

Physics (New Book) - 9th Class Physics English Medium Chapter 9 Preparation

Q1. On which factors does rate of heat flow depends upon?

Ans 1: there are three factors on which rate on heat flow depends upon. i. Cross-sectional area of a solid. ii. Temperature difference between ends. iii. Length of the solid

Q2. What is the effect of length of the solid on thermal conductivity

Ans 1: Length of the solid: Large is the length between the hot and cold ends of the solid more time it will take to conduct heat to the colder end and smaller will be the rate of flow of heat Thus

Q3. How heat energy from the sun reach to earth

Ans 1: Heat energy reaches us neither by conduction nor by convection, because the space between sun and the earth atmosphere is empty It is through radiation that heat reaches us from the sun

Q4. Why metals are good conductors of heat

Ans 1: Metals are good conductors of heat because they have free electrons. These free electrons move with very high velocities within the metals they carry energy at a very fast rate from hot to cold parts of object

Q5. For what purpose double glazed windows are used.

Ans 1: Because air is the one of bad conductor or best insulator. That is why cavity wall i.e two walls separated by an air space and double glazed windows keep the house warm in winter and cool in summer.

Q6. Define convection current in air

Ans 1: Gases also expand on heating, thus convection currents are easily set up due to differences in the densities of air at various parts in atmosphere Or Transfer of heat by movement of heated particles into an area of cooler fluid

Q7. What is the thermo flask?

Ans 1: The thermo flask is a double walled glass vessel, that prevent heat to enter or leave the flask and maintain the temperature inside the flask.

Q8. What is meant by convection currents

Ans 1: Gases expand on heating, convection currents are easily set up due to differences in the densities of air at various parts of the atmosphere. Due to the up down movement of gas molecules convection currents are produced

Q9. Why we avoid wear dark colour dresses in summer season

Ans 1: Dark color absorbs high energy radiations and becomes hot That is reason that we avoid wear dark color dresses in summer season

Q10. