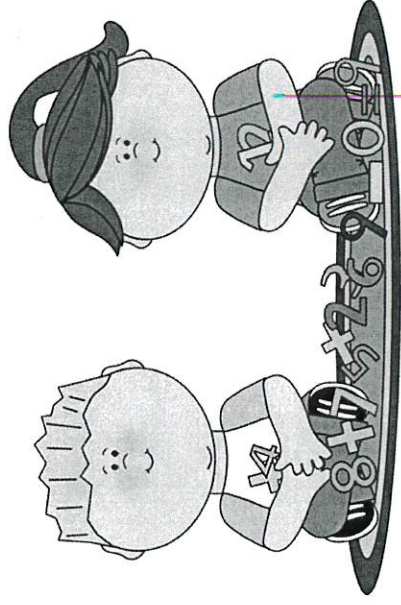
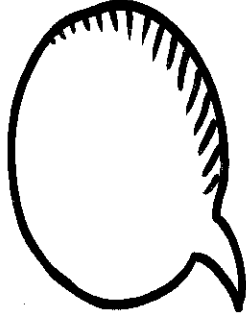
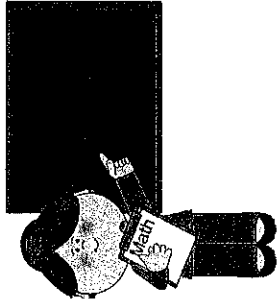




Grade 3 Math

Day 1



Hello!

In today's lesson you will review using multiplication to find an unknown in a division equation.

This lesson consists of an opening, a problem of the day, a math activity, a reflection, and Dreambox if internet is available.

All assignments that have this picture are due to your teacher.

Assignment

Standard:

3.AFO.6 Understand
division as a missing
factor problem.

I CAN Statements:



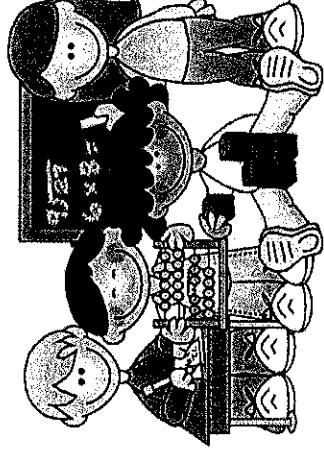
I can explain the relationship
between multiplication and
division.



I can use multiplication to find
an unknown in a division
equation.

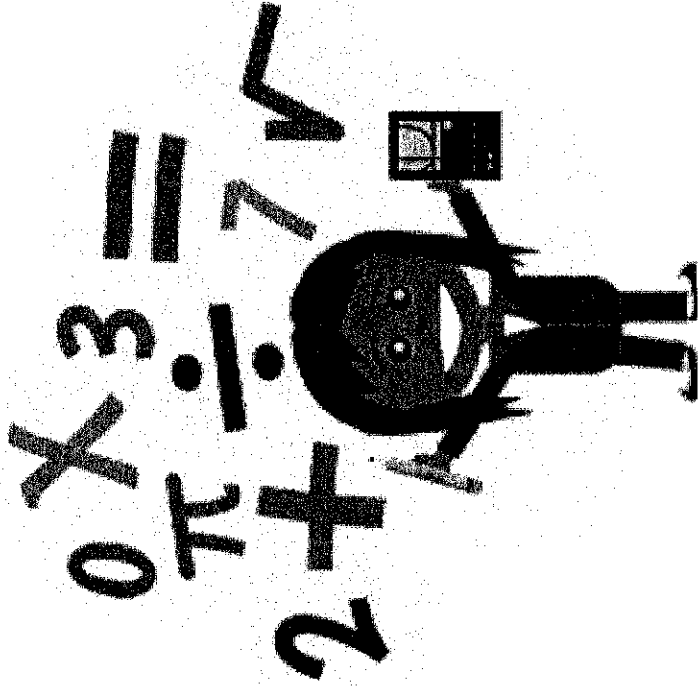
Essential Questions:

- How can multiplication be used to help solve a division equation?



Materials and Resources:

- Paper and Pencil
- Dreambox (If internet is available)



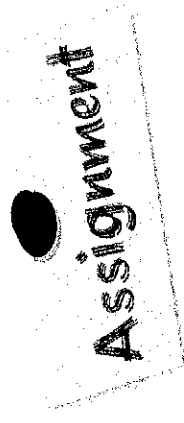
Activities

Opening: Grade 3 Target Number

36028

Find as many representations as you can using a multiplication or division number sentence for the target number:

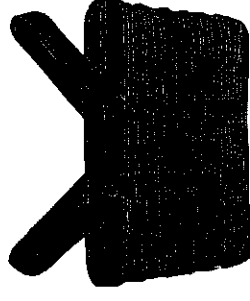
36



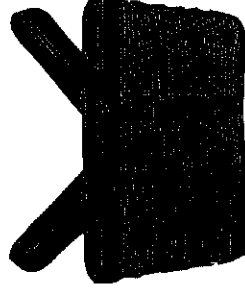
3rd Grade Problem of the Day

Assignment

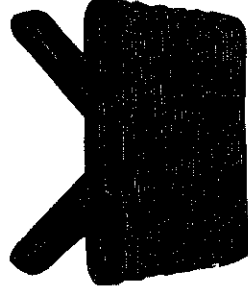
Kim baked 15 muffins. She put an equal number of muffins into 3 baskets. She thinks, 3 times what number equals 15?



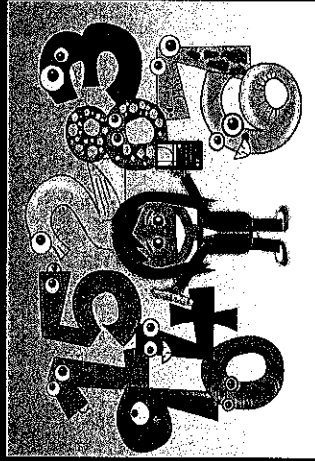
$$3 \times \underline{\quad} = 15$$
$$15 \div \underline{\quad} = 3$$



So, Kim put muffins in each basket.



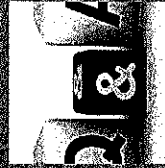
Use pictures, words, and/or numbers to justify your thinking.



Activities:



See next slide for standard
review



#2 Then answer questions 1 – 5.

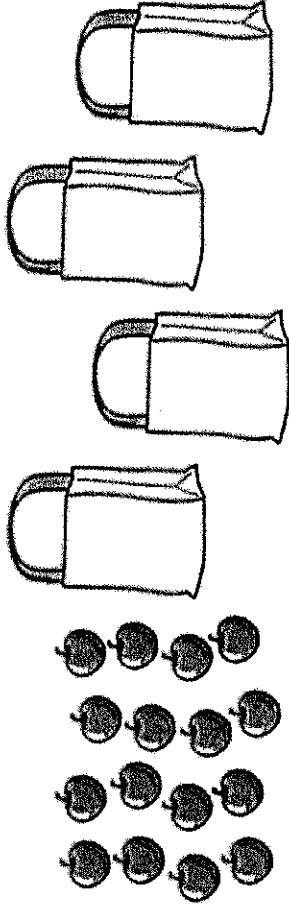
Activity # 1

Standard Review

Multiplication and division can both describe problems where there are equal groups. Either one can be used to solve a problem like this:

Lola buys 16 apples. She puts the same number of apples in 4 bags. How many apples does she put in each bag?

You know the total (16 apples) and the number of groups (4 bags). You need to find the number in each group.



A multiplication equation for the problem is

$$4 \times \square = 16$$

$$4 \times 4 = 16$$

A division equation for the problem is

$$16 \div 4 = \square$$

$$16 \div 4 = 4$$

Lola puts 4 apples in each bag.

Solve the problems.

1 Which multiplication equation can be used to solve each division problem?

Write the multiplication equation from the box that is related to each division problem. Not all answer choices will be used.

$9 \times \square = 36$	$36 \times 9 = \square$	$\square \times 18 = 9$
$9 \times 72 = \square$	$\square \times 9 = 72$	$18 = 9 \times \square$

$$18 \div 9 = \square \quad \longleftrightarrow$$

$$72 \div 9 = \square \quad \longleftrightarrow$$

$$36 \div 9 = \square \quad \longleftrightarrow$$

2 Which division equation can be solved using $3 \times \square = 27$?

A $27 \div 3 = \square$

B $3 \div 27 = \square$

C $\square \div 27 = 3$

D $\square \div 3 = 27$

3 Diana bakes 14 bagels. She puts all of the bagels into 7 bags. Each bag has the same number of bagels. How many bagels does Diana put into each bag?

Write a division equation and a multiplication equation that you can use to solve the problem.

$\underline{\hspace{2cm}} \div 7 = \underline{\hspace{2cm}}$

$7 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Grade 3 Lesson 5 Understand How Multiplication and Division Are Connected



©Curriculum Associates, LLC
Copying permitted for classroom use.

Assignment

4 Sofia uses multiplication to solve division problems.

Assignment

Which sentences are true? Circle all the correct answers.

A She can use $2 \times \square = 10$ to solve $10 \div 2 = \square$.

