Cosmo School

Physics | **Worksheet 1 : 05/10/2020** | **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)

Cognitive Questions (Mark - 1)

1. What is heat?

Ans.: Heat is a kind of energy which creates the sensation of hotness and coldness.

2. What is temperature?

Ans.: Temperature is such a thermal condition of a body which determines whether the body will receive or give up heat when it comes in thermal contact with another body.

Analytical Questions (Marks - 2)

1. If two bodies have the equal amount of heat, yet can they be at different temperature? Explain.

Ans.: If two vessels with an equal mass are heated for same amount of time then the vessel with greater mass will have less temperature. Again, if we apply same amount of heat on a copper and iron rod and keep them together then the

copper will give heat to iron and the iron will receive heat. That is although same amount of heat is applied, the temperature of these two bodies will be different.

2. Temperature of two objects are same but amount of heat may not be same - Explain.

Ans.: The amount of heat two objects contain can be different while their temperature is equal. Temperature is such a thermal condition of a body which determines whether the body will receive or give up heat when it comes in thermal contact with another body. If two objects made of same material contain same amount of heat, the temperature of small object will be higher than the bigger object.

3. Pressure is a thermometric property of matter - Explain.

Ans.: Pressure of some gas sealed in a container depends on its temperature. If temperature is increased, pressure increases too. So, temperature can be determined by measuring pressure. So, pressure is a thermometric property of matter.

4. What is the difference between heat and temperature?

Ans.: The differences between heat and temperature are as follows:

Heat	Temperature
i. The flows of heat do not depend on the amount of heat.	i. The flow of heat depend on the temperature.
ii. The unit of heat is Joule, Calorie.	ii. The unit of temperature is Kelvin, Celsius, Fahrenheit.
iii. Heat is the cause for temperature.	iii. Temperature is the product of heat.
iv. Two substances with same temperature can have different amount of heat.	iv. Two substances with same heat can have different amount of temperature.