### 4th Grade



# Enrichment Package 2020



| Name: |
|-------|
|-------|



#### 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.

| The Instructional Support Services Team |  |
|---|--|
|   |  |

#### Dear Students,

Sincerely,

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

OU BOCES www.ouboces.org

## Section 1



Learning for Life

#### Day 1

Natasha and Evan are each writing a 5-page essay. Natasha completed  $\frac{3}{5}$  of her essay in the morning and  $\frac{2}{5}$  of her essay in the afternoon. Evan completed  $\frac{4}{5}$  of his essay after school. How much more of the total essay did Natasha complete than Evan?

Which number sentence correctly compares two numbers?

- A forty-six thousand three hundred fifteen < 46,350
- **B** 29,073 = 20,000 + 9,000 + 700 + 3
- C 10,000 + 6,000 + 400 > sixteen thousand four hundred ten
- **D** 86,502 = 80,000 + 6,000 + 500 + 20

Andrew wrote the number 186,425 on the board. In which number is the value of the digit 6 exactly 10 times the value of the digit 6 in the number Andrew wrote?

- **A** 681,452
- **B** 462,017
- C 246,412
- **D** 125,655

A loaf of bread was cut into 6 equal slices. Each of the 6 slices was cut in half to make thinner slices for sandwiches. Ben ate 3 slices. Draw a fraction model and write a fraction that tells how much of the loaf Ben ate.

Ms. Clark's class went to recess at 12:00 p.m., as shown below.



The minute hand had turned 90 degrees by the time recess ended. At what time did recess end?

- A 12:15 p.m.
- B 12:30 p.m.
- C 12:45 p.m.
- D 1:00 p.m.

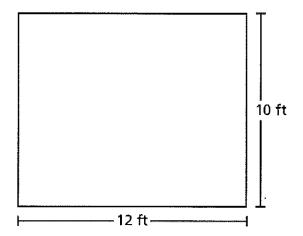
What is  $123 \div 8$ ?

- A 15 remainder 7
- B 15 remainder 3
- C 16 remainder 5
- D 16 remainder 1

What is the measure of an angle that turns through  $\frac{3}{4}$  of a complete circle?

- A 34°
- B 43°
- C 75°
- D 270°

The figure below represents a play space that Logan fenced in for his dog.



Logan is getting a second dog and wants to increase the length of the play space by 3 feet and the width by 3 feet. What will be the difference in the area, in square feet, between the original play space and the new play space?

Show your work.

What is the product of  $32 \times 67$ ?

- A 1,824
- B 1,934
- C 2,044
- **D** 2,144

The population of a certain city is 836,527. What is the population of this city rounded to the nearest ten thousand?

- A 800,000
- **B** 830,000
- C 836,000
- **D** 840,000

## **Saving Snow Leopards**

#### by Pamela Crowe

#### "Mountain Ghost"

- The snow leopard is rarely seen by humans. This mysterious cat lives in 12 Asian countries among the world's tallest mountains.
- The snow leopard is smaller than the tiger, the lion, and the leopard of Africa and Asia. It weighs as much as a cheetah, but is shorter and stockier. The cat's compact shape and thick fur help keep it warm in glacier-chilled air. Dark markings dapple its light-gray coat, camouflaging it in rocky terrain. Big paws make padding over snow easier. An extra-long tail provides balance on steep, rugged ground.
- You might think the snow leopard would be safe living in such harsh, remote places. But it faces multiple threats from humans. The cat has lost important stretches of habitat. (A habitat is the place that fills an animal's needs—mainly food, shelter, and mates.) Mining, wars, and overgrazing by farm animals have all led to this loss of habitat.

#### Protecting the Herd

- The loss of habitat has caused a food shortage. Snow leopards eat wild goats and sheep. When farm animals eat too much vegetation, wild plant eaters can't find enough food to stay healthy. Females don't have enough babies. Over time, the numbers of wild goats and sheep go down, and snow leopards have less to eat. Then the big cats eat livestock, and the herders kill the leopards to protect their livelihoods.
- Agencies are working to save the cats and help herders at the same time. Some agencies give herders wire mesh and wood to keep snow leopards from entering their stables at night. Some pay herders for the animals they lose to snow leopards. In exchange, the herders stop killing snow leopards and leave more room and plants for the wild goats and sheep.

- Are the conservation programs working? Researchers estimate that only 3,500 to 7,500 snow leopards are alive today. But they need more reliable ways to count leopards before they will know.
- That's where scientists like Dr. Kyle McCarthy are needed. He traveled to Kyrgyzstan to test ways of estimating snow leopard numbers. He camped in the mountains with Dr. Jennifer McCarthy (his wife) and other co-workers. They saw no leopards, but they hadn't expected to. Instead, they looked for evidence the cats left behind. "You have to find something related to them: poops, scrapes (claw marks), and pee," Dr. Kyle McCarthy says.
- The group collected scat (poop) for DNA analysis. Along with the waste material of digestion, scat contains cells from the animal's own body. DNA is material inside those cells that, like fingerprints, can identify an individual animal.
- The team also used automatic cameras. The scientists placed motion-and-heat-sensitive cameras along a mountain ridge. When a snow leopard neared one of these "camera traps," the camera snapped its picture.
- Each snow leopard's spot pattern is different. Researchers compared patterns in the photos to identify cats. The cameras had taken photos of 15 different snow leopards at two study sites.

#### A Close Encounter

- Shannon Kachel, Dr. Kyle McCarthy's graduate assistant, has searched for snow leopards in Tajikistan, where he almost saw one. "I was hiking along a ridgeline in the late afternoon and came around the corner of a rock outcropping to find a steaming, fresh kill site with snow leopard signs all round," Kachel says. "I could see and hear where the cat had knocked some rocks loose as it ran away from me, but even though I waited until it was nearly dark, I never saw the cat."
- "Most people will never see a snow leopard, yet it has a right to exist," Dr. Kyle McCarthy says. "It's too magnificent to think about losing."

| THREATS TO SNOW LEOPARDS      |   |  |  |  |
|-------------------------------|---|--|--|--|
| Illegal hunting               | <ul> <li>Snow leopards are hunted for their fur and bones.</li> <li>People and livestock move into snow leopard range.</li> </ul> |  |  |  |
| Loss of habitat               |   |  |  |  |
|                               | Fewer prey are available to<br>snow leopards when wild<br>sheep and goats are hunted  |  |  |  |
| Loss of prey                  | <ul> <li>Livestock compete with the<br/>wild sheep and goats for<br/>food and the number of wi<br/>animals is reduced.</li> </ul> |  |  |  |
| Killed by herders             | Sheep and goat herders kill<br>the leopards when the<br>leopards eat livestock.   |  |  |  |
| Lack of effective protection  | The areas in which the<br>snow leopards live are too<br>large to protect.   |  |  |  |
| -                             | Many countries cannot<br>afford to pay for protection   |  |  |  |
| Lack of awareness and support | Herders do not understand<br>the importance of snow<br>leopards to the ecosystem.   |  |  |  |

#### "Saving Snow Leopards" Questions

#### 1. What does the word "conservation" mean as it is used in paragraph 6?

- A. Action
- B. Education
- C. Preparation
- D. Protection

#### 2. How does paragraph 9, connect to paragraph 6 in the article?

- A. By describing a method for counting snow leopards.
- B. By describing what is like to see a snow leopard.
- C. By explaining why snow leopards are rarely seen by humans.
- D. By explaining how scientists identify individual snow leopards.

