**14** 

**♦** TEKS 5.1.A, 5.1.E, 5.3.F

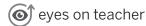
# **Breaking It Down!**

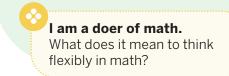
Let's represent quotients of decimals and whole numbers with base-ten blocks and models.



Warm-Up







Activity

1

### **Dividing Fabric**



You and your partner will be given a set of base-ten blocks.

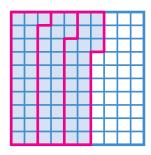
Use the base-ten blocks to represent and solve each problem.

- 1 Miguel has 0.6 yards of fabric left. If he makes 2 identical scarves out of this fabric, how many yards of fabric will he use for each scarf?
  - 0.3 yards
- 2 Miguel wants to use 0.88 yards of fabric to make 4 cat scarves of the same size. How many yards of fabric will he need for each scarf?
  - 0.22 yards
- There are 3.63 yards of blue fabric left. If Miguel makes 3 scarves with an equal amount of fabric, how many yards of fabric will he use for each scarf?
  - 1.21 yards

#### Dividing Fabric (continued)

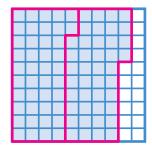
Represent the expression by shading the hundredths model and circling equal groups. Then determine the quotient. Sample work shown.

**4** 0.63 ÷ 3



0.21

**5** 0.84 ÷ 2



0.42

2

## **Painting Miniatures**



You and your partner will be given a set of base-ten blocks.

Use the base-ten blocks to represent and solve each problem.

6 Kara has 0.9 cups of black paint to paint 2 miniature penguins. She wants to use the same amount of black paint on each penguin. How many cups of paint should she use for each penguin?

0.45 cups

7 Kara has 0.75 cups of blue paint. If she uses an equal amount of blue paint on 5 miniatures, how many cups of paint will she use for each miniature?

0.15 cups

8 Kara used 1.68 cups of green paint to paint 6 miniature dragons. How many cups of green paint did she use for each dragon if she used the same amount for each dragon?

0.28 cups

9 Discuss

In Problem 7, how did you decompose the dividend to make an equivalent value? How did this help you solve?

Oral activity: No writing expected. Sample response shown.

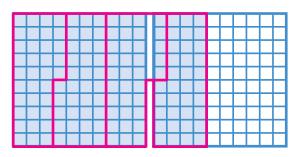
I decomposed 7 tenths into 5 tenths and 20 hundredths. This helped me solve because it made each value divisible by 5, so I was able to make equal groups of 5.

2

#### Painting Miniatures (continued)

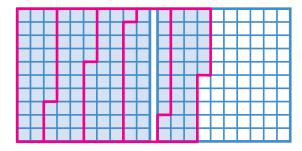
Represent the expression by shading the hundredths model and circling equal groups. Then determine the quotient. Sample work shown.

**10** 1.4 ÷ 4



0.35

**11** 1.35 ÷ 5



0.27