



Learning Enrichment Booklet Project for Grade K, 1, 2, 3, 4, & 5

Spring 2020

Dear Parents and Caregivers,

The OU BOCES Instructional Specialists have assembled ELA and Math Enrichment booklets for grades K, 1, 2, 3, 4, and 5 based on resources developed by NYSED and by OU BOCES. With the NYS Next Generation Standards in mind, we selected ELA and Math focused activities. We made an effort to choose reading passages that address social studies and science learning standards as well. It was our goal to offer learning and review tasks that students who are on grade level could do fairly independently. Fourteen days of learning enrichment are provided for each grade level in case school is closed for health and safety reasons.

In order to complete the work in this booklet one only needs a pencil or pen. We have tried to include types of activities that should seem familiar to your child. We believe that each section could be completed within one day. Please help your child pace themselves. This booklet is designed to be completed over 14 days. One section of activities per day should feel comfortable for most students. If a child cannot complete a full section in day, he or she can do part of a section. As educators, we believe it is important to do some academic work each day.

Sincerely,

The Instructional Support Services Team

Dear Students,

We hope you find these activities interesting. We hope they help you keep your school skills sharp. Each section is designed for one day. If you have trouble finishing a section, ask an adult or friend for help. Please do your best work. Thank you for working on this enrichment book and practicing your academic skills and knowledge. Please also make time to read while you are home.

Sincerely,

The Instructional Support Services Team

Section 1



Directions

Read this passage. Then answer questions 1 through 6.

Alex, the Talking Parrot

by Dorothy Hinshaw Patent

- 1 Parrots that are trained to talk often say silly things like “Polly want a cracker.” Although these birds have learned to imitate the sounds that make up the words, they don’t really know what they’re saying. But there is one parrot who speaks more than a hundred words and actually understands their meanings. He is an African gray parrot named Alex.
- 2 Dr. Irene Pepperberg, a research scientist, has worked with Alex for many years. Teaching Alex to speak and understand wasn’t easy at first. He had to learn one word at a time. Irene and an assistant would teach Alex by showing him what a word meant. Irene would hold up an object, saying, “What’s this?” Her human partner would give the word—“pasta,” for example—while Alex watched. Irene would praise her partner, then ask Alex the name of the object. When he got it right, Irene would praise him and give him the object to play with as a reward. It took Alex many weeks to learn his first word. After that, each new word became easier and easier for him.
- 3 Why did Irene spend so much time getting a parrot to talk? Scientists like Irene are interested in discovering how intelligent animals are and how their brains work. But studying animal intelligence has always been difficult, partly because animals haven’t been able to communicate clearly with humans. Teaching Alex to speak words that he understands has let Irene talk to him directly. She can ask him questions, and he can answer them in English. In this way, Irene is finding out what sorts of things Alex’s brain can do. She has found that parrots are much smarter than scientists used to think. The word “birdbrain,” which means someone who isn’t very smart, certainly doesn’t apply to Alex.
- 4 Alex can identify over forty kinds of objects, five different shapes, five materials, and seven colors, and he can use his knowledge to solve problems and answer questions. For example, from a group of objects, he can pick out a number of things of a certain color, up to the number six. He can also make comparisons, such as bigger or smaller and same or different, between objects.
- 5 “Want wheat!” Alex says loudly. Irene explains to him that she doesn’t have any shredded wheat for him. “How about some crackers, Alex?” she asks.

6 "No, no—want wheat!" he replies.

7 Because it's time for them to work, Irene ignores his request and shows Alex a tray with simple objects scattered over it: a yellow plastic key, a green wooden square, a five-cornered piece of yellow felt, a gray rawhide rectangle, a yellow paper triangle, a red plastic square, and a blue Play-Doh square.

8 "What material is green, Alex?" Irene asks.

9 Alex glances over the assortment, then answers, "Wood!" in his clear but croaky parrot voice.

10 "Good birdie," says Irene as she nuzzles him and hands him the green square. Alex nibbles at it for a moment, then he drops it.

11 "How many yellow?" asks Irene.

12 Alex takes his time looking over the bright, colorful display on the tray.

13 "Three," he answers.

14 Irene praises him again. "Good boy, good birdie," she says as she hands him the yellow key to play with.



15 Alex mouths the key, nibbling at it gently before dropping it.

16 "Wanna go shoulder," he announces.

- 17 “O.K., you can come onto my shoulder,” answers Irene. She puts out her hand. Alex climbs aboard, and she puts him on her shoulder. He rubs his head against Irene’s cheek. “Do you want some corn?” asks Irene.
- 18 “Soft corn,” answers Alex, and Irene holds out her hand with a few kernels on it. Alex carefully takes one kernel into his mouth and eats.
- 19 Alex has shown us that birds like parrots can understand categories such as shape, color, and size. They can solve problems and recognize numbers. Before Alex came along, scientists did not believe that animals with such small brains could do these things.
- 20 Alex uses his ability to talk outside of work sessions, too. At the end of the day, Irene tells Alex she is leaving.
- 21 “I’m going to dinner now,” she says. “You be good.”
- 22 “You be good,” Alex answers.
- 23 “See you tomorrow,” says Irene.
- 24 “Bye,” says Alex.
- 25 “Bye,” she responds.
- 26 “I love you,” croaks Alex.
- 27 Irene’s last words as she goes out the door are “I love you, too.”

“Alex the Talking Parrot” Questions

1. What does the word “assistant” mean as it is used in paragraph 2?

- A. Helper
- B. Leader
- C. Neighbor
- D. Friend

2. What sentence from the passage shows a cause and effect relationship?

- A. “But there is one parrot who speaks more than a hundred words and actually understands their meanings.” (paragraph 1)
- B. “Teaching Alex to speak words that he understands has let Irene talk to him directly.” (paragraph 3)
- C. “In this way, Irene is finding out what sorts of things Alex’s brain can do.” (paragraph 3)
- D. “He can also make comparisons, such as bigger or smaller and same or different, between objects.” (paragraph 4)

3. Read this sentence from paragraph 4.

Alex can identify over forty kinds of objects, five different shapes, five materials, and seven colors, and he can use his knowledge to solve problems and answer questions.

What is the best meaning of the word “identify” as used in this sentence?

- A. Feel
- B. Look at
- C. Pick up
- D. Recognize

4. How does the photograph add to the information in the passage?

- A. It shows one way that Irene works with Alex.
- B. It shows that Irene does not talk with Alex.
- C. It shows that Alex is able to count objects.
- D. It shows the few objects that Alex cannot name.

5. Which part of the passage best shows how Alex feels about Irene?

- A. Paragraph 9
- B. Paragraph 10
- C. Paragraph 17
- D. Paragraph 18

6. Which detail best supports the main idea of the passage?

- A. Irene’s parrot is named Alex
- B. Alex can find a green object when asked
- C. Irene sometimes puts Alex on her shoulder
- D. Alex has a croaky parrot voice.

Name _____

Date _____

Grade 3 Math Review #1

Which equation is true when the missing number is the number 7?

1

A $7 \times \underline{\quad} = 42$

B $7 \times \underline{\quad} = 49$

C $8 \times \underline{\quad} = 40$

D $8 \times \underline{\quad} = 48$

2Which expression is another way to show 8×6 ?

A $(2 + 4) + 6$

B $(2 + 4) \times 6$

C $(2 \times 4) + 6$

D $(2 \times 4) \times 6$

The distance from Chicago to New York City is 794 miles. What is 794 rounded to the nearest hundred?

3

A 700

B 794

C 800

D 894

What number makes the equation true?

4

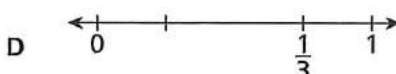
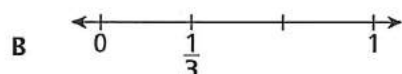
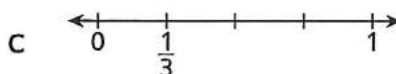
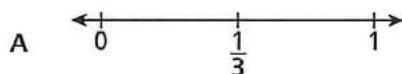
$4 = \underline{\quad} \div 7$

A 11

B 21

C 28

D 32

Which number line shows the fraction $\frac{1}{3}$ plotted correctly?**5****6**

A teacher puts 5 packages of craft paper into a cabinet. Each package has 80 sheets of paper. What is the total number of sheets of craft paper that the teacher puts into the cabinet?

A 40

B 85

C 400

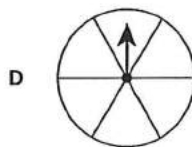
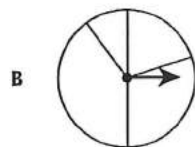
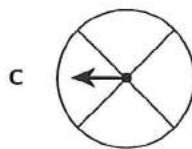
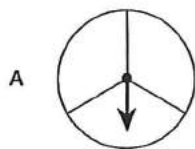
D 450

Section 2



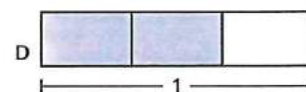
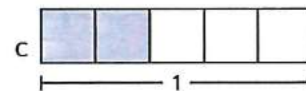
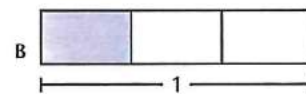
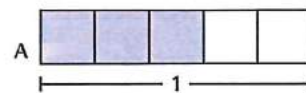
7

The Diaz family used a spinner to play a game. The spinner was in the shape of a circle. Each section of the spinner was $\frac{1}{4}$ of the whole circle. Which picture shows a spinner that the Diaz family used?



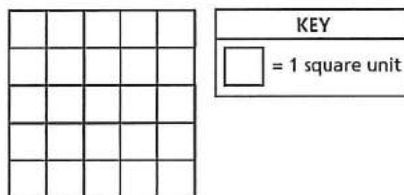
8

Which of these is shaded to represent $\frac{2}{3}$?



9

Brandon used square tiles to find the area of the shaded part of the picture below.

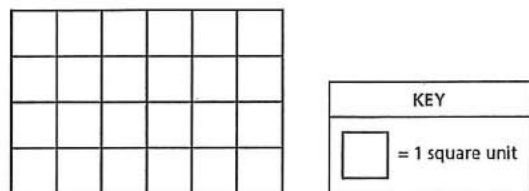


What is the area of the shaded part of the picture?

- A 3 square units
- B 6 square units
- C 8 square units
- D 9 square units

10

The figure below is tiled with squares.



Which expression could be used to find the area of this figure?

- A 4×6
- B $4 + 6$
- C $4 \times 4 \times 6 \times 6$
- D $4 + 4 + 6 + 6$

What is globalization? Read the story and underline/highlight any connection Lizzie has with places around the world.

Lizzie's Morning 7 a.m. The clock radio blasts Jamaican reggae into Lizzie's room in Washington, D.C., and the music wakes her. As she comes to life, she thinks about school and the day ahead. She doesn't think about Guglielmo Marconi of Italy, who patented the radio. And she doesn't know that the first experimental radio broadcast took place in Massachusetts in 1906.

Lizzie gets dressed, heads to the kitchen, and makes a pitcher of orange juice, using frozen concentrate that was preserved by a process developed in Florida during the 1940s. The very same round, golden fruit was popular in ancient China.

Lizzie's mom uses an electric appliance to grind coffee beans from Brazil. The first version of this machine was invented in Ohio in the 1930s. (Before then people used manual grinders, which date to the 1800s.) Her mom pours the ground beans into a cone-shaped filter invented in Germany around 1900.