#### 3. Which idea best explains why Dr. McCarthy and his co-workers traveled to Kyrgystan?

- A. "The loss of habitat has caused a food shortage." (paragraph 4).
- B. "But they need more reliable ways to count leopards before they will know." (paragraph 6).
- C. "They saw no leopards, but hey hadn't expected to." (paragraph 7).
- D. "Researchers compared patterns in the photos to identify cats." (paragraph 10).

#### 4. Which idea from the article best supports the main idea?

- A. "The snow leopard is smaller than the tiger, the lion, and the leopard of Africa and Asia." (paragraph 2).
- B. "Researchers estimate that only 3,500 to 7,500 snow leopards are alive today." (paragraph 6).
- C. "Each snow leopard's spot pattern is different." (paragraph 10).
- D. "The cameras had taken photos of 15 different snow leopards at two study sites." (paragraph 10).

#### 5. How is the article mainly organized?

- A. Compare and contrast.
- B. Sequence of events.
- C. Question then answer.
- D. Cause and effect.

#### 6. How does the table at the end of "Saving Snow Leopards" support the main idea of the article?

- A. By showing reasons why snow leopards are struggling to survive.
- B. By listing ways to better protect snow leopards.
- C. By presenting new information about the habitat of snow leopards.
- D. By providing evidence that there are fewer snow leopards alive now than in the past.

## Section 2



Learning for Life

#### Day 2

What is the measure, in degrees, of an angle that represents  $\frac{50}{360}$  of a circle?

- **A** 50°
- **B** 90°
- **C** 310°
- **D** 360°

Which number could be placed in the blank to make the equation true?

$$6 \times \frac{5}{6} = \frac{?}{} \times \frac{1}{6}$$

- **A** 5
- **B** 11
- **C** 30
- **D** 36

Which comparison is true?

A 
$$\frac{2}{3} = \frac{8}{12}$$

$$\mathbf{B} \qquad \frac{4}{9} = \frac{8}{9}$$

$$C \qquad \frac{3}{4} > \frac{9}{10}$$

$$D \qquad \frac{2}{4} > \frac{2}{3}$$

For a math project, Roxana made the table below to show the amount of time she spent doing different activities last weekend.

#### **WEEKEND ACTIVITIES**

| Activity    | Time Spent<br>(hours) |
|-------------|-----------------------|
| Dance Class | <u>6</u><br>5         |
| Reading     | <u>4</u><br>12        |
| Soccer      | <u>7</u><br>8         |
| Swimming    | <u>2</u><br>6         |

On which activities did Roxana spend more than  $\frac{1}{2}$  an hour? Explain how you know which activities took more than  $\frac{1}{2}$  an hour.

Show your work.

Tatum walks her dog  $\frac{2}{3}$  mile every day after school. How many miles does she walk her dog in 5 days?

- A  $\frac{7}{3}$
- B  $\frac{10}{3}$
- $C = \frac{2}{15}$
- $\mathbf{D} = \frac{10}{15}$

There are three different sections to sit in at a baseball park. The number of people who can sit in each section is described below.

- red section seats 200 people
- blue section seats 20 fewer people than the red section
- green section seats 2 times as many people as the blue section

What is the total number of people who can sit in the baseball park?

- A 260
- **B** 380
- C 640
- D 740

Which fraction model has a shaded area equivalent to  $\frac{3}{12}$ ?

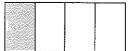
Α



C



D



ח



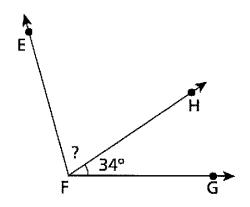
A teacher buys the folders listed below.

- 5 boxes of red folders with 36 folders in each box
- 6 boxes of blue folders with 32 folders in each box

Which number is **closest** to the total number of red and blue folders that the teacher buys?

- A 275
- **B** 380
- C 440
- **D** 550

The measure of angle EFG shown below is 106 degrees.



What is the measure, in degrees, of angle EFH?

- **A** 34
- **B** 56
- **C** 72
- **D** 140

Which statement about an object turning 90 degrees around in a circle is true?

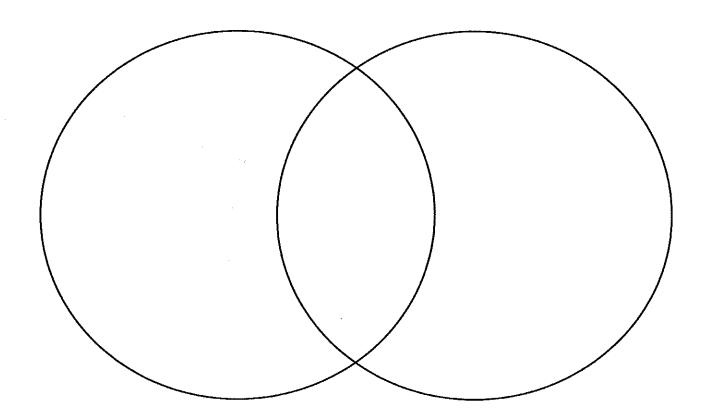
- A It turns  $\frac{1}{4}$  of the way around in a circle.
- B It turns  $\frac{2}{4}$  of the way around in a circle.
- C It turns  $\frac{3}{4}$  of the way around in a circle.
- **D** It turns  $\frac{4}{4}$  of the way around in a circle.

#### Compare (things are the same) and Contrast (things are different) in schools at different times in history.



Use the diagram to compare and contrast this classroom with your classroom

When the Department of **Education first began** gathering data on the subject in the 1869-70 school year students attended school for about 132 days (the standard year these days is 180) depending on when they were needed to help their families harvest crops. Attendance was just 59 percent. School days typically started at 9am and wrapped up at 2pm or 4pm, depending on the area; there was one hour for recess and lunch, which was called "nooning."



# Section 3



Learning for Life

#### Day 3

What is the quotient of  $1,248 \div 7$ ?

- A 177 remainder 9
- **B** 168 remainder 2
- C 178 remainder 2
- D 178 remainder 3

The workers at Cameron's Flower Shop are putting 1,323 flowers into vases for a party. Each vase must hold exactly 8 flowers. What is the total number of vases the workers can fill completely?

Show your work.

A loaf of bread is cut into slices of equal size. Some of the loaf is used in a recipe and  $\frac{2}{12}$  of the loaf is used to make a sandwich. The remaining  $\frac{7}{12}$  of the loaf is put into the refrigerator.

Write and solve an equation to find the fraction of the loaf of bread that is used in the recipe.

