CLASS 6 SCIENCE EXTRA QUESTIONS

Class 6 Science Chapter 7 Temperature and its Measurement Extra Questions

Extra practice questions for Class 6 Science Chapter 7, "Temperature and its Measurement", to reinforce understanding of thermometers and temperature scales beyond the textbook's own exercises.

Contents

Extra practice questions for **Class 6 Science Chapter 7, "Temperature and its Measurement"**, to reinforce understanding of thermometers and temperature scales beyond the textbook's own exercises.

Very Short Answer Questions

Q1. What is temperature a measure of?
Answer: The hotness or coldness of a body.

Q2. What is the normal human body temperature in Celsius and Fahrenheit?
Answer: 37.0°C, which equals 98.6°F.

Q3. Name the SI unit of temperature.
Answer: Kelvin (K).

Q4. What is the typical range of a laboratory thermometer?
Answer: −10°C to 110°C.

Q5. Why are mercury thermometers being phased out?
Answer: Because mercury is toxic and difficult to dispose of safely if the thermometer breaks.

Short Answer Questions

Q6. Describe the correct way to read a laboratory thermometer.
Answer: Hold it vertically, keep the bulb from touching the sides or bottom of the container, read the scale while the bulb remains immersed in the liquid, and keep your eye level with the liquid column to avoid an inaccurate (parallax) reading.

Q7. Why is a digital clinical thermometer generally preferred over a mercury one today?
Answer: It is safer (no toxic mercury risk if broken), gives a quick and clear digital reading, and is easier and safer to use, especially with children.

Q8. Convert 25°C to Kelvin.
Answer: 25 + 273.15 = **298.15 K**.

Q9. Why does temperature stay constant while water is boiling?
Answer: During boiling, the heat energy supplied is used to change the water from liquid to vapour (a change of state) rather than to raise its temperature further, so the temperature remains steady until all the water has boiled away.

Q10. What is absolute zero?
Answer: Approximately −273.15°C (0 K) — the theoretical lowest possible temperature.

Long Answer / Reasoning Questions

Q11. Explain why a laboratory thermometer is unsuitable for measuring human body temperature, even though both are thermometers.
Answer: A laboratory thermometer covers a very wide range (−10°C to 110°C) with relatively large divisions, so it cannot precisely distinguish small but medically important differences within the narrow 35–42°C body-temperature range. It is also made of fragile glass filled with alcohol or mercury and must remain immersed in whatever it's measuring while being read — impractical and unsafe for placing in the mouth or armpit. A clinical thermometer, by contrast, is purpose-built, safe, and precise for this specific

narrow range.

Q12. A student says, “If I feel warmer than my friend, I must have a higher temperature.” Explain why this reasoning can be misleading.
Answer: The sense of touch is relative and depends on what a person touched just before, their own skin temperature, and other factors — not on an absolute, reliable scale. Two people’s perception of “warm” can differ even if their actual temperatures are identical, or a person’s own hands can feel different temperatures from the same object depending on prior exposure (as shown by the classic warm/tap/ice-cold water hand test). Only a thermometer gives a reliable, comparable reading.

Q13. A weather station records air temperature every day. Explain why air temperature is generally higher approaching summer and lower approaching winter, and how this data might be useful.
Answer: Air temperature broadly follows the seasonal position of a location relative to the Sun’s more direct or indirect rays through the year, rising through spring into summer and falling through autumn into winter. This ongoing data helps in weather forecasting, planning agricultural activities, and tracking long-term climate patterns.

Q14. Two students measure the same beaker of water with a laboratory thermometer. One holds it tilted with the bulb touching the beaker’s bottom; the other holds it vertical with the bulb suspended in the water, eye level with the liquid column. Whose reading is likely to be more accurate, and why?
Answer: The **second student’s** reading is likely more accurate. Touching the bottom of the beaker can pick up heat directly from the container rather than the liquid itself, and a tilted thermometer or a viewing angle not level with the liquid column can distort the reading (parallax error). Holding it vertical, fully immersed without touching the container, and reading at eye level follows the correct technique taught for laboratory thermometers.