Subitizing

The ability to 'see' a small amount of objects and know how many there are without counting.



One-to-One Correspondence

Understanding that each object in a group can be counted once and only once. It is useful in the early stages for children to actually tag or touch each item being counted and to move it out of the way as it is counted.











Stable-Order

The list of words used to count must be in a repeatable order.

This "stable list" must be at least as long as the number of items to be counted.



Cardinality

Understanding that the last count of a group of objects represents how many are in the group. A child who recounts when asked how many candies are in the set that they just counted, has not understood the cardinality principle.



Order Irrelevance

The order in which items are counted is irrelevant.



Movement is Magnitude

Understanding that as you move up the counting sequence (or forwards), the quantity increases by one and as you move down (or backwards), the quantity decreases by one or whatever quantity you are going up/down by.



Abstraction

- ...we can count any collection of objects, whether tangible or not.
- ... the quantity of five large things is the same count as a quantity of five small things or a mixed group of five small and large things.













Unitizing

Understanding that in our base ten system objects are grouped into tens once the count exceeds 9 (and into tens of tens when it exceeds 99) and that this is indicated by a 1 in the tens place of a number.



Conservation

Understanding that the count for a set group of objects stays the same no matter whether they are spread out or close together.



Early Number Sense Learning Trajectory

ones

(Clements and Samara)

Subitizing

Magnitude (more, less)

Counting Sequence

One-to-One Correspondence

Cardinality

Hierarchical Inclusion (one less, one more)

Part/Whole Relationships (smaller #s inside larger #s)

Compensation

Unitizing