Show your work.

| Wh   | ch two numbers both round to 1,500 when rounded to the nearest hundred?   |
|------|---|
| Α    | 1,399 and 1,599   |
| В    | 1,449 and 1,549   |
| C    | 1,457 and 1,547   |
| D    | 1,489 and 1,589   |
|      |   |
| The  | nodel below is shaded to represent a fraction.  |
|      |   |
| Whi  | n fraction model is shaded to represent an equivalent fraction?   |
| A    | C   |
|      |   |
| В    | D D   |
| _    |   |
| A re | tangular porch is 4 feet wide. It is 3 times as long as it is wide. Find the  |
| peri | neter of the porch.   |
| _    |   |
|      | the number line with the fractions shown on the tape diagram. Circle the on that labels the point on the number line that also names the shaded |
| Haci | 1   |

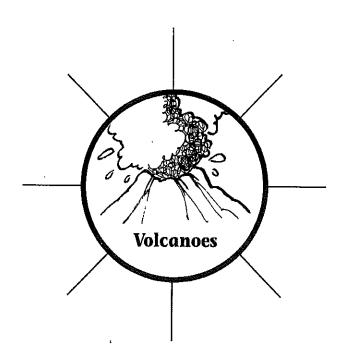
part of the tape diagram.

There were 11 players on Mr. Teach's softball team. They each ate  $\frac{5}{8}$  of a pizza. How many pizzas did they eat?

In a jumping contest, Rosa jumped 1.64 meters. Mary jumped 1.6 meters. Kerri jumped 94 100 meter. Michelle jumped 1.06 meters. Who jumped the farthest?



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



# Werd Warm-Up





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

magma

erupt

blowhole

story

young

shield

destroys

Hawaii

extinct

activity

pumice

explode

# Section 4



Learning for Life

#### Day 4

Jean threw a softball a distance of 9 feet. Lee threw a softball 3 times as far as Jean. Which equation can be used to determine the distance, d, that Lee threw the ball?

- $\mathbf{A} \qquad d \times 3 = 9$
- **B** d + 3 = 9
- **C** 3+9=d
- **D**  $3 \times 9 = d$

Which method can be used to solve 11 × 13?

- A Multiply 11  $\times$  10 and 10  $\times$  3, then add the two products.
- B Multiply 11  $\times$  10 and 11  $\times$  3, then add the two products.
- C Multiply 11  $\times$  100 and 10  $\times$  3, then add the two products.
- $\boldsymbol{D}$  Multiply 11  $\times$  100 and 11  $\times$  3, then add the two products.

Use a number line to compare the following fractions:



Becky and James have a total of  $4\frac{2}{8}$  feet of yarn. Becky has  $1\frac{5}{8}$  feet of yarn. How many feet of yarn does James have?

- A  $2\frac{5}{8}$
- B  $2\frac{7}{8}$
- C  $3\frac{3}{8}$
- D  $3\frac{5}{8}$

Mr. Fuller wants to put fencing around his rectangular-shaped yard. The width of the yard is 55 feet and the length is 75 feet. How many feet of fencing does Mr. Fuller need?

- A 130
- **B** 260
- C 3,905
- D 4,125

Compare the fractions given below by writing > or < on the lines.

Give a brief explanation for each answer referring to the benchmarks  $0, \frac{1}{2^t}$  and 1.

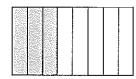
$$\frac{1}{2}$$
  $\frac{3}{4}$ 

b. 
$$\frac{1}{2}$$
  $\frac{7}{8}$ 

c. 
$$\frac{2}{3}$$
  $\frac{2}{5}$ 

d. 
$$\frac{9}{10}$$

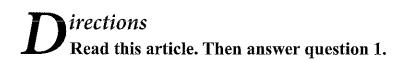
The shaded part of the model below represents the fraction of a candy bar that Jill ate.



Tom has the same size candy bar. He eats 2 times the amount that Jill ate. What fraction of the candy bar does Tom eat?

Show your work.

Katie cut out a rectangular piece of wrapping paper that was 2 times as long and 3 times as wide as the box that she was wrapping. The box was 5 inches long and 4 inches wide. What is the perimeter of the wrapping paper that Katie cut?



## Reaching for the Top

#### by Kassandra Radomski

- For the past six years, Jordan Romero has been chasing a dream. That dream has taken him to the top of the world's highest mountains. The dream came true when the California teenager stepped onto the peak of Mount Vinson Massif in Antarctica.
- On that day—December 24, 2011—Jordan became the youngest person to have climbed the tallest mountain on each of the seven continents. These mountains are known as the "seven summits." (A summit or peak is the highest point of a mountain.)
- It all began when Jordan was 9 years old. He became fascinated by a school mural that showed the seven summits. Jordan had never climbed a mountain before. But he told his dad that he wanted to climb them ALL!
- His dad, an experienced mountaineer, was very supportive. In fact, Jordan's dad and stepmom trained him in top-level mountaineering and climbed every mountain with him. As part of "Team Jordan," they also became the first family to climb the seven summits together.
- Training to climb the highest mountains in the world involves a lot of hard work. But Jordan has always been very physically active—it's just the way he lives. Still, there were times when he thought, "Yeah, I want to be done."
- But he refused to give up. When others thought he was too young to climb Mount Everest, the world's highest mountain, he just became more determined. He recalls thinking at the time, "All you naysayers, I'll show you." He sure did. When he was 13, he became the youngest person to scale Mount Everest.
- He encourages kids to "find your Everest." That doesn't mean he wants everyone to start mountain climbing. He means find something you love doing and set goals to accomplish it.
- 8 "Anything is possible," Jordan says.

### "Reaching for the Top" Questions

|      | <br> | <br> | <br> |
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# Section 5



Learning for Life

#### Day 5

Which expression has the same value as  $7 \times \frac{3}{4}$ ?

- $A \qquad 21 \times \frac{3}{4}$
- $\mathbf{B} \qquad 21 \times \frac{3}{28}$
- C  $21 \times \frac{1}{4}$
- $\mathbf{D} \qquad 21 \times \frac{1}{28}$

Samantha walks a total of  $\frac{2}{3}$  mile to get to and from school each day. Write an expression that can be used to find the total number of miles that Samantha walks to and from school over 5 days. Then evaluate the expression.

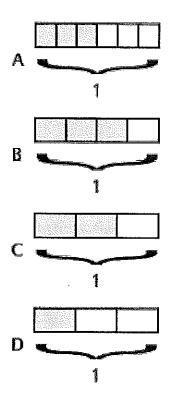
Expression \_\_\_\_\_

Show your work.

For Jordan to get to his cousins' house, he has to travel through Albany and Plattsburgh. From Jordan's house to Albany is 189 miles. From Albany to

Plattsburgh is 161 miles. If the total distance of the trip is 508 miles, how far from Plattsburgh do Jordan's cousins live?

Which model is shaded to represent a fraction that is equivalent to  $\frac{9}{12}$ ?



Use each digit shown below to create a 5-digit number with the greatest value and a 5-digit number with the least value. Each digit can only be used once in each number. Then write a number sentence using >, <, or = to compare the two numbers you created.

2, 9, 1, 3, 8

Show your work.

#### Why do we need a government?

| What Do Governments Do?  |  |  |  |  |
|--|--|--|--|--|
| The national government deals with issues that affect all Americans. | State governments focus on issues that matter to the people in a particular state. | Local governments respond to issues of local importance. | Some issues are important to all three levels of government. |  |
| Examples   | Examples   | Examples   | Examples   |  |
| Printing money Issuing fishing licenses                              |  | Fixing potholes in local roads                           | Fighting crime   |  |
| Declaring war  | Setting a drinking age   | Putting out fires  | Educating children   |  |
| Creating post offices Creating hunting laws                          |  | Cleaning local parks                                     | Supporting museums and libraries                             |  |
| Governments at all three le  | vels collect taxes to help pay   | for these activities.                                    | The Development of   |  |

Issues that are important to people include: jobs, health care, environment (air, water, climate) education, traffic/transportation, services for citizens.

