



ELIZABETH PUBLIC SCHOOLS

Every Child, Achieving Excellence

Olga Hugelmeyer
Superintendent of Schools

Jenny Reguinho
Principal

June 10, 2022

Dear Parents and Students,

Welcome to Terence C. Reilly School No. 7 and a brand-new school year! We are excited for the opportunity to educate your child and have planned for a year with many fun-filled educational experiences. In order to accomplish this, your child will need the following items:

- ✓ 3 marble composition notebooks (NO spiral notebooks)
(label and color code each notebook as the following:

Blue Notebook: **Reading/Rainbow Words**

Red Notebook: **Math**

Yellow Notebook: **Writing**

- ✓ 3 Plastic Folders
- ✓ 1 zipper pencil case (please no hard box cases)
- ✓ A box of 24 #2 pencils
- ✓ Erasers
- ✓ A box of 24 colored pencils
- ✓ A box of 24 crayons
- ✓ 1 small pair of scissors
- ✓ 3 Ultra find tip sharpies
- ✓ 2 Boxes of tissues
- ✓ 2 rolls of paper towels
- ✓ 2 packages of Clorox wipes
- ✓ 2 yellow highlighters
- ✓ 3 large glue sticks
- ✓ 1 bottle of 12 oz. hand sanitizer



We believe through cooperation and collaboration; we can help your child accomplish many goals and discover new talents. We look forward to working cooperatively with you and your child for a successful and productive school year. Please do not hesitate to contact us with any questions or concerns. Together We Can!

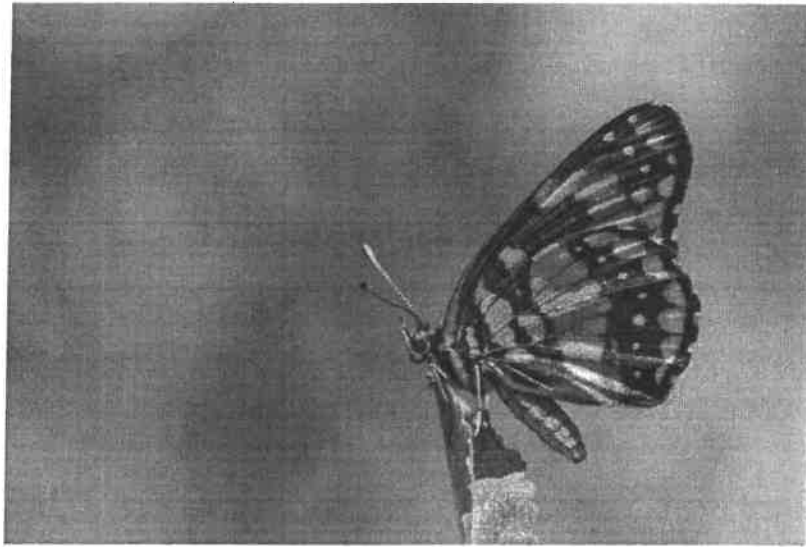
Sincerely,

The Second Grade Team

Terence C. Reilly School No. 7

A Butterfly's Life

Linda Ruggieri



Butterflies are beautiful insects. You often see them around colorful flowers.

A butterfly's life begins in a special way. First, a mother butterfly lays an egg on a leaf. A caterpillar hatches from the egg. The caterpillar eats leaves and grows bigger.

Next, the caterpillar spins a covering around itself. The covering is called a chrysalis (KRIS-a-liss). Inside the chrysalis, the caterpillar slowly changes. The parts of a butterfly begin to form, like the wings, legs, and antennae.

About two weeks later, a new creature pops out of the chrysalis. It has become a butterfly! The butterfly flutters its wings and flies away.

Name: _____ Date: _____

Directions: For questions 1-4, circle the correct answer.

1. What kind of animal is a butterfly?

- a) Butterflies are reptiles.
- b) Butterflies are insects.
- c) Butterflies are mammals.

2. The text describes the different steps in a butterfly's life. What are butterflies when they first hatch?

- a) Butterflies hatch as worms.
- b) Butterflies hatch as caterpillars.
- c) Butterflies hatch as fully grown butterflies.

3. Read the following sentences from the text:

"Inside the chrysalis, the caterpillar slowly changes. The parts of a butterfly begin to form, like the wings, legs, and antennae.

"About two weeks later, a new creature pops out of the chrysalis. It has become a butterfly!"

Based on this information, when does the caterpillar turn into a butterfly?

- a) while it is in the chrysalis
- b) after it leaves the chrysalis
- c) before it spins the chrysalis

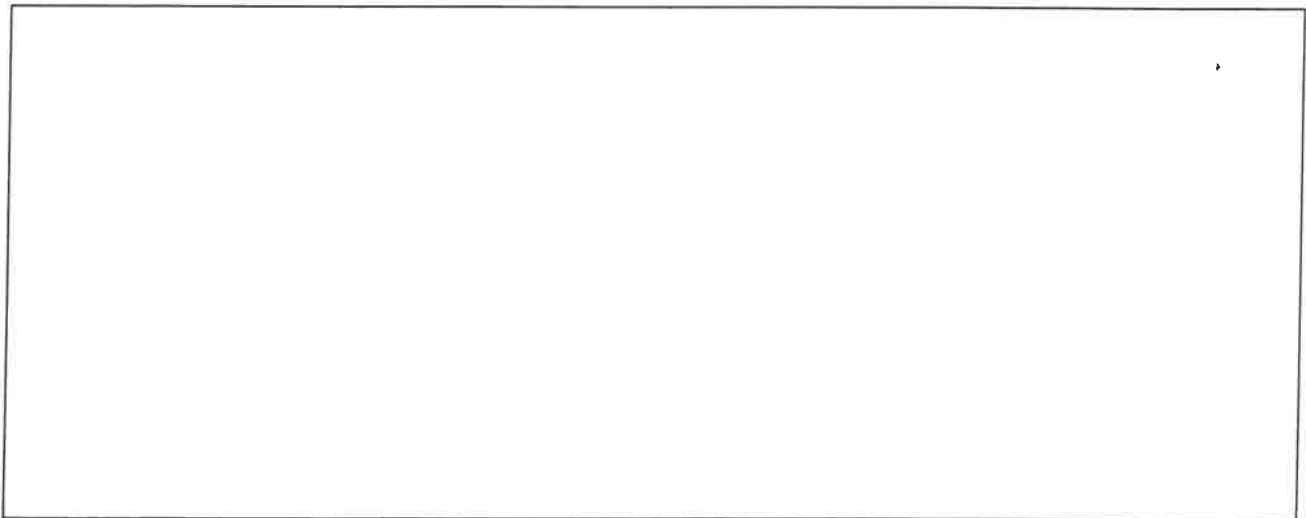
4. What is "A Butterfly's Life" mostly about?

- a) how butterflies make a chrysalis
- b) what butterflies eat
- c) the life of a butterfly

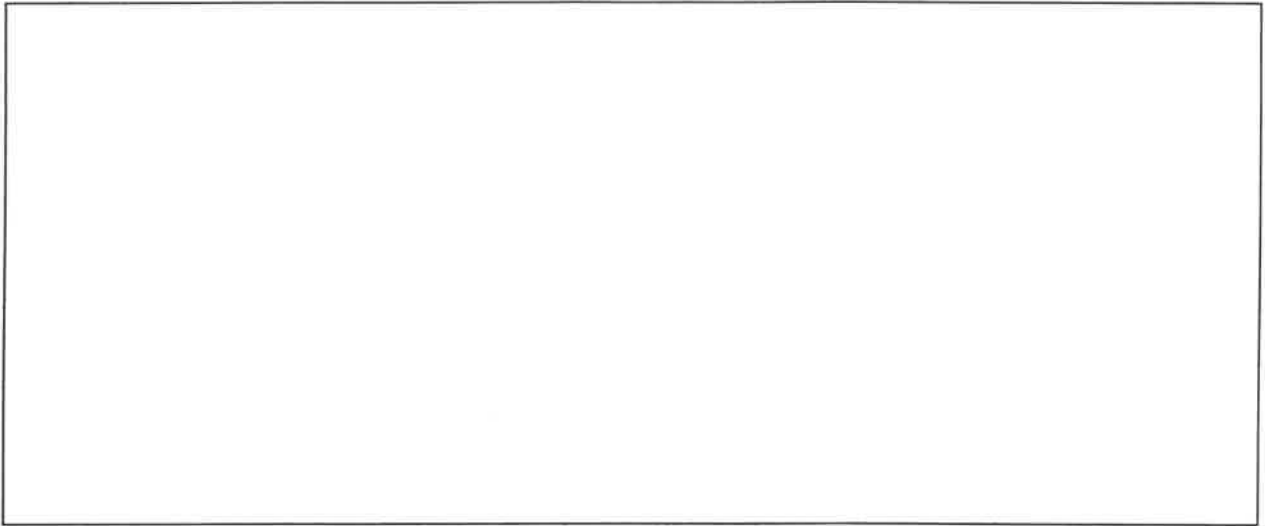
5. What can you often see butterflies around?

