Understanding Variables

**Variables** - The parts of an experiment. Any things that can affect your results in an experiment.

- **Independent Variable** - “I change it” the variable that is changed by the experimenter.
- **Dependent Variable** - “Wait and see” the variable that responds or gives you the answer. This is the variable you measure for your results.
- **Constants** - “Stays the same” all other variables should be kept the same, you only change one variable at a time.

**Example:**

How does the *color of paint* affect *how long the paint lasts*?

- **Independent Variable** - “I change it” is *color of paint*

- **Dependent Variable** - “Wait and see” is *how long the paint lasts*

- **Constants** - “Stays the same” are all other variables:
  - Brand of paint
  - Type of paint
  - Surface painted
  - Type of brush
  - Where the painted surfaces are
  - ? Can you think of more?