Can you think of other topics or concerns that you feel the government should work on to help the citizens?

From your list of concerns what is the issue that you think a government could address and do something about to bring about a positive effect? Now complete the chart below and identify which level of government should address the issue. Example having repairs made at the park where you like to meet your friends and play – local government

| Government | Identify an issue | Why is this important? | What should be done? |
|------------|-------------------|------------------------|----------------------|
| Local      |                   |                        |                      |
|            |                   |                        |                      |
|            | 8                 |                        |                      |
|            | N                 |                        |                      |
| State      |                   |                        |                      |
|            |                   |                        |                      |
|            |                   |                        | -                    |
|            |                   |                        |                      |
| National   |                   |                        |                      |
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| All levels | 1                 |                        |                      |
|            | 8                 |                        |                      |
|            | 1                 |                        | -                    |
|            |                   |                        | α                    |

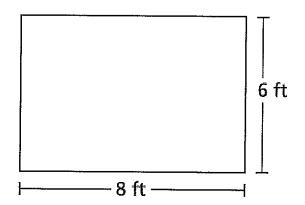
## Section 6



Learning for Life

#### Day 6

Megan's art class painted two rectangular murals. The size of the first mural is shown below.



The second mural had the same area as the first mural but had a different perimeter. Which measures could be the side lengths of the second mural?

- A 8 feet and 6 feet
- B 5 feet and 9 feet
- C 4 feet and 12 feet
- D 4 feet and 10 feet

Cindy recycled 54 pounds of paper. She recycled 9 times as many pounds of paper as Monica. Write an equation that can be used to find m, the number of pounds of paper Monica recycled. Then solve the equation to find the number of pounds of paper Monica recycled.

Show your work.

Each time Rami turned the dial on a machine, the dial moved 1 degree. Rami turned the dial 10 times. What is the total number of degrees the dial moved?

- A 10
- B 90
- C 110
- D 360

The three models below are each shaded to represent a different fraction.

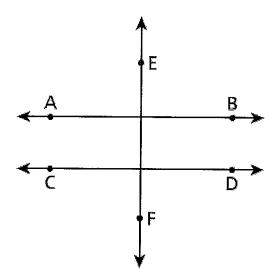


What is the sum of the fractions represented by the shaded parts of the models?

- A  $\frac{10}{18}$
- $\mathbf{B} \qquad \frac{8}{10}$
- $c = \frac{10}{8}$
- **D**  $\frac{10}{6}$

A store sold a total of 21,650 balls. It sold 11,795 baseballs. It sold 4,150 fewer basketballs than baseballs. The rest of the balls sold were footballs. How many footballs did the store sell?

The diagram below shows line AB, line CD, and line EF.



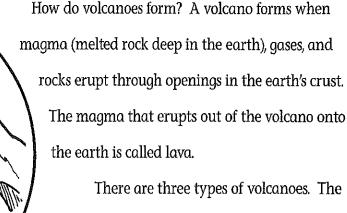
Identify two lines on the diagram that appear to be perpendicular to each other.

#### Explain how you determined your answer.

Every day at the bagel factory, Cyndi makes 5 different kinds of bagels. If she makes 144 of each kind, what is the total number of bagels that she makes?

Mr. Salazar cut his son's birthday cake into 8 equal pieces. Mr. Salazar, Mrs. Salazar, and the birthday boy each ate 1 piece of cake. What fraction of the cake was left? Draw and label a diagram.

# Volcanoes



first type is called a composite volcano. This type is explosive. When it explodes, lava, ash, and gases shoot out of an opening in it. To imagine what this looks

like, think about the spray that shoots up from a whale's blowhole.

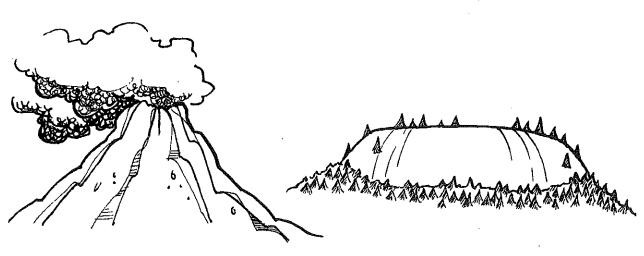
The volcano shoots up in the same way but on a much larger scale and a lot hotter. Hardened lava and ash build up over the years. They can form mountains that are quite tall. Mount St. Helens (located in the state of Washington) is a composite volcano.

Some volcanoes do not shoot lava up in the air. The lava pours out of it instead. When the lava gets to the surface of the earth, it moves like a thick river. This type of volcano is called a shield volcano. The lava flows slowly over the land. It destroys anything in its path. But you do not have to worry! The lava moves slowly enough for people who live nearby to leave safely. Then, the lava flow slows down, cools off, and turns into rock. Shield volcanoes form shorter mountains. They are wide, rounded, and smooth. If you visit Hawaii, look for some shield volcanoes. You will find them there!

The third type of volcano forms quickly and is smaller. It is called a cinder cone volcano. These volcanoes are usually less than 300–400 feet (91.5–122 meters) tall. They explode one time quickly. When cinder cones erupt, they force out ash, gases, and lava in tiny bits.

After a volcano erupts, the lava cools off. It gets hard and becomes igneous rock. How the volcano erupts determines the kind of igneous rock that is formed. Composite volcanoes form rocks from the lava that shoots out of it. Some of these rocks are obsidian and pumice. Magma that gets trapped in the earth's crust forms granite. Shield volcanoes make rocks such as basalt, "pahoehoe," and "aa" (pronounced "ah-ah"). The last two names are Hawaiian. The "pahoehoe" rock feels like rope. The "aa" is a sharp and jagged rock. Tuff, pumice, and lots of basalt cinders come from cinder cone volcanoes. Pumice is made from lava that has many bubbles of hot gases in it. The lava cools so fast that the gases do not have time to get out. Some pieces of pumice are so full of holes from the gases that they can float in water!

Volcanoes have been forming for thousands of years. Some are still active. This means that they have erupted in the last 10,000 years and could erupt again. Others are dormant or extinct. Dormant volcanoes show no signs of activity. Many scientists think they could erupt again some day. Those that are extinct have not had any signs of activity in the last 10,000 years. They probably will not erupt again.



### Volcano Questions:

| 1. What are the three types of volcanoes? How are they the same and different?  |
|---|
|   |
|   |
|   |
| 2. Why do volcanoes erupt?  |
|   |
|   |
|   |
| 3. Would you want to live in an three-story mansion with 8 bedrooms and a pool if it were at the base of a cinder cone volcano? Why or why not? |
|   |
|   |
|   |

# Section 7



### Day 7

Jack picks 60 apples from an apple tree. He uses 12 of them to make applesauce. He places the remaining apples equally into 6 gift baskets. Which equation can be used to determine the number of apples, a, that Jack places into each gift basket?