You can often see butterflies around

6. Draw a butterfly that has just emerged from its chrysalis.



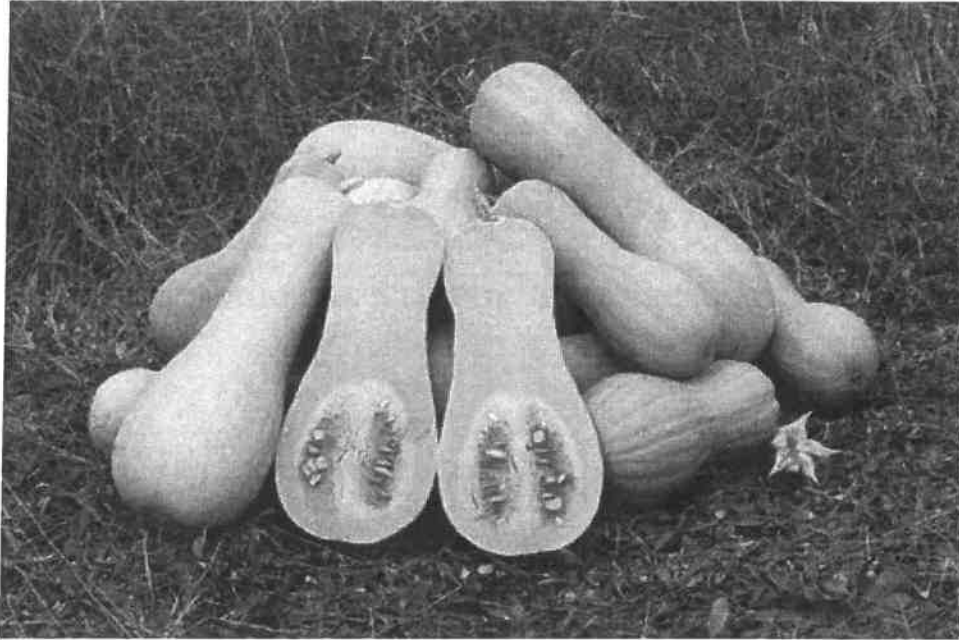
7. What did you learn from "A Butterfly's Life"?



8. Class Discussion Question: Use information from the text to summarize the steps in the life of a butterfly.

Fruits Have Seeds

By Linda Ruggieri



Fruits grow in different ways. Apples grow on trees. Grapes grow on vines. Blueberries grow on bushes.

All fruits have something special. Do you know what that is? Seeds! Some fruits have one seed. Others have many seeds.

A peach has one seed. A coconut has one seed too. A pumpkin has many small seeds. A strawberry has many tiny seeds. They are on the outside of the fruit.

Seeds are important because they can grow into new plants.

What happens when seeds fall to the ground? Plants grow. Those plants will have stems, leaves, flowers, fruits—and more seeds.

Name: _____ Date: _____

For questions 1–4, please circle the correct answer.

1. What can fruit grow on?

- A) Fruit can grow on seeds, stems, and leaves.
- B) Fruit can grow on rocks, dirt, and water.
- C) Fruit can grow on trees, vines, or bushes.

2. The text describes fruits. What do all fruits have in common?

- A) All fruits have many seeds.
- B) All fruits grow on vines.
- C) All fruits have at least one seed.

3. Different fruits have different numbers of seeds. Which information from the text shows us this is true?

- A) A coconut has one seed. A pumpkin has many small seeds.
- B) Apples grow on trees. Grapes grow on vines.
- C) Seeds are important because they can grow into new plants.

4. What is the main idea in "Fruits Have Seeds"?

- A) All fruits have seeds.
- B) Fruits grow in different ways.
- C) Coconuts have only one seed.

5. What can seeds grow into?

Seed can grow into

6. Draw a fruit mentioned in the text that has one seed and a fruit that has many seeds. Be sure to label each fruit.



7. What did you learn from "Fruits Have Seeds"?

8. Class Discussion Question: Seeds from fruit can grow into new plants. What must happen first before these seeds can grow into new plants? Use information from the text to support your answer.

Drinking Fountain

By Marchette Chute

When I climb up
To get a drink,
It doesn't work
The way you'd think.

I turn it up,
The water goes
And hits me right
Upon the nose.

5

I turn it down
To make it small
And don't get any
Drink at all.

10

*From Around and About by Marchette Chute, published 1957 by E.P. Dutton.
Copyright renewed by Marchette Chute, 1985. Reprinted by permission of Elizabeth M. Weinrich.*

Name: _____ Date: _____

For questions 1–4, please circle the correct answer.

1. Why does the speaker of the poem climb up?

- A) to go down a slide
- B) to get a drink
- C) to get hit in the nose

2. Some words in this poem rhyme. What are two words in the poem that rhyme?

- A) “up” and “right”
- B) “down” and “any”
- C) “small” and “all”

3. The speaker of the poem has trouble using a drinking fountain.

What information from the poem supports this statement?

- A) When the speaker turns it down, the water of the drinking fountain becomes too small to drink.
- B) When the speaker turns it up, the water of the drinking fountain becomes too small to drink.
- C) When the speaker climbs up to the drinking fountain, the speaker is not tall enough to reach the water.

4. What is “Drinking Fountain” mostly about?

- A) someone who is too short to use a drinking fountain
- B) someone who has trouble getting a drink from a drinking fountain
- C) someone who likes to drink water but does not like to drink milk

5. What happens when the speaker of the poem turns the water up?

The water hits the speaker on

6. Draw a picture of what happens when the speaker turns the water up.

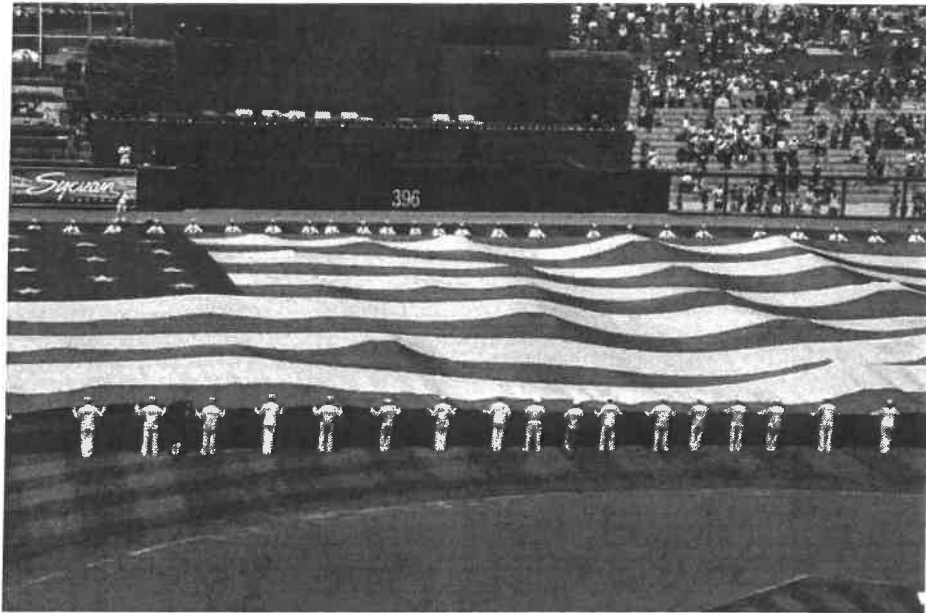


7. What did you learn from "Drinking Fountain"?

This image shows a full page of blank handwriting practice paper. It features multiple sets of horizontal lines. Each set consists of a solid top line, a dashed midline, and a solid bottom line, providing a guide for letter height and placement. The paper is otherwise completely blank, with no text or markings.