For breakfast, Lizzie eats a bowl of Kellogg's Corn Flakes, named after the American family that developed the cereal in the 1890s. As she eats, she glances at the newspaper. (The first regular weekly newspapers appeared in Germany in the early 1800s.)

After breakfast, Lizzie brushes her teeth. (The Chinese claim they invented the toothbrush in the 1400s.) She then says good-bye to her father, who is shaving with a safety razor—patented in 1901 by a salesman from Wisconsin. The earliest safety razors date from France in the late 1800s. Centuries ago, people used shells and sharks' teeth as razors.

Lizzie gathers her stuff for school, including her saxophone—invented in Belgium by Adolphe Sax in the 1840s. She puts on her Walkman, developed in Japan in the 1970s. Then, when her mom isn't looking, she pops some gum into her mouth. People have enjoyed gum since ancient times, and the Indians of Mexico and Central America chewed chicle, a substance from wild sapodilla trees. Chicle was introduced to the United States in the 1860s.

Rain begins to fall as Lizzie leaves the house. She races back inside for her umbrella, which was made in Taiwan. Umbrellas have a long past. They appear in artwork from ancient Egypt, and they've been used in various cultures—both practically and ceremonially.

Back outside, Lizzie dashes across the street once the traffic light turns green. The first working traffic signal was installed outside the Houses of Parliament in London, the capital of the United Kingdom. Modern traffic lights were invented in the early 20th century.

The smooth, solid road that Lizzie crosses is paved with macadam, a surface developed in part by English engineer John McAdam. Lizzie waits a few minutes for the bus that will take her to school. The first bus line was established in Paris, France, in the 1600s, but it didn't last long. Not until the 1800s were horse-drawn buses a regular part of life in cities such as Paris, London, and New York. Lizzie climbs aboard the bus, pays her fare, and heads off to school.

How does your life reflect connections to places around the world?

Look around your home: closet for clothing items, pantry and food, and other products you use. List a few items that come from other places. Why do you think we are so interconnected to other places?

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Section 3



Name _____

Date _____

Grade 3 Math Review #3

1 What is 637 rounded to the nearest ten?

- A 600
- B 630
- C 640
- D 647

2 What is 345 rounded to the nearest 100?

- A 300
- B 340
- C 350
- D 400

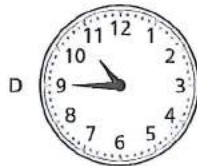
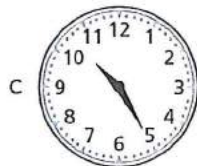
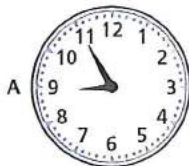
3 Which expression is equivalent to $(5 + 2) \times 8$?

- A $(8 \times 5) + (8 \times 2)$
- B $(5 \times 8) + (5 \times 2)$
- C $8 \times (5 \times 2)$
- D $(5 \times 8) \times 2$

4 A store has 8 fish tanks that each have 40 liters of water. What is the total number of liters of water in all of the fish tanks?

- A 5
- B 48
- C 280
- D 320

5 Frankie's music class begins at 9:40 a.m. The class is 45 minutes long. Which clock shows the time that Frankie's class ends?



6 Ms. Perez drove a total of 40 miles in 5 days. She drove the same number of miles each day. How many miles did Ms. Perez drive each day?

- A 5
- B 7
- C 8
- D 9

7

Which fraction is equivalent to 4?

- A $\frac{1}{4}$
- B $\frac{8}{4}$
- C $\frac{4}{4}$
- D $\frac{4}{1}$

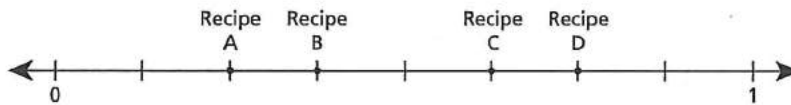
8

Theo divided a garden equally into 6 parts. He planted seeds in 5 of the parts. In what fraction of the garden did Theo plant seeds?

- A $\frac{1}{6}$
- B $\frac{1}{5}$
- C $\frac{5}{6}$
- D $\frac{6}{5}$

9

Four different recipes were used by students to bake cookies for a bake sale. The number line below shows the fraction of a cup of milk needed in each recipe.

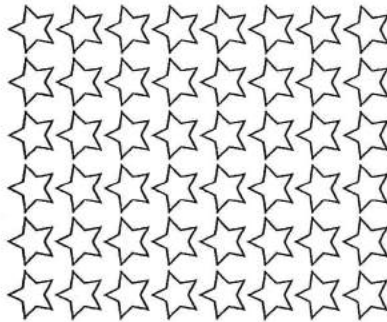


Which recipe needs $\frac{3}{8}$ cup of milk?

- A Recipe A
- B Recipe B
- C Recipe C
- D Recipe D

10

Ethan made the array below to show the product of 6×7 .

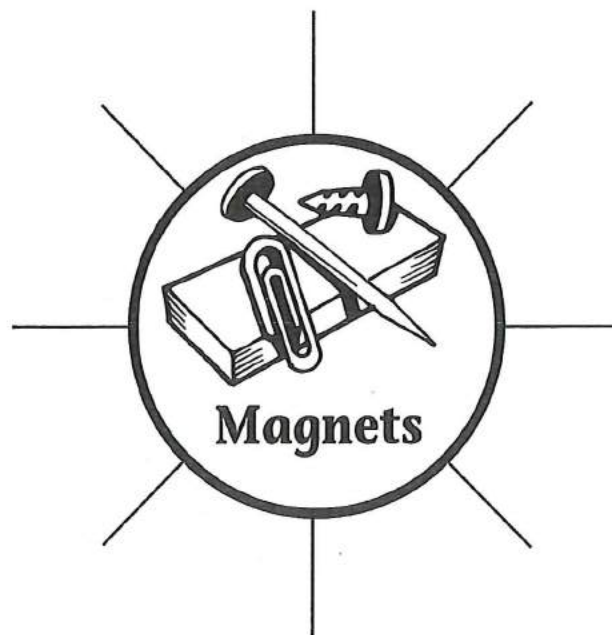


Does Ethan's model show the product of 6×7 ? Explain why or why not.

Answer

Concept Map

Facts we already know about **magnets**, and the new facts we have learned



Word Warm-Up



Which words might you expect to find in a story about **magnets**?

trains

cobalt

stick

safety

materials

object

factories

water

south
pole

energy

nail

north
pole

Section 4



Name _____

Date _____

Grade 3 Math Review #4

1

What number makes the equation below true?

$$35 \div ? = 7$$

- A 5
- B 6
- C 7
- D 8

2

The rectangular floor of a bathroom is 6 feet wide and 7 feet long. What is the total area, in square feet, of the floor of the bathroom?

- A 13
- B 26
- C 42
- D 48

3

Which expression is equal to 720?

- A 7×20
- B 8×80
- C 9×80
- D 9×90

4

If the equation $5 \times \underline{\quad ? \quad} = 45$ is true, then which expression can be used to find the missing value?

- A $9 \div 45$
- B $5 \div 45$
- C $45 \div 9$
- D $45 \div 5$

5

There were 6 rows of chairs set up for a meeting. Each row had 8 chairs. What was the total number of chairs set up for the meeting?

- A 14
- B 36
- C 48
- D 64

6

A number belongs in the box below. When the number is rounded to the nearest hundred, the result will be 900.



Which number belongs in the box?

- A 849
- B 852
- C 960
- D 999

7

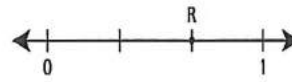
What time is shown on the clock below?



- A 7:10
- B 10:07
- C 10:37
- D 11:37

8

Which fraction represents the location of point R on the number line below?



- A $\frac{1}{3}$
- B $\frac{2}{4}$
- C $\frac{2}{3}$
- D $\frac{3}{4}$

9

Which situation could be represented by the expression 6×2 ?

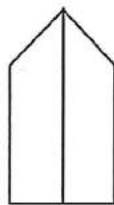
- A Rocco hiked six miles each day for two days.
- B Rocco had six baseballs and gave away two of them.
- C Rocco had a total of six tennis balls in two cans.
- D Rocco biked six miles and then continued for two more miles.

10

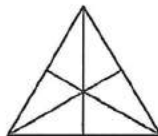
Four students each drew a figure. Each student shaded part of the figure to represent a fraction.



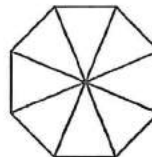
Selena



Tara



Carson



Erik

Which sentence about the figures is true?

- A Selena shaded $\frac{5}{8}$ of her figure.
- B Tara shaded $\frac{1}{2}$ of her figure.
- C Carson shaded $\frac{2}{4}$ of his figure.
- D Erik shaded $\frac{5}{8}$ of his figure.

Directions

Read this story. Then answer questions 1 through 6.

Flying on Ice

by Valerie Hunter

- 1 Craig watched his older sister, Riley, and her friend Liz race up and down the lake on their skates, dodging the other hockey players. Their skate blades looked like silver smoke.
- 2 When the game was over, the girls skated up to the bench where Craig was sitting. Craig asked Riley what skating felt like.
- 3 "When I go really fast, I feel like I'm flying," she said.
- 4 That's silly, thought Craig. Flying is something birds do in the air, not something people do on ice skates. Then he watched Riley go back out on the ice. She skated around and around the edge of the lake with her arms pumping and her scarf trailing behind her. Soon she was going so fast that her arms looked like wings and her scarf looked like a feathery tail. Maybe skating really was like flying.
- 5 When Riley sat down to take her skates off, Craig said, "I wish I could fly."
- 6 Riley retied her skate laces and crouched next to Craig. "Get on my back," she said, and Craig did. Riley started skating, but Craig didn't feel like he was flying. It just felt like a wobbly piggy-back ride.
- 7 "You're too heavy," Riley said. "I can't go fast when I'm carrying you." She skated slowly back to the bench. Craig got off her back.
- 8 "Even if you could go fast, I wouldn't be flying," he said sadly. "I need skates to fly."
- 9 Riley didn't say anything on the walk home, but a few days later she asked Craig if he wanted to go skating.
- 10 "To watch?" he asked.
- 11 "No, to skate," she said cheerfully. "Mom and I found a pair of my old skates. They might fit you."

12 The skates were a little big, but when Riley stuffed newspaper in the toes, they fit. Craig couldn't stop smiling. He didn't want to take them off, but he had to so he could walk to the lake.

13 Riley and Liz went with him. They carried their hockey sticks, two orange cones, and a wooden chair. When they got to the lake, Craig put his skates back on and Riley helped him onto the ice. Then she put his hands on the back of the chair.

14 "Hang on to this and you won't fall," she said. "Just push it along in front of you, OK?"

15 Craig grinned. "OK." His feet felt wobbly, but he held on to the chair and he didn't fall. Riley and Liz cheered him on as he started to move forward. Then they set up the cones and practiced passing the puck to each other and shooting goals.

16 Craig watched them. They made skating look easy. He tried to skate like them, but when he let go of the chair he fell. So he grabbed on to it again and inched along. His skate blades went *scritch scritch scritch* instead of the *swish swish* sound that his sister's blades made. This wasn't like flying at all. It was like being a snail.

