

The Principles of Counting

Counting is saying a word to describe a number. The idea of counting seems like such a simple concept, but when broken down, there are actually several distinct counting principles that progressively build toward a child being able to effectively count a group of objects.








One-one correspondence

When saying the names of the numbers in sequence, each object receives one count and only one count.



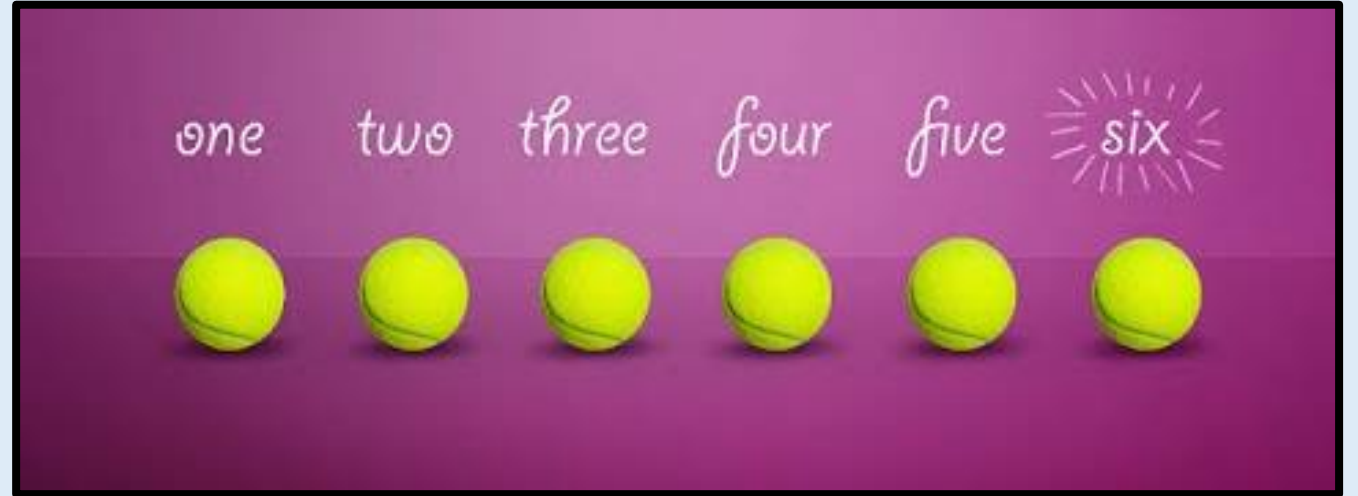
Stable-order

The verbal sequence of counting; being able to say the number names in sequential order.

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ● | ● | ● | ● | ● |
|  |  |  |  |  |
| One | Two | Three | Four | Five |

Cardinality

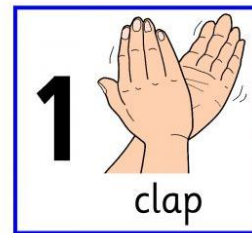
The last number spoken in a counting sequence names the quantity for that set.