8. What does the word “it” refer to in this poem? Support your answer with information from the poem.

Celebrate Flag Day



June 14 is Flag Day in America. Many people honor the American flag on that day.

The American flag is red, white, and blue. It has 13 stripes. It has 50 stars. Each star stands for one of our 50 states.

Where do we see the American flag? We see it in parades. We see it on people's houses. We see it on buildings in towns. We see it at schools. We see the flag on many holidays. Where have you seen the American flag?

Name: _____ Date: _____

Directions: For questions 1-4, circle the correct answer.

1. When is Flag Day in America?

- a) July 4th
- b) June 14th
- c) December 25th

2. What holiday does this passage describe?

- a) Independence Day
- b) Flag Day
- c) Memorial Day

3. Flag Day is a time to celebrate the American flag and the important things it stands for. What part of the passage shows us that this is true?

- a) "The American flag is red, white, and blue."
- b) "Many people honor the American flag on that day."
- c) "We see the flag on many holidays."

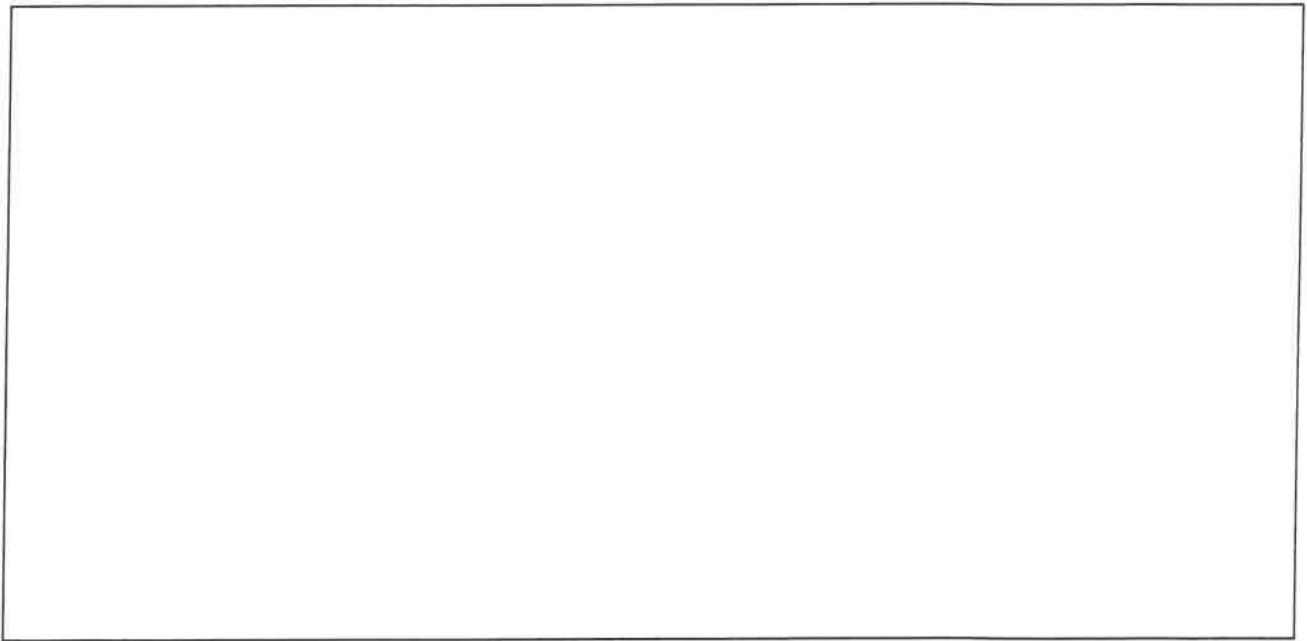
4. What is the theme of "Celebrate Flag Day"?

- a) parades and why people have them
- b) Flag Day and the American flag
- c) American holidays

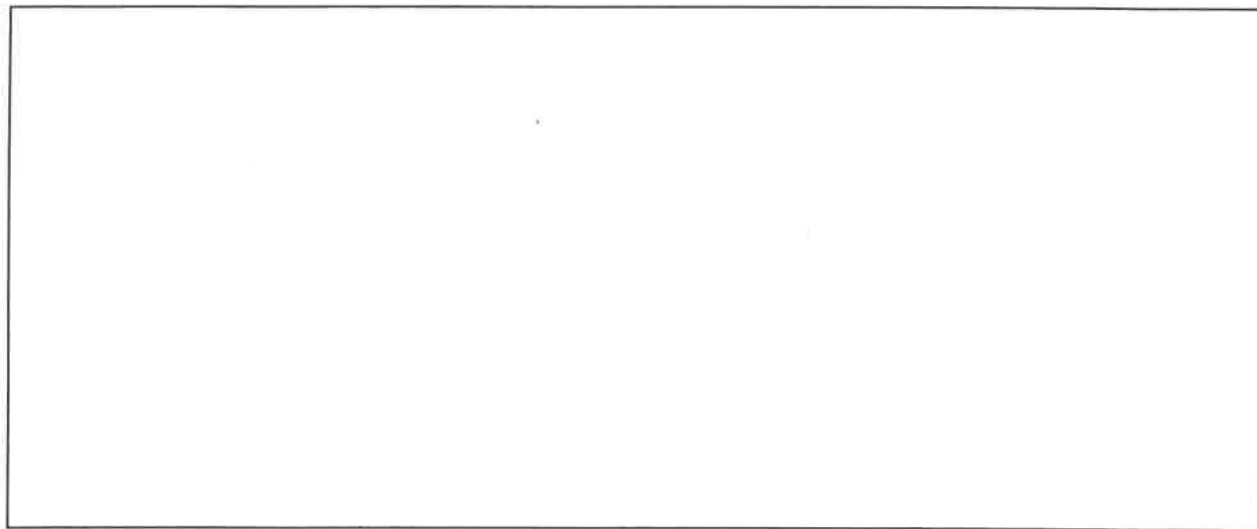
5. A) How many stars and stripes does the American flag have?

The American flag has

B) Draw the American flag.



6. What did you learn from "Celebrate Flag Day"?



7. Class Discussion Question: List the places where the American flag can be seen. Then discuss why people display the American flag.

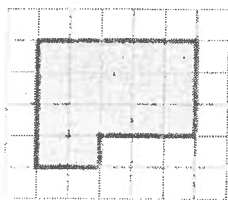


Name _____

Set A pages 209–212

A unit square has sides that are 1 unit long.

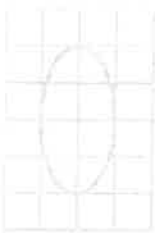
Count the unit squares that cover the shape. The count is the area of the shape.



 = 1 unit square

Seventeen unit squares cover the shape. The area of the shape is 17 square units.

Sometimes you need to estimate to find the area. First count the full squares. Then estimate the number of partially filled squares.



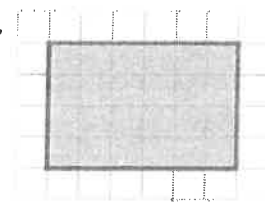
About 6 unit squares cover this shape.

