

Math Vocabulary

Counting- the ability to produce the standard list of counting words in order.

Set- a collection of items.

Number-the sum, total, count, or aggregate of a collection of units

Subitize - to recognize a number of objects within a set without counting.

Cardinality- the number of elements in a given mathematical set.

Ordinal Numbers: Numbers that denote order (i.e. 1st, 2nd, 3rd, 4th, etc.)

1-to-1 Correspondence - the ability to match one object to another object, or to assign one number name to one object counted.

Conservation-the total number of items in the set does not change when an attribute of the set changes.

Part-part-whole relationship- the conceptual ideal that a quantity has parts that can be composed and decomposed.

Numeral-a written symbol representing a number.

Numeracy Triangle: Numeral, Quantity and Number Name

Operations: Putting together and taking apart sets (adding, subtracting, multiplying, dividing).

Measurement: assignment of a numerical value to an attribute of an object. A practical, real life activity that connects to other areas of mathematics such as number and operations and geometric ideas.

Rote Counting: ability to recite numbers in order starting at 1 or 0.

Oral Counting: Stating the numbers in the correct order; counting patterns; learning the patterns of number order.

Estimation: Making an educated guess to the how many there are in larger sets of objects

Attribute: a characteristic of an object such as shape, size, color, etc.

Quantity: How much there is or how many there are of something



Gelman and Gallistel's Principles to Counting

- ***One to One Principle:*** Ability to separate objects that have been counted from objects that have not been counted one at a time.
- ***Stable Order Principle:*** Saying the number words in the same order every time they count.
- ***Cardinality Principle:*** Understand that the last number word they said when counting a set is the number of objects in the set.
- ***Abstraction Principle:*** Any collection of objects can be counted, things that are the same (spoons in the drawer), things that are not the same (all the silverware), and even non-tangible things, like jumps on a trampoline.
- ***Order-irrelevance Principle:*** no matter what order you count a set in, you will arrive at the same quantity.