B She can use $5 \times 25 = \square$ to solve $25 \div 5 = \square$.

C She can use $\square \times 8 = 56$ to solve $56 \div 8 = \square$.

D She can use $42 \times \square = 7$ to solve $42 \div 7 = \square$.

E She can use $\square \times 27 = 3$ to solve $27 \div 3 = \square$.

Assignment

5 Lenny has 48 crackers divided into piles. There are 8 crackers in each pile. How many piles of crackers does Lenny have?

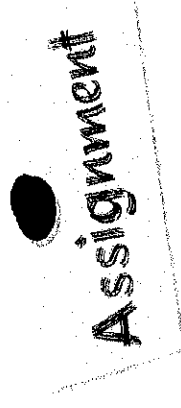
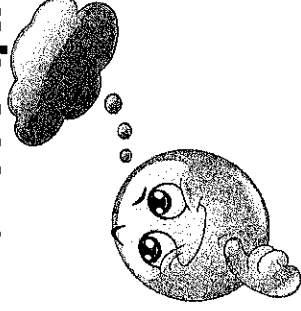
The division equation $48 \div 8 = \square$ shows the problem. Lenny wants to use multiplication to solve the problem. He thinks, "What number times 48 gives me 8?"

Explain why Lenny is not correct. What is the correct answer?

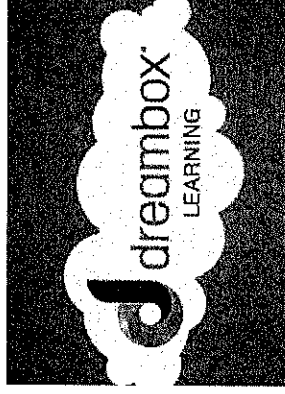
Answer: Lenny has _____ piles of crackers.

Reflection: Today you have reviewed using multiplication to find an unknown in a division equation. **What was one thing you did well with today's lesson? What is one thing you need additional help with?**

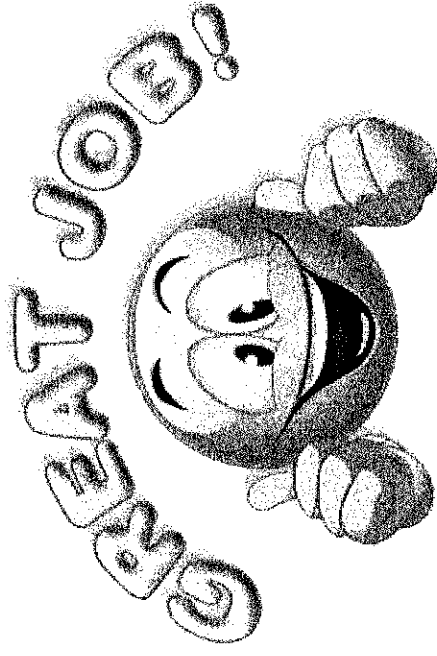
Write down the answers to these questions on a sheet of paper.

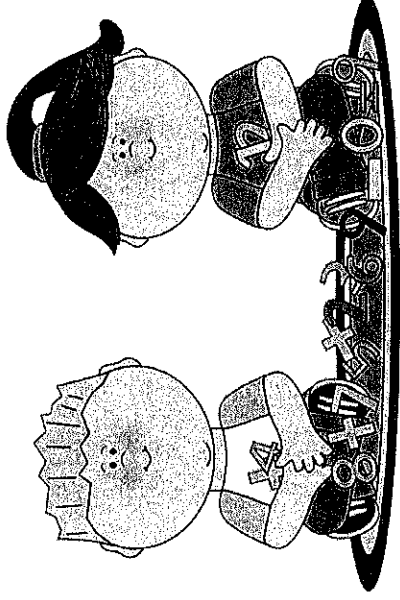


If internet is available, please
login to Dreambox and work for 10 minutes.



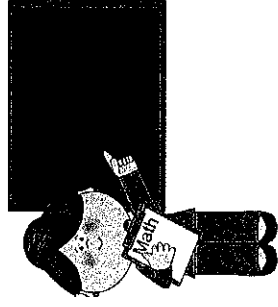
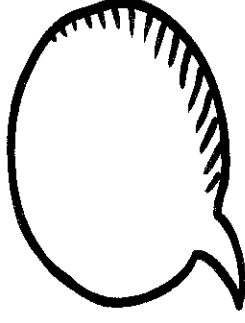
Great job, mathematicians! Please make sure you have written down your answers to each question from today's activities and place your work in your book bag to give to your teacher when you return to school.





Grade 3 Math

Day 2



Hello!

This lesson is for Grade 3 students. In today's lesson you will review representing fractions using a variety of models. This lesson consists of an opening, a problem of the day, a math activity, a reflection, and Dreambox if internet is available.

All assignments that have this picture are due to your teacher.

Assignment

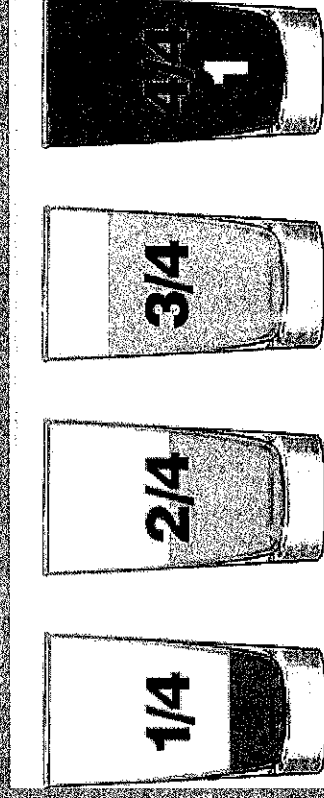
Standard:

3.NSF.1 Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. A fraction can be represented using set, area, and linear models.

I CAN Statements:



I can represent fractions using set, area, and linear models.

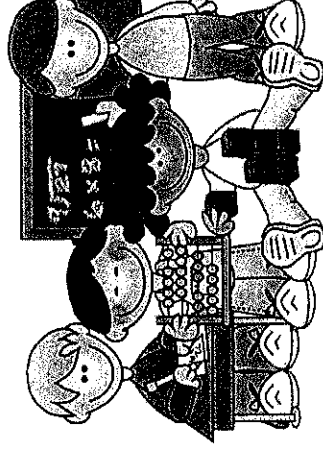


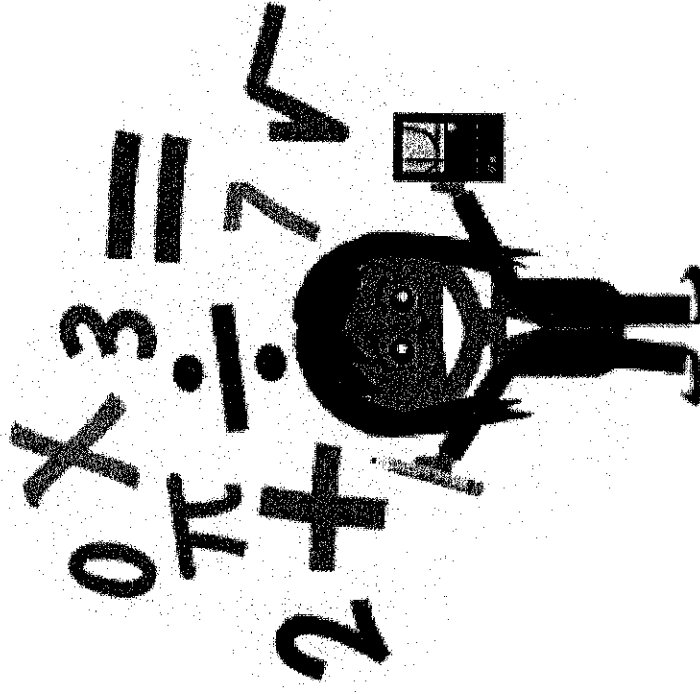
Essential Questions:

- How can we apply our understanding of fractions in everyday life?
- How can I represent fractions in different ways?

Materials and Resources:

- Paper and Pencil
- Dreambox (If internet is available)





Activities

Opening: Grade 3 Fraction Routine:

Assignment

Draw the number line below onto a sheet of paper.

Place the following fractions on the number line.

$$\frac{2}{4}$$

$$\frac{4}{4}$$

$$\frac{1}{2}$$

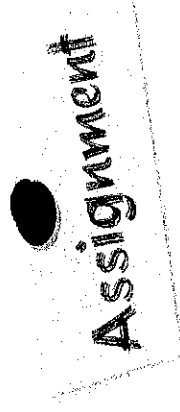
$$\frac{3}{4}$$

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



3rd Grade Problem of the Day

In Mario's soccer league, one soccer player is $\frac{1}{8}$ of a team.
How many players are on the whole team?



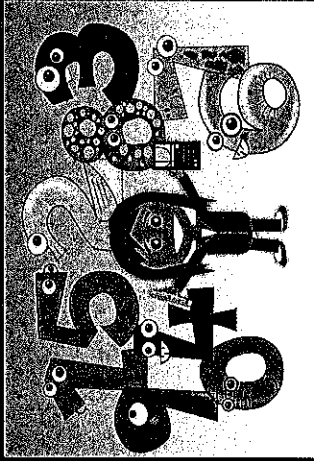
A. 1

B. 4

C. 6

D. 8

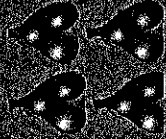
Use pictures, words, and/or numbers to justify your thinking.



