Cosmo School

Physics | **Worksheet 9 : 05/11/2020** | **Class - IX**

CHAPTER 6 : EFFECT OF 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

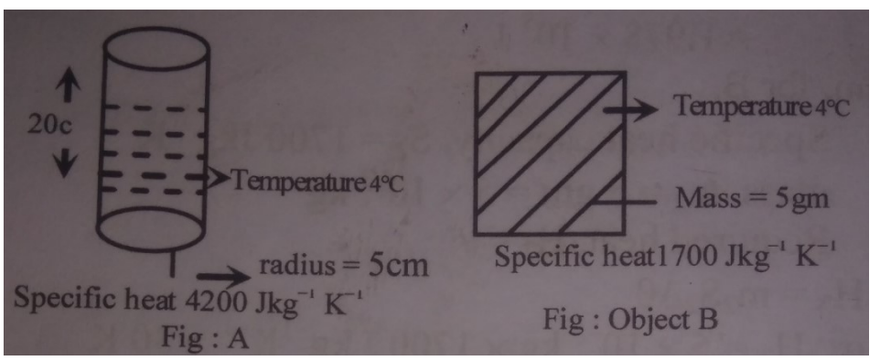
(Solve Yourself)

1. 420g of copper at 100°C is dropped in 200g of water at 40°C. The temperature of the mixture is 50°C. The relative temperature of copper and water are $400 Jkg^{-1}K^{-1}$ and $4200 Jkg^{-1}K^{-1}$ respectively.

a) Determine the heat limit of copper.

b) Explain using mathematical explanation, how the mentioned action agrees with the basic principles of calorimetry.

2. Observe the following figure carefully and answer the questions.



a) Find out the value of the temperature of the object B in Fahrenheit scale.

b) What is the amount of heat needed to increase the temperature of only liquid of the container A and object B through 30°C separately? Which one needs more and how much? Analyze mathematically. (At 4°C, the mass of 1c.c. water is 1gm).