- **A**  $(60 \div 6) 12 = a$
- **B**  $(60-12) \div 6 = a$
- **C** (60-6)-12=a
- **D**  $(60 + 12) \div 6 = a$

Of the animals at a pet show,  $\frac{3}{8}$  were cats and  $\frac{4}{8}$  were dogs. The rest of the animals were rabbits. What fraction of the animals at the pet show were rabbits?

Show your work.

A mixture of 2 chemicals measures 1,034 milliliters. It contains some of Chemical A and 755 milliliters of Chemical B. How much less of Chemical A than Chemical B is in the mixture?

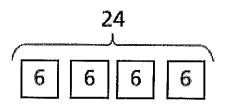
Rowan has 3 pieces of yarn, as described below.

- a red piece of yarn that is  $\frac{3}{4}$  foot long
- a yellow piece of yarn that is  $\frac{6}{8}$  foot long
- a blue piece of yarn that is  $\frac{4}{12}$  foot long

Which number sentence correctly compares the lengths of 2 of these pieces of yarn?

- A  $\frac{3}{4} < \frac{6}{8}$
- B  $\frac{4}{12} < \frac{3}{4}$
- $C = \frac{3}{4} > \frac{6}{8}$
- $D = \frac{4}{12} > \frac{6}{8}$

Which comparison statement describes the model below?



- A 6 is 24 times as many as 4
- B 24 is 4 times as many as 6
- C 4 times as many as 24 is 6
- D 6 times as many as 6 is 24

Mick and Jackie buy a large sandwich to share. They each eat  $\frac{2}{5}$  of the sandwich. How much of the sandwich is remaining?

### Show your work.

Every day, Penelope jogs three laps around the playground to keep in shape. The playground is rectangular with a width of 163 m and a length of 320 m. How many meters does Penelope jog in three laps?

### **How Birds Beat the Odds**

by Charles C. Hofer

Raising a nest of young birds is a lot of work. Parent birds have to keep their eggs safe from predators, shelter the chicks from weather, and find enough food for all those hungry mouths. Different kinds of birds do these things in different ways. But they all face the same challenge: making sure that there's a next generation of birds.

### The More, the Merrier

- The Gambel's quail lives in the deserts of the American Southwest. These ground-dwelling birds usually lay 10 to 12 eggs at a time in a shallow nest. That's a lot of tiny mouths to feed.
- Gambel's quail chicks don't need much attention. Just hours after hatching, they're up and running. And they'd better be quick! These birds are a favorite prey of desert hunters like bobcats, snakes, and hawks. This means that only a few chicks will survive to be adults. By laying lots of eggs, adult quails increase the chances that at least some of their young will grow up to lay eggs themselves.

### Try, Try Again

- American robins are common backyard birds. They also lay many eggs—but not all at once. Instead, robins raise two to four batches of eggs over the summer.
- Robins build cup-shaped nests that hungry predators like snakes or raccoons can easily raid. Building several nests in a season instead of just once makes it more likely that at least one clutch will survive to become adult robins.

### Spiny Hideaway

Many birds try to improve their eggs' chances by hiding their nests. The Gila woodpecker has found a great hiding place—inside the giant saguaro cactus. This woodpecker drills a hole in the cactus, where she lays about six eggs. Not many egg-stealers are willing to risk being stuck by the sharp spines.

### "How Birds Beat the Odds" Questions

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# Section 8



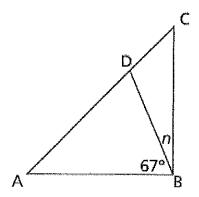
### Day 8

A number, rounded to the nearest thousand, is 47,000. Which number could be the number that was rounded?

- A 46,295
- **B** 46,504
- C 47,520
- **D** 47,924

Kathy had 6 bottles of glitter. Her sister used  $\frac{5}{6}$  of a bottle. How many bottles of glitter are left?

Right triangle ABC is shown below.



Write an equation that can be used to determine the angle measure, in degrees, of angle DBC. Let n represent the measure of angle DBC. Then determine the measure of n.

Show your work.

Melina walked  $\frac{9}{12}$  mile each day for 5 days. What was the total distance, in miles, she walked in the 5 days?

- $A \frac{9}{60}$
- B  $\frac{45}{60}$
- $C \frac{14}{12}$
- $D \frac{45}{12}$

How does the value of the digit 3 in the number 63,297 compare to the value of the digit 3 in the number 60,325? Be sure to include what you know about place value in your answer.

### Explain your answer.

A truck is parked next to a tree. The height of the truck is 6 feet. The height of the tree is 3 times the height of the truck. Which equation can be used to find the height of the tree?

- A 6+3= ?
- **B**  $6 \times 3 = ?$
- C  $(6 \times 3) + 3 =$  ?
- **D**  $(6 \times 3) + 6 = ?$

A local store was having a two-week Back to School sale. They started the sale with 36,390 notebooks. During the first week of the sale, 7,424 notebooks were sold. During the second week of the sale, 8,967 notebooks were sold. How many notebooks were left at the end of the two weeks?

A small bag of chips weighs 48 grams. A large bag of chips weighs three times as much as the small bag. How much will 7 large bags of chips weigh?



SHIPPING LANE The canal system connects the Great Lakes with the Hudson River and Lake Champlain.

In 1853, the Erie Canal carried 62 percent of all U.S. trade, twice as much as all other water routes combined, including the Mississippi River. The Erie Canal was enlarged several times over the nineteenth and early twentieth centuries. But by the end of the nineteenth century, railroads were moving more freight and people than waterways. The Erie Barge Canal that opened in 1915 was the last effort to make the canal profitable but it could not compete against expanding railroads and highway systems. Today, the Erie Canal is a National Heritage Corridor used by pleasure boaters and tourists.

| Question                     | What is you answer? | What evidence did you use ? |
|------------------------------|---------------------|-----------------------------|
| What were some of the        |                     | >                           |
| geographic challenges to     |                     |                             |
| building the Erie Canal?     |                     |                             |
| What were some of the        |                     | 8                           |
| things farmers and           | n                   |                             |
| merchants gained by          | 2                   |                             |
| transporting their goods     |                     | 3,                          |
| along a canal and not a road |                     |                             |
| across New York State?       |                     | "                           |
| How do you think the canal   |                     |                             |
| impacted where people live   |                     |                             |
| and worked?                  |                     |                             |
| How did the canal build up   |                     |                             |
| New York State               |                     | *                           |
| economically?                | 3                   |                             |
| Why did the importance of    |                     |                             |
| the Erie Canal change over   |                     | W.                          |
| time?                        |                     | 7,                          |
|                              |                     |                             |

# Section 9



### Day 9

What is the rule for the pattern shown below?

41, 38, 35, 32, 29, . . .

- A divide by 3
- **B** divide by 4
- C subtract 3
- D subtract 4

A teacher buys 8 packs of orange erasers and 6 packs of blue erasers for his classroom. There are 24 orange erasers in a pack and 28 blue erasers in a pack. What is the total number of erasers the teacher buys for his classroom?

Show your work.

Ms. Peterson wants to replace all the floor tiles in her kitchen. The kitchen floor is 12 feet long and 7 feet wide. If Ms. Peterson already has 45 one-foot square tiles, how many more one-foot square tiles does she need to completely cover the kitchen floor?

### Show your work.

Robert's family brings six gallons of water for the players on the football team. If one gallon of water contains 128 fluid ounces, how many fluid ounces are in six gallons?

