

1. What is heat?
2. Can we always rely on our sense of touch for measuring heat?
3. What is temperature?
4. How do we measure temperature? Name the device.
5. What is a clinical thermometer?
6. Describe a clinical thermometer.
7. Which scales are used as thermometer?
8. What range of temperature is measured by a clinical thermometer in
(a) Fahrenheit scale (b) Celsius scale.
9. Write the precautions that should be observed while reading a clinical thermometer.
10. How do we losing the mercury down in a clinical thermometer?
11. What is the normal body temperature of a human body?
12. What is the normal body temperature? Is it always 37°C . Why?
13. Why does a clinical thermometer have a range of 35°C to 42°C ?
14. What is laboratory thermometer? What is the range of laboratory thermometer?
15. Which special type of thermometer is used for reporting maximum and minimum temperatures by the weather department?
16. What additional precautions are taken while using a laboratory thermometer?
17. Why can't we use a laboratory thermometer for taking our temperature?
18. Why does the mercury not fall or rise when a clinical thermometer is taken out of the month.
19. What is the function of a sink near the bulb of clinical thermometer?
20. Why is there a lot of concern over the use of mercury in thermometers?
21. Why are digital thermometer preferred these days?
22. Define conduction of heat.
23. How is heat generally transferred in solids?
24. Why does a cooking pan have a handle made of plastic?
25. Differentiate between conductors & insulators.
26. Give three examples of conductors & insulators each.
27. Describe connection?
28. How will you demonstrate connection?
29. How does heat travel in air?
30. In which direction does the smoke go?
31. What is sea breeze? Why does it blow during the day?
32. What is land breeze? Why does it blow at night?
33. Distinguish between sea breeze and land breeze.
34. How does heat from the sun reach us?
35. Why can't sun's heat reach us by connection or conduction?
36. Define radiation.
37. How is radiation different from conduction and connection?

38. By which mechanism of heat transfer do these take place / Give reasons identify mechanism

- Room heaters are placed on the floor of a room.
- Ads are fitted at a higher level.
- Exhaust fans are fitted near sealing.

39. Tabulate the difference between conduction, convection and radiation.

40. What are the conditions necessary for conduction?

41. What conditions are necessary for convection to take place?

42. Give reasons why

- We wear light colours in summer.
- Dark colours are worn in winter.
- In cold & hilly areas – outer walls & roof are usually painted dark.
- In factories, roofs are painted shiny silver.
- In room heaters, the reflectors behind the heating coil are shiny, silvery and polished.
- A thermos flask can maintain the temperature of the substance in it.
- The temperature of the places is higher when it snows and it becomes colder when snow melts.

43. What is radiant energy?

44. Describe the working of a thermos flask?

45. How is heat loss reduced in a thermos flask?

- By conduction
- By convection
- By radiation

46. Name the three common temperature scales and give their symbols.

47. What is the boiling point of (i) water in (ii) human body's normal temperature.

- Celsius
- Fahrenheit scale.