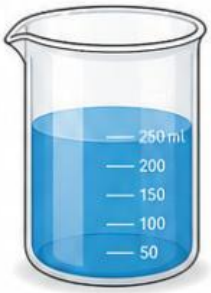
GRADE 5 SCIENCE MINI TEST – SET 1

SCIENTIFIC EXPERIMENTS & INVESTIGATION SKILLS

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

1 Identifying Laboratory Equipment

A student uses this equipment to hold and mix liquids. It can also be heated.



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

2 Making a Prediction

Mai plants two identical bean seeds in similar pots.

Plant A
placed in sunlight

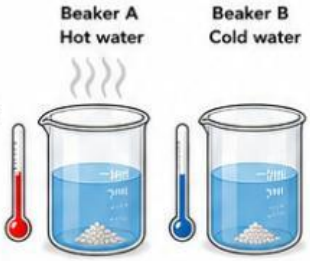
Plant B
placed in a dark cupboard

What is the best prediction?
A. Both plants will grow the same.
B. Plant B will grow better than Plant A.
C. Plant A will grow better than Plant B.
D. Neither plant will grow.

3 Fair Test

A student wants to investigate: "Does temperature affect how fast sugar dissolves in water?"

The student:
- puts 1 teaspoon of sugar into each beaker
- uses 200 mL of water in each beaker
- uses identical beakers
- stirs both beakers the same way
- measures how long it takes for the sugar to dissolve completely



Which variable is the student changing in this experiment?
A. The amount of sugar
B. The temperature of the water
C. The size of the beaker
D. The stirring method

4 Observing Results

A student left an ice cube on the table and recorded its size every 5 minutes.

Time (minutes)	0	5	10	15
Size of ice cube				

What observation can be made from the results?
A. The ice cube gets bigger with time.
B. The ice cube melts and gets smaller with time.
C. The ice cube stays the same size.
D. The ice cube changes colour.

5 Measuring Temperature

Which instrument is shown in the diagram below?

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

6 Variables in an Experiment

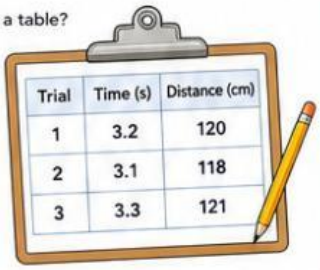
A student wants to find out how the type of surface affects the distance a toy car travels. The same car is pushed with the same force on different surfaces.

Carpet | Wooden floor | Tile floor

What is the independent variable in this investigation?
A. The distance travelled by the car
B. The type of surface
C. The colour of the car
D. The force used to push the car

7 Recording Data

Why do scientists record their results in a table?
A. To make the experiment take longer
B. To organise information clearly so it is easy to read and compare
C. To make the report look more colourful
D. To change the results if they are wrong



Trial	Time (s)	Distance (cm)
1	3.2	120
2	3.1	118
3	3.3	121

8 Safety in Experiments

A student is heating water in a beaker using a spirit burner.

Which safety equipment should the student wear to protect the eyes?
A. Sunglasses
B. Safety goggles
C. Hat
D. Scarf

9 Drawing a Conclusion

A student gave three identical plants different amounts of water every day for two weeks.

Amount of water each day	Low (50 mL)	Medium (100 mL)	High (200 mL)
Appearance of plant after two weeks			

What is the best conclusion?
A. More water always helps plants grow better.
B. Medium amount of water is best for plant growth.
C. Plants do not need water to grow.
D. Water has no effect on plants.

10 Repeating Experiments

A student carries out an experiment three times. The results are very similar each time.

Why do scientists repeat experiments?
A. To make the experiment more exciting
B. To make the results more reliable and accurate
C. To change the results if they are not good
D. To make the experiment take more time