



a WOW Lab

**BLUEPRINT**

The Siphontific Method

## Glossary

**bar graph** - a chart using rectangular bars with lengths that are equivalent to the values of the data.

**dependent variable** - the observed result of manipulating the independent variable. In this experiment, time is the dependent variable.

**experiment** - a test performed to determine whether a hypothesis is valid.

**graph axis** - the two variables from the experiment are plotted against each other to create a graph. The independent variable is on the horizontal axis and the dependent variable is on the vertical axis.

**hypothesis** - a proposal developed before performing an experiment in order to try to explain what may happen during the experiment.

**independent variable** - a variable that can be changed or manipulated during an experiment. In this experiment, tube length, tube width or height difference are independent variables.

**inverse relationship** - a relationship where the independent variable increases and the dependent variable decreases by an equivalent amount or where the independent variable decreases and the dependent variable increases by an equivalent amount.

**height difference** - the measured difference between the bottom of both of the beakers.

**linear relationship** - a relationship where the independent variable increases and the dependent variable increases by an equivalent amount.

**line graph** - a chart with connected dots, which represent the data points.

**siphon** - a tube that is commonly in an inverted "U" shape. It allows a liquid to flow upward then down to a lower level by gravity.

**tube length** - the measurement that corresponds to the distance from one end of the tube to the other.

**tube width** - the measurement that corresponds to the diameter of the tube.

**unit** - the symbol that quantifies a measurement. For instance,  $g$  is used for grams to explain mass and  $cm$  is used for centimetres to explain length.