

+ How you can help at home:

- Become familiar with the area model, a different method of multiplying than you may have learned
- Continue to review the place value system with your student
- Consider reading children's literature with a math focus like *The Great Divide*
- Discuss mathematical patterns, such as 5×9 , 5×90 , 50×90 , 50×900 , etc.

Students will learn how to determine if a number is prime or composite by looking for factor pairs in the number.

Factor Pairs for 35	
1	35
5	7

Key Words to Know

Number Properties

Associative Property: $3 \times (4 \times 8) = (3 \times 4) \times 8$

Distributive Property: $6 \times (3 + 5) = (6 \times 3) + (6 \times 5)$

Partial Product:

$24 \times 6 = (20 \times 6) + (4 \times 6)$

Mathematical Terms

Prime Number - positive integer only having factors of one and itself

Composite Number - positive integer having three or more factors

Divisor - the number by which another number is divided

Remainder - the number left over when one integer is divided by another

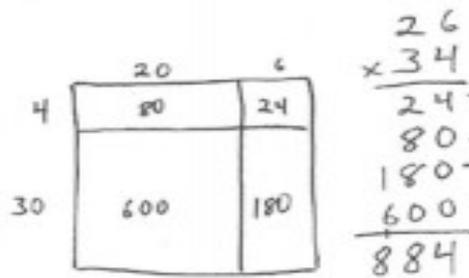
Algorithm - steps for base ten computations with the four operations

Area - the amount of two dimensional space in a bounded region

Perimeter - length of a continuous line around a geometric figure

Key Standards:

- Use the four operations (+, -, x, /) with whole numbers to solve problems
- Gain familiarity with factors and multiples
- Use place value understanding and properties of operations to perform multi-digit arithmetic
- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit



Spotlight on Math Models:

Area Models

You will often see this mathematical representation in *A Story of Units*.

A Story of Units has several key mathematical “models” that will be used throughout a student’s elementary years.

Students began in earlier grades to build arrays, showing multiplication and division as a series of rows and columns. In 4th grade, they learn to show these types of problems as an area model.

As students move through the grades, the area model will be a powerful tool that can take them all the way into algebra and beyond. One of the goals in *A Story of Units* is to first give students concrete experiences with mathematical concepts, and then build slowly toward more abstract representations of those concepts. The area model is a tool that helps students to make that important leap.

Sample from the curriculum:

Use an area model to represent 50×40 .

(Example taken from Lesson 6, Module 3)