**Reteaching**

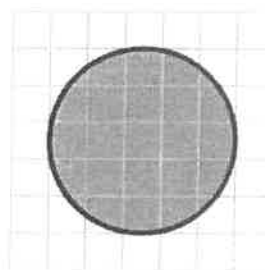
Remember that area is the number of unit squares needed to cover a region with no gaps or overlaps.

In **1** and **2**, count to find the area. Tell if the area is an estimate.

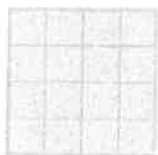
1.



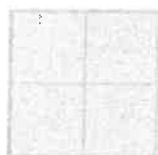
2.

**Set B** pages 213–216

Unit squares can be different sizes. The size of a unit square determines the area.




16 unit squares



4 unit squares

 = 1 square unit

 = 1 square unit

Area = 16 square units

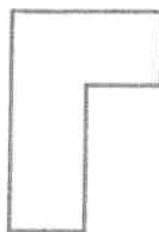
Area = 4 square units


The measurements are different because different sizes of unit squares were used.

Remember that you can use unit squares to measure area.

Draw unit squares to cover the figures and find the area. Use the unit squares shown.


1.



 = 1 square unit

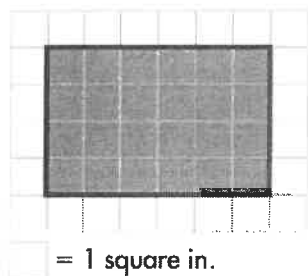
2.



 = 1 square unit

The unit squares below represent square inches.

What is the area of the figure below?



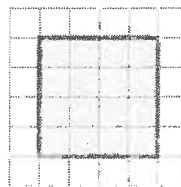
Twenty-four unit squares cover the figure.
The area of the figure is measured in square inches.

So, the area of the figure is 24 square inches.

Remember that you can measure using standard or metric units of area for unit squares.

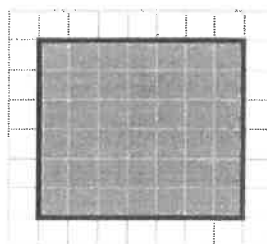
In 1 and 2, each unit square represents a standard unit. Count the unit squares. Then write the area.

1.



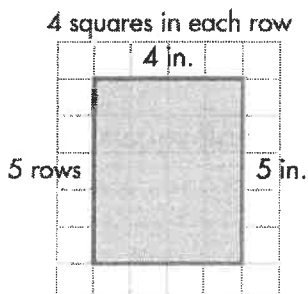
= 1 square ft

2.



= 1 square cm

You can find area by counting the number of rows and multiplying by the number of squares in each row.



There are 5 rows.

There are 4 squares in each row.

$$5 \times 4 = 20$$

The area of the figure is 20 square inches.

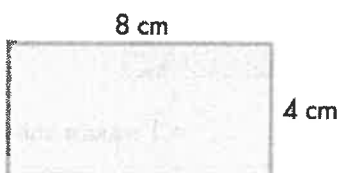
Remember that you can multiply the number of rows by the number of squares in each row to find the area.

In 1–3, find the area of each figure. Use grid paper to help.

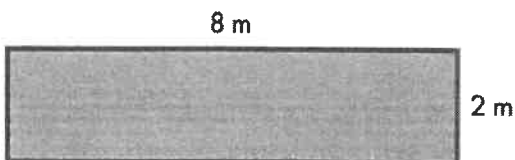
1.



2.



3.



Name _____



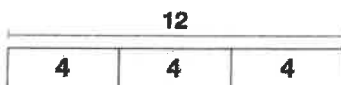
TOPIC

1

Set A

pages 5–8

How many is 3 groups of 4?



$$4 + 4 + 4 = 12$$

$$3 \times 4 = 12$$

$$4 + 4 + 4 = 3 \times 4$$

Remember that you can use addition or multiplication to join equal groups.

Reteaching

Complete each equation. Use counters or draw a picture to help.

1. $2 + 2 + 2 = 3 \times$ _____

2. _____ + _____ + _____ = 3×6

3. $8 +$ _____ + _____ = _____ $\times 8$

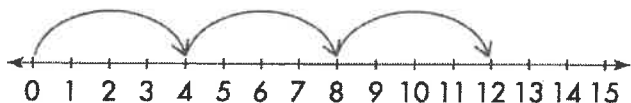
Set B

pages 9–12

Skip count by 4s three times.



You can use a number line to find 3×4 .



Number of jumps: 3

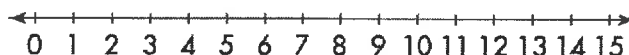
Number in each jump: 4

$$3 \times 4 = 12$$

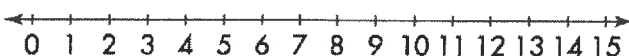
Remember that you can show skip counting on a number line.

Use the number line to complete each multiplication equation.

1. $2 \times 3 =$ _____



2. $4 \times 3 =$ _____



Set C

pages 13–16

Find 4×6 .

The array shows 4 rows of 6 counters.



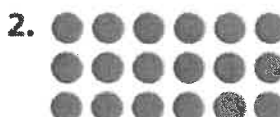
Each row is an equal group. You can use skip counting or multiplication to find the total.

6, 12, 18, 24

$$4 \times 6 = 24$$

Remember that an array shows objects in equal rows.

Show how to use skip counting and multiplication for each array.

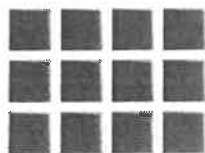


Set C, continued

pages 13–16

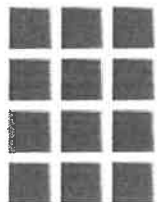
This array shows
3 rows of 4.

$3 \times 4 = 12$



This array shows
4 rows of 3.

$4 \times 3 = 12$



So, $3 \times 4 = 4 \times 3$.

Set D pages 17–24

Two friends share 6 fruit snacks equally. How many fruit snacks does each friend get?

$6 \div 2 = 3$ fruit snacks

You can use repeated subtraction.

$6 - 2 = 4$ You subtract 2 from 6 three

$4 - 2 = 2$ times to reach zero.

$2 - 2 = 0$

$6 \div 2 = 3$

Remember that the Commutative Property of Multiplication says you can multiply factors in any order and the product is the same.

Draw arrays and write the products.

1. $2 \times 5 =$ $5 \times 2 =$

Remember that division is an operation to find the number of equal groups or the number in each equal group.

1. Nine raisin boxes are shared by 3 children.
Each child gets raisin boxes.

2. $12 \div 2 =$ 3. $10 \div 5 =$

4. $25 \div 5 =$ 5. $16 \div 4 =$

6. $12 \div 3 =$ 7. $24 \div 6 =$

Set E pages 25–28

Think about these questions to help you
use appropriate tools strategically.

Thinking Habits

Which tools can I use?

Why should I use this tool to help me solve the problem?

Is there a different tool I could use?

Am I using the tool appropriately?



Remember that you can use digital tools.

Sam makes enough muffins to give 8 of her friends 3 muffins each. Each tray holds 6 muffins. How many trays does she need?

1. Choose a tool to represent the problem.
Explain why you chose that tool.

2. Solve. Explain how the tool helped.

Name _____



TOPIC
2

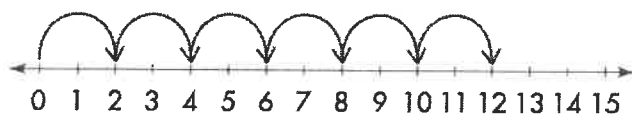


Reteaching

Set A pages 41–44

Find 6×2 .

Use skip counting. Draw 6 curved arrows on a number line. Each arrow should be 2 units wide.



$$6 \times 2 = 12$$

Find 6×5 .

Use a pattern. Count by 5s. The 6th number in the pattern is the product.

5, 10, 15, 20, 25, 30

$$6 \times 5 = 30$$

Remember that multiples of 2 end in 0, 2, 4, 6, or 8. Multiples of 5 end in 0 or 5.