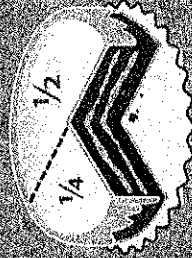
Activities:



See next slide for standard review.



#2 Complete the activity found on the slide following the standard review



#3 Then answer questions 1 – 5 on the slides that follow.

Activity # 1

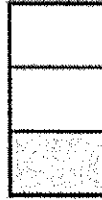
Standard Review

Fractions are numbers that describe equal parts of a whole.

denominator: the bottom number in a fraction. It tells how many equal parts are in the whole.

numerator: the top number in a fraction. It tells how many parts you have.

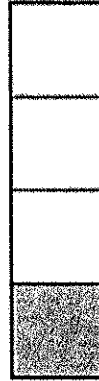
$\frac{1}{3}$ of this rectangle has been shaded.



$\frac{1}{3}$ part shaded
 $\frac{1}{3}$ equal parts in the whole

$\frac{1}{3}$ is a **unit fraction** because it names just one equal part of a whole.

$\frac{1}{4}$ is another example of a unit fraction.



Three $\frac{1}{4}$ s of this rectangle have been shaded. So we write that $\frac{3}{4}$ is shaded.



Activity #1

Directions: Use the activity sheet on the next page just like the one on the right and complete.

Activity Sheet

Record objects around your home where you see fractions. Record the unit fraction and provide a drawing of your observation.

Item	Unit Fraction	Drawing

Assignment



Activity Sheet

Record objects around your home where you see fractions. Record the unit fraction and provide a drawing of your observation.

Item	Unit Fraction	Drawing

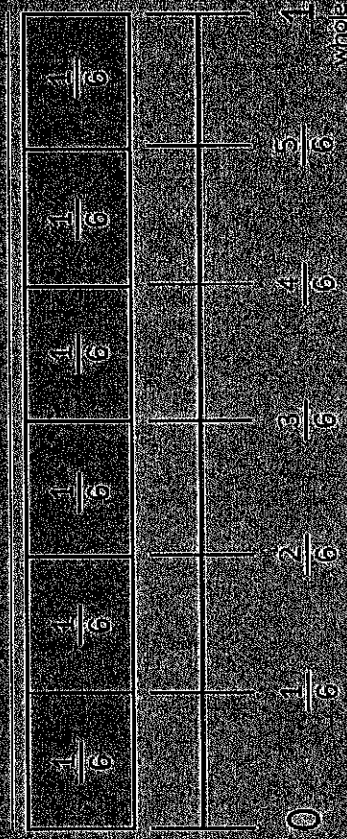
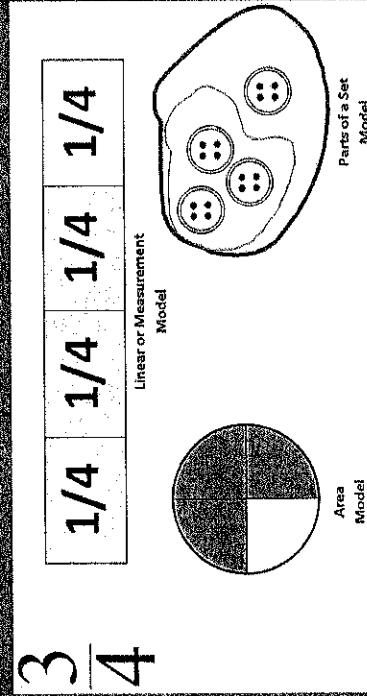
Answer Questions 1-5 found on the following slides

There are
2 parts
altogether...



$\frac{1}{2}$

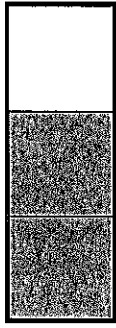
$$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$$



Assignment

Solve the problems.

- 1** The parts in this model are all equal.



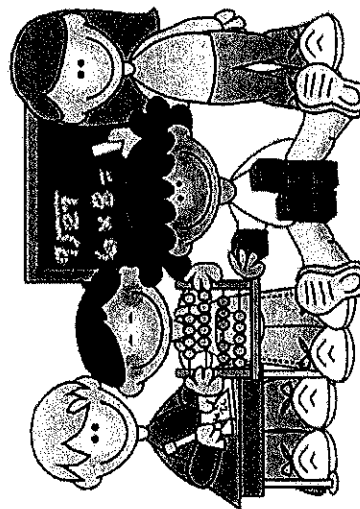
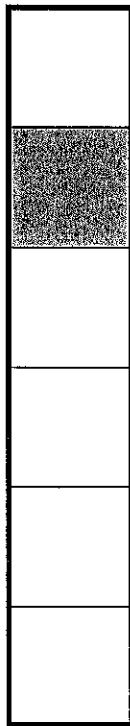
Which fraction names the shaded part of the model?

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



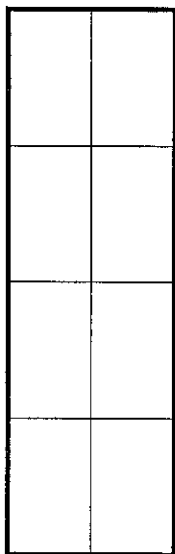
Assignment

- 2** The rectangle shows $\frac{1}{6}$. Finish shading the model to show $\frac{4}{6}$ shaded.



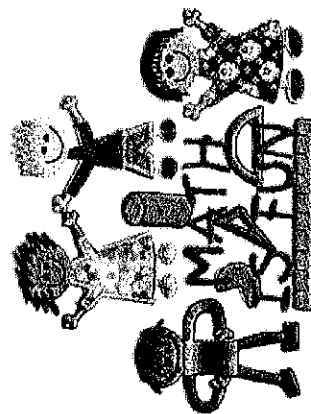
Assignment

- 3** Abigail draws a rectangle. The parts in her rectangle are all equal.



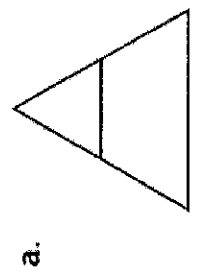
Write the unit fraction shown by each part of Abigail's rectangle.

$\frac{\square}{\square}$	$\frac{\square}{\square}$
---------------------------	---------------------------

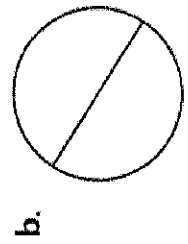


Assignment

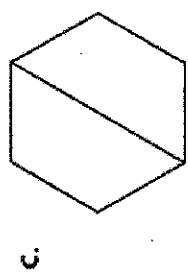
4 Does the model show one half?
Choose Yes or No for each model.



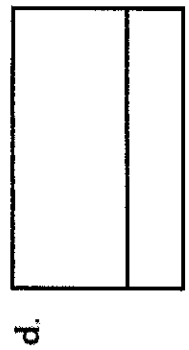
☐ Yes ☐ No



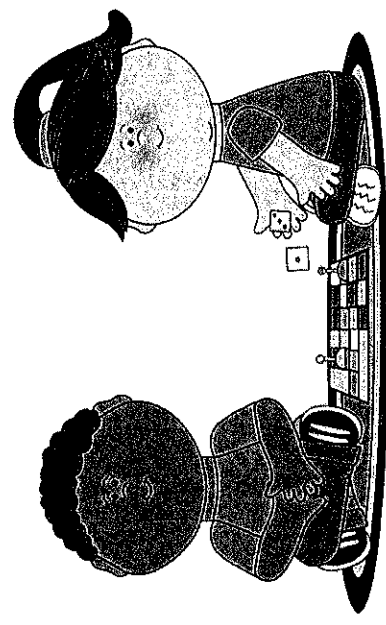
☐ Yes ☐ No



☐ Yes ☐ No

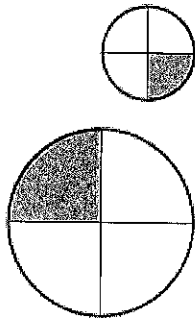


☐ Yes ☐ No



Assignment

- 5** Each circle is divided into equal parts.

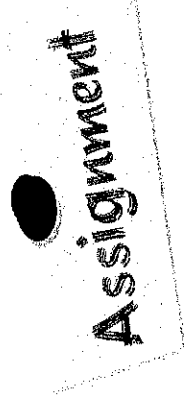
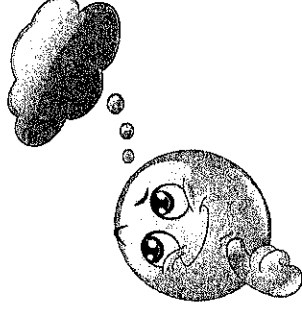


Compare the fraction of each model that is shaded. Explain what is the same and what is different about the shaded parts.

