Associative Property

Example: 96= 3 x (4 x 8) = (3 x 4) x 8

3 times 4 groups of 8 = 3 groups of 4 eight times

Composite Number

Positive Integer having three or more whole number factors.

Example: The factors of 15 are 1, 3, 5 and 15 so 15 is composite.

Distributive Property

Example: 64 x 27 =
(60 x 20) + (60 x 7) + (4 x 20) + (4 x 7)

Divisible

Capable of being divided by another number without a remainder.

Example: 24 is divisible by 6.

Divisor

The number by which another number is divided.

$$15 \div 3 = 5$$

dividend   divisor   quotient

Formula

A mathematical rule expressed as an equation with numbers and/or variables.

Example: Perimeter= 2 x (l + w)

Long Division

Process of dividing a large dividend using several recorded steps.

Partial Product

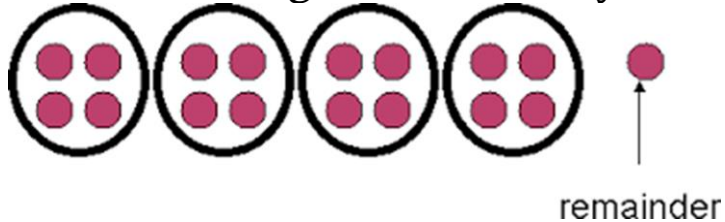Example: 24 x 6= (20 x 6) + (4 x 6) = 120 + 24

Prime Number

Positive integer greater than 1 having whole number factors of only 1 and itself.

Example: 2 is a prime number because its factors are 1 and itself.

Remainder

The number left over when one integer is divided by another.

17 ÷ 4 = 4 R1

remainder

Algorithm

Steps for base ten computations with the four operations.

$$\begin{array}{r} 612 \\ \times\ 24 \\ \hline 2448 \\ 12240 \\ \hline 14688 \end{array}$$

Example:

Area

The amount of two-dimensional space in a bounded region.

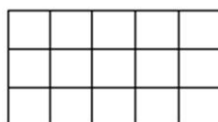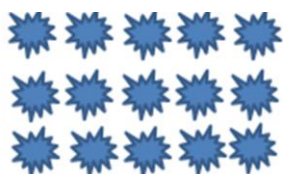*The amount of space inside the shape.*

Area Model

A model for multiplication and division problems that relates rectangular arrays to area, in which the length and width of a rectangle represent the factors for multiplication, and for division, the width represents the divisor and the length represents the quotient.

	60	**4**
20	60 x 20	4 x 20
7	60 x 7	4 x 7

Array

A set of numbers or objects that follow a specific pattern, a matrix.

3 x 5 = 15

Bundling, grouping, renaming, changing

Compose or decompose a 10, 100, etc.

Compare

To find the similarity or dissimilarity between.

Distribute

Decompose an unknown product in terms of two known products to solve.

Example: 14 x 8= (10 x 8) + (4 x 8)

Divide, division

Example: 15 ÷ 5 = 3

Equation

A statement that the values of two mathematical expressions are equal using the = sign.

Example: 14 x 8 = 112

Factors

Numbers that can be multiplied together to get other numbers.

5 x 4 = 20

factors

Mixed Units

Example: 1 ft. 3 in., 4 lb. 13 oz.

Multiple

Product of a given number and any other whole number.

Example. 10, 20, 30, etc. are all multiples of 10.

Multiply/multiplication

Example: 4 x 6 = 24

Perimeter

Length of a continuous line forming the boundary of a closed geometric figure.

The distance around the shape.

Place Value

The numerical value that a digit has by virtue of its position in a number.

Example; In 547, the 5 is worth 500 because it is in the hundreds place.

Product

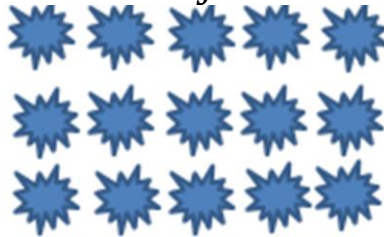The result of multiplication.

Example; 6 x 3 = 18

↑

Product

Quotient

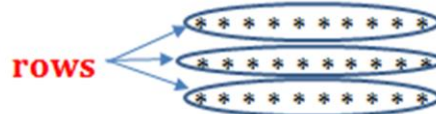The result of division.

$$4 \overline{)32} = 8$$

Rectangular Array

An arrangement of a set of objects into rows and columns.

Rows, Columns

In reference to rectangular arrays.

___ times as many ___ as __

Multiplicative comparative sentence frame.

Example; A porch is 4 feet wide. It is 3 times as long as it is wide.