

Principles of Counting

Adapted from the Guide to Effective Instruction in Mathematics K-3 Number Sense & Numeration p. 7-8



Stable Order Principle
Understanding that the counting sequence stays consistent. It is always 1, 2, 3, 4, 5, 6, 7, etc., not 1, 2, 4, 5, 8.



One-to-One Correspondence Principle
Understanding that each object being counted must be given one count and only one count. It is useful in the early stages for children to actually tag each item being counted and to move an item out of the way as it is counted.



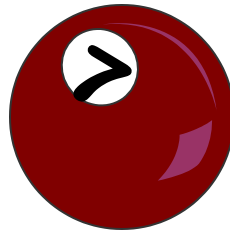
Order Irrelevance Principle
Understanding that the counting of objects can begin with any object in a set and the total will stay the same.



Cardinality Principle
Understanding that the last count of a group of object 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.



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



Movement is Magnitude Principle
Understanding that as you move up the counting sequence, the quantity increases by one and as you move down or backwards, the quantity decreases by one (or by whatever number you are counting by as in skip counting by 10's, the amount goes up by 10 each time).



Abstraction Principle
Understanding that the quantity of five large things is the same count as a quantity of five small things. Or the quantity is the same as a mixed group of five small, medium and large things,



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