17 "Ready to go home?" Riley finally asked.

18 Craig nodded, frowning. Riley had never said how hard skating was.

19 "What's wrong?" she asked.

20 "I wanted to skate like you," Craig said. "I wanted to fly."

21 "Someday you will," Riley said. "It takes practice." She patted his shoulder. Then she whispered something to Liz, who grinned and winked at Craig. Each girl took one of Craig's hands.

22 "Someday you'll fly on your own," Riley said. "But today Liz and I will help you."

23 Riley and Liz started skating, pulling Craig with them. The edges of his skate blades just touched the ice. The girls went faster and faster, and so did he. When he looked down, his skate blades were a silver blur. His hat nearly blew off.

24 "I'm flying!" he yelled, and the words blew away in the wind like a bird's happy song.

“Flying on Ice” Questions

1. What does the word “crouched” mean as it is used in paragraph 6?
 - A. Spun around
 - B. Bent down
 - C. Stood up
 - D. Fell over

2. In paragraph 9, what is the most likely reason Riley stays quiet as she and Craig walk home?
 - A. She is thinking about how well she played hockey.
 - B. She is upset with Craig because he hurt her back.
 - C. She is thinking about how to get skates for Craig.
 - D. She is tired from skating in the hockey game.

3. What does paragraph 12 help the reader understand about Craig?
 - A. Craig is too young to learn how to skate.
 - B. Craig is very excited about learning to skate.
 - C. Craig is unable to take the skates off by himself.
 - D. Craig is worried that his sister will take the skates back.

4. In paragraph 16, what does the phrase “like being a snail” help the reader to understand about Craig?
 - A. He skates very slowly.
 - B. He moves in a crooked line.
 - C. He searches for a place to hide.
 - D. He looks like all the other skaters.

5. Which sentence best describes how paragraph 6 relates to paragraph 23?
 - A. Paragraph 6 provides a problem and paragraph 23 provides a solution.
 - B. Paragraph 6 asks a question and paragraph 23 provides an answer.
 - C. Paragraph 6 provides a cause and paragraph 23 provides an effect.
 - D. Paragraph 6 provides similarities and paragraph 23 shows differences.

6. Which sentence best describes a central message of the story?
 - A. Change is normal and an important part of life.
 - B. Friendship often becomes stronger over time.
 - C. New experiences can be exciting and wonderful.
 - D. Natural talent is more important than practice.

Section 5



Name _____

Date _____

Grade 3 Math Review #5**1**Which expression is equivalent to 5×9 ?

- A $(5 \times 4) \times (5 \times 5)$
B $(5 \times 5) + (5 \times 4)$
C $(5 \times 5) + (5 \times 9)$
D $(5 \times 9) \times (5 \times 9)$

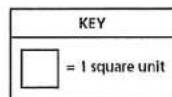
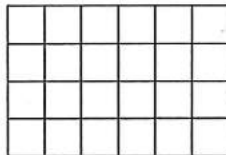
2

Which statement is true?

- A The product of 5×2 is even because both of the factors are even.
B The product of 4×4 is odd because both of the factors are even.
C The product of 2×7 is even because both of the factors are odd.
D The product of 5×3 is odd because both of the factors are odd.

3

The figure below is tiled with squares.

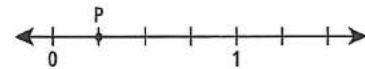


Which expression could be used to find the area of this figure?

- A 4×6
B $4 \div 6$
C $4 \times 4 \times 6 \times 6$
D $4 + 4 + 6 + 6$

4

Which fraction does point P represent on the number line below?



- A $\frac{1}{6}$
B $\frac{2}{6}$
C $\frac{1}{4}$
D $\frac{2}{4}$

5

A coach rounded the number of runners at a track meet to the nearest 10. The rounded number of runners is 400. Which number could be the actual number of runners at the track meet?

- A 382
B 397
C 406
D 447

6

A circle is divided into parts. Each part is $\frac{1}{4}$ of the total area of the circle. Which sentence describes the circle?

- A The circle has 1 small part and 3 large parts.
B The circle has 1 small part and 4 large parts.
C The circle has 4 parts that are each the same size.
D The circle has 5 parts that are each the same size.

7

A coach rounded the number of runners at a track meet to the nearest 10. The rounded number of runners is 400. Which number could be the actual number of runners at the track meet?

- A 382
- B 397
- C 406
- D 447

8

Mr. Jacobs had 56 books in his office. He put an equal number of books on each of 7 shelves. The equation below can be used to determine the number of books he put on each shelf.

$$56 \div 7 = \underline{\quad ? \quad}$$

How many books, in all, did Mr. Jacobs put on each shelf?

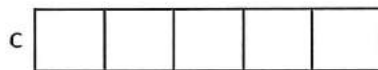
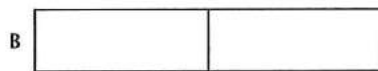
- A 7
- B 8
- C 49
- D 63

9

The fraction strip shown below is shaded to represent a fraction.



Which fraction strip is shaded to represent a fraction equal to the fraction strip shown above?



10

Katia received a sticker each time she picked up her toys. She placed some of the stickers on page 1 of her scrapbook, as shown below.

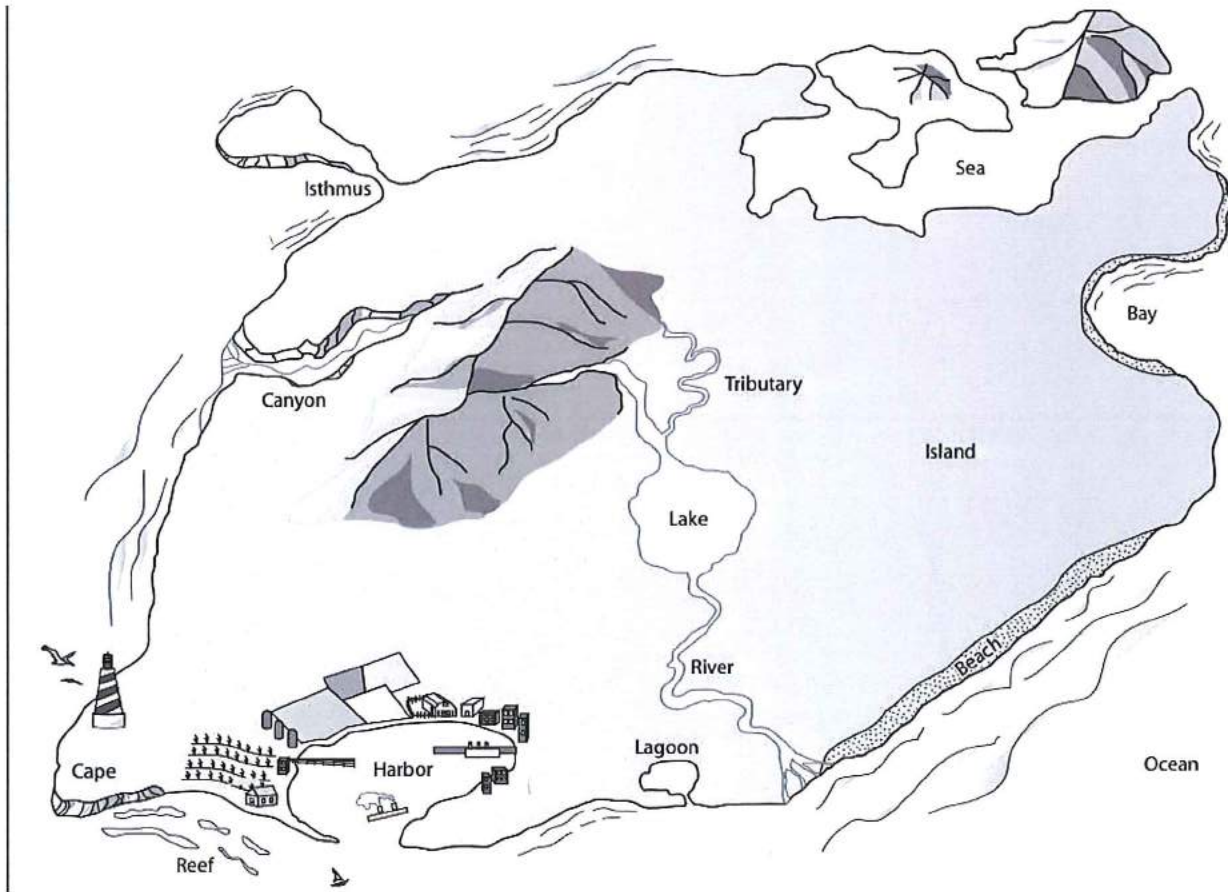
Page 1



Write numbers in the blanks below to show two multiplication facts represented by the array of stickers on page 1 of her scrapbook.

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



Look at the map of an island and please use a dictionary if you need to remind yourself of the meaning of any the geographic terms noted next to places. Decide where on the island you would like to live and draw a house at that spot.

– Your island is remote and supply ships only come every few months. There are a small number of people who do live in a cluster near the harbor.

List 3 to 5 reasons why you think that your selection is a place that could meet your needs and wants

What additional information would you like to have to help you make the best decision? List those questions below.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be from a notebook or a set of legal pads. There is no handwriting or other markings on the page.

Section 6



Name _____

Date _____

Grade 3 Math Review #6

1

Which number sentence can be used to determine the value of $72 \div 9$?

- A $9 \times \underline{\quad ? \quad} = 72$
- B $9 + \underline{\quad ? \quad} = 72$
- C $9 \times 72 = \underline{\quad ? \quad}$
- D $9 + 72 = \underline{\quad ? \quad}$

2

Which expression is equivalent to 4×9 ?

- A $(4 \times 4) + (4 \times 5)$
- B $(4 + 4) \times (4 + 5)$
- C $(4 + 4) + (4 + 5)$
- D $(4 \times 4) \times (4 \times 5)$

3

Ms. Carter has 30 students in her classroom. She arranges them into 5 equal groups. Which expression represents how to find the number of students in each group?

- A $30 + 5$
- B $30 \div 5$
- C $30 - 5$
- D 30×5

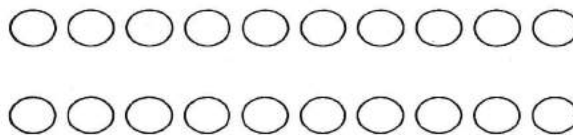
4

A number is rounded to the nearest hundred. The result is 500. Which number could not be the number before it was rounded to the nearest hundred?

- A 458
- B 463
- C 547
- D 559

5

Which expression could be used to find the total number of circles shown below?



- A $2 + 20$
- B 2×20
- C $2 + 10$
- D 2×10

6

An art teacher is planning a painting project for her classes. She made the table below to show how much paint she would need for each class.

PAINT FOR ONE CLASS

Color	Amount Needed (pints)
Red	4
Yellow	2
Blue	3

What is the total number of pints of paint that will be needed for her five classes?

Show your work.

Answer _____ pints

7

Ryan played a computer game three times. His score on each of the first two games is shown in the table below.