1. $2 \times 3 =$ _____ 2. $5 \times 3 =$ _____

3. $5 \times 5 =$ _____ 4. $2 \times 6 =$ _____

5. $8 \times 2 =$ _____ 6. $7 \times 5 =$ _____

7.
$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$
 8.
$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$$
 10.
$$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$$

Set B pages 45–48

Find 9×4 .

List 9s facts.

$$9 \times 1 = 9$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

Remember that there are patterns in the multiples of 9.

1. $9 \times 5 =$ _____ 2. $9 \times 7 =$ _____

3. $6 \times 9 =$ _____ 4. $8 \times 9 =$ _____

5. $9 \times 9 =$ _____ 6. $9 \times 0 =$ _____

Set C pages 49–52

Find 0×7 .

Zero Property of Multiplication: When you multiply a number by 0, the product is 0.

$$0 \times 7 = 0$$

Find 1×7 .

Identity (One) Property of Multiplication: When you multiply a number by 1, the product is that number.

$$1 \times 7 = 7$$

Remember that the product of 0 and any other number is 0. When you multiply a number by 1, the product is that same number.

1. $0 \times 4 =$ _____ 2. $1 \times 9 =$ _____

3. $0 \times 9 =$ _____ 4. $1 \times 6 =$ _____

5. $10 \times 0 =$ _____ 6. $9 \times 0 =$ _____

7. $3 \times 1 =$ _____ 8. $8 \times 1 =$ _____

9. $0 \times 2 =$ _____ 10. $1 \times 0 =$ _____

Set D pages 53–56Find 6×10 .

You can use patterns to find multiples of 10.

 6×10 is 6 groups of 10.

$6 \times 10 = 60$



Remember that you can use place value or number lines to find multiples of ten.

1. $10 \times 7 =$ _____

2. $10 \times 10 =$ _____

3. $3 \times 10 =$ _____

4. $9 \times 10 =$ _____

5. $10 \times 0 =$ _____

6. $1 \times 10 =$ _____

Set E pages 57–60Find 5×10 .

There are many patterns and properties you can use to multiply.

Use skip counting with 5s facts:
5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Use a place-value pattern for 10s facts:
10 times greater than 5 is 50.

The product is the same.
 $5 \times 10 = 50$

Remember that you can use the Commutative Property of Multiplication to multiply 2 factors in any order.

1. $5 \times 9 =$ _____

2. $0 \times 6 =$ _____

3. $10 \times 3 =$ _____

4. $8 \times 1 =$ _____

5. $7 \times 2 =$ _____

6. $9 \times 6 =$ _____

7. $2 \times 5 =$ _____

8. $4 \times 5 =$ _____

Set F pages 61–64

Think about these questions to help you **model with math**.

Thinking Habits

- How can I use math I know to help solve the problem?
- How can I use pictures, objects, or an equation to represent the problem?
- How can I use numbers, words, and symbols to solve the problem?



Remember that representations can help you apply math that you know.

Umar has 5 dimes in his left pocket. He has 3 dimes in his right pocket. A dime is worth 10 cents. How much money does Umar have?

1. Draw a bar diagram to help answer the hidden question.
2. Draw a bar diagram to help answer the main question.



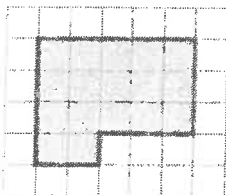
Name _____

Set A

pages 209–212

A unit square has sides that are 1 unit long.

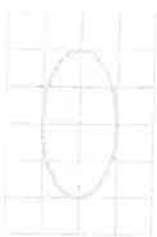
Count the unit squares that cover the shape.
The count is the area of the shape.



 = 1 unit square

Seventeen unit squares cover the shape. The area of the shape is 17 square units.

Sometimes you need to estimate to find the area. First count the full squares. Then estimate the number of partially filled squares.



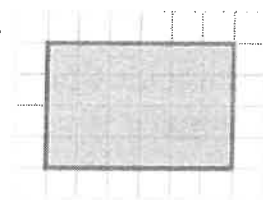
About 6 unit squares cover this shape.

**Reteaching**

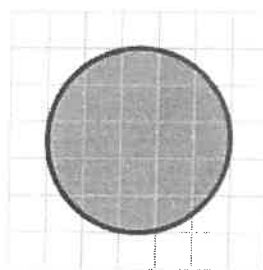
Remember that area is the number of unit squares needed to cover a region with no gaps or overlaps.

In **1** and **2**, count to find the area. Tell if the area is an estimate.

1.



2.

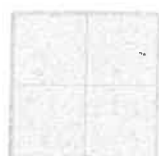
**Set B**

pages 213–216

Unit squares can be different sizes. The size of a unit square determines the area.




16 unit squares



4 unit squares

 = 1 square unit

 = 1 square unit

Area = 16 square units

Area = 4 square units

The measurements are different because different sizes of unit squares were used.

Remember that you can use unit squares to measure area.

Draw unit squares to cover the figures and find the area. Use the unit squares shown.

1.



2.



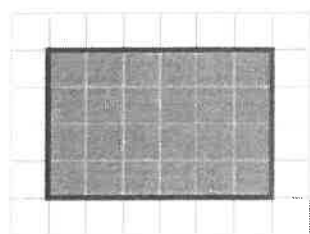
= 1 square unit



= 1 square unit

The unit squares below represent square inches.

What is the area of the figure below?



 = 1 square in.

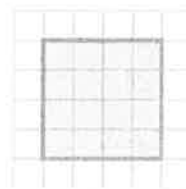
Twenty-four unit squares cover the figure.
The area of the figure is measured in square inches.


So, the area of the figure is 24 square inches.

Remember that you can measure using standard or metric units of area for unit squares.

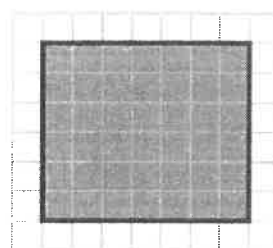
In 1 and 2, each unit square represents a standard unit. Count the unit squares. Then write the area.

1.



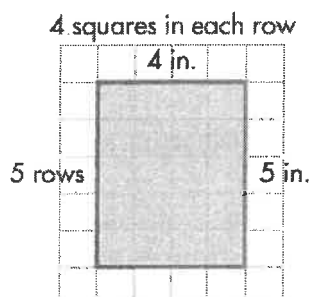
 = 1 square ft

2.



 = 1 square cm

You can find area by counting the number of rows and multiplying by the number of squares in each row.



There are 5 rows.
There are 4 squares in each row.

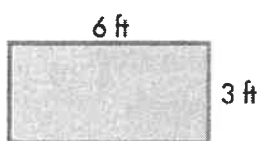
$$5 \times 4 = 20$$

The area of the figure is 20 square inches.

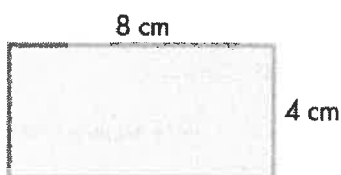
Remember that you can multiply the number of rows by the number of squares in each row to find the area.

In 1–3, find the area of each figure. Use grid paper to help.

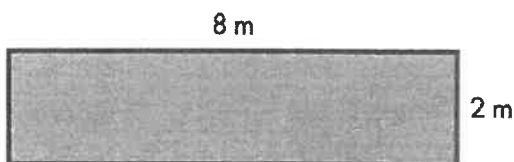
1.



2.



3.





Name _____

Set A

pages 337–340

Find the sum of $257 + 186$.

You can break apart $257 + 186$ by place value to solve.

Break apart each number by place value and find the sum of the numbers in each place. Then add the sums.

$$\begin{array}{r} 257 \\ + 186 \\ \hline 300 \\ 130 \\ + 13 \\ \hline 443 \end{array}$$

So, $257 + 186 = 443$.



Remember that you can use place value to add numbers by breaking large addition problems into smaller addition problems.

In 1–5, use place-value blocks or drawings and partial sums to add.