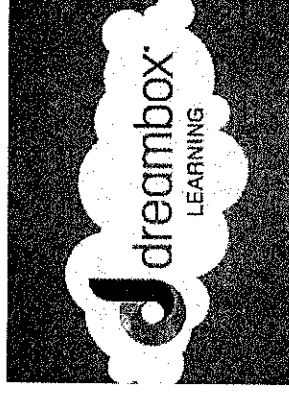


Reflection: Today you have reviewed representing fractions using a variety of models. What was one thing you did well with today's lesson? What is one thing you need additional help with?

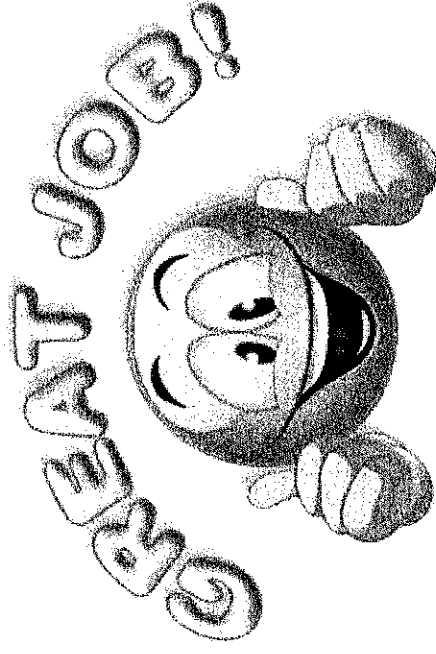
Write down the answers to these questions on a sheet of paper.



If internet is available, please
login to Dreambox and work for 10 minutes.

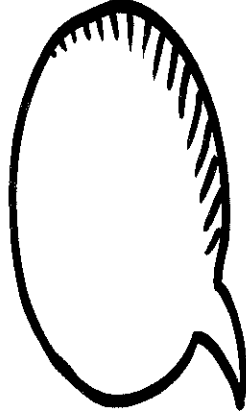


Great job, mathematicians! Please make sure you have written down your answers to each question from today's activities and place your work in your book bag to give to your teacher when you return to school.





Day 3



Hello!

In today's lesson you will review understanding fraction equivalence and comparison. This lesson consists of an opening, a problem of the day, a math activity, a reflection, and Dreambox if internet is available.

All assignments that have this picture are due to your teacher.

Assignment

Standard:

3.NF.2 Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that

- a. Two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line.
- b. Fraction equivalence can be represented using set, area, and linear models.
- c. Whole numbers can be written as fractions (e.g., $4 = \frac{4}{1}$ and $1 = \frac{4}{4}$).
- d. Fractions with the same numerator or same denominator can be compared by reasoning about their size based on the same whole.

I CAN Statements:



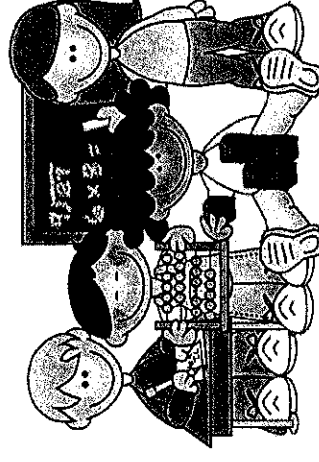
I can model and write equivalent fractions.

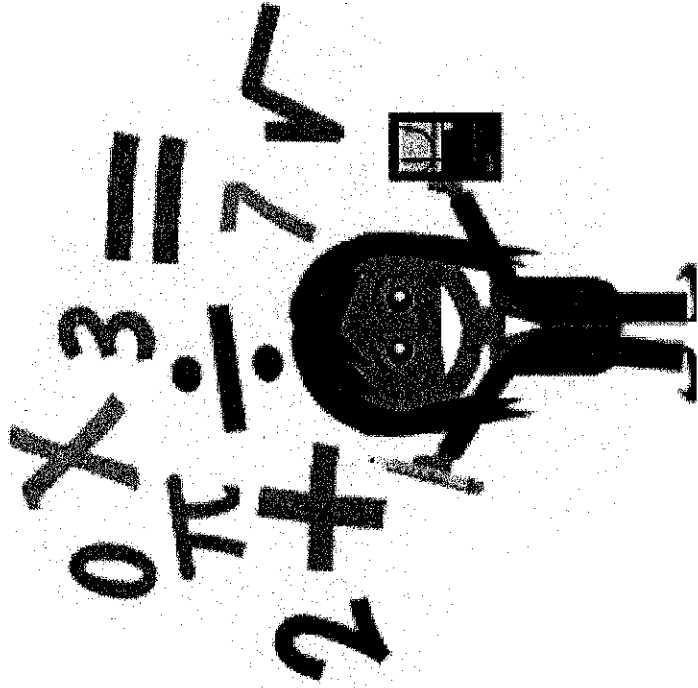
Essential Questions:

- How can we use models to show equivalent fractions?

Materials and Resources:

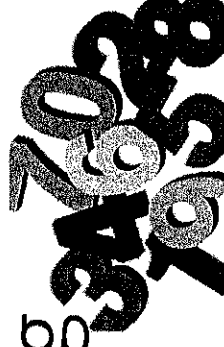
- Paper and Pencil
- Dreambox (If internet is available)





Activities

Opening: Grade 3 Which Doesn't Belong



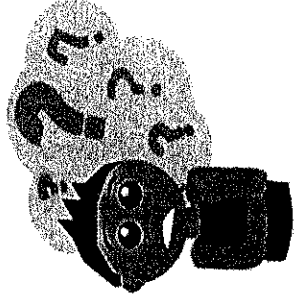
Look at the set of numbers to the right. Think about 3 different ways a number cannot belong within that group of numbers.

Remember to explain why you think that particular number does not belong.

9	16
25	43

3rd Grade Problem of the Day

Models of two fractions are shown below:



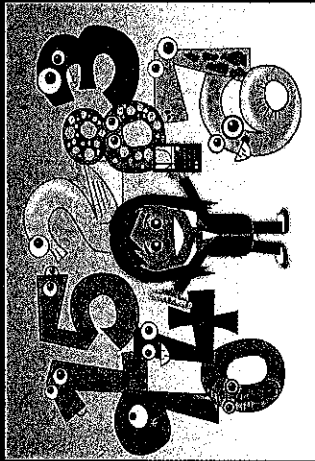
Select *all* the true statements.

- A. The fractions cannot be compared.
- B. The fractions are equivalent.

C. $\frac{6}{8} > \frac{3}{4}$

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

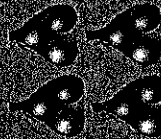
Use pictures, words, and or numbers to justify your thinking.



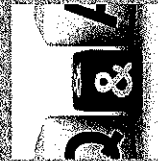
Activities:



See next slide for standard review.



#2 Then complete Activity 2 on the slide following.



#3 Then answer the Problem Solving Questions as a review.

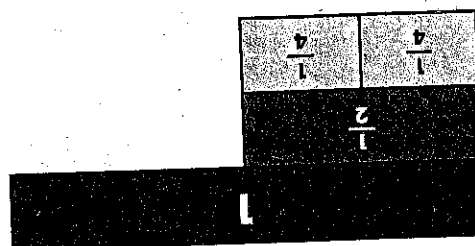
Activity # 1

Standard Review

Please read over the lesson on the next page as a guide and answer the Convince Me! scenario at the bottom of the page.

Convince Me! Look for Relationships In the examples above, what pattern do you see in the fractions that are equivalent to $\frac{1}{2}$? What is another name for $\frac{1}{2}$ that is not shown above?

The fractions $\frac{1}{2}$ and $\frac{4}{4}$ represent the same part of the whole.



$\frac{1}{2} = \frac{\square}{\square}$ You can use fraction strips.

Different fractions can name the same part of a whole.

The Chisholm Trail was used to drive cattle to market. Ross's herd has walked $\frac{1}{2}$ the distance to market. What is another way to name $\frac{1}{2}$?

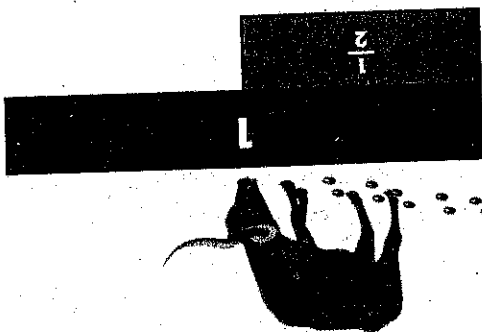
How Can Different Fractions Name the Same Part of a Whole?

Essential Question

A-Z Glossary

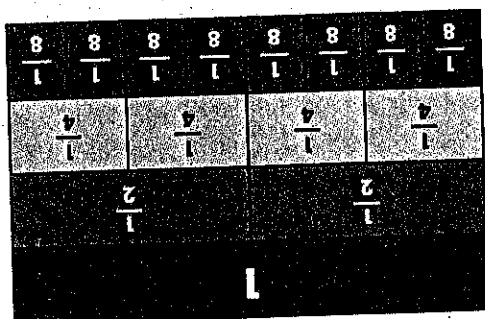
Visual Learning

Visual Learning Bridge



Fractions that name the same part of a whole are called equivalent fractions.

You can find other equivalent fractions. Think about fractions that name the same part of the whole.



