

GRADE 7

HEAT AND ITS EFFECTS

A. Fill in the blanks:

1. The SI unit of temperature is _____.
2. Heat is a form of _____.
3. The temperature of steam is taken as the _____ fixed point.
4. The lower fixed point in the kelvin scale is _____.
5. When matter is heated it _____.
6. The rate of expansion is _____ for different liquids.

B. Short answer questions:

7. What is temperature?
8. What is the principle used in constructing a liquid thermometer?
9. What is a digital thermometer?
10. Why laboratory thermometers are not used to measure the body temperature?
11. Draw a labelled diagram of a clinical thermometer? What is the function of the kink in the stem?
12. One litre of water at 30°C is mixed with one litre of water at 50°C . The approximate temperature of the mixture will be a) 80°C b) more than 50°C but less than 80°C c) 20°C d) between 30°C and 50°C

C. Long answer questions:

13. Discuss the effects that heat has on matter?

14. Convert

a. 75°C into $^{\circ}\text{F}$

b. 37°F into $^{\circ}\text{C}$

c. 50°C into K

15. Give two differences between a laboratory thermometer and a clinical thermometer?

16. Explain three useful applications of expansion of solids?

17. Why are liquids, not solids or gases, normally used in thermometers?

18. Which is warmer - 50°F or 10°C ?