Unit 5 Module 1 Session 2

Problems & Investigations-Connecting Multiplication and Division

Getting Ready-

- SB 144-145 Thinking About Fours
- Fours Chart from previous session (see Preparation)
- Pointer
- Markers in 2 different colors
- Crayons

Vocabulary

Divide

Equation

Group

Multiply

Row

- 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 measurement quantities
- Identify patterns among basic multiplication facts

How many groups of four do you see in the first row of our chart?

And how many groups of four are there in the second row?

How many groups of four do you see in the third row?

What about in the fourth row?

What are you noticing?

Use if you didn’t make a class chart

1 horse has 4 legs.

1 x 4 = 4

Horses & Legs

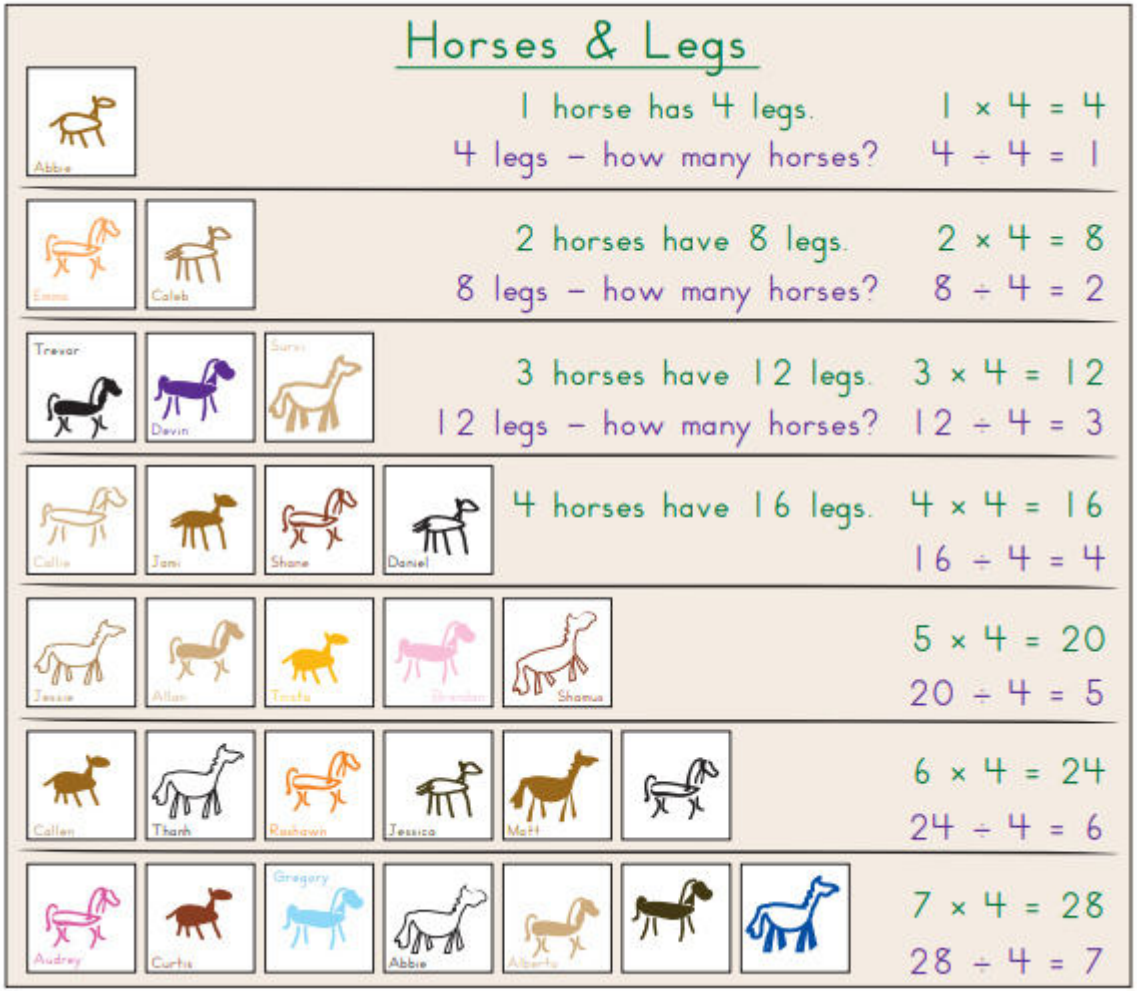
1 horse has 4 legs. 1 x 4 = 4

3 horses have 12 legs. $3 \times 4 = 12$

12 legs – how many horses? $12 \div 4 = 3$

- How many (legs) would you see in the row after the last one on our chart? How do you know?
- How many (legs) do you think there would be in the 10th row? How did you figure it out?
- What about the 20th row?
- What about the 100th row? How are you figuring out the answers to these problems?
- If I was looking at a row with 44 (legs) which row would it be?

  How did you figure it out?



WORKBOOK PAGE 144 PLEASE

Thinking About Fours page 1 of 2

1 Write three mathematical observations about the Fours Chart. Include at least one observation about a row you *can't* see.

a

b

c

2 Draw a line from each question on the left to the matching expression on the right. Then write the answer to each.

James saw 6 cars in the parking lot. How many wheels on the cars?	$5 \times 4 =$ ____
Jenny went to the pet shop to visit the rabbits. When she looked into the rabbit pen, she saw 12 legs. How many rabbits?	$16 \div 4 =$ ____
The kindergartners at our school have 5 little red wagons to use on the playground. How many wheels?	$7 \times 4 =$ ____
When Jeff went to the farm to visit the new piglets, he saw 16 little legs in the pigpen. How many piglets?	$6 \times 4 =$ ____
Lori went to the skateboard park with 6 of her friends. They all brought their skateboards. How many wheels?	$20 \div 4 =$ ____
Sara and Max went for a walk and saw 20 dog legs. How many dogs did they see?	$12 \div 4 =$ ____

3 Every square has 4 sides. Fill in the ratio table to show how many sides different numbers of squares have.

number of squares	1	2	3		5	8		20	50	
number of sides	4			16	20		40			400

4 You will be circling and coloring in all the counting-by-4s numbers on the grid below.

a Do you think 100 will be one of the numbers you circle and color in? Why or why not?

b Now circle and color in all the counting-by-4s numbers on this grid.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

c Is 100 one of those numbers? _____

5 Jake says that counting-by-4s numbers have to be even and they can never be odd. Do you agree with Jake? Why or why not?

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 146 Writing Multiplication Equations