Which expression can be used to solve the equation below?

$$4,600 \div 5 =$$
 ?

A 
$$(46 \div 5) + (100 \div 5)$$

**B** 
$$(400 \div 5) - (600 \div 5)$$

**C** 
$$(4,000 \div 5) - (60 \div 5)$$

**D** 
$$(4,000 \div 5) + (600 \div 5)$$

At a neighborhood park, there are 11 spaces for bicycles on a rack by the basketball court. The bicycle rack by the playground has 3 times as many spaces for bicycles as the one by the basketball court. Which equation could be used to find the total number of bicycle spaces on the rack by the playground?

A 
$$3 \times 11 = ?$$

B 
$$11+3=?$$

$$C 11 \div ? = 3$$

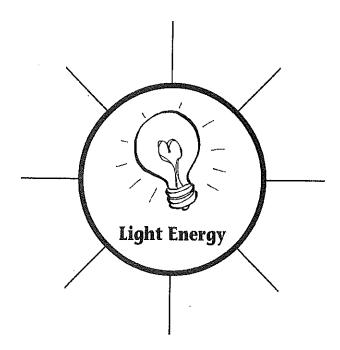
D 
$$? + 3 = 11$$

572 cars were parked in a parking garage. The same number of cars was parked on each floor. If there were 4 floors, how many cars were parked on each floor?

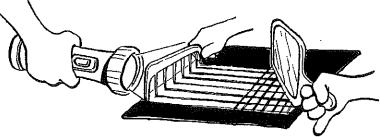
Show that  $\frac{2}{3}$  is equivalent to  $\frac{8}{12}$  using a tape diagram and a number sentence.



Facts we already know about light energy, and the new facts we have learned



# Werd Warm-Up



Which words might you expect to find in a story about light energy?

retina

roller coaster

angle

waves

body

colors

energy

refraction

house

information

reflection

lasers

# Section 10



### **Day 10**

Which statement is true?

- A  $\frac{4}{12} > \frac{5}{8}$  because  $\frac{5}{8}$  is greater than  $\frac{1}{2}$  and  $\frac{4}{12}$  is closer to 1 than  $\frac{1}{2}$ .
- **B**  $\frac{4}{12} < \frac{5}{8}$  because  $\frac{4}{12}$  is less than  $\frac{1}{2}$  and  $\frac{5}{8}$  is greater than  $\frac{1}{2}$ .
- C  $\frac{5}{8} > \frac{4}{12}$  because  $\frac{4}{12}$  and  $\frac{5}{8}$  are both closer to 1 than  $\frac{1}{2}$ .
- **D**  $\frac{5}{8} < \frac{4}{12}$  because  $\frac{5}{8}$  and  $\frac{4}{12}$  are both less than  $\frac{1}{2}$ .

Bill is shopping for folders, notebooks, and pencils for the first day of school. A notebook costs 4 times as much as a folder. A notebook costs 2 times as much as a set of pencils. Each folder costs \$2. Determine the total cost for 1 folder, 1 notebook, and 1 set of pencils.

Show your work.

If a total of 762 students at a citywide competition are divided into 6 equal-sized teams, how many students are on each team?

- A 110
- B 120
- C 127
- D 137

Which expression has the same value as  $\frac{7}{12}$ ?

A 
$$\frac{2}{12} + \frac{3}{12} + \frac{3}{12}$$

$$\mathbf{B} \qquad \frac{7}{12} + \frac{7}{12} + \frac{7}{12}$$

C 
$$\frac{2}{12} + \frac{1}{12} + \frac{2}{12} + \frac{1}{12}$$

$$\mathbf{D} \qquad \frac{2}{12} + \frac{1}{12} + \frac{2}{12} + \frac{2}{12}$$

The height of Mountain P is 1,086 feet. The height of Mountain Q is 4 times the height of Mountain P. The area model shown below represents one way to find the height of Mountain Q.

What are the missing values for A, B, and C in the area model?

Show your work.

### Around the World

### by Paula Morrow

- "No one but a man can do this," the business manager of the *World*, a New York newspaper, said to the young woman. The year was 1888. A popular book at the time told about a character who traveled around the world in 80 days. Now Nellie Bly, a young reporter for the newspaper, wanted to do it in real life.
- "Very well," said Nellie. "Start the man, and I'll start the same day for some other newspaper and beat him."
- In those days it was very unusual for a woman to travel alone. But Nellie Bly was an unusual woman. Her real name was Elizabeth Jane Cochran. When she was 20, she wrote a fiery letter to the editor of the *Pittsburgh Dispatch*. The editor was so impressed with her letter that he offered her a job as a writer.
- It wasn't considered "proper" to use a woman's name in a newspaper. So the editor signed Elizabeth's work *Nellie Bly*, a name from a popular song.
- Back then, women were only supposed to write about things considered to be "women's topics," such as fashion and society. But Nellie had other ideas. She reported on issues that were important, even controversial. Newspaper readers were fascinated—but they didn't believe that Nellie Bly was really a woman. They thought men were writing the articles!

### controversial = a topic that causes an argument

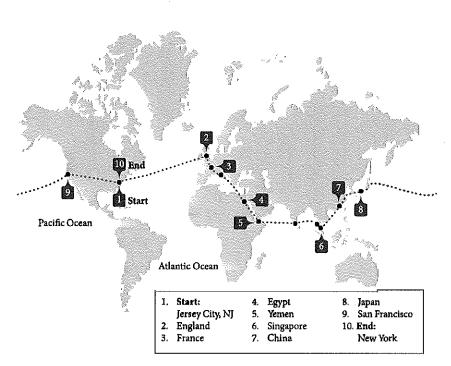
After Nellie threatened to make the trip for another newspaper, her editor gave in and allowed her to do it for the *World*. One year after asking to do the trip, Nellie set out. Traveling east across the Atlantic, Nellie took just one bag in order to move quickly. As she traveled, she wrote. She telegraphed her articles about people and places to the newspaper. Schoolchildren followed her route across Europe and Asia. Geography became a national fad as readers tracked her around the world.

telegraphed = a way to send messages to a faraway place

- On day 68 of her trip, Nellie reached San Francisco. Quickly, she dashed across the country on a train hired by her newspaper. She reached New York in 4½ days.
- She met her challenge! Along the way, every train stop was a "maze of happy greetings, happy wishes, congratulating telegrams, fruit, flowers, loud cheers, wild hurrahs, rapid hand-shaking," she wrote. While traveling through France, Nellie was thrilled to meet Jules Verne, author of the book that inspired her trip, *Around the World in 80 Days*.
- Nellie Bly beat the 80-day goal. She also invented a new style of journalism. She reported to her readers what she saw, thought, and felt during her adventure. She also proved that a woman is as competent and resourceful as a man. Her journey around the world was a journey toward equal opportunity for both women and men.

competent = capable

resourceful = skilled at solving problems



Nellie Bly's Historic 1888 Trip Around the World in 72 Days

### "Around the World" Questions

### 1. What does the phrase "set out" mean as it is used in paragraph 6 of the article?

- A. Grabbed her suitcase
- B. Began her journey
- C. Accepted work
- D. Started writing

### 2. Read this sentence from paragraph 4.

Traveling east across the Atlantic, Nellie took just one bag in order to move quickly.