COMPUTER GAME SCORES

Game	Ryan
1	215
2	225
3	
	714
	Total

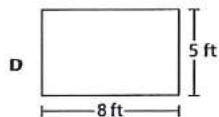
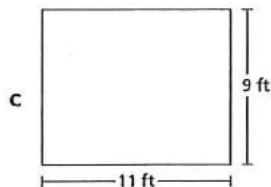
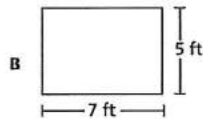
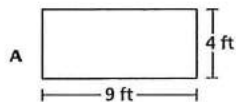
Ryan's total score for all 3 games was 714. What was Ryan's score in game 3?

Show your work.

Answer _____

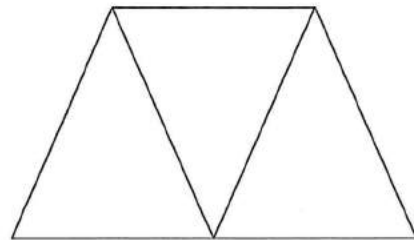
8

Mandy's garden is shaped like a rectangle. It has a total area of 40 square feet. Which figure could represent Mandy's garden?



9

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer _____

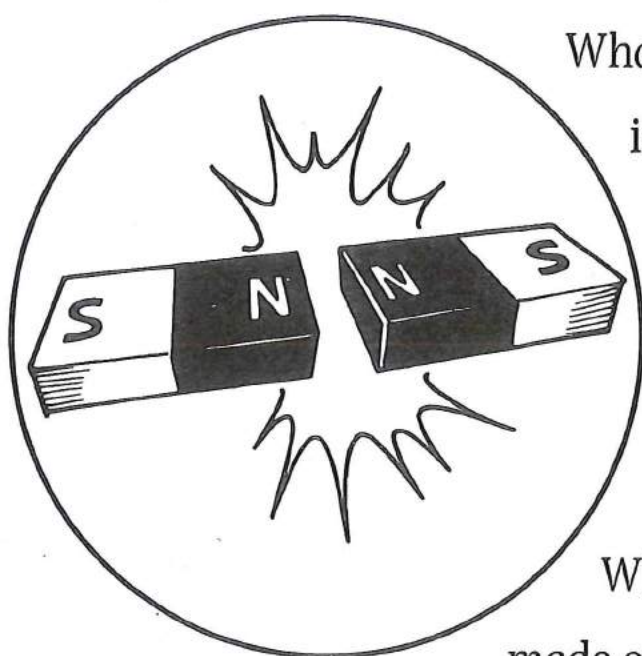
Explain how you know your answer is correct.

10

Mr. Bachu bought 24 pounds of potting soil. Which sentence could describe the potting soil Mr. Bachu bought?

- A He bought 6 bags that weigh 4 pounds each.
- B He bought 5 bags that weigh 4 pounds each.
- C He bought 4 bags that weigh 20 pounds each.
- D He bought 10 bags that weigh 14 pounds each.

Magnets



What is a magnet? It is an object that is made of nickel, iron, cobalt, or steel that sticks to other things. Magnets can stick to other magnets, too. They can also push away from other magnets.

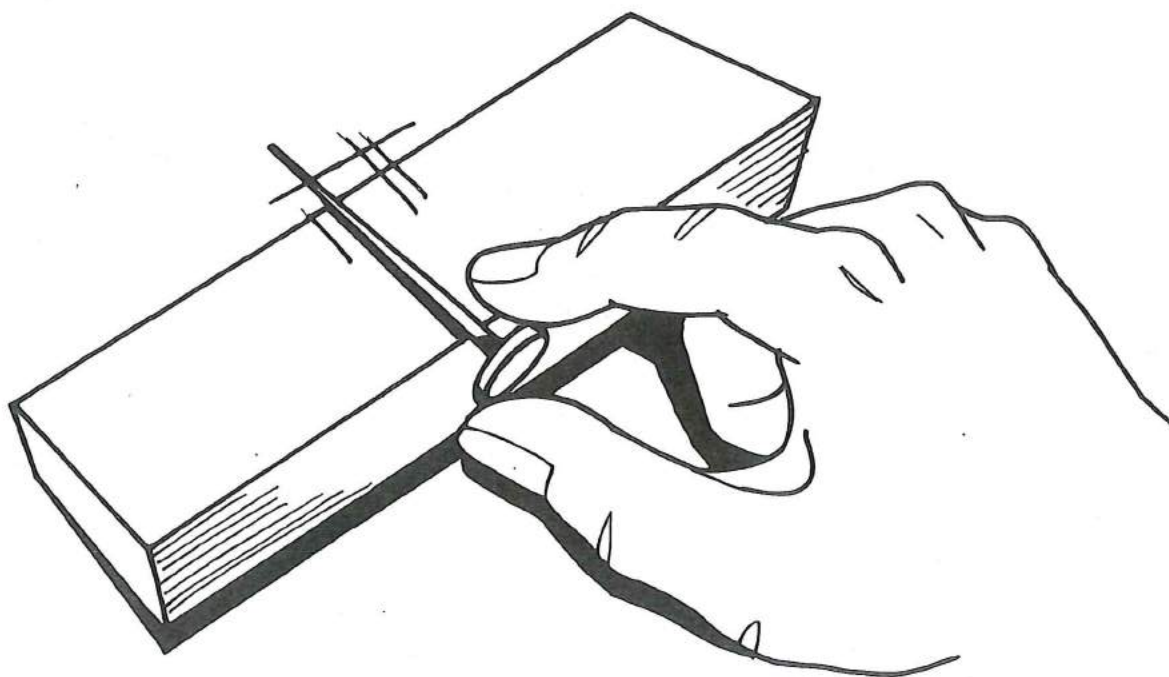
Why are some things that are made of iron or steel not magnetic? A magnet made of iron can pick up things. A nail that is also made of iron cannot pick up things. Do you know why? There are small bits of iron in the magnet. They all face the same way. This lets them work together. It gives them the energy to pick up things. But, in the nail, the small bits of iron all face in different ways. They do not work together. They cannot pick up things.

You cannot see the energy of a magnet. It is all around the magnet. It is strongest at the ends. These are called the poles. All magnets have a north pole and a south pole. The north pole of one magnet will stick to the south pole of other magnets. When the

north poles of two magnets are next to each other, they will push away from each other.

You can make some things act like a magnet. If you rub a pin on a magnet, that pin can pick up other pins. Try this at home to see how many pins you can pick up. This kind of magnet will not last long.

Magnets are used to help us in a lot of ways. They make your doorbell work and make some trains stay on their tracks! What kinds of magnets can you find? What are they used for?



Magnet Questions:

1. What is a magnet? How can magnets help us?

2. Spoons are sometimes made of stainless steel. Why aren't they magnets?

3. What items can you find in a classroom or at home that a magnet would pick up?

Section 7



Name _____

Date _____

Grade 3 Math Review #7

Jess scored 18 points during her last basketball game. Each basket she made was worth 2 points. How many baskets did she make?

1

A 20

B 16

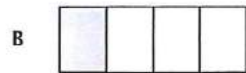
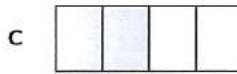
C 9

D 8

The shape below is shaded to represent a fraction.

2

Which shape is shaded to represent a fraction equivalent to the shape shown above?

**3**

The distance from Chicago to New York City is 794 miles. What is 794 rounded to the nearest hundred?

A 700

B 794

C 800

D 894

4

Haley cut pieces of ribbon to make bookmarks. Each bookmark was $\frac{1}{8}$ foot long. Draw a point at $\frac{1}{8}$ on the number line below and label the point A.

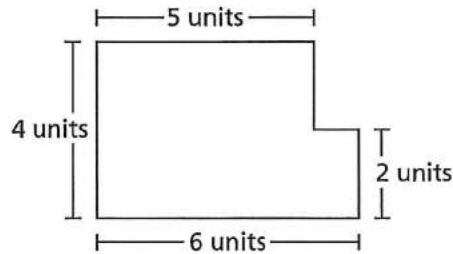
**5**

A band has 36 members. They are arranged into 6 equal rows. How many **Answer** _____ band members are in each row?

Show your work.

6

The figure below was made by combining two rectangles.



What is the total area, in square units, of the figure?

- A 17
- B 20
- C 22
- D 32

7

Ms. Ross is making breakfast for her family. She makes 15 small pancakes to share equally among 3 people. How many small pancakes will each person get?

Show your work.

Answer _____ pancakes

8

Joe and Mike both ran the same race. Joe finished the race 4 minutes before Mike. If Mike finished the race at 4:02 p.m., what time did Joe finish the race?

- A 3:58 p.m.
- B 4:06 p.m.
- C 8:02 p.m.
- D 12:02 p.m.

9

Tayshawn sorts 56 marbles into equal groups with no marbles left over. Which statement could be true of the groups of marbles Tayshawn sorts?

- A There are 6 groups of marbles with 8 marbles in each group.
- B There are 7 groups of marbles with 7 marbles in each group.
- C There are 8 groups of marbles with 7 marbles in each group.
- D There are 9 groups of marbles with 6 marbles in each group.

10

Last weekend Sanjay watched 3 television shows that were each 30 minutes long. He also watched 1 movie on television that was 90 minutes long. What is the total number of minutes Sanjay watched television last weekend?

- A 100
- B 120
- C 150
- D 180

Directions

Read this passage. Then answer questions 1 and 2.

How We Use Glass

by Chris Oxlade

Glass and Its Properties

- 1 All the things we use at home, school, and work are made from materials. Glass is a material. It can be used for all sorts of different jobs. For example, we make ornaments from glass, we cover buildings with glass, and a type of glass even carries our emails around the world.
- 2 Properties tell us what a material is like. Glass can be transparent, which means light goes through it. This is a property of glass. Glass can also be clear or colored. It has a very smooth surface. It is hard but it is also brittle, which means it breaks before it bends. Air and water cannot flow through glass and neither can electricity.

Where Does Glass Come From?

- 3 Glass is not a natural material. It is made in factories. But the raw materials for glass are natural. They come from the ground. The main raw material is sand, the same as the sand on a beach. There are different kinds of glass. To make each different kind, different chemicals are added to the sand. Most glass is soda glass. It is made from sand, limestone, and a chemical called soda ash.

Making glass

- 4 At a glass factory the ingredients are mixed together and poured into a huge tank. The glass mixture is heated to about 2,732° F (1,500° C), which is many times hotter than the temperature in a kitchen oven. The sand melts and mixes with the other ingredients. This makes hot, liquid glass.

Glass Windows

- 5 Most of the glass made in factories is used in windows. Glass is a good material for making windows because it is transparent, waterproof, and airtight. So a glass window lets light in, but it keeps out wind and rain. It also keeps warm air in, stopping a room from getting cold. Glass used in windows is called glazing.

Making window glass

- 6 Windows are made from a type of glass called float glass. To make float glass, melted glass is poured into a huge bath of a molten metal called tin. The glass spreads out on top of the tin to make a flat, thin sheet. The sheet is cooled very slowly, which keeps it from cracking.

molten = melted by heat

“How We Use Glass” Questions

1. How does paragraph 3 connect to paragraph 4 of “How We Use Glass”? Use two details from the article to support your response.

2. How do the details in paragraph 5 support the main idea of “How We Use Glass”? Use two details from the article to support your response.

Section 8

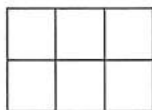


Name _____

Date _____

Grade 3 Math Review #8

- 1 Mr. Lopez divided his garden into equal parts for planting, as shown in the diagram below. The shaded part of the diagram shows where he planted carrots.