Reteaching

1. $135 + 152$ 2. $650 + 138$

3. $535 + 423$ 4. $475 + 264$

5. Yvette took 137 photographs on Friday. She took 248 photographs on Saturday. How many did she take in all?

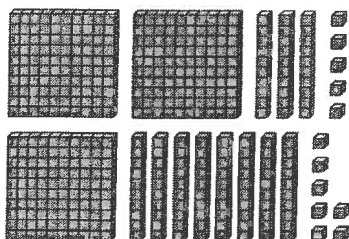
Set B

pages 341–344

Find $235 + 187$.

Estimate by rounding: $240 + 190 = 430$.

Use place-value blocks to represent each number and find partial sums. Regroup to find the final sum.



$$\begin{array}{r} 235 \\ + 187 \\ \hline 422 \end{array}$$

The answer is reasonable because 422 is close to 430.



Remember that an estimate can help you check whether your answer is reasonable.

In 1–6, estimate and find each sum.

1. $\begin{array}{r} 236 \\ + 217 \\ \hline \end{array}$ 2. $\begin{array}{r} 407 \\ + 436 \\ \hline \end{array}$

3. $235 + 59$ 4. $584 + 326$

5. $196 + 243$ 6. $465 + 357$

Find $124 + 32 + 238$.

Estimate by rounding:

$$120 + 30 + 240 = 390.$$

You can solve using partial sums.

$$\begin{array}{r} 124 \\ 32 \\ + 238 \\ \hline 300 \\ 80 \\ + 14 \\ \hline 394 \end{array}$$

You can solve using column addition.

Hundreds	Tens	Ones
1	2	4
	3	2
+ 2	3	8
3	8	14
3	9	4

The answer is reasonable because 394 is close to 390.



So, $124 + 32 + 238 = 394$.

Remember that adding three numbers is like adding two numbers.

In 1–7, estimate and then use partial sums to add.

1.
$$\begin{array}{r} 209 \\ 48 \\ + 312 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 412 \\ 273 \\ + 139 \\ \hline \end{array}$$

3. $146 + 86 + 53$

4. $125 + 224 + 306$

5. A flower shop has 124 tulips, 235 roses, and 85 carnations. How many flowers does the flower shop have?
6. Mike's Café sells 237 sandwiches on Friday. It sells 448 sandwiches on Saturday and 102 sandwiches on Sunday. How many sandwiches are sold on all 3 days?
7. Three planes leave an airport. Each plane has 239 seats. The first plane has 224 passengers. The second plane has 189 passengers. The third plane has 122 passengers. How many passengers are on all 3 planes?

Name _____



TOPIC
9

Reteaching

Continued

Set D pages 349–352

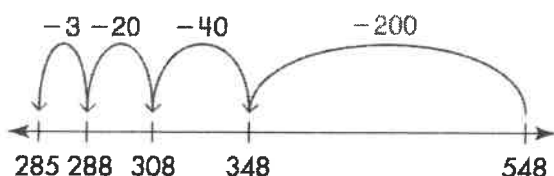
Use place value to help find $548 - 263$.

Subtract the hundreds. $548 - 200 = 348$

Subtract the tens. $348 - 40 = 308$
First subtract 4 tens.

Then subtract 2 more tens. $308 - 20 = 288$

Subtract the ones. $288 - 3 = 285$



So, $548 - 263 = 285$.

Remember that place value can help you break a subtraction problem into smaller problems.

In 1–6, find each difference. Estimate and then use place value and partial differences to subtract.

1. $489 - 253$ 2. $544 - 162$

3. $856 - 328$ 4. $349 - 98$

5. $873 - 184$ 6. $526 - 207$

Set E pages 353–356

Find $416 - 243$.

Estimate: $420 - 240 = 180$.

Subtract 3 ones.

$$\begin{array}{r} 416 \\ - 3 \\ \hline 413 \end{array}$$

Subtract 1 ten.

$$\begin{array}{r} 413 \\ - 10 \\ \hline 403 \end{array}$$

Regroup 1 hundred as 10 tens.

Subtract 3 tens.

$$\begin{array}{r} 403 \\ - 30 \\ \hline 373 \end{array}$$

Subtract 2 hundreds.

$$\begin{array}{r} 373 \\ - 200 \\ \hline 173 \end{array}$$

So, $416 - 243 = 173$.

Remember to regroup if necessary.

In 1–8, estimate each difference. Then find each difference.

1. $\begin{array}{r} 458 \\ - 176 \\ \hline \end{array}$

2. $\begin{array}{r} 236 \\ - 79 \\ \hline \end{array}$

3. $\begin{array}{r} 863 \\ - 526 \\ \hline \end{array}$

4. $\begin{array}{r} 748 \\ - 279 \\ \hline \end{array}$

5. $400 - 227$

6. $306 - 198$

7. $220 - 187$

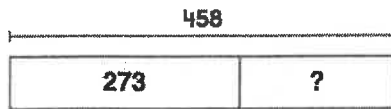
8. $657 - 122$

The answer is reasonable because 173 is close to 180.



Two hundred seventy-three people have finished a marathon. A total of 458 people entered the marathon. How many people are still running?

You can use a bar diagram and addition or subtraction to solve.



$$273 + ? = 458$$

$$458 - 273 = ?$$

Estimate:

$$460 - 270 = 190$$

Solve:

$$273 + 185 = 458$$

$$458 - 273 = 185$$

185 people are still running.

The solution,
185, is reasonable.
It is close to the
estimate.



Think about these questions to help you **construct arguments**.

Thinking Habits

- How can I use numbers, objects, drawings, or actions to justify my argument?
- Am I using numbers and symbols correctly?
- Is my explanation clear and complete?



Remember to regroup when needed.

In 1 and 2, estimate. Then solve.

1. Damian's conservation club wants to plant 640 seedlings. They have 172 seedlings that they still need to plant to meet their goal. How many seedlings have they planted so far?
2. The Smith family is driving to Dallas. The trip is 450 miles. So far, they have driven 315 miles. How many miles are left in the trip?

Remember that a conjecture needs to be proved to be true.

Emma has \$191. She spends \$105. She donates \$52 to charity. Can Emma save \$30?

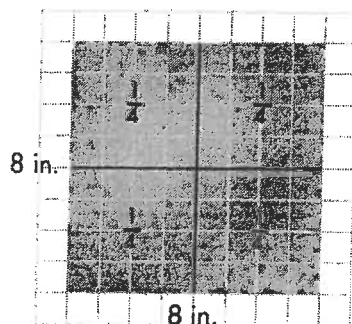
Conjecture: Emma can save \$30.

1. Draw a diagram to represent the math.
2. Use your diagram to justify the conjecture.

Set A

pages 437–440

This is one way to divide a whole into fourths.



Because each of the 4 parts has the same area, each part is one fourth of the whole.

You can write this fraction as $\frac{1}{4}$.

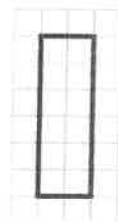
A unit fraction represents one of the equal parts. $\frac{1}{4}$ is a unit fraction.

Remember that fractions can name equal parts of a whole.

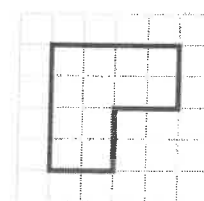
Reteaching

In 1 and 2, draw lines to divide the shape into the given number of equal parts. Then write the fraction that represents 1 part.

1. 6 equal parts



2. 2 equal parts

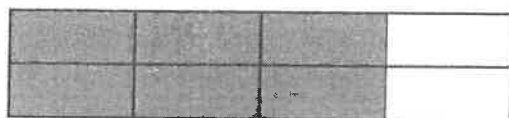


3. Martin divides a shape into 3 equal parts. What unit fraction can he write to represent 1 part?

Set B

pages 441–444

What fraction of this rectangle is shaded?



The rectangle is divided into 8 equal parts. So, the unit fraction of the rectangle is $\frac{1}{8}$.

