# GRADE 5 SCIENCE MINI TEST – SET 2

## SCIENTIFIC EXPERIMENTS & INVESTIGATION SKILLS

Choose the correct answer (A, B, C or D) for each question.

### 1 Planning an Experiment

A student wants to find out:

**Does light affect plant growth?**


The student keeps all other factors the same.

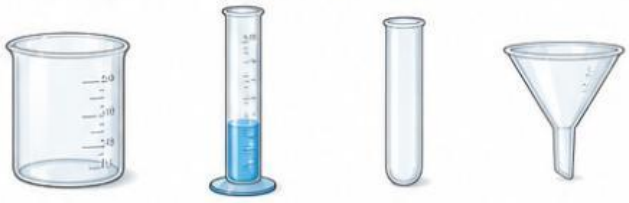
What is the **independent variable?**

**A.** Type of soil
**B.** Amount of water
**C.** Light condition
**D.** Plant height

### 2 Choosing Equipment

A student needs to measure 50 mL of water accurately.

Which apparatus should be used?

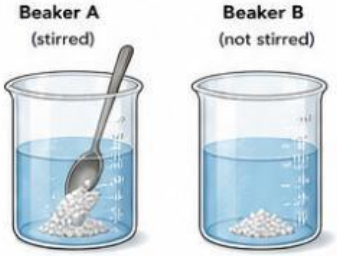


**A** Beaker
**B** Measuring cylinder
**C** Test tube
**D** Funnel

### 3 Fair Test

A student wants to find out:

**Does stirring affect how fast salt dissolves in water?**




The student:

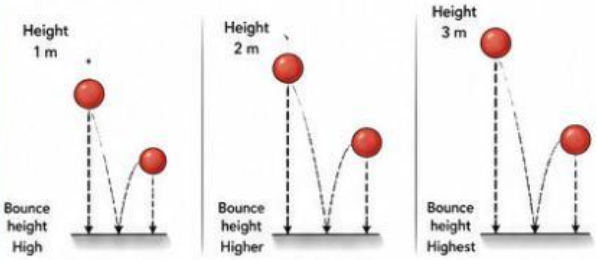
- uses the same amount of salt
- uses the same volume of water
- uses the same temperature
- uses identical beakers
- measures how long it takes for the salt to dissolve completely

Which variable is the student changing?

**A.** Amount of salt
**B.** Stirring
**C.** Water temperature
**D.** Beaker size

### 4 Observing Changes

A ball is dropped from different heights and the bounce height is measured.




What can be concluded from the results?

**A.** The higher the drop, the higher the bounce.
**B.** The ball becomes heavier when dropped.
**C.** The floor affects the bounce.
**D.** The ball disappears after bouncing.

### 5 Measuring Time

Which instrument is used to measure the time shown in the diagram?


**A.** Stopwatch
**B.** Thermometer
**C.** Balance
**D.** Ruler

### 6 Variables in an Experiment

A student pours the same amount of hot water into two cups. One cup is covered with a lid. The other cup is left uncovered.


The student measures the temperature of the water every 5 minutes.

What is the dependent variable in this investigation?

**A.** The type of lid
**B.** The temperature change
**C.** The colour of the cup
**D.** The amount of water

### 7 Recording Results

A student rolls a toy car down a ramp three times and records the distance travelled.

| Trial | Distance travelled (cm) |
|---|---|
| 1 | 120 |
| 2 | 119 |
| 3 | 121 |

Why does the student repeat the experiment?

**A.** To make the experiment more exciting
**B.** To make the results more accurate and reliable
**C.** To change the answer
**D.** To finish the experiment quickly

### 8 Safety in Experiments

A student is mixing a chemical solution.


Which safety equipment should the student wear to protect the eyes?

**A.** Gloves
**B.** Safety goggles
**C.** Apron
**D.** Face mask

### 9 Drawing Conclusions

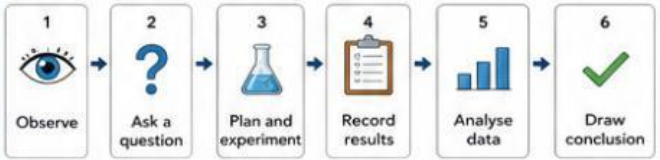
A student grows three groups of plants using different amounts of fertiliser for one month.


What is the best conclusion?

**A.** More fertiliser always helps plants grow.
**B.** The right amount of fertiliser helps plants grow best.
**C.** Plants do not need fertiliser to grow.
**D.** Too much fertiliser does not harm plants.

### 10 Scientific Skills

The diagram shows the steps in a scientific investigation.




Which step comes immediately after recording results?

**A.** Observe
**B.** Analyse data
**C.** Ask a question
**D.** Draw conclusion