Temperature

A. Choose the correct answer:

1. What is the primary function of a thermometer?

a) To measure speed
b) To measure temperature
c) To measure weight
d) To measure pressure

2. Which type of thermometer is commonly used to measure human body temperature?

a) Mercury thermometer
b) Barometer
c) Anemometer
d) Speedometer

3. Which liquid is traditionally used in a mercury thermometer?

a) Water
b) Alcohol
c) Mercury
d) Oil

B. Fill in the Blanks:

1. A thermometer is used to measure _____.
2. The freezing point of water in a Celsius thermometer is _____ degrees Celsius.
3. A digital thermometer uses electronic sensors instead of _____ to measure temperature.

C. Case Study:

A school conducted an experiment to compare different types of thermometers. Three students used different thermometers to measure the temperature of hot water:

- **Student A** used a mercury thermometer and recorded a temperature of 80°C.
- **Student B** used a digital thermometer and noted a temperature of 79°C.
- **Student C** used an alcohol thermometer and got a reading of 78.5°C.

After analyzing the results, the teacher explained that different thermometers have slight variations due to their sensitivity and design.

Questions & Answers:

1. What was the main objective of this experiment?
2. Why did the three students get slightly different temperature readings?
3. Which thermometer is safer for home use and why?
4. How does a digital thermometer work compared to a mercury thermometer?

D. Short Answer Questions:

1. What is a thermometer and what is it used for?
2. Why is mercury used in some thermometers?
3. How do digital thermometers differ from traditional mercury thermometers?

E. Long Answer Questions:

1. Explain the working principle of a mercury thermometer and a digital thermometer.
2. Discuss the advantages and disadvantages of using mercury thermometers.
3. Describe different types of thermometers and their uses in daily life.