In the whole rectangle, there are 8 parts of $\frac{1}{8}$.

8 copies of $\frac{1}{8}$ is $\frac{8}{8}$.

For the shaded part there are 6 parts of $\frac{1}{8}$.

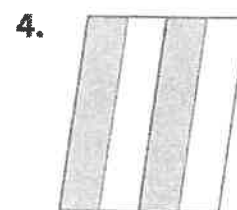
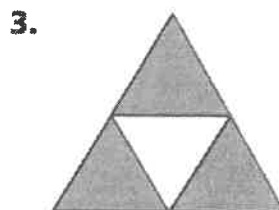
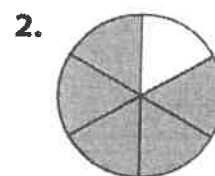
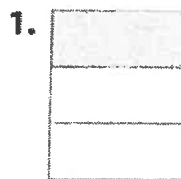
$$\frac{\text{numerator}}{\text{denominator}} = \frac{\text{the number of repetitions of the unit fraction}}{\text{what fractional part is being counted}} = \frac{6}{8}$$

6 copies of $\frac{1}{8}$ is $\frac{6}{8}$.

So, $\frac{6}{8}$ of the rectangle is shaded.

Remember that you need to think about how many parts there are in all and how many parts are shaded.

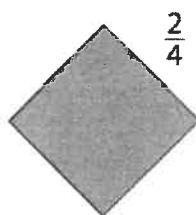
In 1–4, write the unit fraction that represents each part of the whole. Next, write the number of shaded parts. Last, write the fraction of the whole that is shaded.



Set C

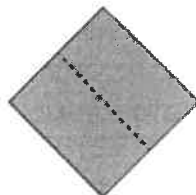
pages 445–448

This shape is $\frac{2}{4}$ of a piece of fabric Tina used in a quilt. You can draw a picture and write a fraction to represent the whole piece of fabric.

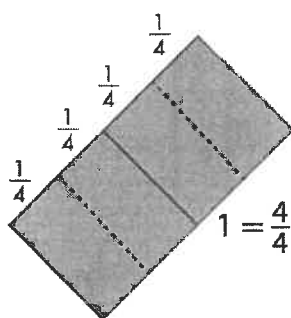


$\frac{2}{4}$ is 2 copies of $\frac{1}{4}$.

Divide the piece of fabric into 2 equal parts.



4 copies of $\frac{1}{4}$ makes $\frac{4}{4}$, or 1 whole.



Remember that the denominator shows the total number of equal parts in a whole.

In 1 and 2, draw a picture and write a fraction to represent the whole.

1. $\frac{1}{4}$



$$1 = \frac{\quad}{\quad}$$

2. $\frac{3}{8}$



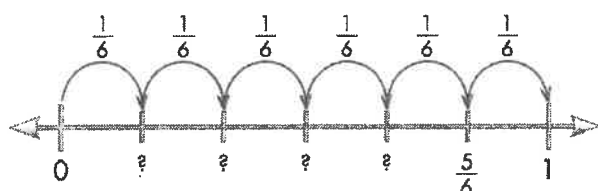
$$1 = \frac{\quad}{\quad}$$

Set D

pages 449–452

You can show fractions on a number line.

The fraction $\frac{5}{6}$ is labeled. What are the missing fractions?



First, find the unit fraction. The line is divided into six equal lengths. So, the number line shows sixths.

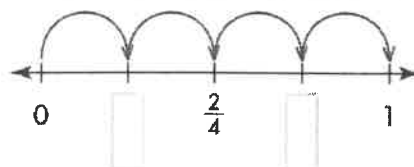
Each jump represents $\frac{1}{6}$. So, the first tick mark is labeled $\frac{1}{6}$. The second tick mark is labeled $\frac{2}{6}$, and so on.

The missing fractions on the number line are $\frac{1}{6}$, $\frac{2}{6}$, $\frac{3}{6}$, and $\frac{4}{6}$.

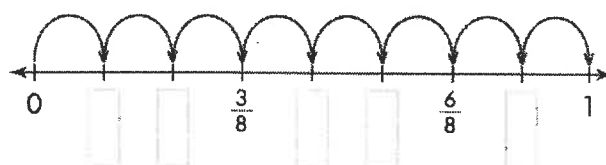
Remember to first decide what unit fraction is shown on each number line.

In 1 and 2, write the missing fractions on each number line.

1.



2.



3. Divide the number line below into 3 equal parts and mark $\frac{2}{3}$ on the line.



Name _____

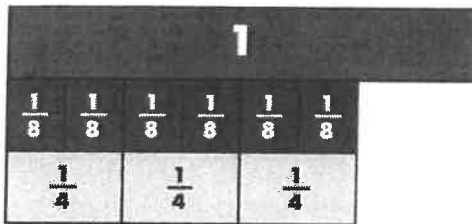
Reteaching

Set A pages 485–488

Two fractions are equivalent if they name the same part of a whole.

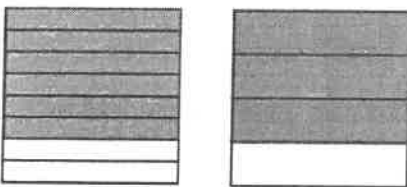
What is one fraction that is equivalent to $\frac{6}{8}$?

You can use fraction strips to find equivalent fractions.



$$\frac{6}{8} = \frac{3}{4}$$

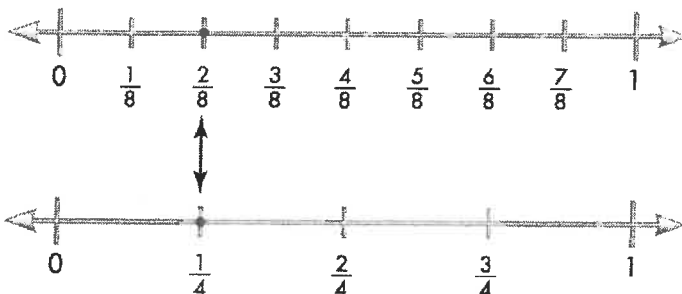
You also can use area models to see that $\frac{6}{8}$ and $\frac{3}{4}$ are equivalent fractions. The shaded fractions both show the same part of the whole.



Set B pages 489–492

Riley says the library is $\frac{2}{8}$ of a mile from their house. Sydney says it is $\frac{1}{4}$ of a mile.

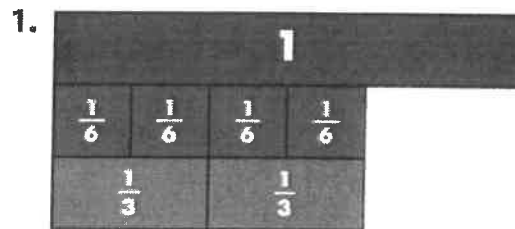
Use the number lines to find who is correct.



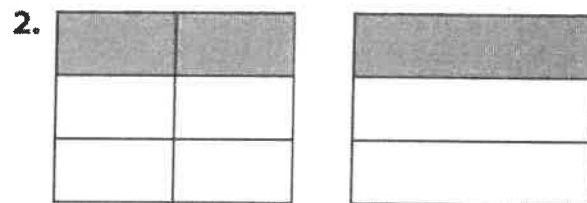
The fractions $\frac{2}{8}$ and $\frac{1}{4}$ are equivalent. They are the same distance from 0 on a number line. Riley and Sydney are both correct.

Remember to check that both sets of strips are the same length.

In 1 and 2, find an equivalent fraction. Use fraction strips and models to help.



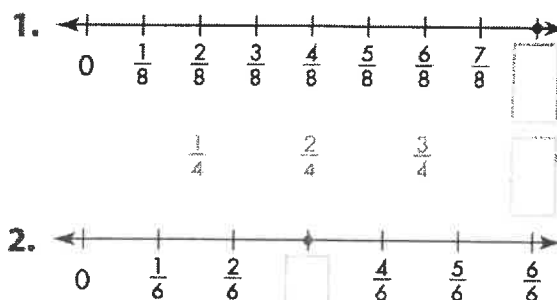
$$\frac{4}{6} = \frac{\quad}{\quad}$$



$$\frac{2}{6} = \frac{\quad}{\quad}$$

Remember that equivalent fractions have different names, but they represent the same point on a number line.

