

Dear Families,

Our next math unit will be on division and it is largely based on the division lessons found in EngageNY module 3. Don't forget to visit the 4th Grade Math Site for more resources!

Standards Covered

CCSS.MATH.CONTENT.4.OA.A.2

Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.1

CCSS.MATH.CONTENT.4.OA.A.3

Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

CCSS.MATH.CONTENT.4.OA.B.4

Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.

CCSS.MATH.CONTENT.4.NBT.B.6

Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

New Vocabulary (see 4th Grade Math website for definitions)

- ★Prime number
- ★Composite number
- ★Factor
- ★Multiple
- ★Remainder
- ★Quotient

Example Problems

- ★List all factor pairs of 42.
- ★Is 34 a prime number?
- ★A piece of ribbon 876 inches long was cut by a machine into 4-inch long strips to be made into bows. How many strips were cut?
- ★542 / 5

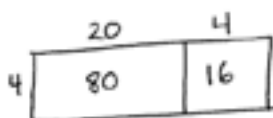
Notable Methods (see 4th Grade Math website for more info)

★Using area models and arrays to visualize and solve multiplication problems such as

96 / 4



$$\begin{array}{r} 24 \\ 4 \overline{)96} \\ \underline{-8} \\ 16 \\ \underline{-16} \\ 0 \end{array}$$



A tree diagram showing the division of 96 into 80 and 16. The number 96 is in a circle at the top. Two lines branch down to two circles containing 80 and 16. Below the circles, the calculation is shown: $(80 \div 4) + (16 \div 4) = 20 + 4 = 24$.

$$\begin{array}{l} 96 \\ \swarrow \quad \searrow \\ 80 \quad 16 \\ (80 \div 4) + (16 \div 4) \\ = 20 + 4 \\ = 24 \end{array}$$

Please contact us if you have any questions,

The 4th grade team