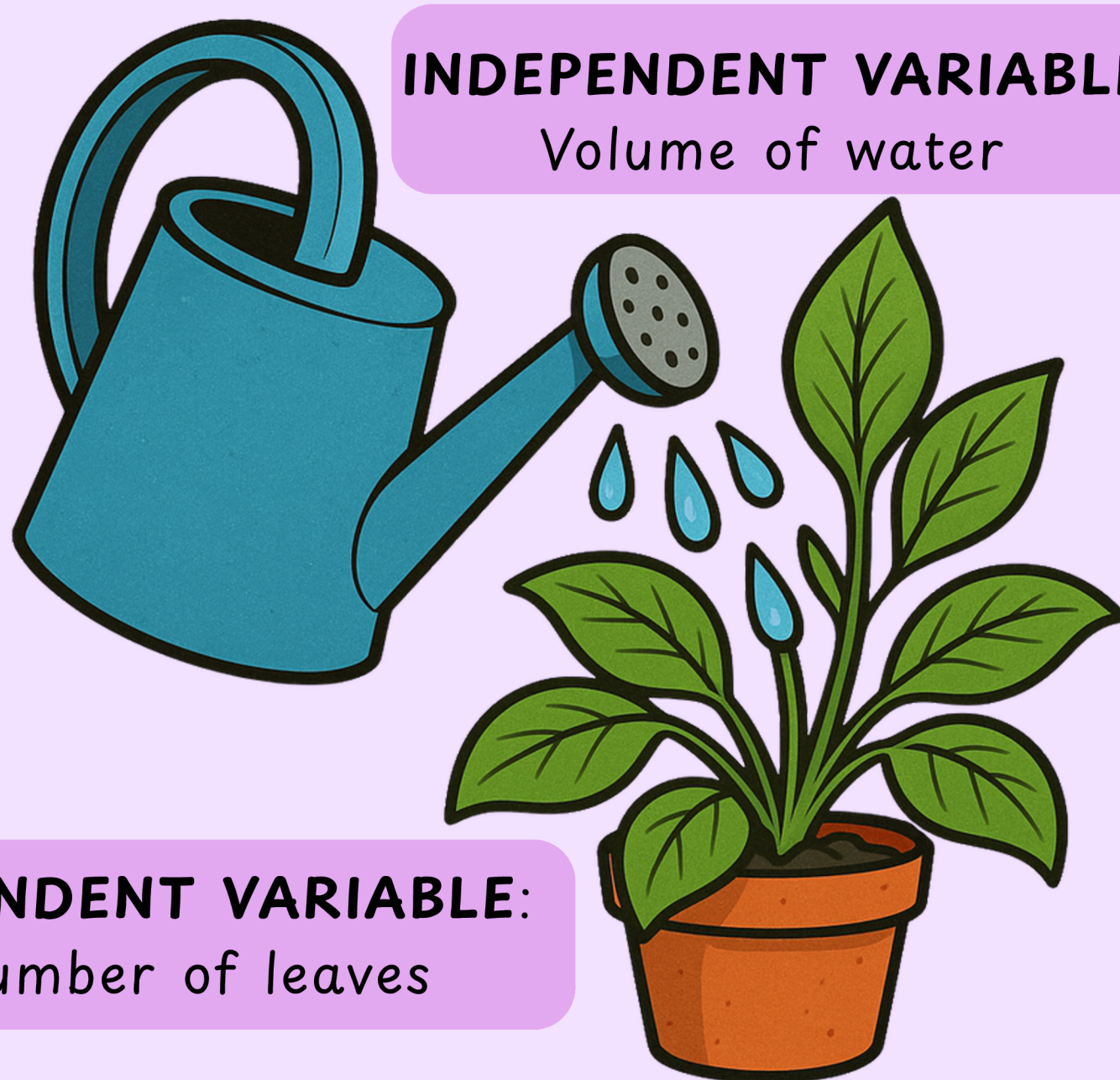


National 5 Biology Assignment

THE AIM

The purpose of your investigation. The aim always includes both the **independent** and **dependent variables** and what aspect of each is **changed** or **measured**.



INDEPENDENT VARIABLE:
Volume of water

DEPENDENT VARIABLE:
Number of leaves

AIM

To investigate the effect of volume of water on number of leaves in a green plant.

Read through these experiments and identify the:

1. The independent variable
2. The dependent variable
3. The Aim

1. Different caffeine concentrations are given to several people, and their reaction times are measured.

Independent variable:
Caffeine concentrations

Dependent variable:
Reaction time

Aim:

To investigate the effects of different caffeine concentrations on reaction time in people.

2. Several materials are wrapped around a beaker of hot water, and the temperature drop is measured after 10 minutes.

Independent variable:
Types of materials

Dependent variable:
Water heat loss

Aim:

To investigate the effects of different types of materials on water heat loss in a beaker.

3. People exercise for different lengths of time, and their heart rate is recorded immediately after.

Independent variable:
Exercise time

Dependent variable:
Heart Rate

Aim:

To investigate the effects of exercise duration on heart rate in humans.

4. Three different types of fertiliser are added to plants, and their growth is measured after two weeks.

Independent variable:
Type of fertiliser

Dependent variable:
Plant growth

Aim:

To investigate the effects of type of fertiliser on plant growth.