



MATH NEWS



LAFAYETTE
PARISH SCHOOL SYSTEM

Grade 3, Module 3, Topic D

December 2013

3rd Grade Math

Module 3: Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10

Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 3 of Eureka Math (Engage New York) covers Multiplication and Division with Units of 0, 1, 6-9 and Multiples of 10. This newsletter will discuss Module 3, Topic D.

Topic D Multiplication and Division Using Units of 9

Vocabulary Words

- $9 = 10 - 1$ Strategy
- Unit

Division Word Problem

Joey has 54 trading cards and shares them with 7 of his friends. He is so excited he drops his box of cards and loses 14 trading cards. How many trading cards will Joey and each of his friends get?

First find out how many trading cards Joey has left.

$$54 - 14 = c \quad c = 40$$

Next divide the trading cards that are left into 8 people.

$$40 \div 8 = d \quad d = 5$$

Joey and each of his 7 friends get 5 trading cards.

OBJECTIVE OF TOPIC D

- 1 Apply the distributive property and the fact $9 = 10 - 1$ as a strategy to multiply.
- 2 Identify and use arithmetic patterns to multiply.
- 3 Interpret the unknown multiplication and division to model and solve problems.

Focus Area- Topic D

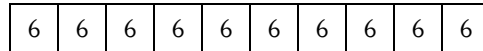
Multiplication and Division Using Units of 9

Students will use the distributive property to establish the $9 = 10 - 1$ pattern for multiplication.

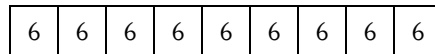
Understanding this pattern will enable students to see this method of multiplication as a tool, rather than a trick.

What is easier to solve, 9×6 or 10×6 ? 10×6

How many sixes are in 10×6 ? 10 sixes



How many sixes are in 9×6 ? 9 sixes



$$9 \times 6 = (10 \times 6) - (1 \times 6)$$

$$9 \times 6 = 60 - 6$$

What is $60 - 6$? 54

They will also learn to break up 9 into 5 and 4.

$$9 \times 6 = (5 + 4) \times 6$$

Now use the distributive property to distribute the 6

$$9 \times 6 = (5 \times 6) + (4 \times 6)$$

$$9 \times 6 = 30 + 24$$

$$9 \times 6 = 54$$

Kim has 9 packs of cookies with 5 in each pack. After giving 1 to each classmate she has 15 left. How many cookies did Kim give away?

First find out how many cookies Kim has.

$$9 \times 5 = h \quad h = \underline{45}$$

Next subtract 15 from the total to see how many she gives away.

$$45 - 15 = g \quad g = \underline{30}$$

How many classmates does Kim have? 30