Four $\frac{1}{8}$ strips are equal to $\frac{1}{2}$, so $\frac{1}{2} = \frac{4}{8}$.

Another name for $\frac{1}{2}$ is $\frac{4}{8}$.

Activity # 2

Assignment

- Complete the Guided Practice and Independent Practice questions on the next page and then continue with the Problem Solving questions.

Another Example!

You can find an equivalent fraction for $\frac{4}{6}$ using an area model.

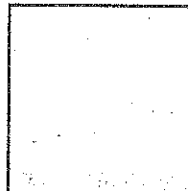
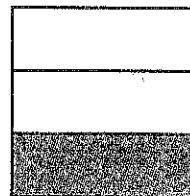


Both area models have the same-sized whole. One is divided into sixths. The other shows thirds. The shaded parts show the same part of a whole. Because $\frac{4}{6} = \frac{2}{3}$, another name for $\frac{4}{6}$ is $\frac{2}{3}$.

Guided Practice

Do You Understand?

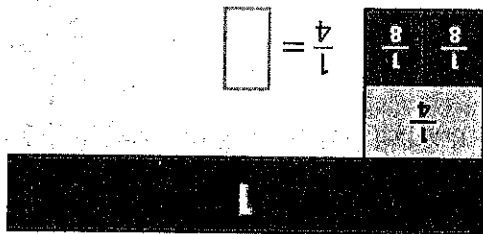
1. Divide the second area model into sixths. Shade it to show a fraction equivalent to $\frac{1}{3}$.



$$\frac{1}{3} = \frac{\square}{\square}$$

Do You Know/How?

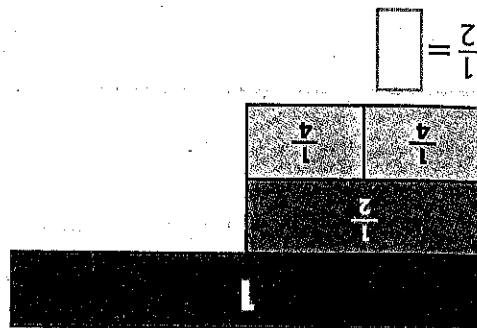
2. Use the fraction strips to help find an equivalent fraction.



$$\frac{1}{4} = \frac{\square}{\square}$$

Independent Practice

3. Use the fraction strips to help find an equivalent fraction.



$$\frac{1}{2} = \frac{\square}{\square}$$

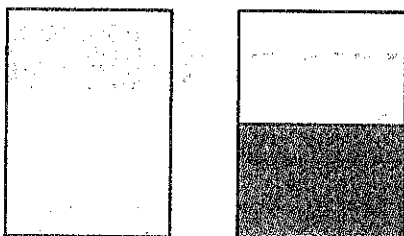
In 5-8, find each equivalent fraction. Use fraction strips or draw area models to help.

$$5. \frac{4}{3} = \frac{\square}{8}$$

$$6. \frac{6}{6} = \frac{8}{\square}$$

$$7. \frac{6}{2} = \frac{3}{\square}$$

$$8. \frac{8}{4} = \frac{\square}{2}$$



$$\frac{1}{2} = \frac{\square}{\square}$$

4. Divide the second area model into eighths. Shade it to show a fraction equivalent to $\frac{1}{2}$.

In 9 and 10, use the fraction strips at the right.

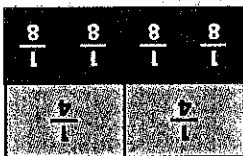
9. Marcy used fraction strips to show equivalent fractions.

Complete the equation.

$$\frac{4}{\square} = \frac{\square}{4}$$

10. Rita says the fraction strips show fractions that are equivalent to $\frac{7}{2}$. Explain what you could do to the diagram to see if she is correct.

Both fractions represent the same part of the whole.



11. Reasoning A band learns 4 to 6 new songs every month. What is a good estimate for the number of songs the band will learn in 8 months? Explain.

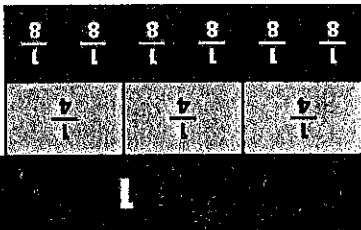
12. Three eighths of a playground is covered by grass. What fraction of the playground is **NOT** covered by grass?

13. Higher Order Thinking Aiden folded 2 strips of paper into eighths. He shaded a fraction equal to $\frac{4}{8}$ on the first strip and a fraction equal to $\frac{3}{8}$ on the second strip. Use eighths to show the fractions Aiden shaded on the pictures to the right. Which fraction of each strip did he shade?

Assessment Practice

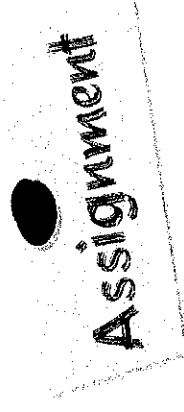
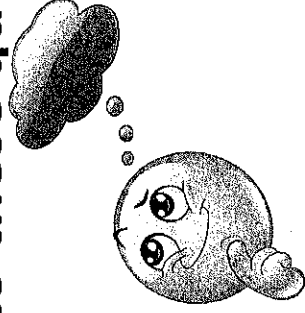
14. Which fractions are equivalent? Select all that apply.

- ☐ $\frac{1}{4}$ and $\frac{8}{8}$
- ☐ $\frac{1}{4}$ and $\frac{2}{8}$
- ☐ $\frac{3}{4}$ and $\frac{6}{8}$
- ☐ $\frac{4}{3}$ and $\frac{8}{8}$

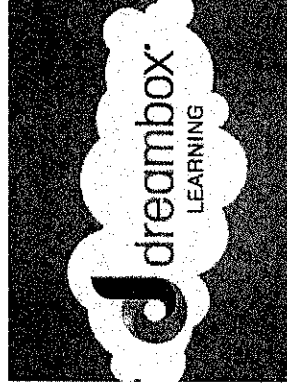


Reflection: Today you have reviewed fraction equivalence and comparisons using model representations. What was one thing you did well with today's lesson? What is one thing you need additional help with?

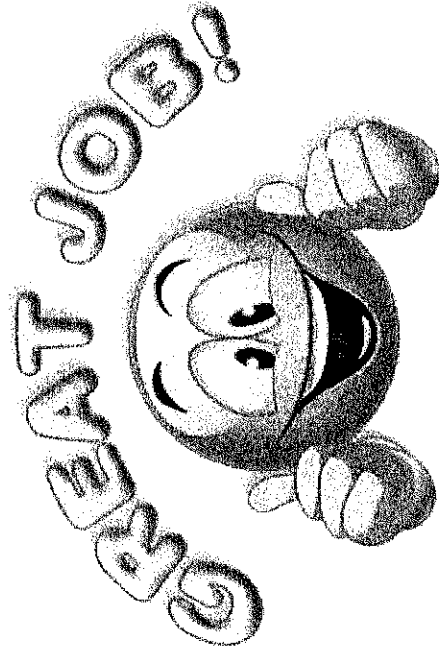
Write down the answers to these questions on a sheet of paper.

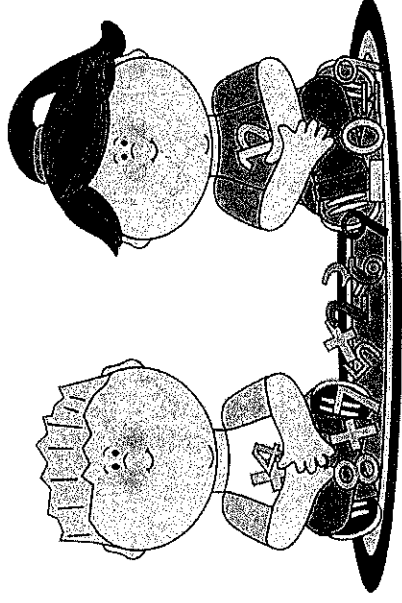


If internet is available, please
login to Dreambox and work for 10 minutes.



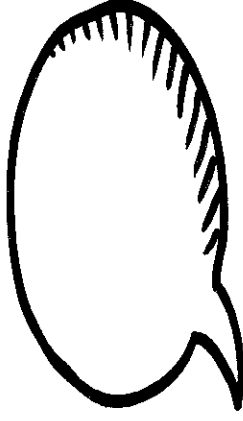
Great job, mathematicians! Please make sure you have written down your answers to each question from today's activities and place your work in your book bag to give to your teacher when you return to school.



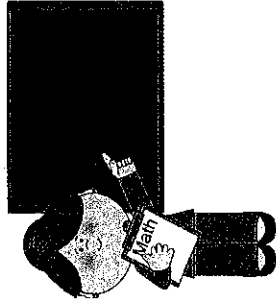


Grade 3 Math

Day 4



Hello!



In today's lesson you will review organizing data on a line plot using correct units. This lesson consists of an opening, a problem of the day, a math activity, a reflection, and Dreambox if internet is available.

All assignments that have this picture are due to your teacher.

Assignment

Standard:

3.MDA.4 Generate data by measuring length to the nearest inch, half-inch, and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units.