### How is this detail important to paragraph 1?

- A. It shows how she is the same as the character in the book
- B. It shows one way to help her reach her goal
- C. It shows a young reporter exploring the world in real life
- D. It shows that a young woman taking a trip alone is unusual

### 3. How does the author organize the information in paragraphs 6 and 7?

- A. By listing events in the order that they happened
- B. By comparing and contrasting the places Nellie visited
- C. By showing wat caused Nellie to want to take the trip
- D. By stating how the problem of traveling so far was solved

### 4. What does the word "journalism" mean as it is used in paragraph 9?

- A. Writing for newspapers
- B. Traveling for women
- C. Finding adventures
- D. Discovering opinions

### 5. Which detail from the article does the map support?

- A. "Start the man, and I'll start the same day..." (paragraph 2)
- B. "She reached New York in 4 ½ days." (paragraph 7)
- C. "She met her challenge!" (paragraph 8)
- D. "She reported to her readers what she saw, thought, and felt..." (paragraph 9)

### 6. Which sentence best states the main idea of "Around the World"?

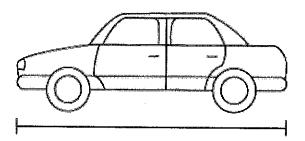
- A. Traveling around the world in a short period of time is a difficult goal.
- B. It was unusual for a woman to travel in the past.
- C. Geography is an important subject to study.
- D. A woman showed she can do anything.

# Section 11



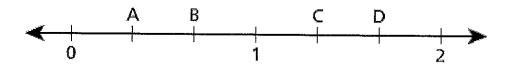
### **Day 11**

What is the length, in inches, of the toy car shown below?



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

Which letter on the number line below represents a fraction equivalent to  $\frac{4}{6}$ ?



- A A
- ВВ
- C
- D D

The table below shows the sizes and weights of containers of potato salad sold at a store.

### **POTATO SALAD**

| Size        | Weight (pounds) |
|-------------|-----------------|
| Small       | <u>2</u><br>8   |
| Medium      | <u> </u>        |
| Large       | <u>6</u> 8      |
| Extra Large | <u>9</u><br>8   |

Kim purchased 6 small containers of potato salad and Seth purchased 2 extra large containers of potato salad. What is the difference in the weights, in pounds, of Kim's and Seth's purchases?

Show your work.

There are 16,850 Star coffee shops around the world. Round the number of shops to the nearest thousand and ten thousand. Which answer is more accurate? Explain your thinking using pictures, numbers, or words.

The Haudenosaunee (the people who build a house) are the people who live in New York State and whose ancestors lived there before the Europeans came to the area. The name refers to a CONFEDERATION or ALLIANCE among six Native American nations who are more commonly known as the Iroquois Confederacy. Each nation has its own identity. These nations are: Mohawk, Oneida, Onondaga, Cayuga, Seneca, and Tuscarora.

### **HAUDENOSAUNEE GAMES**

### **SNOWSNAKE**

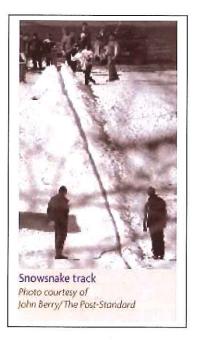
Snowsnake is a winter sport played by teams of men and boys in Haudenosaunee communities. Teams compete against each other by throwing a long, wooden, spear-like stick, called a snowsnake, down the length of a snow track, which is built up from the ground. The team that throws its sticks the farthest wins the game. The name snowsnake comes from the way the stick looks as it travels down the track — it



Snowsnakes NMAI photo by Stephanie Betancourt

slithers like a snake. There are two types of snowsnakes: the longsnake, which is seven feet long, and the mudcat, which is three feet long. Strength and concentration are important qualities to win the game. Each team, called a corner, is allowed a limited number of throws. Each player coats his stick with a special wax that makes the stick travel farther. The best players can throw a stick more than a mile down the track.

Long ago, snowsnakes were used for communication. They were thrown along frozen rivers and lakes to deliver messages between winter camps.



Games have always been, and still are, an important part of Haudenosaunee social life. Not only are they fun to play but many of them teach the importance of physical strength, well-being, and team building. Team sports also offer opportunities for communities to socialize.

What are some games, activities that reflect your social life. What sports or activities bring you together with other people, work in a team and help you learn to get along with others?

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# Section 12



### **Day 12**

Which expression shows 125,206 written in expanded form?

**B** 
$$100,000 + 20,000 + 5,000 + 200 + 6$$

**D** 
$$100,000 + 20,000 + 5,000 + 2,000 + 6$$

A tree farmer planted 3 types of trees on 22 acres of land. He planted 48 trees per acre. What was the total number of trees the farmer planted?

### Show your work.

The farmer planted an equal number of each type of tree. Oak trees were one of the 3 types of trees planted. What was the total number of oak trees planted?

A baseball cap costs \$8. A matching shirt costs 4 times as much as the cap. Which of the following can be used to determine the cost of the shirt?

A 
$$8 \div 2 = _{?}$$

B 
$$8-4=$$
 ?

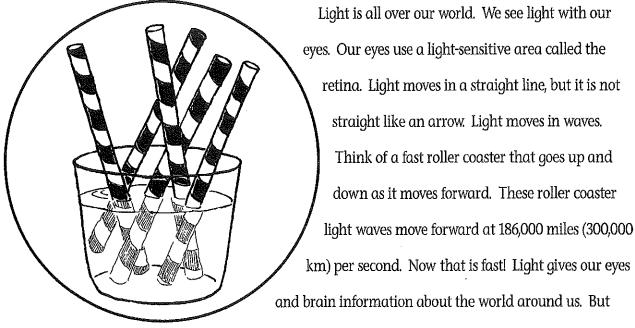
$$C 8 + 4 = ?$$

D 
$$8 \times 4 =$$
 ?

At the local aquarium, Bubba the Seal ate 25,634 grams of fish during last week. If, on the first day of the week, he ate 6,987 grams of fish, how many grams of fish did he eat during the remainder of the week?

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# Light Energy



what is light?

Light is a form of energy. It is useful to us. Light comes from things such as flashlights, candles, lamps, fires, and the sun. Although light waves move in a straight line, the light can be bent. This will change its direction. Then, it will move in a straight line in a new way. This happens when light goes through something clear at a slant. Have you seen what happens when you put your feet in a swimming pool? What happens when you place a pencil in a glass of water? Does the object seem bent at the top of the water? It sure does! This is from refraction. Refraction, or the bending of light, happens when light goes from one thing to another. In the pool, the light rays refract, or bend, as they move from air into water.

What happens if light lands on something that is not clear? Some of the light will bounce away from the object. This is called reflection. Reflection happens when light hits an object and bounces off. You see a reflection each time you look in a mirror. You see your reflection! Since most mirrors are flat and not clear, they reflect almost all of the light. The light rays bounce off of the mirror. This is like a

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ball that bounces back to you when you play handball. If the light rays hit the mirror at an angle, they will bounce off that same way. If the light rays hit the mirror straight on, they will bounce straight back to you. This is true of any flat, smooth surface. But, if the surface of an object is not smooth, it will not reflect light very well. This makes the light rays bounce off in many different ways.