Which fraction of the garden is planted with carrots?

- A $\frac{1}{6}$
B $\frac{1}{5}$
C $\frac{1}{3}$
D $\frac{1}{2}$

2

A store manager orders shirts from their warehouse. The shirts are packed into boxes and sent to the store, as described below.

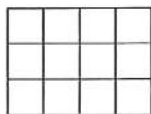
- 81 shirts are ordered
- each shipping box holds 9 shirts

How many shipping boxes are needed for all of the shirts ordered?

- A 8
B 9
C 72
D 90

3

The array below represents a product.



Which expression can be used to find the product represented by the array?

- A $4 + 3$
B $4 + 4 + 4 + 4$
C 3×4
D $3 \times 3 \times 3 \times 3$

4

Alex sorted 20 toy cars into 4 groups with the same number of cars in each group. Which expression represents the number of toy cars in each group?

- A 20×4
B $20 + 4$
C $20 \div 4$
D $20 - 4$

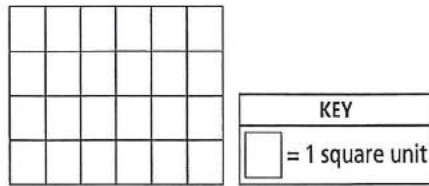
5

Lucy is counting by 2s. She starts with the number 2 and stops at the number 50. Which number would Lucy **not** count?

- A 11
B 22
C 34
D 48

Leeza used unit squares to find the area of the rectangle shown below.

6



What is the area, in square units, of the rectangle?

- A 16
- B 20
- C 24
- D 28

Last week, Paul ate 2 cookies each day for 5 days. This week, he ate 2 cookies each day for 4 days. Which expression can be used to represent the total number of cookies Paul ate in these two weeks?

A $2 \times (5 \times 4)$

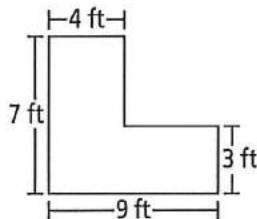
B $2 \times (5 + 4)$

C $(2 \times 5) \times (2 \times 4)$

7 D $(2 + 5) \times (2 + 4)$

The shape of Cindy's flower garden is shown below.

8



What is the area, in square feet, of Cindy's flower garden?

- A 23
- B 32
- C 43
- D 47

Which fraction comparison is not correct?

A $\frac{1}{3} < \frac{2}{3}$

B $\frac{3}{4} < \frac{1}{4}$

C $\frac{2}{3} > \frac{2}{8}$

9 D $\frac{5}{6} > \frac{5}{8}$

10

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

Analyzing a Commercial Advertisement -How can students be good consumers?

A great deal of advertising targets children. Think about a commercial that you have seen that stands out in your memory?

What was the product or service? _____

What ways did the commercial or advertisement use to catch your attention?

These methods are called strategies. They are using persuasion (influence, talk into, lead)

Let's look at the different types of persuasive methods. For each method can you think of a way you have seen this strategy?

<i>Persuasive method and its definition</i>	<i>Example of this being used in advertisements</i>
Voice of authority: uses words or numbers to prove a point/ idea	
Testimonials: a well-known person (celebrity) speaks favorably about the product	
Hop on the Bandwagon: claims that everyone else is buying this product/ having fun using it so you should too	
Just Plain Folks: everyday people in regular life speaking about why they like something (and you would as well)	
Mudslinging: making the competition (the other products like this) look undesirable in some way (ours is better)	

Design a TV commercial for a product and consider the following things as you design your advertisement plan.

- What are you advertising?
- People and the setting
- Objects or props would to be included
- Colors, lighting, music that would be a part of the ad

Using the second page provided create a story board for your ad and include words spoken and describe any background music of other items that would be added when it was filmed.

Title:

Product



Section 9



Name _____

Date _____

Grade 3 Math Review #9

- 1 Selena had 204 stamps in her collection. She bought 47 more stamps. If she gave 38 stamps to her brother, how many stamps does Selena have now?

A 119
B 195
C 213
D 289

Which two values are located at the same point on a number line?

- 2 A $\frac{4}{1}$ and 4
B $\frac{1}{3}$ and 3
C $\frac{8}{8}$ and 8
D $\frac{6}{2}$ and 4

- 3 which situation can the expression $64 \div 8$ be used?

A There are 8 buses with 64 students on each bus.
B Ms. Vance has 8 pens and 64 pencils in a container.
C There are 64 books in a bookcase and 8 books are removed.
D Mr. Juarez has 64 cups and puts an equal number on each of 8 tables.

- 4 Maddie will ride her bike a total of 56 miles over 7 days. She will ride the same number of miles each day. What is the total number of miles Maddie will ride each day?

A 8
B 9
C 49
D 63

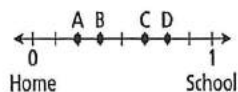
Wyatt wants to solve the equation below to find the missing factor.

5 $8 \times \underline{\quad ? \quad} = 24$

How can Wyatt find the missing factor by changing the equation to a division problem? Be sure to include the value of the missing factor in your answer.

Explain your answer.

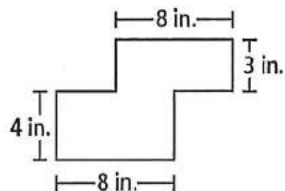
- 6 The distance between Liam's home and his school is exactly 1 mile, as shown on the number line below.



Liam buys a snack at a store that is $\frac{3}{8}$ mile from his home. What point on the number line shows the location of the store?

- A point A
- B point B
- C point C
- D point D

A diagram of Keisha's poster board is shown below.



What was the total area, in square inches, of Keisha's poster board?

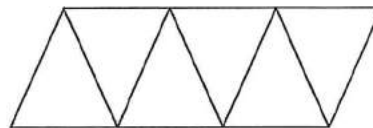
- A 46 square inches
- B 56 square inches
- C 112 square inches
- D 192 square inches

- 10 A librarian receives two boxes of books for the library. The first box has 136 books. The second box has 58 fewer books than the first box. What is the total number of books the librarian receives?

- A 58
- B 78
- C 194
- D 214

7

The figure below is divided into equal-sized parts.



Which fraction is represented by the shaded parts of the figure?

- A $\frac{1}{3}$
- B $\frac{3}{3}$
- C $\frac{3}{6}$
- D $\frac{6}{3}$

Coach Wu has a total of 30 soccer balls.

9

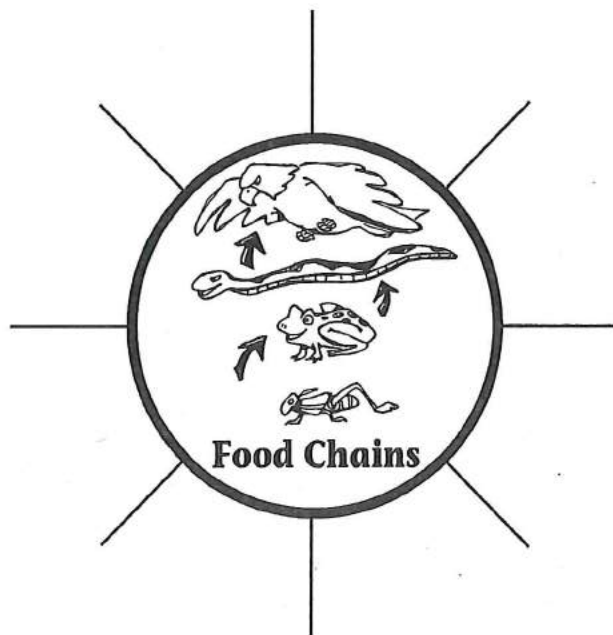
- 9 soccer balls are white
- the remaining soccer balls are one of three different colors (blue, pink, or green)
- there is an equal number of blue, pink, and green balls

How many green soccer balls does Coach Wu have?

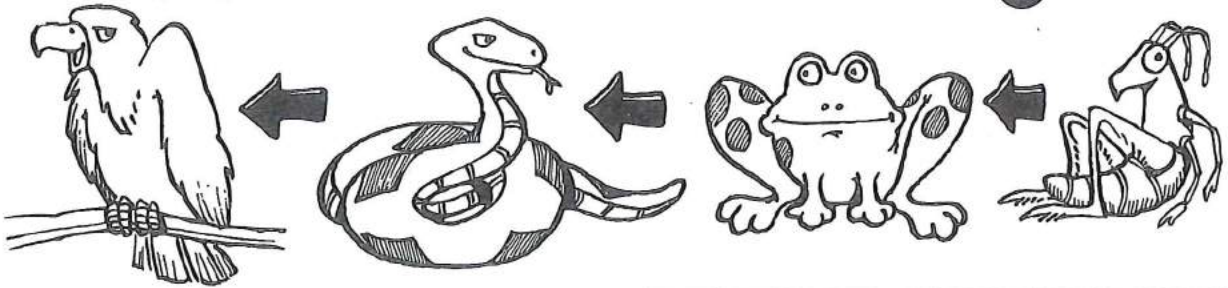
- A 7
- B 10
- C 21
- D 39

Concept Map

Facts we already know about **food chains**, and the new facts we have learned



Word Warm-Up



Which words might you expect to find in a story about **food chains**?

ruined

nutrients

energy

healthy

plankton

listen

survive

family

carbon
dioxide

garbage

decomposer

consumer

Section 10

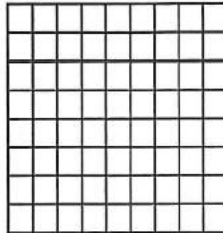



Name _____

Date _____

Grade 3 Math Review #10

The diagram below represents a wall Kim painted in her basement.

1

KEY	
	= 1 square foot

What is the area, in square feet, of the wall Kim painted?

- A 17
- B 34
- C 64
- D 72

3

- A $4 \times \underline{\quad ? \quad} = 36$
- B $4 \div \underline{\quad ? \quad} = 36$
- C $\underline{\quad ? \quad} + 4 = 36$
- D $\underline{\quad ? \quad} \div 4 = 36$

4

A total of 30 players will play basketball at a park. There will be exactly 5 players on each team. Which statement correctly explains how to find the number of teams needed?

- A Add 5 to 30 to find 35 teams.
- B Divide 30 by 5 to find 6 teams.
- C Multiply 30 and 5 to find 150 teams.
- D Subtract 5 from 30 to find 25 teams.

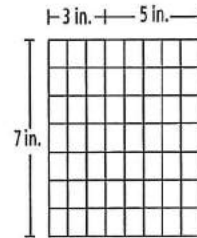
5

A teacher puts 5 packages of craft paper into a cabinet. Each package has 80 sheets of paper. What is the total number of sheets of craft paper that the teacher puts into the cabinet?

- A 40
- B 85
- C 400
- D 450

2

Ryan used square tiles to make the design shown below. He used gray tiles and white tiles.



Which expression could be used to find the total area, in square inches, of Ryan's design?

- A $(7 \times 3) + (7 \times 5)$
- B $(7 + 3) \times (7 + 5)$
- C $3 \times 5 \times 7$
- D $3 + 5 + 7$

- 6 The table below shows the number of tickets for the school play that were sold each day.