Abstraction

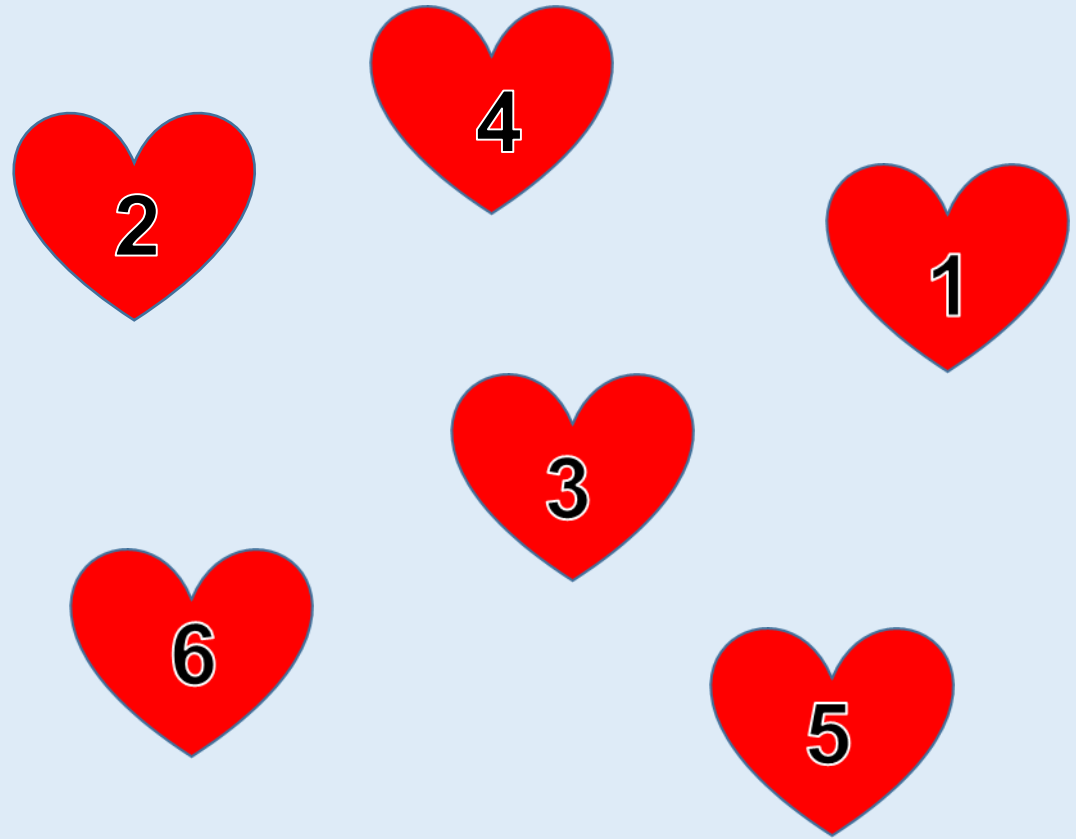
It doesn't matter what you count, how we count stays the same. For example, any set of objects can be counted as a set, regardless of whether they are the same colour, shape, size, etc.

This can also include non-physical things such as sounds, imaginary objects, etc.



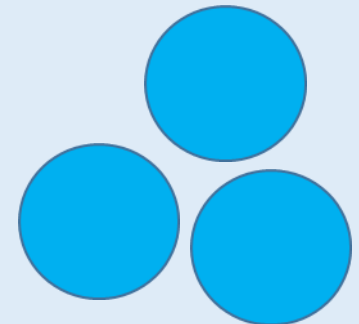
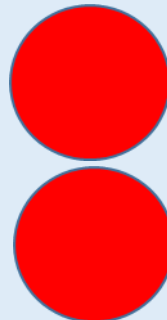
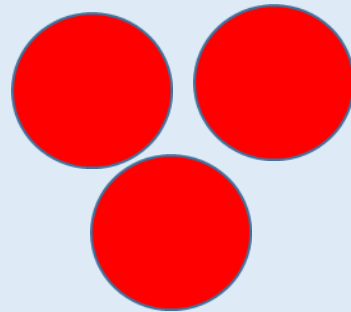
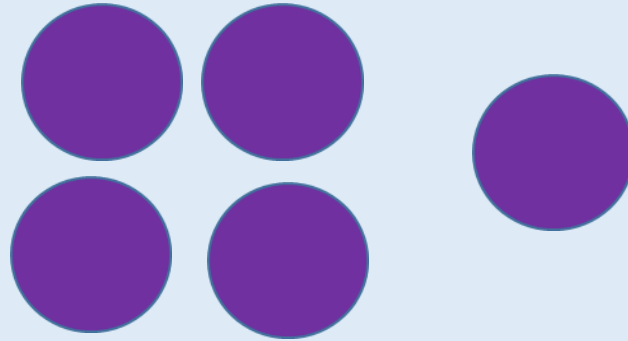
Order irrelevance

The order that items are counted in is irrelevant, left-to-right, right-to-left, in a random fashion, as long as every object in the set is given one count and only one count.



