

ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Physical Science Class: 8 Date: 08.03.21

Duration: 40 min Worksheet Solution 16

HEAT

Choose the Correct options:

- 1 The capacity to do work is called:
 - A. Heat
 - B. Energy
 - C. work
 - D. none of the above
- 2 Heat is measured in:
 - A. Joule
 - B. Calorie
 - C. both A and B
 - D. Joule/second
- 3.1 cal. = ?
 - A. 1.2 joule
 - B. 3.2 joule
 - **C.** 4.2 joule
 - D. none of the above
- 4 The form of energy that produces a feeling of hotness is called as:
 - A. work
 - B. Heat
 - C. Energy
 - D. none of the above
- 5 With the increase in temperature, heat will be:
 - A. increase
 - B. constant
 - C. decrease
 - D. double
- 6 How we measure the energy value of food?
 - A. Joule
 - B. Joule/second
 - C. Calorie
 - D. none of the above

7 In evaporation

- A. All molecules of liquid begin to escape out
- B. Only the molecules at the surface escape out
- C. The temperature of liquid rises by absorbing heat from surroundings.
- D. The molecules get attracted within the liquid

- 8 The rate of evaporation of a liquid increases when
 - A. Temperature of liquids falls
 - B. Liquid is poured in a vessel of less surface area
 - C. Air is blown above the surface of liquid
 - D. Humidity increases
- 9 During boiling or vaporization
 - A. All molecules take part
 - B. Temperature rises
 - C. No heat is absorbed
 - D. The average kinetic energy of molecules increases.
- 10 The boiling point of a liquid is increased by
 - A. Increasing the volume of liquid
 - B. Increasing the pressure, on liquid
 - C. Adding ice to the liquid
 - D. Decreasing pressure on liquid
- 11 Two rods A and B of the same metal, but of length 1m and 2m respectively are heated from 0 degree celsius to 100 degree celsius. Then
 - A. Both the rods A and B elongate the same
 - B. The rod A elongates more than the rod B
 - C. The rod B elongates more than the rod A
 - D. The rod A elongates but the rod B contracts
- 12 Two rods A and B of the same metal, same length, but one solid and other hollow are heated to the same rise in temperature. Then
 - A. The solid rod A expands more than the solid rod B
 - B. The hollow rod B expands more than the solid rod A
 - C. The hollow rod B contracts but the solid rod A expands
 - D. Both the rods A and B expand the same
- 13 A given volume of alcohol and the same volume of water are heated from the room temperature to the same temperature then
 - A. Alcohol contracts but water expands
 - B. Water contracts but the alcohol expands
 - C. Water expands more than alcohol
 - D. Alcohol expands more than water
- 14 The increase in length of a metal rod depends on
 - A. The initial length of the rod only
 - B. The rise in temperature only
 - C. The material of rod only

D. All the above three factors

15 The correct statement is

- A. Iron rims are cooled before they are placed on the cart wheels
- B. A glass stopper gets tighten on warming the neck of the bottle
- C. Telephone wires sag in winter but become tight in summer
- D. A little space is left between two rails on a railway track