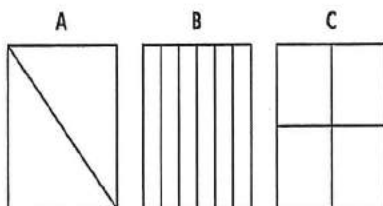
SCHOOL PLAY TICKETS

Day	Number of Tickets Sold
Thursday	238
Friday	361
Saturday	249
Sunday	328

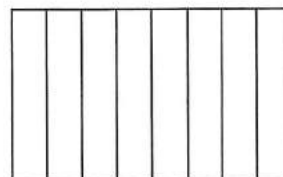
On which day does the number of tickets sold round to 300, when rounded to the nearest hundred?

- A Thursday
- B Friday
- C Saturday
- D Sunday

- 8 Shade the models below to show 3 equivalent fractions and explain why they are equivalent.



- 7 Amar and his friends made a flag for their clubhouse. They divided the flag into equal sections and colored 3 of the sections gray. The flag is shown below.



What fraction of the flag is gray?

- A $\frac{1}{3}$
- B $\frac{3}{8}$
- C $\frac{3}{5}$
- D $\frac{5}{8}$

- 9 Nadia was working on a math problem. She was asked to shade parts of the figure so that $\frac{5}{6}$ of the figure below was shaded.



What should Nadia do to complete the math problem?

- A Nadia should shade two more parts of the figure.
- B Nadia should shade three more parts of the figure.
- C Nadia should shade four more parts of the figure.
- D Nadia should shade five more parts of the figure.

- 10 Gianna cuts a ribbon into equal pieces as shown below.



She uses 4 pieces of the ribbon for a project. What fraction of the ribbon does Gianna use for the project?

Explain how you found your answer.

Directions

Read this story. Then answer questions 1 through 3.

Excerpt from *Just the Right Gift*

by Mary Penn

- 1 A boy on in-line skates zoomed around the corner and crashed into me before I could jump out of the way. We fell into a sprawling heap as the box I'd been carrying flew from my hands and landed in the street with a sickening thump. A moment later, a car whizzed past, sending the box spinning in circles.
- 2 The skater got up, mumbled sorry, and sped off around the corner.
- 3 "Are you OK, Emily?" Aiden asked.
- 4 "I think so." My arm had slapped the sidewalk hard. I stood and slowly moved it in circles.
- 5 "Oh no! Look at Mom's present!" Aiden's face was red.
- 6 I picked up the crushed box and opened it. The drinking glasses inside were broken. I closed the box and left it in a garbage can on the sidewalk, then started hurrying toward home. Aiden had to run at full speed to keep up with me.
- 7 When we got to the apartment, we plopped down on chairs in the kitchen.
- 8 "It isn't fair! Why did that happen?" Aiden said.
- 9 "I didn't even see that guy! He came out of nowhere," I huffed. Aiden's lower lip trembled. "Mom would've loved those glasses."
- 10 We'd saved our money for weeks to buy glasses with pink flowers on them for Mother's Day. We have other glasses, but not a full set that matches. I wished I could sling something against the wall and scream, but I knew I couldn't. I'm the older one. I had to hold it together.
- 11 "I wanted to make her happy," Aiden sputtered.

- 12 "We'll think of something else to give her for Mother's Day," I said, trying to cheer up Aiden.
- 13 "Like what?" he asked. "We don't have any money left."
- 14 I swallowed hard and knew I had to think of something fast. "Maybe we can *make* a present for Mom."
- 15 Aiden's eyes lit up. "At school we cut out pictures and glued them on paper. We could find pictures in old magazines and make her a Mother's Day card."
- 16 "Good thinking," I said. "And I'll come up with something else to make her happy, too." An idea was starting to form in my head.
- 17 The next morning, Aiden and I pulled Mom from her bedroom into the kitchen, where we had set out her favorite breakfast: yogurt with cereal and bananas. Mom put her hand over her heart. "I forgot it was Mother's Day."
- 18 "We have presents," Aiden said, handing her the card he'd made out of bright red construction paper with pictures of pink flowers scattered across it.
- 19 I waved a stack of index cards in the air. "And look, Mom. Every card has a riddle on it with the answer on the back. You used to love riddles."
- 20 When Aiden saw tears rolling down Mom's cheeks, he yelled, "I knew this was a bad idea!" and flung himself onto the floor.
- 21 "Aiden!" Mom pulled him to his feet and kissed him. "I love your presents. Your Mother's Day card is beautiful. You know I love pink flowers." She pulled me into a hug, too. "And I'll love reading the riddles. I'm crying because you've made me so happy."
- 22 The anger left Aiden's face as he took his card from Mom and turned it over and over, beaming with pride.
- 23 "What is black and white and red all over?" I read from one of my index cards.
- 24 "A newspaper?" Mom asked.
- 25 "Nope," I said as Aiden shouted, "A sunburned zebra!"
- 26 Mom looked at us and smiled. It was a quiet smile at first, but it grew big and bright.

“Excerpt from *Just the Right Gift*” Questions

1. In “Excerpt from *Just the Right Gift*,” how is paragraph 12 important to the rest of the story? Use two details from the article to support your response.

2. In “Excerpt from *Just the Right Gift*,” what do the details in paragraphs 17 through 21 show about the mother? Use two details from the article to support your response.

3. What is a central message in “Excerpt from *Just the Right Gift*”? Use two details from the article to support your response.

Section 11



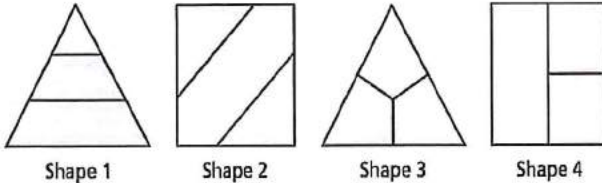
Name _____

Date _____

Grade 3 Math Review #11

There are four shapes shown below.

1



Which of the shapes is $\frac{2}{3}$ shaded?

- A shape 1
- B shape 2
- C shape 3
- D shape 4

3

The table below shows four numbers rounded to the nearest hundreds place. One of the numbers is rounded incorrectly.

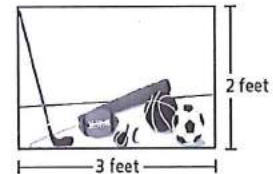
Starting Number	Rounded to the Nearest Hundred
1,212	1,200
2,396	2,300
3,636	3,600
5,573	5,600

Which number is rounded to the nearest hundreds place incorrectly?

- A 1,212
- B 2,396
- C 3,636
- D 5,573

2

Kelly has a rectangular poster in her room. The poster is shown below.



What is the area, in square feet, of Kelly's poster?

- A 5
- B 6
- C 10
- D 12

4

Alexis read 63 pages of a book in seven days. She read an equal number of pages each day. The equation below can be used to find the total number of pages she read each day.

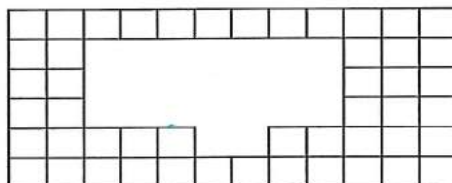
$$63 \div 7 = \underline{\quad ? \quad}$$

What is the total number of pages Alexis read each day?

- A 8
- B 9
- C 56
- D 70

5

What is the area, in square units, of the shaded shape on the grid below?



KEY	
	= 1 square unit

- A 22
- B 23
- C 28
- D 72

The table shows the total number of wheels Mr. Monroe needs to make different numbers of wagons.

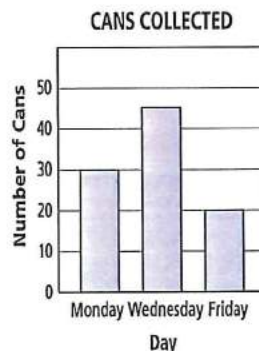
WHEELS NEEDED FOR WAGONS

Number of Wagons	Total Number of Wheels
1	4
2	8
3	12
4	16

What is one pattern that can be seen in the table?

- A The number of wheels increases by 1 each time.
- B The number of wheels increases by 3 each time.
- C The number of wheels increases by 4 each time.
- D The number of wheels increases by 12 each time.

The students in Mr. Gazer's class are collecting cans for recycling. The bar graph below shows the number of cans they collected for each of three days.

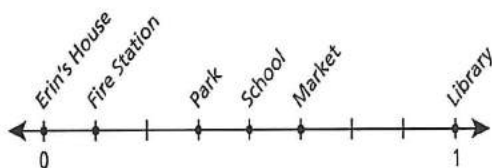


How many more cans were collected on Wednesday than on Friday?

- A 15
- B 20
- C 25
- D 45

8

Erin walked 1 mile from her house to the library. Along the way, she passed several places shown on the number line below.



Which place is $\frac{4}{8}$ mile from Erin's house?

- A the fire station
- B the park
- C the school
- D the market

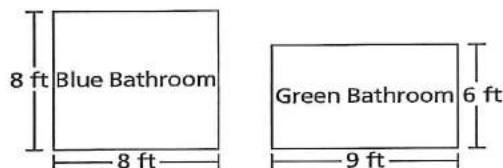
9

A bulletin board can be covered completely by 30 square pieces of paper without any gaps or overlaps. If each piece of paper has side lengths of 1 foot, what is the total area of the bulletin board?

- A 1 foot
- B 30 feet
- C 1 square foot
- D 30 square feet

10

The sizes of two bathroom floors in Beth's house are shown below.

