



MATH NEWS



LAFAYETTE
PARISH SCHOOL SYSTEM

Grade 3, Module 3, Topic F

Winter 2014

3rd Grade Math

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

Math Parent Letter

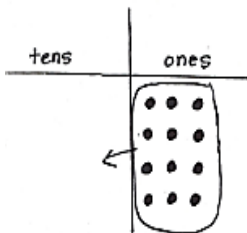
This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 3 of Eureka Math (Engage New York) covers Multiplication and Division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

Topic F: Multiplication of Single-Digit Factors and Multiples of 10

Vocabulary Words

- array
- associative property
- tape diagram

Things to Remember!!!



This array shows 3 ones \times 4 = 12 ones. 30×4 is just 3 tens \times 4 which is equal to 12 tens, or 120. We can move the dots over to the tens place to show this, because the only thing that changes is the unit.

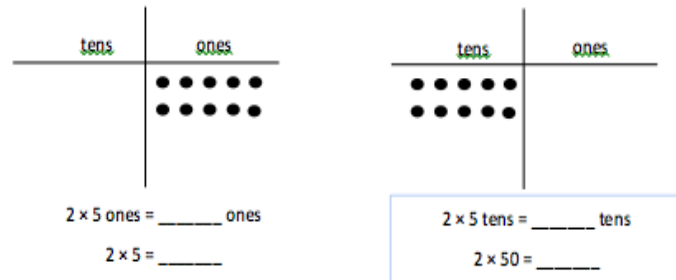
$$\begin{aligned}
 2 \times 20 &= 2 (2 \times 10) \\
 &= (2 \times 2) \times 10 \\
 &= 4 \times 10 \\
 &= 40
 \end{aligned}$$

Focus Area- Topic F

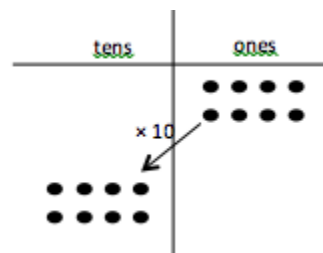
Multiplication of Single-Digit Factors and Multiples of 10

In Lessons 19-21 students will use the place value chart to multiply multiples of 10. For example, to solve 2×40 , they begin modeling 2×4 in the ones place. Students relate this to multiplying 2×4 tens, locating the basic fact in the tens column. They see that when multiplied by 10, the product shifts one place value to the left.

In Lesson 19, students will multiply by multiples of 10 using a place value chart.

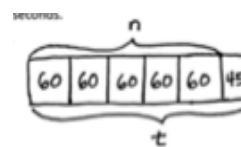


In Lesson 20, students will use the associative property to multiply multiples of 10.



$$\begin{aligned}
 \text{a. } &(2 \times 4) \times 10 \\
 &= (8 \text{ ones}) \times 10 \\
 &= \underline{80}
 \end{aligned}$$

There are 60 seconds in 1 minute. Use a tape diagram to find the total number of seconds in 5 minutes and 45 seconds.



$$\begin{aligned}
 5 \times 60 &= n \\
 n &= 300 \\
 t &= 300 + 45 \\
 t &= 345 \\
 \text{There are } &345 \text{ seconds in 5 minutes} \\
 &\text{and 45 seconds.}
 \end{aligned}$$

In Lesson 21, students will solve two-step word problems involving multiplying single-digit factors and multiples of 10.

OBJECTIVE OF TOPIC F

- 1 Multiply by multiples of 10 using the place value chart.
- 2 Use place value strategies and the associative property $n \times (m \times 10) = (n \times m) \times 10$ (where n and m are less than 10) to multiply by multiples of 10.
- 3 Solve two-step word problems involving multiplying single-digit factors and multiples of 10.