	INDIAN SCHOOL AL WADI AL KABIR	
CLASS: VI	**DEPARTMENT: SCIENCE** **2024-25**	**DATE: 28-10-2024**
TEXTBOOK Q & A	**TOPIC: TEMPERATURE AND ITS MEASUREMENT**	**NOTE: A4 FILE FORMAT**
NAME OF THE STUDENT:	**CLASS & SECTION:**	**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

2. **37 °C is the same temperature as**
   (i) 97.4 °F
   (ii) 97.6 °F
   (iii) 98.4 °F
   (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 degree 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

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

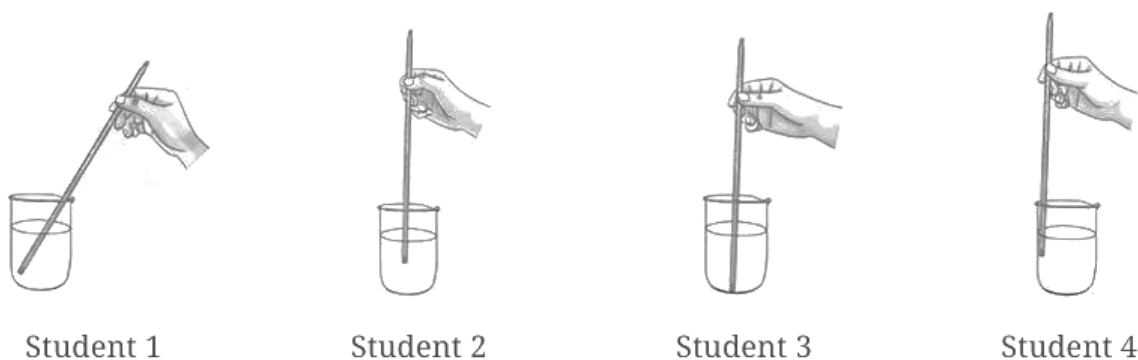Student 1   Student 2   Student 3   Student 4

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

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

Fig. 7.7

[**Hint: i. Each small line is 2 °C.14 °C is two lines after the mark of 10 °C.**
ii. Each small line is 1 °C.17 °C is 7 lines after the mark of 10 °C.
iii. Each small line is 0.5 °C. 7.5 degree Celsius is 15 lines after the mark of 0 °C.

7.Observe the part of 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 laboratory thermometer.

(ii)The thermometer reading is 26°C

(iii)The temperature difference between 0°C and 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 because

1. the value drops to zero as soon as we take the laboratory thermometer from our body.

2.It will not give an accurate value. The smallest value of reading required for body temperature is 0.1 °C which cannot be obtained in a laboratory thermometer.]

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

DAY	Temperature at					
	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 Vaishavi 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.
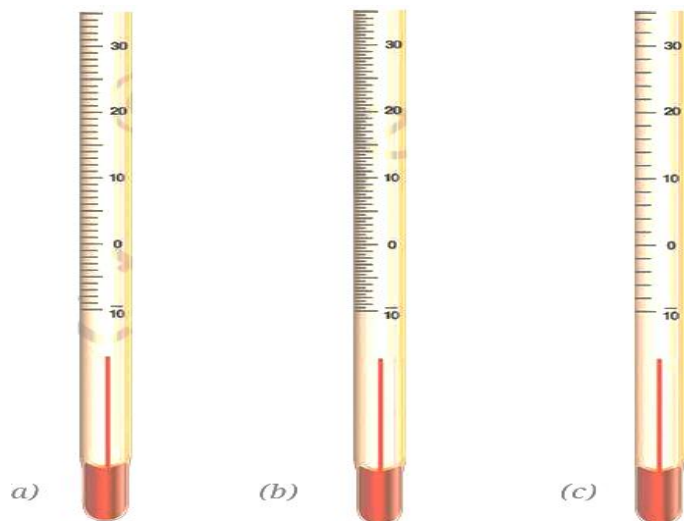

Fig. 7.9: Three thermometers

[Hint: Thermometer (b).
Thermometer (a) can measure the smallest value of 1°C and thermometer (c) can measure the smallest value of 2°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°C which is necessary for measuring a temperature of 22.5°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

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-100°C
Measurement of each division=100/50=2°C]

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.
[Hint:

]

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

[Hint: She means the temperature on the Fahrenheit scale. Human body temperature does not normally go below 35 °C or above 42 °C. In the Fahrenheit scale this range is between 95 degrees to 107.8 degrees.]

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