I CAN Statements:



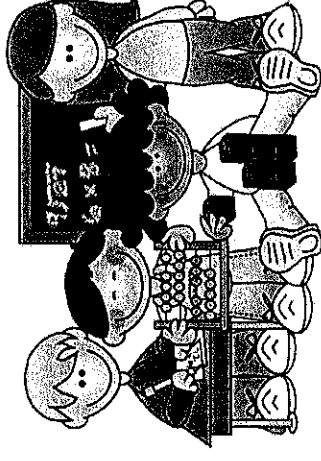
I can organize data on a line plot using correct units.

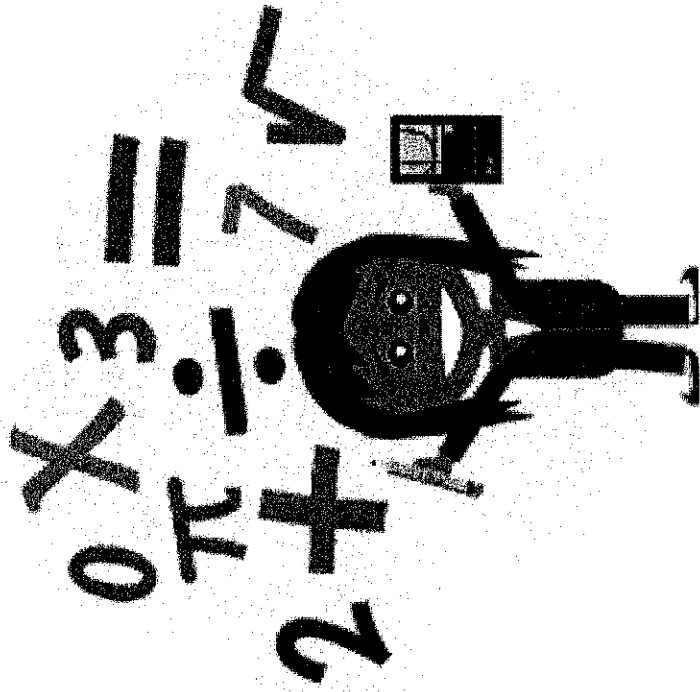
Essential Questions:

- How can data be organized on a line plot?

Materials and Resources:

- Paper and Pencil
- Dreambox (If internet is available)





Activities

Opening: Grade 3 Fraction Counting

347028
7028

Count by $\frac{1}{8}$ until you get to 2 wholes.

Write down the fractions as you count.

For example: When counting by $\frac{1}{4}$ you would write $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, \frac{4}{4}, \frac{5}{4}, \frac{6}{4}, \frac{7}{4}, \frac{8}{4}$

Also write an equivalent fraction
under the appropriate
fraction.

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

3rd Grade Problem of the Day

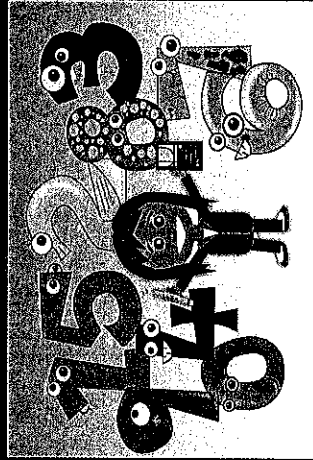
Jacquetta, Isabella, Sarah, and Joni all collect colorful ribbons to wear in their hair.

- Jacquetta has a yellow ribbon that is $8\frac{1}{2}$ inches long
- Isabella has a black and white striped ribbon that is $8\frac{1}{4}$ inches long
- Sarah has a pink ribbon that is $8\frac{1}{4}$ inches long
- Joni has a blue ribbon that is 8 inches long

Organize the lengths of the girls' ribbons in a line plot using a horizontal scale marked off in appropriate units.



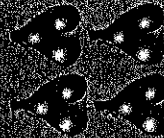
Use pictures, words, and or numbers to justify your thinking.



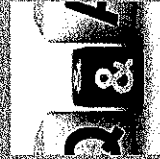
Activities:



#1 See next slide for standard review.



#2 Then complete Activity 2 on the slide following.



#3 Then answer questions 1– 2.

Activity # 1

Standard Review

A **line plot** is a graph using marks along a number line to show how many objects are in different categories. In this lesson, using categories based on fractional measurements of length gives your child a chance to practice using a ruler, practice reading and writing mixed numbers like $2\frac{1}{2}$, and practice locating fractions on a number line.

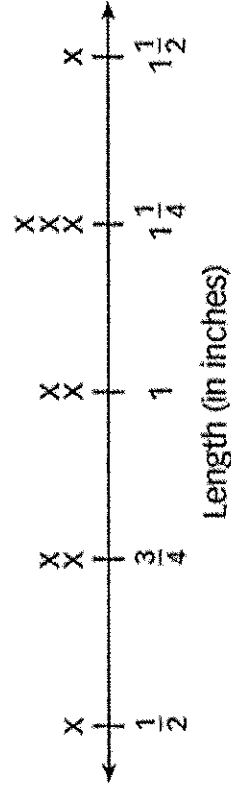
Here is a table showing the lengths of some dragonfly wings. The wings have been measured to the nearest $\frac{1}{4}$ inch.

Lengths of Dragonfly Wings

Wing	A	B	C	D	E	F	G	H	I
Length	$\frac{3}{4}$	$\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	1

The data from the chart above is shown on the line plot below. There is an "X" for each wing length recorded. The line plot sorts the data for you, and makes it easy to see things like what wing length is most common.

Lengths of Dragonfly Wings



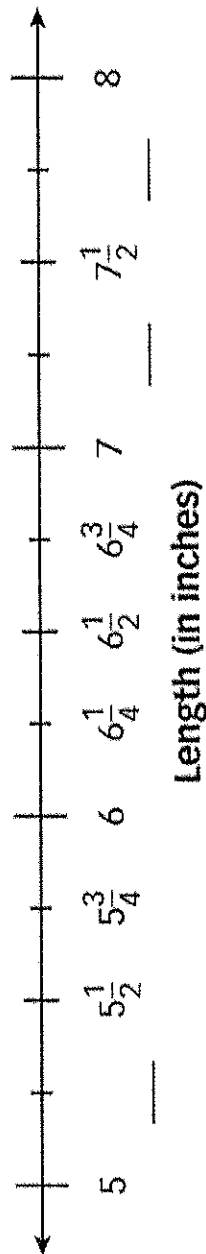
Activity # 2

Assignment

Some students measured the length of each other's hair. They recorded the data in this list. Make a line plot to display the data.

Hair Length (inches)						
$5\frac{1}{2}$	$5\frac{1}{4}$	$6\frac{1}{2}$	$5\frac{3}{4}$	$6\frac{1}{2}$	$5\frac{3}{4}$	7
$7\frac{1}{2}$	$5\frac{1}{4}$	$6\frac{1}{4}$	$7\frac{1}{4}$	$5\frac{3}{4}$	$7\frac{1}{4}$	$6\frac{1}{2}$
						$7\frac{3}{4}$

Hair length

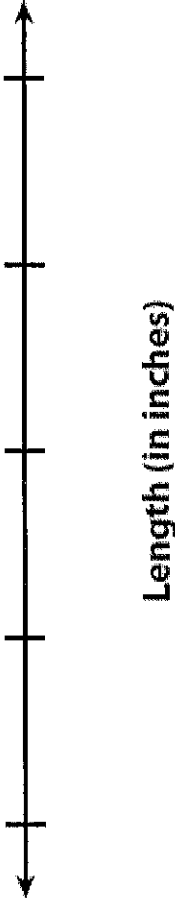


Sasha measures the lengths of some baby carrots. She records the data in the table.

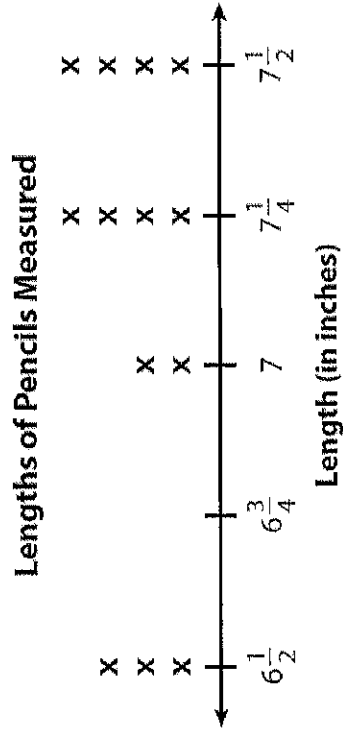
Carrot	A	B	C	D	E	F	G	H
Length (in inches)	3	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{1}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{4}$	3

Complete the line plot to show the lengths of Sasha’s baby carrots.

Lengths of Sasha’s Baby Carrots



The line plot shows the lengths of some pencils in Jacob's classroom.



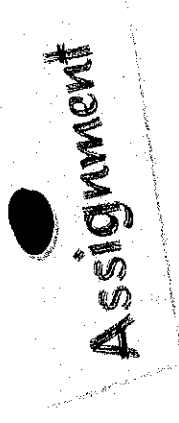
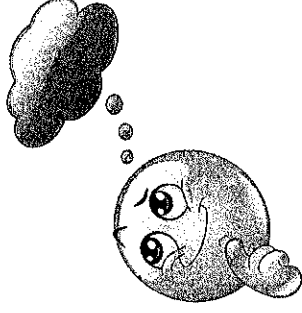
Are the sentences about the line plot true?