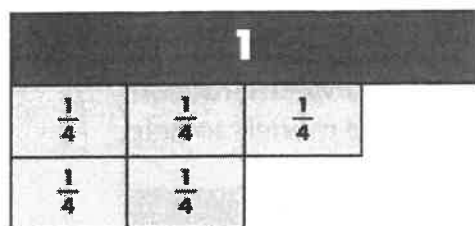
In 1 and 2, write two fractions that name the same location on the number line.



Set C pages 493–496

You can use fraction strips to compare fractions with the same denominator.

Compare $\frac{3}{4}$ to $\frac{2}{4}$.



The denominator of each fraction is 4.

Three $\frac{1}{4}$ fraction strips show $\frac{3}{4}$.

Two $\frac{1}{4}$ fraction strips show $\frac{2}{4}$.

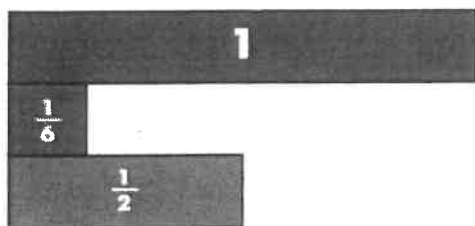
The fraction strips showing $\frac{3}{4}$ have 1 more unit fraction than the strips showing $\frac{2}{4}$.

So $\frac{3}{4} > \frac{2}{4}$.

Set D pages 497–500

You can use fraction strips to compare fractions with the same numerator.

Compare $\frac{1}{6}$ to $\frac{1}{2}$.



The numerator of each fraction is 1.

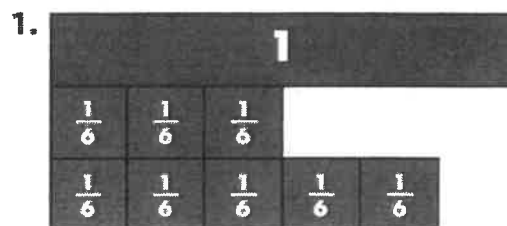
The $\frac{1}{6}$ fraction strip is less than the $\frac{1}{2}$ strip.

So $\frac{1}{6} < \frac{1}{2}$.

You can use reasoning to understand. Think about dividing a whole into 6 pieces and dividing it into 2 pieces. One of 6 pieces is less than 1 of 2 pieces.

Remember that if fractions have the same denominator, the greater fraction has a greater numerator.

In 1–3, compare. Write $<$, $>$, or $=$.
Use fraction strips to help.



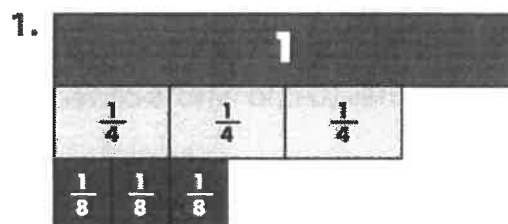
$$\frac{3}{6} \bigcirc \frac{5}{6}$$

2. $\frac{4}{6} \bigcirc \frac{5}{6}$

3. $\frac{5}{8} \bigcirc \frac{3}{8}$

Remember that if fractions have the same numerator, the greater fraction has a lesser denominator.

In 1–3, compare. Write $<$, $>$, or $=$.
Use fraction strips to help.



$$\frac{3}{4} \bigcirc \frac{3}{8}$$

2. $\frac{5}{6} \bigcirc \frac{5}{8}$

3. $\frac{1}{3} \bigcirc \frac{1}{2}$

Name _____



Set E pages 501–504

You can compare fractions using benchmark numbers such as 0, $\frac{1}{2}$, and 1.

Chris and Mary are painting pictures. The pictures are the same size. Chris painted $\frac{3}{4}$ of his picture. Mary painted $\frac{3}{8}$ of her picture. Who painted the greater amount?

$\frac{3}{4}$ is greater than $\frac{1}{2}$.

$\frac{3}{8}$ is less than $\frac{1}{2}$.

Chris painted the greater amount.

Remember that you can compare each fraction to a benchmark number to see how they relate to each other.

Reteaching
Continued

In 1 and 2, use benchmark numbers to help solve.

1. Mike had $\frac{2}{6}$ of a candy bar. Sally had $\frac{4}{6}$ of a candy bar. Whose fraction of a candy bar was closer to 1? Closer to 0?
2. Paul compared two bags of rice. One weighs $\frac{4}{6}$ pound, and the other weighs $\frac{4}{8}$ pound. Which bag is heavier?

Set F pages 505–508

You can use a number line to compare fractions.

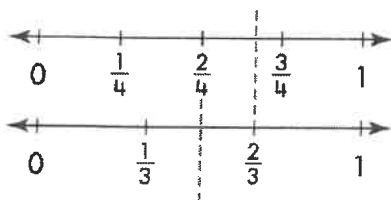
Which is greater, $\frac{3}{6}$ or $\frac{4}{6}$?



$\frac{4}{6}$ is farther from zero than $\frac{3}{6}$, so $\frac{4}{6}$ is greater.

You also can compare two fractions with the same numerator by drawing two number lines.

Which is greater, $\frac{2}{4}$ or $\frac{2}{3}$?

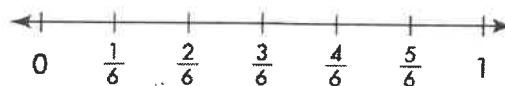


$\frac{2}{3}$ is farther from zero than $\frac{2}{4}$, so $\frac{2}{3}$ is greater.

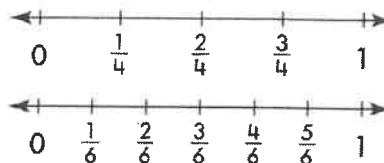
Remember to draw two number lines that are equal in length when comparing fractions with different denominators.

In 1 and 2, compare. Write $<$, $>$, or $=$. Use number lines to help.

1. $\frac{2}{6}$ $\frac{3}{6}$

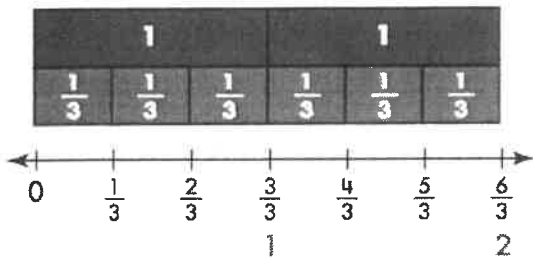


2. $\frac{3}{4}$ $\frac{3}{6}$



How many thirds are in 2 wholes?

You can use a number line or fraction strips to find a fraction name for 2 using thirds.



$$2 = \frac{6}{3}$$

The whole number 2 can also be written as the fraction $\frac{6}{3}$.

Remember that when you write whole numbers as fractions, the numerator can be greater than the denominator.

In 1–4, write an equivalent fraction for each whole number.

1. 3

2. 2

3. 5

4. 1

In 5–8, write the equivalent whole number for each fraction.

5. $\frac{6}{3}$

6. $\frac{10}{2}$

7. $\frac{14}{2}$

8. $\frac{8}{8}$

Think about these questions to help **construct arguments**.

Thinking Habits

- How can I use numbers, objects, drawings, or actions to justify my argument?
- Am I using numbers and symbols correctly?
- Is my explanation clear and complete?



Remember that when you construct an argument, you explain why your work is correct.

Odell and Tamra paint two walls with the same dimensions. Odell paints $\frac{1}{6}$ of a wall. Tamra paints $\frac{1}{3}$ of the other wall. Conjecture: Odell paints less than Tamra.

1. Draw a diagram to justify the conjecture.

2. Use the diagram to justify the conjecture.