Unit 5 Module 1 Session 1

Problems & Investigations-What Comes in Fours?
Assessment- Unit 5 Pre-Assessment

Getting Ready-

- ™ T1-T5 Unit 5 Pre-Assessment
- Colored Tiles (see Preparation)
- Red Linear Pieces
- Scratch paper
- Piece of chart paper or whiteboard
- 4"x4" squares of white paper, class set plus a few extra

Getting Ready- Con't.

- 36" x 48" piece of folded butcher paper (see Preparation)
- crayons, class set
- glue or glue sticks

Vocabulary

Area

Array

Dimension

Divide

Equal

Equation

Fact family

Group

Measure

Multiply

Rectangle

Story problem

- Interpret products of whole numbers; write story problems or describe problem situations to match a multiplication expression or equation
- Interpret quotients of whole numbers; write story problems or describe problem situations to match a division expression or equation
- Solve multiplication and division story problems with products to 100 involving situations of equal groups and arrays
- Solve for the unknown in a multiplication or division equation involving 3 whole numbers

- Fluently multiply and divide with products and dividends to 100 using strategies
- Solve two-step story problems using multiplication and division; select equations with a letter standing for the unknown quantity to represent two-step story problems
- Demonstrate an understanding that unit squares can be used to measure the areas of other plane figures

- Demonstrate an understanding that a plane figure that can be covered without gaps or overlaps by n unit squares has an area of n square units
- Measure the area of a plane figure by counting the number of square units that cover it, with no gaps or overlaps
- Find the area of a rectangle with whole-number side lengths by tiling it
- Find the area of a rectangle by multiplying its side lengths

PASS OUT ASSESSMENT

Unit 5 Pre-Assessment page 1 of 4

1 Draw a line from each problem on the left to the matching equation on the right. Then write the correct answer.

a A T-shirt costs $10 at the mall. A jacket costs 4 times as much as a T-shirt. How much does a jacket cost?

$18 \div 6 =$ ____

b Jeff and his sister picked 18 flowers. They put 6 flowers in each vase. How many vases did they use?

$24 \div 4 =$ ____

c The third graders are setting up the room for Grandparents' Day. They set up 3 rows of chairs with 9 chairs in each row. How many chairs in all?

$3 \times 9 =$ ____

d There are 4 minivans to take 24 kids to the museum. How many kids will ride in each van if all the vans take the same number of kids?

$4 \times 10 =$ ____

2 Fill in the answer to both equations. Then write a story problem to match each one.

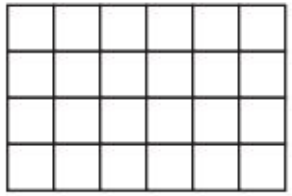
a $4 \times 5 =$ _____

My Story Problem:

b $14 \div 2 =$ _____

My Story Problem:

3 Write 2 multiplication and 2 division equations (a fact family) to describe this array.



_____ × _____ = _____ _____ ÷ _____ = _____

_____ × _____ = _____ _____ ÷ _____ = _____

4 Solve each story problem. Use numbers, labeled sketches, or words to show your thinking, and write the answer. Then write an equation to match the problem.

a The pet store just got 24 new turtles. Petra is putting the turtles into terrariums. She puts 6 turtles in each terrarium. How many terrariums does she use?

Work:

Petra uses _____ terrariums.

Equation: _____

b The pet store has 9 puppies. Each puppy drinks 6 cups of water each day. How many cups of water do all of the puppies, together, drink in one day?

Work:

The puppies drink _____ cups of water in one day.

Equation: _____

5 The pet store got 4 boxes of new dog collars. There were 6 dog collars in each box. Petra unpacked all the collars and hung them up in 3 equal rows on the wall. How many collars in each row?

a Choose the equation that could help you solve this problem.

- ○ $(4 + 6) \times 3 = c$
- ○ $(4 \times 6) \div 3 = c$
- ○ $4 + 6 + 3 = c$
- ○ $(4 \times 6) - 3 = c$

b Solve the problem. Show all your work.

Answer: There were _____ collars in each row.

6 Fill in the missing number to solve each equation.

$15 \div \_\_\_ = 5$ $\quad\quad$ $24 = 4 \times \_\_\_$

$4 = \_\_\_ \div 5$ $\quad\quad$ $\_\_\_ \times 3 = 21$

7 Jami has to solve this story problem:

There are 32 fourth graders in the gym. The gym teacher divides them into 4 equal groups. How many fourth graders in each group?

a Jami says she can solve the problem by thinking, "4 times *what number* equals 32?" Do you agree with Jami? Why or why not?

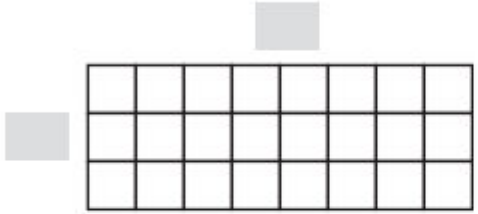
b Write and solve a division equation to match Jami's problem.

8 Use colored tiles to find the area of this rectangle.

The area of this rectangle is _____ square units.

9 Label each rectangle with its dimensions and area. Then write a multiplication equation to show how you found the area of the rectangle.

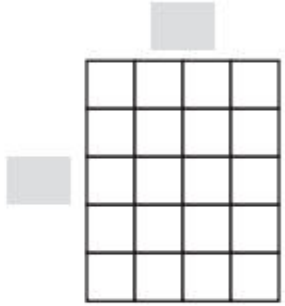
a



Area = _____ square units

Equation

b



Area = _____ square units

Equation

10 Mark **all** the statements about area that are true.

- ○ Area is measured in square units.
- ○ If you want to find out how long something is, you measure its area.
- ○ You can find the area of a rug that is 5 feet long and 3 feet wide by multiplying 5×3.
- ○ When you measure the area of something, you find out how much space it takes up.

What things in the world come in groups of fours?

LET'S VOTE

LET'S DRAW

LET'S CREATE

Sample chart

We will work with our chart in the next session

Work Places

3C Round Ball Hundreds

3D Round & Add Hundreds

4A Tic-Tac-Tock

4B Measurement Scavenger Hunt

4C Target One Thousand

4D Hexagon Spin & Fill

Daily Practice

SB 143 Comparing Fractions

Home Connection

HC 81-82 Sharing Money