Choose Yes or No for each sentence.

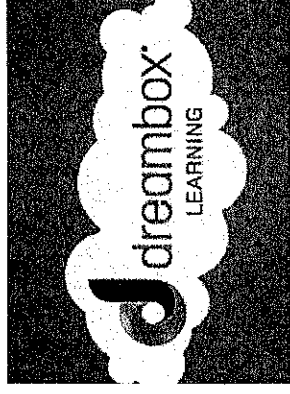
- The lengths of the longest pencils are $6\frac{1}{2}$ inches.
☐ Yes ☐ No
- The line plot shows the lengths of 12 pencils in all.
☐ Yes ☐ No
- Exactly two pencils have lengths that are 7 inches.
☐ Yes ☐ No
- The length of one pencil is $6\frac{3}{4}$ inches.
☐ Yes ☐ No
- All of the pencils have lengths that are at least $6\frac{1}{2}$ inches.
☐ Yes ☐ No
- Ten pencils have lengths that are greater than 7 inches.
☐ Yes ☐ No

Reflection: Today you have reviewed organizing data on a line plot using correct units. **What was one thing you did well with today's lesson? What is one thing you need additional help with?**

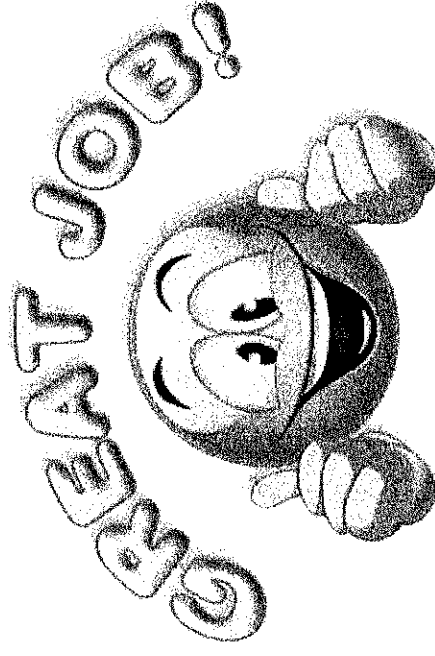
Write down the answers to these questions on a sheet of paper.

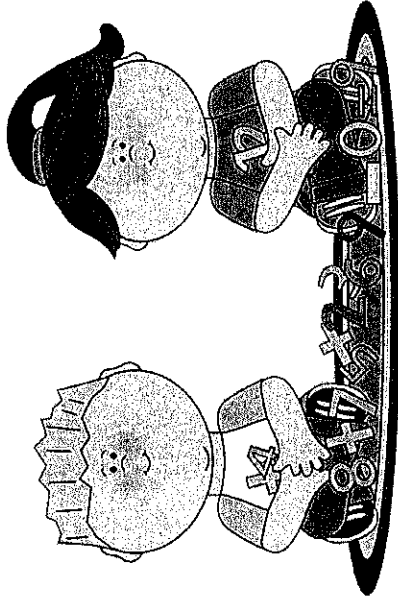


If internet is available, please
login to Dreambox and work for 10 minutes.



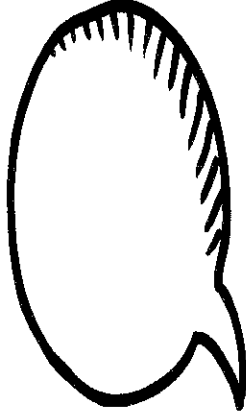
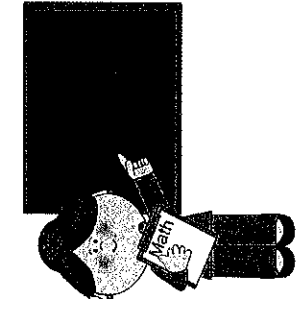
Great job, mathematicians! Please make sure you have written down your answers to each question from today's activities and place your work in your book bag to give to your teacher when you return to school.





Grade 3 Math

Day 5



Hello!

In today's lesson you will review how to use picture graphs and bar graphs to answer questions about data sets. We will also look for patterns to solve problems. This lesson consists of an opening, a problem of the day, a math activity, a reflection, and Dreambox if internet is available.

All assignments that have this picture are due to your teacher.

Assignment

Standard:

3.MDA.4

Collect, organize, classify, and interpret data with multiple categories and draw a scaled picture graph and a scaled bar graph to represent the data.

I CAN Statements:



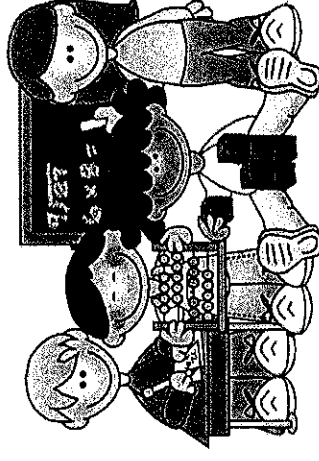
I can read and interpret scaled picture and bar graphs in order to solve problems.

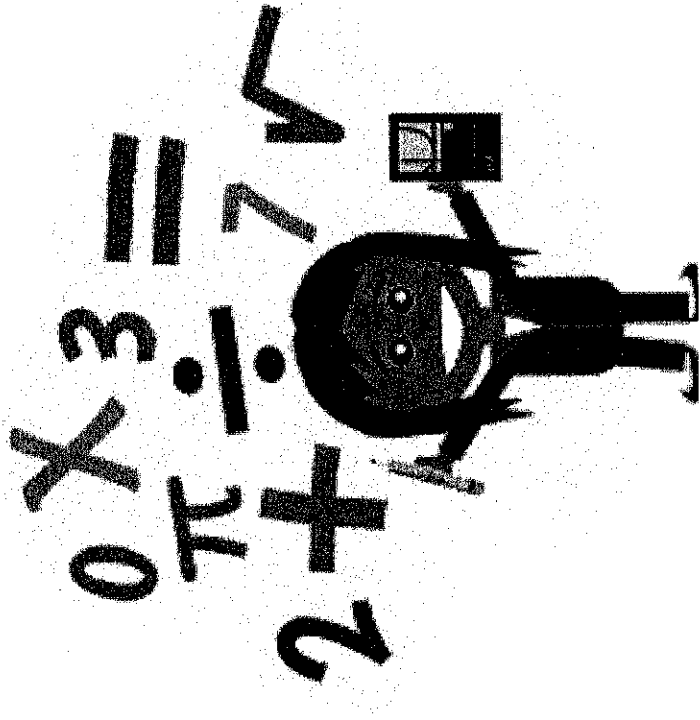
Essential Questions:

- How can data displayed in tables and graphs be used to inform?
- How are tables, bar graphs, and picture graphs useful ways to display data?

Materials and Resources:

- Paper and Pencil
- Dreambox (If internet is available)

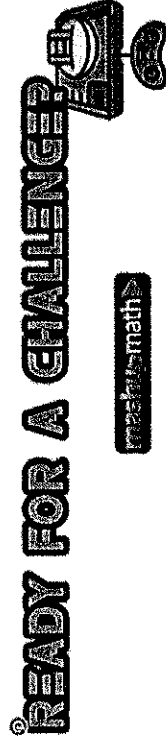




Activities

Opening: Grade 3 Math Puzzle

347028
70258



www.mashupmath.com

1.  +  +  = 9

2.  -  = 7

3.  =  + 

4.  +  = ?

Look at the Math
Puzzle to the right.
Use what you know
about the unknown to
solve the answer to
question number 4.

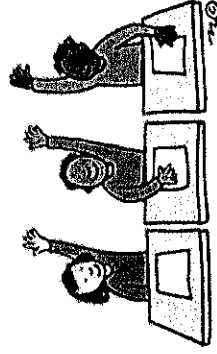
Remember to explain/
justify your answer.

You can get more fun and printable holiday-themed math puzzles at www.mashupmath.com

3rd Grade Problem of the Day

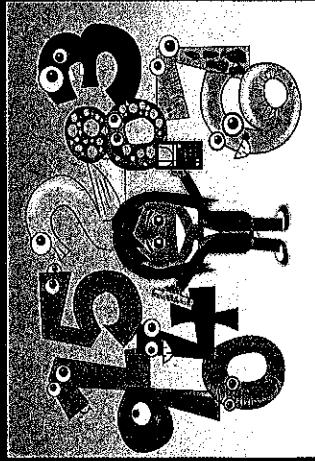
What rule do the numbers in the highlighted column follow?

x	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81



- A. Add 7 B. Add 14 C. Add 1 D. Add 63

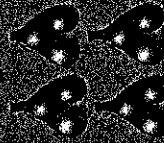
Justify your answer using words, pictures, and/or numbers.



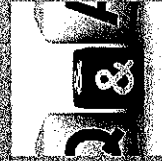
Activities:



See next slide for standard review.



#2 Then complete Activity 2 on the slide following.



#3 Then answer the Problem Solving Questions as a review.

