	
25.	$4 \times \underline{\quad} = 12$	
26.	$4 \times \underline{\quad} = 28$	
27.	$4 \times 4 =$	
28.	$5 \times \underline{\quad} = 10$	
29.	$5 \times \underline{\quad} = 35$	
30.	$5 \times 5 =$	
31.	$6 \times \underline{\quad} = 24$	
32.	$6 \times \underline{\quad} = 48$	
33.	$6 \times 6 =$	
34.	$7 \times \underline{\quad} = 21$	
35.	$7 \times \underline{\quad} = 63$	
36.	$7 \times 7 =$	
37.	$8 \times \underline{\quad} = 32$	
38.	$8 \times \underline{\quad} = 56$	
39.	$8 \times 8 =$	
40.	$9 \times \underline{\quad} = 27$	
41.	$9 \times \underline{\quad} = 72$	
42.	$9 \times 9 =$	
43.	$9 \times \underline{\quad} = 63$	
44.	$10 \times 10 =$	

4.OA, MD Karl's Garden

Alignments to Content Standards: 4.MD.A.3 4.OA.A.3

Task

Karl's rectangular vegetable garden is 20 feet by 45 feet, and Makenna's is 25 feet by 40 feet. Whose garden is larger in area?

Raging Rectangles

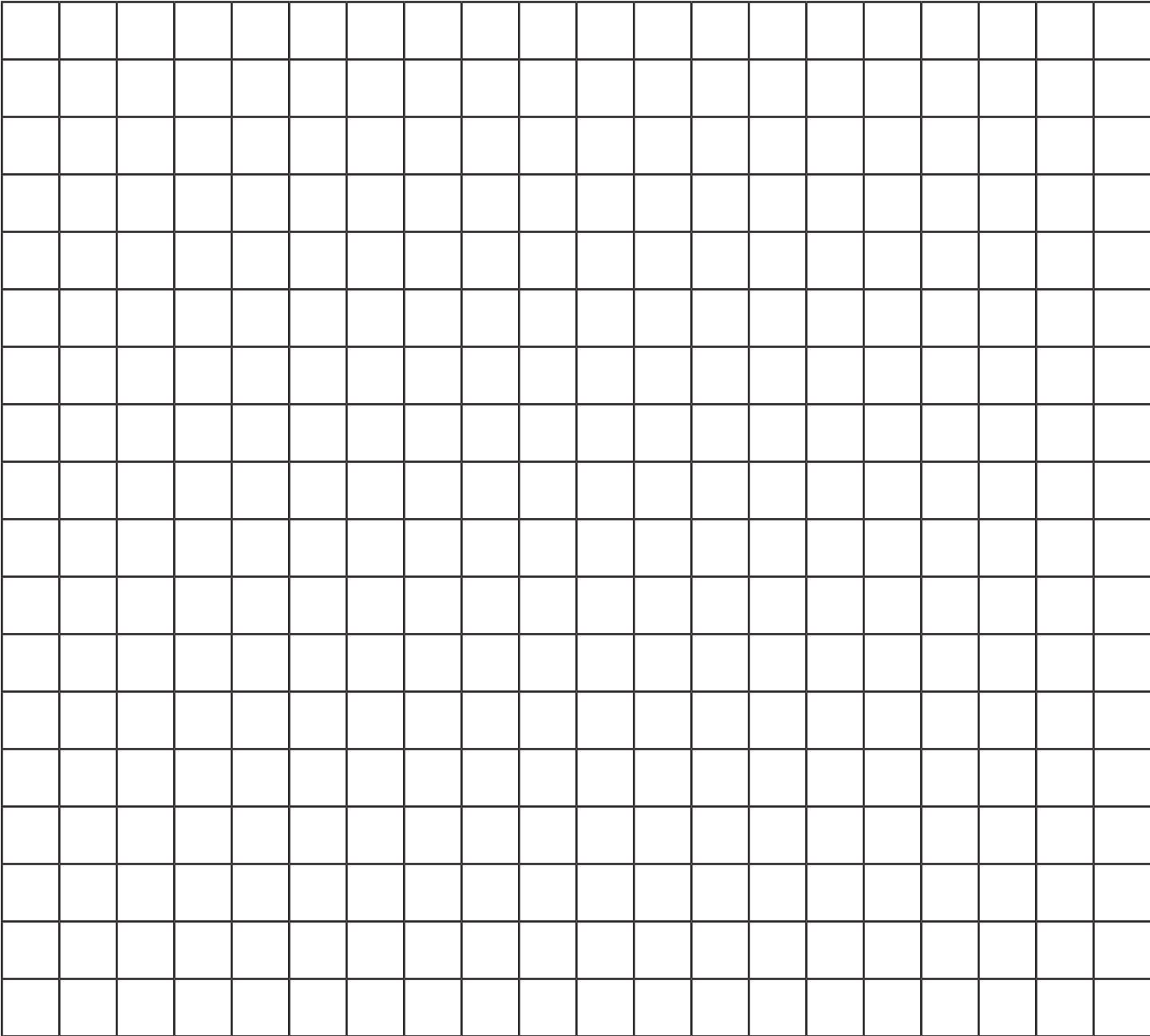
Building Fluency: area and perimeter

Materials: a pair of dice, gameboard, and crayons or colored pencils

Number of Players: 2

- Directions:**
1. In turn each player rolls the dices. A player outlines and colors a rectangle on the gameboard to match the dice.
Example: a roll of 6 and 3 = a 6 x 3 rectangle or a 3 x 6 rectangle
 2. Player writes an equation to represent total number of squares (area) in the center of the rectangle.
 3. A player loses a turn when he rolls and cannot fit his rectangle on the gameboard. Game is over when neither player can draw a rectangle. Winner is the player with the most squares colored on the gameboard.

Variation/Extension: Teacher can change the dimensions of the gameboard or let each player have their own gameboard. They could also find the total area of their gameboard. Player with largest area wins.



Science Grade 4

Assignment #1

- A. List of Objects you see

What did you use to see the objects?

- B. Turn the lights off and describe what you can see. Was it easier or harder to see the objects when the lights were turned off? What do you think made it harder to see the objects?
- C. Find a lamp in your house. Turn it on.
- a. Can you see the light from the lamp standing in different places near the lamp? Predict why you can see the light when standing in different places.
 - b. Find a book at least 8 x 10 inches. As you stand near the lamp, put the book in front of your face. Can you see the light source? Why or why not?
- D. Draw a model (in your notebooks or the space below) that shows how you were able to see objects when the light was on. Use the evidence from the activities with the lights off and the lamp to help you draw the model. Label the objects in your model. Explain your model in writing.

Assignment #2

A. Read the article Light Bounces

Light Bounces

Take a look around. What do you see? All of the objects that surround you—a book, a plant, a pen, a door and even your own body—can only be seen thanks to light. Light is a type of energy that helps us see the world we live in. When it's completely dark, it is impossible to see anything. Light comes from different places. The sun, stars, lightning and fire all give off light. So do light bulbs, flashlights and candles. Most living things need light in order to survive.

