



**Mid-Ohio Educational Service Center
Mathematics Course of Study
Second Grade – Vocabulary Definitions**

(Ohio Department of Education. 2001. K-12 Mathematics Academic Content Standards)

associative property	The result of an operation on real numbers will be unchanged due to grouping; e.g., for addition, $(a + b) + c = a + (b + c)$ or for multiplication, $a(bc) = (ab)c$.
categorical data	Data that can be classified by type; e.g., color, types of dogs. These types of data are typically represented using bar chart, pie charts or pictographs.
common referents	Something that is familiar that can be used to relate to another thing that is not familiar; e.g., the width of a finger is a centimeter.

commutative property	The order of the objects in an operation can be changed without affecting the results; e.g., for addition, $a + b = b + a$ or for multiplication, $ab = ba$.
-----------------------------	---

compatible numbers	Numbers that go together easily, usually related by pairing in the basic facts; use of compatible numbers generally gives an approximate result; e.g., $473 \div 6 \approx 480 \div 6 = 80$.
---------------------------	---

compensatory numbers	Compensatory numbers are used to adjust numbers in a computation after use of <i>compatible numbers</i> , e.g., $23 + 18 \approx 23 + 20 = 43$. Since two was added to increase 18 to 20 as compatible numbers, two will be subtracted from 43 to compensate for the change. Therefore, two is the compensatory number.
-----------------------------	--

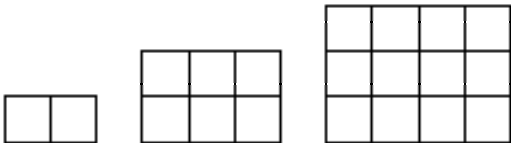
congruent	Having exactly the same size and shape.
------------------	---

equation	A statement that shows two mathematical expressions that are equal to each other.
-----------------	---

expressions	Any combination of <i>variables</i> , numbers, and symbols (excluding the equality and inequality symbols).
--------------------	---

front-end estimation	Using the leading, or left-most, digits to make an estimate quickly and easily. After making an initial estimate using front-end digits, an adjustment can be made to refine the estimate; e.g., Using front-end estimation to estimate the sum of 594, 32, and 221, an initial estimate would be $5 + 0 + 2$ hundreds or 700. An adjustment can be made by grouping the tens and ones (about $100 + 50$ or 150 more) and adding to get an adjusted estimate of 850.
-----------------------------	--

function	A mathematical relationship between two <i>variables</i> , an independent <i>variable</i> and a dependent <i>variable</i> , where every value of the independent <i>variable</i> corresponds to exactly one value of the dependent value.
-----------------	---

growing patterns	Patterns that involve a progression. For example, 
-------------------------	--

probability	The chance of an event occurring. The probability of an event is equal to the number of favorable outcomes divided by the number of possible outcomes.
--------------------	--

qualitative data	Data that can be assigned qualities or categories. They are non-numerical data.
-------------------------	---

quantitative data	Data that are numerical. The data can be <i>discrete</i> or <i>continuous</i> .
--------------------------	---

rectangular arrays	An arrangement of things or data in rows and columns.
---------------------------	---

sequence	An ordered set of objects or numbers.
-----------------	---------------------------------------

transformation An operation that creates an image from an original figure, or preimage.

reflection- *A transformation that results in a mirror image of the original shape.*

rotation- *A rotation is a transformation about a fixed point such that every point in the object turns through the same angle relative to that fixed point.*

translation- *A transformation in which an image is formed by moving every point on a figure the same distance in the same direction.*

dilation- *A transformation that preserves the shape of a figure, but allows the size to change.*

two-dimensional figures	A shape that has two dimensions, usually described in terms of length and breadth, or length and height.
--------------------------------	--