How does light help us to see colors? We see objects when light hits them and reflects back to our eyes. Sunlight, or white light, is made up of all the colors of the rainbow. A red shirt looks red because only the red light is reflected. The dye in the shirt soaks up the other colors. A white shirt looks white because it reflects all the colors of light. A black shirt looks black because it soaks up all the colors. No light is reflected back to your eyes. Light that is soaked up, or absorbed, is changed into heat.

Much progress is being made in the world of light technology. There are new uses of light in our lives. There has been work with light to make lasers, holograms, photographs, and medicine. Laser lights are used in CD players, video discs, computers, and the machines that read bar codes on the products you buy at the store. Doctors now use lasers to operate on human hearts, to remove moles, and even to fix eye problems. Lasers are a strong form of just one color of light energy. We would not have these things if we did not have light and understand how it works.



### Light Energy Questions:

| 1. What is light? How does it travel?                                  |
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| Triving is fight. Flow does it travel:                                 |
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| 2. How do you "see" a shirt that has red and blue stripes?             |
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| 3. What light sources are in your room, your house, or your classroom? |
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# Section 13



### **Day 13**

Carl used some fabric to make a seat cover. Then he used 8 times as much fabric to make a tent. He used 24 yards of fabric to make the tent. Which equation can be used to determine the amount of fabric he used to make the seat cover?

A 
$$24 = 8 \times _{?}$$

B 
$$24 = 8 + _{?}$$

C 
$$8 \times 24 = _{?}$$

$$D \cdot 8 + 24 = ?$$

Sam was in a contest at the library to read as many books as he could in three months. At the end of the contest he earned 2 tickets for each book he read. The table below shows the number of books Sam read each month.

### **BOOKS SAM READ**

| Month    | Number of Books |
|----------|-----------------|
| January  | 15              |
| February | 13              |
| March    | 16              |

Sam was able to buy 1 prize for every 5 tickets he had earned. Sam bought as many prizes as he could with his tickets. How many prizes was Sam able to buy?

Show your work and explain your answer.

There are 86,400 seconds in one day. If Mr. Liege is at work for 28,800 seconds a day, how many seconds a day is he away from work? Draw a diagram to

represent the problem. Use numbers to solve, and write your answer as an equation.

A student has 3 puzzles. Each puzzle has 1,250 pieces. What is the total number of pieces in the puzzles?

- A 3,650
- B 3,750
- C 4,650
- D 4,750

What is the quotient of  $1,224 \div 9$ ?

- A 135
- B 136
- C 1,215
- D 1,360

The Peacemaker Story as you read look for ideas that would tell people how to treat others and work together.

Long ago, the Haudenosaunee Nations were at war with each other. A man called the Peacemaker wanted to spread peace and unity throughout Haudenosaunee territory. While on his journey, the Peacemaker came to the house of an Onondaga leader named Hayo'wetha (hi-an-WEN-ta), more commonly known as Hiawatha. Hayo'wetha believed in the message of peace and wanted the Haudenosaunee people to live in a united way.

An evil Onondaga leader called Tadadaho, who hated the message of peace, had killed Hayo'wetha's wife and daughters during the violent times. Tadadaho was feared by all; he was perceived as being so evil that his hair was comprised of writhing snakes, symbolizing his twisted mind. The Peacemaker helped Hayo'wetha mourn his loss and ease his pain. Hayo'wetha then traveled with the Peacemaker to help unite the Haudenosaunee. The Peacemaker used arrows to demonstrate the strength of unity. First, he took a single arrow and broke it in half. Then he took five arrows and tied them together. This group of five arrows could not be broken. The Peacemaker said, "A single arrow is weak and easily broken. A bundle of arrows tied together cannot be broken. This represents the strength of having a confederacy. It is strong and cannot be broken."

The Mohawk, Oneida, Cayuga, Seneca, and Onondaga accepted the message of peace. With the nations joined together, the Peacemaker and Hayo'wetha sought out Tadadaho. As they approached Tadadaho, he resisted their invitation to join them. The Peacemaker promised Tadadaho that if he accepted the message of peace, Onondaga would be the capital of the Grand Council. Tadadaho finally succumbed to the message of peace. It is said that the messengers of peace combed the snakes from his hair. The name Hayo'we:tha means "he who combs," indicating his role in convincing Tadadaho to accept the Great Law of Peace. Joined together, these five nations became known as the Haudenosaunee Confederacy.

When peace had successfully been spread among the five nations, the people gathered together to celebrate. They uprooted a white pine tree and threw their weapons into the hole. They replanted the tree on top of the weapons and named it the Tree of Peace, which symbolizes the Great Law of Peace that the Haudenosaunee came to live by. The four main roots of the Tree of Peace represent the four directions and the paths of peace that lead to the heart of Haudenosaunee territory, where all who want to follow the Great Law of Peace are welcome. At the top of the Tree of Peace is an eagle, guardian of the Haudenosaunee and messenger to the Creator.

The Peacemaker then asked each nation to select men to be their leaders .... The Peacemaker gave the laws to the Haudenosaunee men, who formed the Grand Council. .....that makes decisions following the principles set forth in the Great Law of Peace. When decisions are made or laws passed, all council members must agree on the issue; this is called CONSENSUS.

Today, Haudenosaunee communities continue to live by the principles of the Great Law. The Great Law of Peace is one of the earliest examples of a formal democratic governance structure. The Great Law of Peace was known to some of the Founding Fathers and has been compared — in terms of designated authorities and balances of power — to the U.S. Constitution. The Haudenosaunee Grand Council is the oldest governmental institution still maintaining its original form in North America.

Write a paragraph to explain how the ideas/evidence from the story explains to the Haudenosaunee how they should treat others, work to maintain a democratic society and try to preserve peace among groups.

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# Section 14



### **Day 14**

| Ms. Larsen  | is buying 2 | delivery | vans for he | r business, | The price | of the | first ' | var |
|-------------|-------------|----------|-------------|-------------|-----------|--------|---------|-----|
| is shown be | elow.       | -        |             |             |           |        |         |     |

\$16,257

The digit 2 in the price of the second van is 10 times the value of the digit 2 in the price of the first van. Which amount could be the price of the second van?

- A \$12,987
- **B** \$15,927
- C \$17,257
- **D** \$21,579

Aisha and Dave play the same computer game and compare their highest score each morning. Today, Aisha said that she scored thirty thousand twenty-five points, and Dave said that he scored thirty thousand two hundred five points.

Write a number sentence using one of the symbols, >, <, or =, to correctly compare Alsha's number of points to Dave's number of points.

| Answer | <br> | <br> |  |  |
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At President Bush's inauguration in 2005, the newspaper headlines stated there were about 400,000 people in attendance. If the newspaper rounded to the nearest ten thousand, what is the largest number and smallest number of people who could have been there?

Some bakers make apple pies.

- They have 15 boxes of apples.
- Each box has 18 apples.
- They use 7 apples for each pie.

What is the total number of apple pies that the bakers can make?

- A 33
- B 38
- C 39
- D 40

A company developed a student survey so that students could share their thoughts about school. In 2011, 78,234 students across the United States were administered the survey. In 2012, the company planned to administer the survey to 10 times as many students as were surveyed in 2011. About how many surveys should the company have printed in 2012? Explain how you found your answer.

# Congratulations!

You've completed the at home Enrichment Program!