Some objects produce their own light, but most do not. The walls in the room you are in do not give off their own light. The light coming down from the ceiling lights above your head bounces right off the walls. If it didn't, we would not be able to see the walls at all. How do we see things? When light from any source bounces off an object and into our eyes, we are able to see that object. Take a look at your pencil. You can see the pencil because light is bouncing off it and entering your eyes. This "bouncing off" is called "reflection."

Transparent, or see-through, objects let the light pass right through them. Light can shine through glass and clear plastic. It can also move through water and air. When light travels, it travels in a straight line.

Some objects block the light, like trees, buildings, and even you! When an object blocks the light, light cannot pass through to the other side. This is how shadows are made. When the sun shines on a tree, it cannot shine right through the tree. The tree blocks the light beams. On the other side of the tree, you will see a dark spot that is shaped like the tree. That is its shadow, the place where the sun cannot reach.

Try standing in front of a wall that is all lit up by a flashlight. Your body does not allow light to pass through it, so it will create a shadow on the wall. You can use all kinds of objects to block the light and make shadows. Try forks and spoons from your kitchen, your shoes or a stuffed animal. Try moving your body or one of these objects around to change the shape of the shadow! The closer the object moves to the flashlight, the bigger and fuzzier its shadow will be. The further the object moves away from the flashlight, the smaller and sharper its shadow will be.

Using a mirror, you can take light from one place and make it travel to another. Point your flashlight at the mirror. Now tilt the mirror. By moving the mirror around, you can make the light beam bounce off its shiny surface and fall on different objects in the room. Have you ever wondered why you can see your own face in a mirror? Light shines on your face, then bounces off it and hits the mirror you are looking into. Then, the light bounces, or reflects, off the mirror and right into your eyes.

Light bounces around! If it didn't, we'd be left in the dark.

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- a. List two types of light and two light sources.
- b. How do we see light?
- c. What types of objects block light and what types of objects allow light to pass through.

B. Watch the video about how light travels. Complete the notice and wonder chart

NOTICE (what did you see?)	WONDER (what questions do you have?)

Extension Activity

- C. Revise your sight model using the evidence from the video and that includes labels and additions to your explanation.

Assignment #3

A. How has your understanding of how light travels to the eye changed?

B. Reread the Light Bounces article from Assignment #2. Create at least 2 shadows using objects in your house that block light. Record your ideas in the Notice and Wonder chart.

NOTICE (what did you see?)	WONDER (what questions do you have?)

Extension Activity

C. Revise your Sight model by adding one of the objects that blocked light and expanding your explanation.