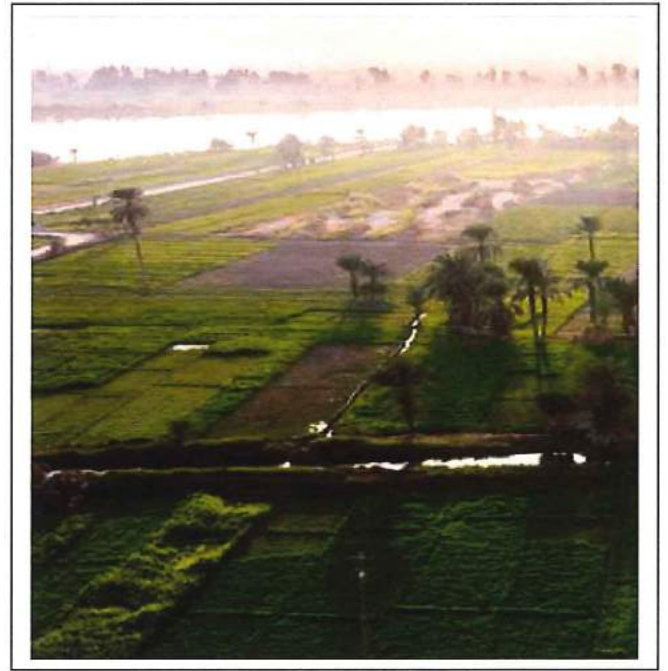


Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

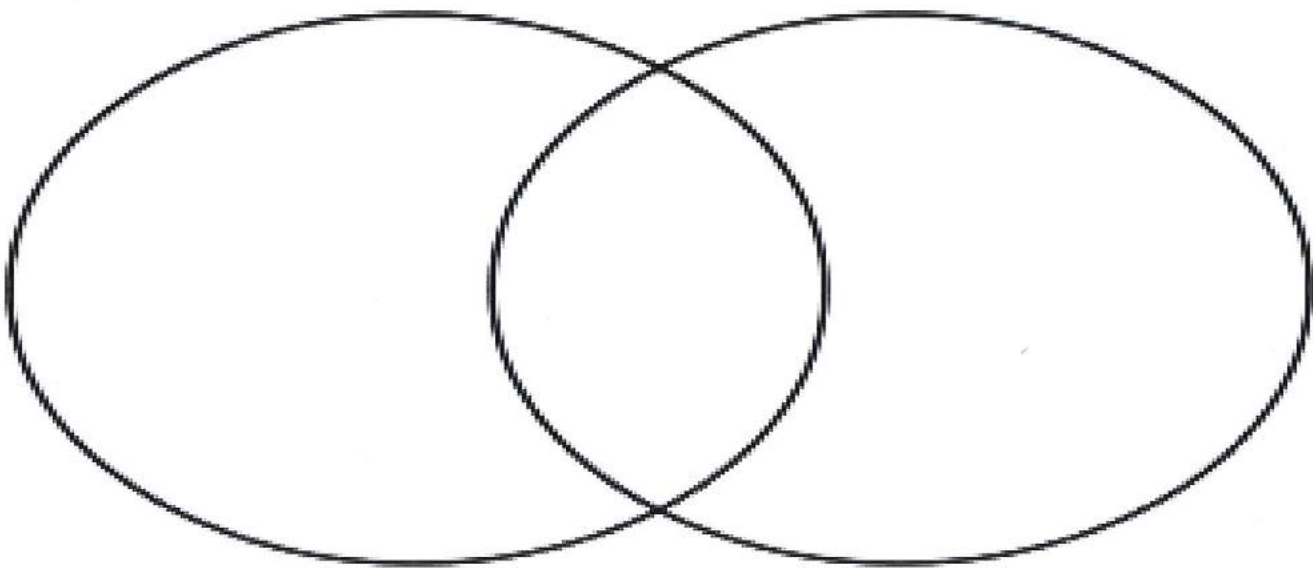


Cultivated land in China



Cultivated land along the Nile in North Africa

Compare and Contrast these two areas by analyzing the pictures.



What else do you now wonder and would like to know more about these regions?

Section 12



Name _____

Date _____

Grade 3 Math Review #12

- 1 Which pair of equations is true when the number 8 is placed in the blanks?

A $4 \times \underline{\hspace{1cm}} = 32$
 $32 \div \underline{\hspace{1cm}} = 4$

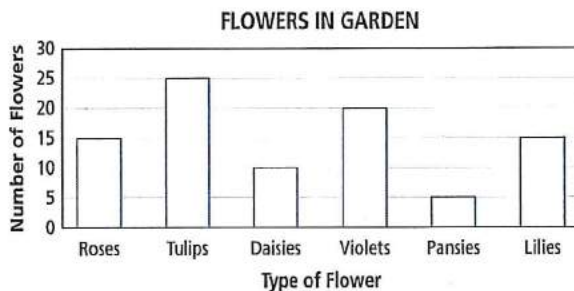
B $5 \times \underline{\hspace{1cm}} = 40$
 $\underline{\hspace{1cm}} \div 40 = 5$

C $6 \times 48 = \underline{\hspace{1cm}}$
 $48 \div \underline{\hspace{1cm}} = 6$

D $7 \times \underline{\hspace{1cm}} = 63$
 $63 \div \underline{\hspace{1cm}} = 7$

3

Ms. Jones has six types of flowers in her garden. The bar graph below shows the number of each type of flower.

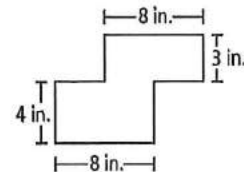


Based on the bar graph, which sentence is true?

- A Ms. Jones has 25 more tulips than pansies.
 B Ms. Jones has 10 more lilies than daisies.
 C Ms. Jones has 5 more violets than lilies.
 D Ms. Jones has 5 more roses than pansies.

2

A diagram of Keisha's poster board is shown below.



What was the total area, in square inches, of Keisha's poster board?

- A 46 square inches
 B 56 square inches
 C 112 square inches
 D 192 square inches

4

A third-grade class is having a car wash. They put the same amount of water in each bucket, as shown.



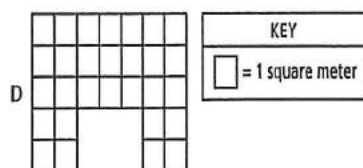
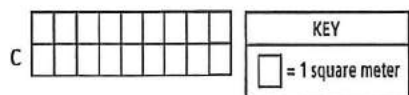
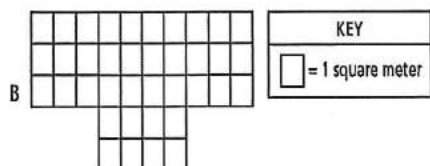
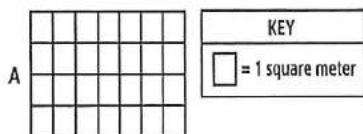
Which expression can be used to find the total amount of water, in gallons, in all the buckets?

- A 4×3
 B 5×3
 C 4×4
 D 5×4

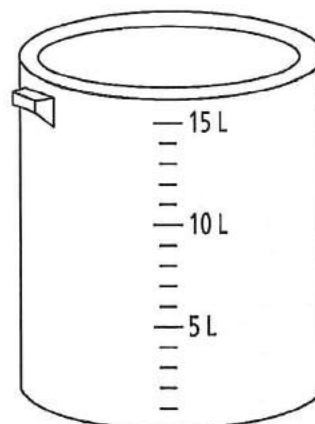
- 5 Mr. Kohlberg owns a flower shop. At the beginning of the day, he had 52 roses. Mr. Kohlberg sold 96 of the roses and then wanted to separate the rest of the roses equally among 8 vases. What will be the total number of roses in each vase?

- A 7
 B 12
 C 48
 D 56

- 6 Mr. Gomez built a deck. The deck had an area of 29 square meters. Which figure could represent the deck?



- 7 Kara has a bucket of water, as shown below.



Kara wants to pour all of the water equally into 3 bowls for her dogs. How many liters of water should Kara pour into each bowl?

- A 4
B 5
C 9
D 15

- 8 Colton and his dad bought a gallon of paint that cost \$13. They also bought 2 brushes that cost \$9 each. What was the total cost, not including tax, of the brushes and the paint they bought?

- A \$22
B \$24
C \$31
D \$35

- 9 Which two fractions should be plotted at the same location on a number line?

- A $\frac{3}{4}$ and $\frac{4}{8}$
B $\frac{1}{4}$ and $\frac{2}{8}$
C $\frac{2}{4}$ and $\frac{4}{6}$
D $\frac{1}{2}$ and $\frac{2}{6}$

- 10 Carmen saved 592 pennies. Her sister saved 128 pennies. Together, they put 250 pennies in wrappers and took them to the bank. What is the total number of pennies, rounded to the nearest hundred, Carmen and her sister have left?

- A 300
B 500
C 700
D 1,000

Section 13

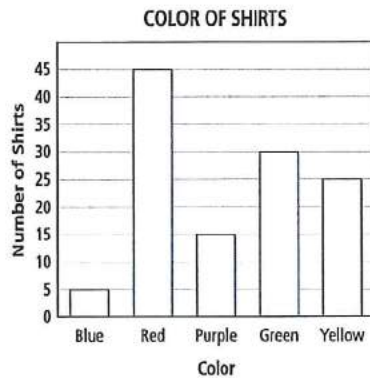


Name _____

Date _____

Grade 3 Math Review #13**1**

The graph below shows the number of shirts of each color in a store.



How many more red shirts than the total number of blue shirts and yellow shirts are in the store?

- A 15
B 30
C 40
D 45

2

Leroy made a game board, shown below. Each small square on the game board has the same area.



What fraction of the game board is shaded?

- A $\frac{1}{9}$
B $\frac{1}{8}$
C $\frac{1}{6}$
D $\frac{1}{3}$

3

Rick has 15 muffins. He will give each of his three children one muffin each day. The equation below can be used to find the total number of days he can give the muffins to his children before they are gone.

$$15 \div \underline{\quad ? \quad} = 3$$

What is the total number of days Rick can give the muffins to his children?

- A 4
B 5
C 12
D 18

4

Anya placed 16 cups in rows on a table. There are 8 cups in each row. Which equation could be used to represent this situation?

- A $16 \times 8 = \square$
B $8 + 16 = \square$
C $\square \div 8 = 16$
D $\square \times 8 = 16$

5

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

Explain your answer.

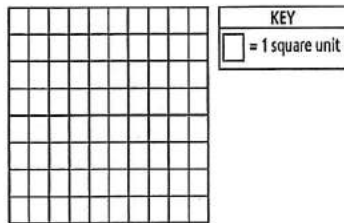
Conor made 9 shapes with straws. Each shape had 5 straws. Conor used 15 more straws to make more shapes. What is the total number of straws Conor used to make all the shapes?

- A 20
- B 29
- C 45
- D 60

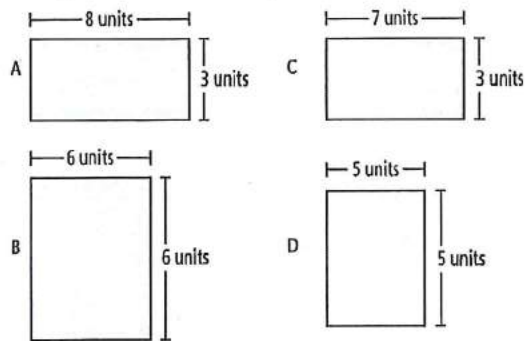
7 There are 12 students in Ms. Miller's class. She needs 24 juice boxes for a class party. The juice boxes come in packages of 6 juice boxes each. Which expression represents the number of packages of juice boxes Ms. Miller needs to buy for the class party?

- A $24 + 12$
- B $36 \div 6$
- C 12×6
- D $24 \div 6$

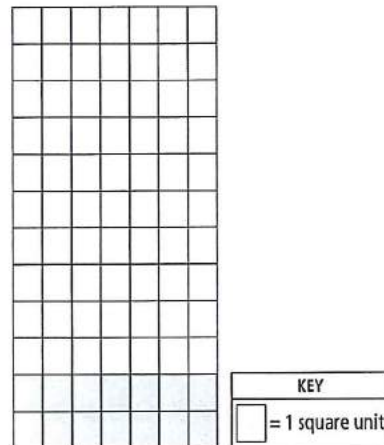
8 Tomas made a poster for his science project. The shaded part of the figure below shows the area of his poster.



Which figure has the same area as the poster?



9 The figure below represents a floor covered with white tiles and gray tiles.



Which expression could be used to find the area, in square units, of the entire floor?

