

Parent Friendly

Equality

- Equality is when you have an equal number of items in two groups
- Students are comparing the number of items in two groups. When each group has the same number of items, you have equality

Inequality

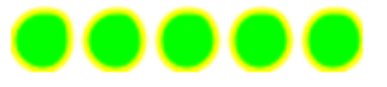
- Inequality is when you have different numbers of items in two groups
- One group has more or less than the other group

Attribute

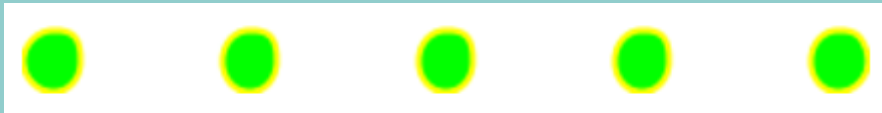
- Attributes are ways of describing items, such as:
 - Quantity (how many)
 - Colour
 - Length
 - Weight
 - Shape

Conservation of number

- Conservation of number is when a student knows that the number stays the same even when it looks different.
- For example,



is the same amount as



or $3 + 2$ is the same as $2 + 3$

Symbolically

- Symbolically writing math is when students use written numbers and math symbols (not pictures, and not real objects)
- For example: $13 + 8 = 21$

Concretely

- Representing a situation or solving a problem concretely means using actual objects (for example, bingo chips, beads, or blocks, etc.)

Pictorially

- Working on math pictorially means using drawings or pictures

Equation

- An equation shows two groups that are equal in number (even if they are written in a way that makes them look different). Note: One group is shown before the equal sign and one group is shown after the equal sign.
- Examples of equations include:
 - $4 + 7 = 11$

- $9 = 7 + 2$
- $2x + 3 = 13$
- $5 + 3 = \underline{\quad} + 6$

Variable

- A variable is something that is unknown, or something that can change its value. Variables are usually shown as blank lines, empty boxes or letters.
- Examples of variables are shown in pink below:
 - $2 + ? = 8$
 - $5 + 3 = \underline{\quad} + 6$
 - $2x + 3 = 13$
 - $y = 3x - 5$

Preservation of equality

- If you start with two equal groups, these groups will always remain equal to each other if you do any of the following:
 - Add the same amount to both groups
 - Remove the same amount from each group
 - multiply each group by the same number
 - divide each group by the same number