



INDIAN SCHOOL AL WADI AL KABIR

| CLASS: VI | DEPARTMENT: SCIENCE 2025- 26 | DATE: 19/10/2025 |
|----------------------|---|-------------------------|
| TEXTBOOK Q & A | TOPIC: TEMPERATURE AND ITS MEASUREMENT | NOTE: A4 FILE FORMAT |
| NAME OF THE STUDENT: | CLASS & SEC: | ROLL NO: |

1. The normal temperature of a healthy human being is close to

- (i) 98.6 °C
- (ii) 37.0 °C
- (iii) 32.0 °C
- (iv) 27.0 °C

Ans: (ii) 37.0 °C

2. 37 °C is the same temperature as

- (i) 97.4 °F
- (ii) 97.6 °F
- (iii) 98.4 °F
- (iv) 98.6 °F

Ans: (iv) 98.6 °F

3. Fill in the blanks:

- (i) The hotness or coldness of a system is determined by its temperature.
- (ii) The temperature of ice-cold water cannot be measured by a **clinical** thermometer.
- (iii) The unit of temperature is degrees **Celsius**.

4. The range of a laboratory thermometer is usually

- (i) 10 °C to 100 °C
- (ii) -10 °C to 110 °C
- (iii) 32 °C to 45 °C
- (iv) 35 °C to 42 °C

Ans: (ii) -10 °C to 110 °C

5. Four students used a laboratory thermometer to measure the temperature of water as shown in Figure 7.6:

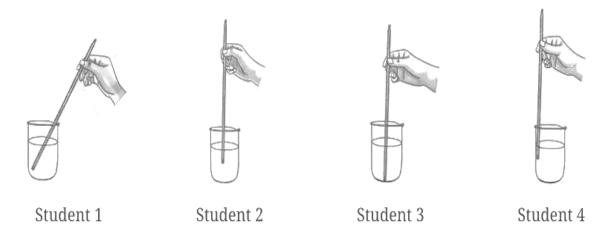


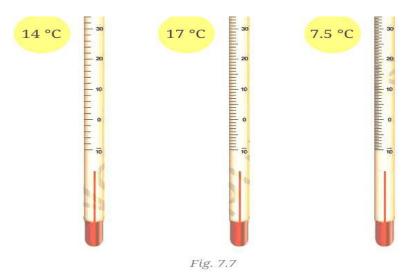
Fig. 7.6

Who do you think followed the correct way for measuring temperature?

- (i) Student 1
- (ii) Student 2
- (iii) Student 3
- (iv) Student 4

Ans: (ii) Student 2

6. Colour to show the red column on the drawings of thermometers (Fig. 7.7) as per the temperatures written below.



[Hint:

- In the first thermometer, each small line is 2°C. So, 14 °C is two lines after the mark of 10 °C.
- In the second thermometer, each small line is 1°C. So, 17°C is 7 lines after the mark of 10 °C.
- In the third thermometer, each small line is 0.5° C. So, 7.5 degrees Celsius is 15 lines after the mark of 0° C.]
- 7. Observe the part of the thermometer shown in the given figure and answer the following questions:



- (i) What type of thermometer is it?
- (ii) What is the reading of the thermometer?
- (iii) What is the smallest value that this thermometer can measure?
 [Hint: (i) The lowest mark on the thermometer is -10°C, so the picture shows a laboratory thermometer.
- (ii) The thermometer reading is 26 °C.
- (iii) The temperature difference between 0 °C & 10 °C is 10 °C and the number of divisions is 10. So, the smallest value that this thermometer can read is 10/10 = 1 °C
- 8. A laboratory thermometer is not used to measure our body temperature. Give a reason. [Hint: A laboratory thermometer is not used to measure our body temperature for the following reasons:
 - i) The value drops to zero as soon as we take the laboratory thermometer from our body, as it does not have the kink to hold the liquid column in place, making it unsuitable for measuring body temperature accurately.
 - ii) The calibration and scale are not as precise for the narrow range of human body temperature compared to clinical thermometers.

9. Vaishnavi has not gone to school as she is ill. Her mother has kept a record of her body temperature for three days, as shown in Table 7.4.

| Table 7.4: Body temperature record of Vaishnavi | | | | | | | |
|---|----------------|---------|---------|---------|---------|---------|--|
| | Temperature at | | | | | | |
| DAY | 7am | 10am | 1pm | 4pm | 7pm | 10pm | |
| One | 38.0 °C | 37.8 °C | 38.0 °C | 38.0 °C | 40.0 °C | 39.0 °C | |
| Two | 38.6 °C | 38.8 °C | 39.0 °C | 39.0 °C | 39.0 °C | 38.0 °C | |
| Three | 37.6 °C | 37.4 °C | 37.2 °C | 37.0 °C | 36.8 °C | 36.6 °C | |

- (i) What was Vaishnavi's highest recorded temperature?
- (ii) On which day and at what time was Vaishnavi's highest temperature recorded?
- (iii) On which day did Vaishnavi's temperature return to normal?
- [Hint: (i) The highest recorded temperature for Vaishnavi is 40.0 °C
 - (ii) The highest temperature was recorded on Day One at 7 pm.
 - (iii) Vaishnavi's temperature returned to normal on Day 3.]
- 10. If you have to measure the temperature 22.5 °C, which of the following three thermometers will you use (Fig. 7.9)? Explain.

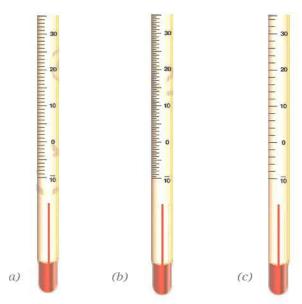


Fig. 7.9: Three thermometers

[Hint: Thermometer (b).

Thermometer (a) can measure the smallest value of 1 $^{\circ}$ C, and thermometer (c) can measure the smallest value of 2 $^{\circ}$ C as per the small line markings on these. Only thermometer (b) has the markings on it to measure the smallest value of 0.5 $^{\circ}$ C, which is necessary for measuring a temperature of 22.5 $^{\circ}$ C.]

11. The temperature shown by the thermometer in Fig. 7.10 is

- (i) 28.0 °C
- (ii) 27.5 ° C
- (iii)26.5 °C
- (iv) 25.3 °C

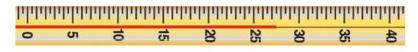


Fig. 7.10

Ans: (ii) 27.5 ° C

12. A laboratory thermometer has 50 divisions between 0 °C and 100 °C. What does each division of this thermometer measure?

[Hint: Number of divisions = 50, Temperature range = 0 °C to 100 °C ∴ Measurement of each division = 100/50

13. Draw the scale of a thermometer in which the smallest division reads 0.5 °C. You may draw only the portion between 10 °C and 20 °C.



14. Someone tells you that she has a fever of 101 degrees. Does she mean it on the Celsius scale or the Fahrenheit scale?

[Hint: In Celsius, 101 degrees would be extremely high and life-threatening, since normal body temperature is around 37°C, and it does not normally go below 35 °C or above 42 °C. 101°C is far beyond human tolerance. Therefore, it is clear that the fever is being referred to in Fahrenheit.]

| Prepared by: | Checked by: |
|-------------------|-------------|
| Ms Sithara Sharaf | HOD Science |