- A $(12 + 7) \times (12 + 7)$
- B $(12 \times 7) + (12 \times 7)$
- C $(10 + 7) \times (2 + 7)$
- D $(10 \times 7) + (2 \times 7)$

10

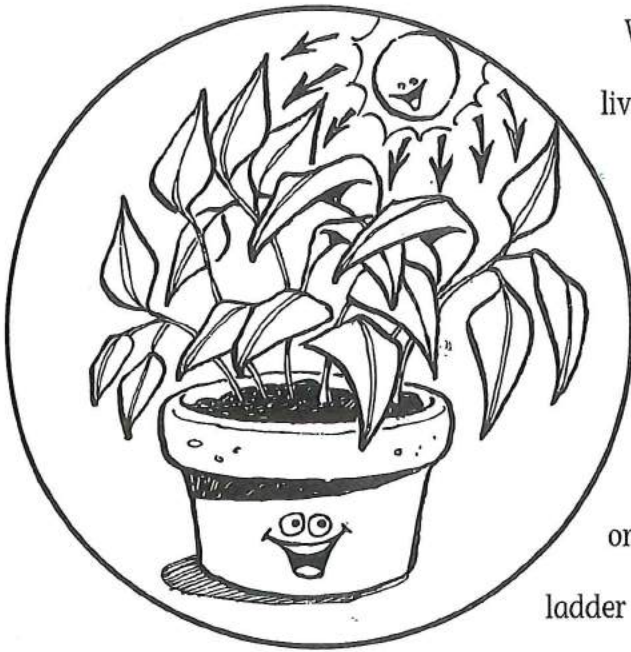
Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

Food Chains



What is a food chain? A food chain explains how living things eat other living things in order to stay alive. All living things are linked to each other.

They need other living things to survive. A food chain is like a ladder. Imagine you are standing in the middle of a ladder. You would eat the animals or plants that are below you on the ladder. The animals above you on the ladder would eat you!

The sun is needed in a food chain. It gives plants and animals the energy to grow. There would not be a food chain at all without sunlight.

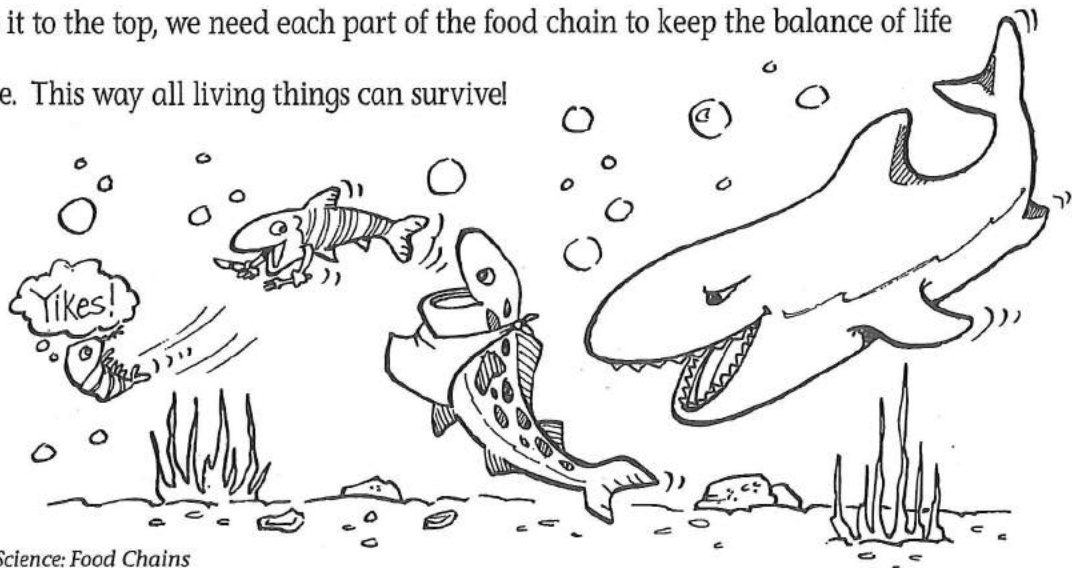
All food chains begin with a link called a producer. Producers make food from nonliving things. A green plant is an example of a producer. Have you ever watered a plant? If so, you have helped a plant make its own food! The plant takes that water and uses the sun's energy to combine it with carbon dioxide. This is how the plant makes its own food. This gives the plant nourishment. It is just like when you eat a healthy meal.

The next link in a food chain is called a consumer. A consumer is any living thing that needs a producer for food. There are many types of consumers. One type is called an herbivore. This is an animal that only eats plants. A plant gets nutrients from the food it makes. Then, an animal gets nourishment by eating the plant. The second type of consumer is called a carnivore. Animals that only eat other animals are called carnivores. The third type of consumer is called

an omnivore. Animals and people who eat both plants and animals are called omnivores. What type of consumer are you?

The last link in a food chain is called a decomposer. Decomposers, like bacteria and fungi, are living things that eat dead plants and animals or help them decay. Decomposers are nature's garbage collectors. They help to keep the earth clean and healthy. Can you imagine what the earth would look like if each plant and animal that died just laid on the ground forever? It would be a very crowded and stinky world! You can see that even though most decomposers are small, they do a very big job.

Let's look at a food chain in action in the sea. At the bottom of the food chain, there are plants and plankton. Fish and animals like shrimp, jellyfish, and sea stars need to eat this plankton to live. Then, larger fish like tuna and mackerel eat the jellyfish and shrimp. Then, even larger fish and animals such as sharks, seals, and people eat them. Do you know what would happen if all of the plankton disappeared? The shrimp and jellyfish would die because they would not have any food. So, the tuna and mackerel would not have as much to eat, and they could start to die. If this went up the food chain, it could affect our lives as well. Just like each step on a ladder is important to make it to the top, we need each part of the food chain to keep the balance of life the same. This way all living things can survive!



Food Chain Questions:

1. What is a food chain?

2. How do hunting, overcrowding, and the destruction of natural habitats affect a food chain?

3. Why is a food chain important to humans?

Section 14



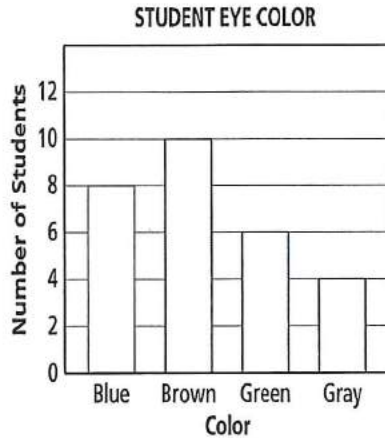
Name _____

Date _____

Grade 3 Math Review #14

1

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.



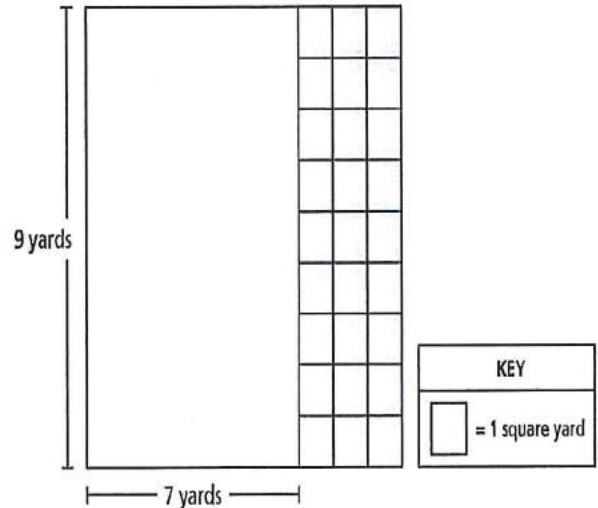
How many fewer students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

Answer _____ fewer students

2

Mr. Nuccio's sandwich shop was 9 yards long and 7 yards wide before he added a new section. The shaded squares below show the new section.



What is the total area, in square yards, of Mr. Nuccio's sandwich shop after the new section was added?

Answer _____

3

Which situation could be represented by the expression 6×2 ?

- A Rocco hiked six miles each day for two days.
- B Rocco had six baseballs and gave away two of them.
- C Rocco had a total of six tennis balls in two cans.
- D Rocco biked six miles and then continued for two more miles.

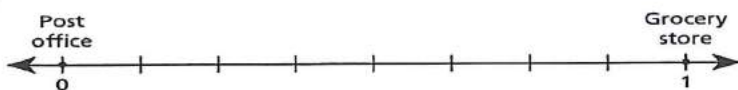
4

The first number in a number pattern is 28. The pattern rule is to add 14 to get the next number in the pattern. If the pattern continues, which statement is true?

- A All the numbers in the pattern can be divided equally by 10.
- B All the numbers in the pattern can be divided equally by 4.
- C All the numbers in the pattern can be divided equally by 8.
- D All the numbers in the pattern can be divided equally by 7.

Amy and Barney live on a road between the post office and the grocery store. The post office and the grocery store are 1 mile apart. The road is represented by the number line below.

5



- Amy lives $\frac{2}{8}$ mile from the post office.
- Barney lives $\frac{3}{8}$ mile from Amy's house.

Draw and label points for Amy's house and Barney's house on the number line. Use labels A for Amy and B for Barney.

How far does Barney live from the post office?

6

Umi created the number pattern below by adding the same amount each time to get the next number.

20, 40, 60, 80, ...

What will be the eighth number in the pattern?

- A 160
- B 240
- C 320
- D 640

7

Kay and Juanita each have a garden of the same size and shape.

- Kay grows flowers in $\frac{1}{6}$ of her garden.
- Juanita grows flowers in $\frac{1}{3}$ of her garden.

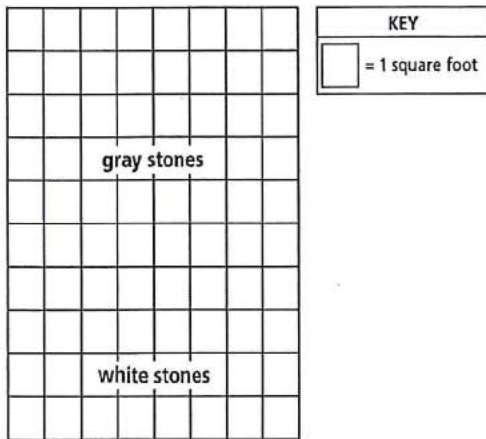
Which statement shows a correct comparison of the sections of flowers grown in Kay's garden and Juanita's garden?

- A $\frac{1}{6} > \frac{1}{3}$
- B $\frac{1}{6} < \frac{1}{3}$
- C $\frac{1}{3} = \frac{1}{6}$
- D $\frac{1}{3} + \frac{1}{6}$

8

9

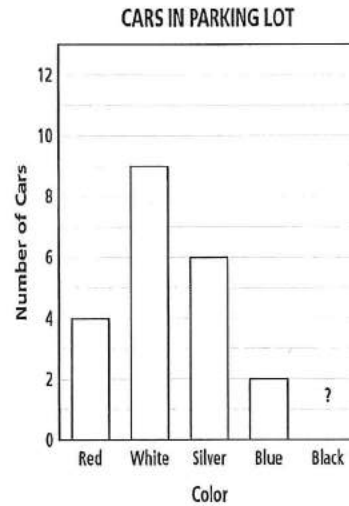
Paul has gray and white paving stones in his patio. A diagram of his patio is shown below.



Which equation can be used to find the total area, in square feet, of Paul's patio?

- A $(8 \times 7) + (8 \times 3) = ?$
 B $(8 + 7) \times (8 + 3) = ?$
 C $(10 \times 7) + (10 \times 3) = ?$
 D $(10 + 7) \times (10 + 3) = ?$

The bar graph shows the numbers and colors of cars in a parking lot.



The total number of silver and black cars equals the total number of red, white, and blue cars. How many black cars are in the parking lot?

- A 9
 B 10
 C 15
 D 30

10

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

Congratulations!

You've completed the at home
Enrichment Program!

