MINI TEST – SET 7

SCIENCE EXPERIMENTS & FAIR TESTING

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

1 Water Temperature and Dissolving

A student wants to find out how water temperature affects how fast salt dissolves.

Three beakers each contain 100 mL of water.

The student adds 1 teaspoon of salt to each beaker and stirs at the same speed.

Beaker A
Cold water
(10°C)

Beaker B
Warm water
(30°C)

Beaker C
Hot water
(60°C)



The student measures how long it takes for the salt to dissolve completely.

What is the independent variable?

A. The amount of salt
B. The temperature of the water
C. The speed of stirring
D. The size of the beaker

2 Effect of Sunlight on Evaporation

Three identical trays each contain 50 mL of water.
They are placed in different sunlight conditions.

Tray A
In sunlight

Tray B
In shade

Tray C
Indoors (no sun)



The student measures how much water is left after 3 hours.

What should the student measure?

A. The color of the tray
B. The amount of water left
C. The size of the tray
D. The type of surface

3 Spring Stretch Experiment

A student hangs different weights from the same spring and measures how far it stretches.

The spring used is the same for all trials.

Weight added	50 g	100 g	150 g
Diagram	 50 g	 100 g	 150 g

What is the dependent variable?

A. The weight added
B. The length of the spring
C. The type of spring
D. The shape of the weight

4 Insulation and Temperature

Two bottles contain the same amount of hot water (200 mL).
Bottle A is wrapped with a thick towel.
Bottle B is not wrapped.



Bottle A
With towel

Bottle B
Without towel

The student measures the temperature of the water every 10 minutes for 40 minutes.

What is the purpose of this experiment?

A. To change the color of the bottle
B. To find out how insulation affects temperature
C. To test different types of water
D. To see which towel is better

5 Soil Type and Water Drainage

A student wants to find out which soil type drains water the fastest.

Three funnels are filled with different soils.

Each funnel receives 100 mL of water.

Soil A
Sand

Soil B
Garden soil

Soil C
Clay



How will the student know which soil drains fastest?

A. By checking the color of the water
B. By measuring the time taken for the water to drain
C. By tasting the soil
D. By weighing the soil

6 Effect of Liquid Type on Rusting

Three iron nails are placed in different liquids.
The same size and type of nails are used.

Beaker A
Tap water

Beaker B
Salt water

Beaker C
Oil



After 5 days, the student checks which nail has rusted the most.

What is the independent variable?

A. The amount of liquid
B. The type of liquid
C. The size of the nail
D. The time left for 5 days

GOOD LUCK!

LIVEWORKSHEETS