Activity # 1

Standard Review

Please read over the lesson on the next page as a guide and answer the Convince Me! scenario at the bottom of the page.

A

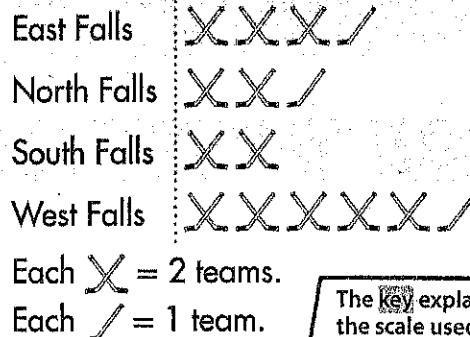
How many teams are in the East Falls League?



Information you collect is called data. A scaled picture graph uses pictures or symbols to show data.

The scale is the value each picture or symbol represents.

Number of Hockey Teams in Each League



The key explains the scale used in the graph.

B

Use the key.

Look at the data for East Falls League.

There are 3 X and 1 /.

The 3 X represent $3 \times 2 = 6$ teams.The 1 / represents $1 \times 1 = 1$ team.

$$6 + 1 = 7$$

There are 7 teams in the East Falls League.

C

How many more teams does the East Falls League have than the South Falls League?

Use the picture graph to write equations and compare the two rows.

East Falls

$$3 \times 2 + 1 = 7$$

South Falls

$$2 \times 2 = 4$$

Subtract: $7 - 4 = 3$

The East Falls League has 3 more teams than the South Falls League.

Convince Me! Be Precise Tell something about each league you can find out from the picture graph.

Activity # 2

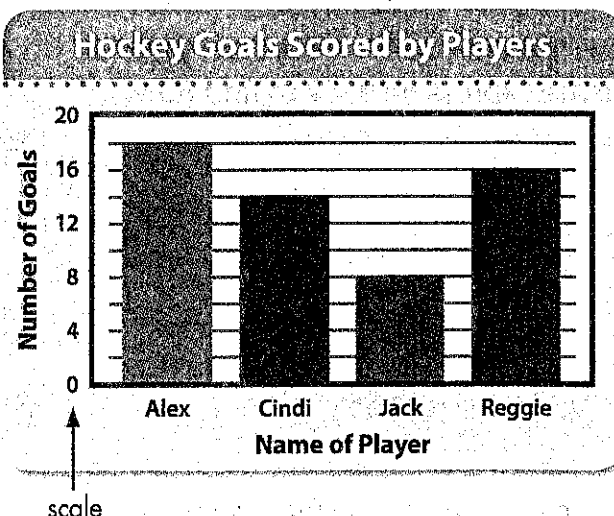
Assignment

- Complete the Guided Practice and Independent Practice questions on the next page and then continue with the Problem Solving questions.

Another Example!

A **scaled bar graph** uses bars to represent and compare information. This bar graph shows the number of goals scored by different players on a hockey team. The scale shows the units used.

On this bar graph, each horizontal grid line represents two units. Every other grid line is labeled: 0, 4, 8, and so on. For example, the line halfway between 4 and 8 represents 6 goals.



★ Guided Practice

Do You Understand?

In 1 and 2, use the bar graph above.

- How many goals in all did Alex and Reggie score?

Do You Know How?

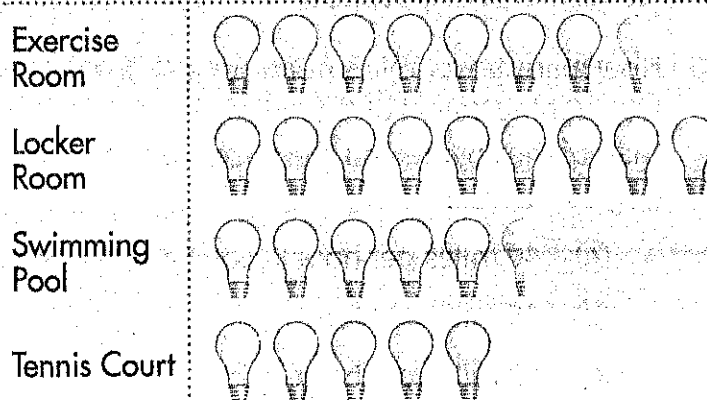
- Explain how to find how many fewer goals Cindi scored than Alex.

★ Independent Practice

In 3–5, use the picture graph.

- Which area has lights on for exactly 50 hours each week?
- What does the half bulb in the data for the exercise room represent?
- In one week, how many more hours are lights on in the exercise room than at the swimming pool?

Hours of Light Usage at Sports Center Number of Hours Lights Are on Each Week



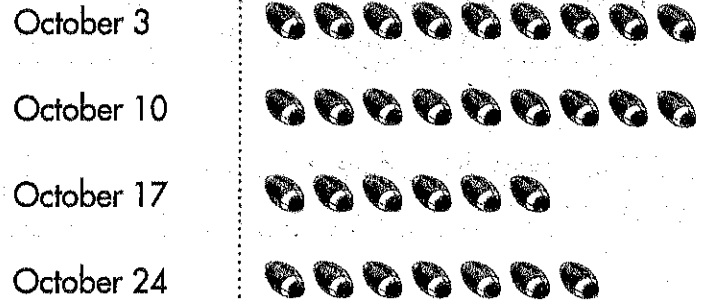
Each  = 10 hours. Each  = 5 hours.

Problem Solving

In 6–8, use the picture graph.

6. **Reasoning** For which days can you use the expression 9×7 to find how many points were scored?

Football Team Scores



Each  = 7 points.

7. On which days did the football team score fewer than 50 points?

8. **Higher Order Thinking** How many more points were scored on October 10 and 24 combined than on October 3 and 17?

Assessment Practice

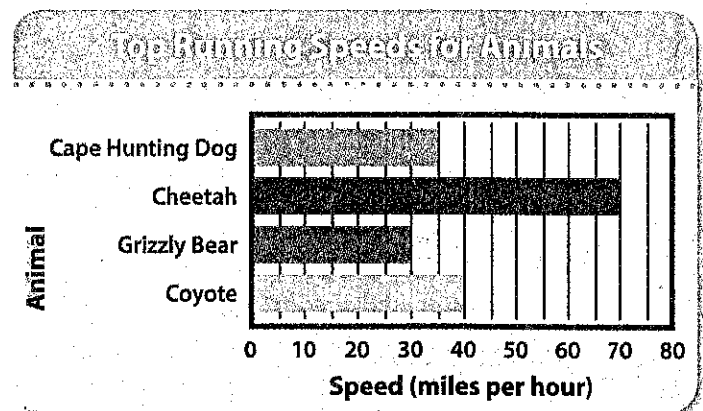
In 9 and 10, use the bar graph at the right.

9. How many more miles per hour is the top running speed of the cheetah than of the Cape hunting dog?

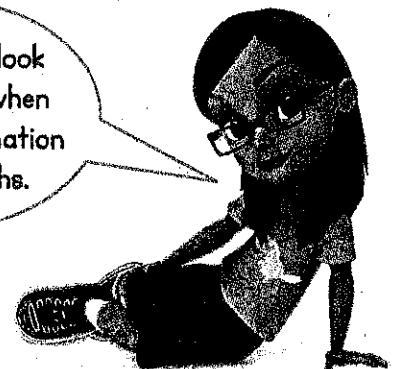
- (A) 25 miles per hour
- (B) 30 miles per hour
- (C) 35 miles per hour
- (D) 40 miles per hour

10. How many fewer miles per hour is the top running speed of the grizzly bear than of the coyote and the Cape hunting dog combined?

- (A) 40 miles per hour
- (B) 45 miles per hour
- (C) 50 miles per hour
- (D) 55 miles per hour

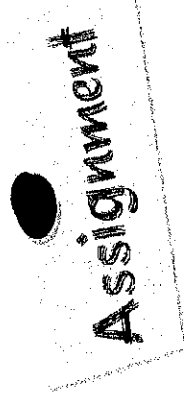
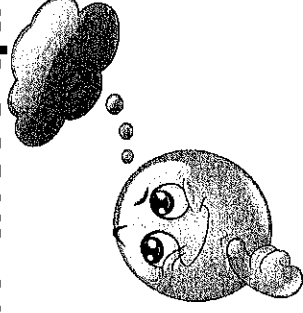


You need to look at the scale when reading information in bar graphs.

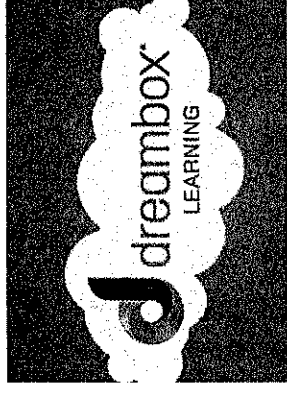


Reflection: Today you have reviewed how to use picture graphs and bar graphs to answer questions about data sets. What was one thing you did well with today's lesson? What is one thing you need additional help with?

Write down the answers to these questions on a sheet of paper.



If internet is available, please
login to Dreambox and work for 10 minutes.



Great job, mathematicians! Please make sure you have written down your answers to each question from today's activities and place your work in your book bag to give to your teacher when you return to school.