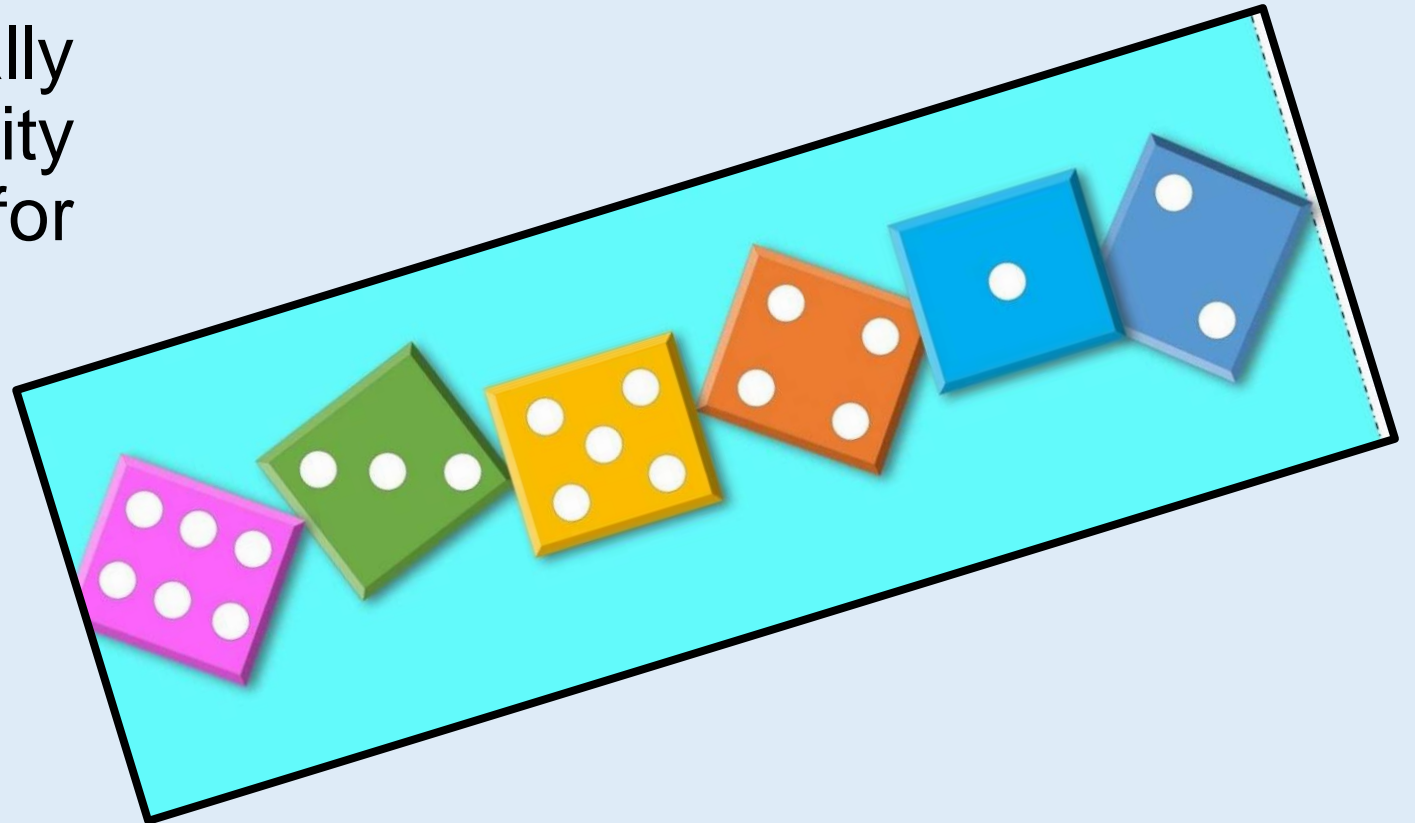
Number conservation

The number of objects remains the same when they are rearranged spatially. For example, 5 can be... 4 and 1 OR 3 and 2 OR 2 and 3, etc.



Subitising

Being able to visually recognise a quantity without the need for counting.



Comparison

Being able to compare quantities by identifying which is more and which is less.

