Cosmo School

Physics	Worksheet 8 : 02/11/2020	Class - IX

CHAPTER 6 : EFFECT 0F HEAT ON MATTER

Instructions:

✓ Read the chapter in your book - quickly and thoroughly, preferably more than once.

✓ Watch the uploaded video classes of this chapter from school's website/You Tube channel. For becoming more clear about the basics, watch more than once, if needed.

✓ Contact me in case of any difficulty in understanding.

(Questions given in this worksheet are important questions for all exams)

Creative Questions

(Solve Yourself)

1. Area of a copper plate and a steel plate at 10°C is 9m^2 each. After applying heat, temperature becomes 50°C and due to this the area of steel body becomes 9.012024m^2. (co-efficient of superficial expansion of copper is 22.0 x 10^{-6}K^{-1}.)

   a) Determine the co-efficient of volume expansion of copper.

   b) By increasing the temperature is it possible to place the copper plate on the steel plate equally? Explain your opinion with mathematical logic.

2. By applying 1950J heat upon a wire of mass 0.5kg, its temperature is raised 30K and final length becomes 100.033m.

   a) Determine the specific heat of the material of the wire.

   b) Is it possible to enter a ring made by the initial length of the wire inside a hollow cube of height 32m? Give your opinion with mathematical analysis.