



Identifying Variables

The **independent variable** is the variable that you change or select the values for.
The **dependent variable** is the variable that is measured for each change of the independent variable.

Identify the independent variable and the dependent variable in each of the following investigations.

1. A student investigated how the intensity of light affects the surface area of leaves on a tree.

independent variable

light intensity

dependent variable

surface area of leaves

2. A student investigated whether the height of a person affects how fast they can run.

independent variable

height of person

dependent variable

speed/how fast they can run

3. A student investigated the amount of energy stored in different brands of crisps.

independent variable

brand of crisp

dependent variable

amount of energy stored

4. A student investigated whether the height a ball bounces depends on the ball's circumference.

independent variable

circumference of the ball

dependent variable

height of the bounce

5. A student investigated how the rate of a reaction was affected by temperature.

independent variable

temperature

dependent variable

rate of reaction

6. A student investigated which colour of flower attracts the most bees.

independent variable

colour of flower

dependent variable

number of bees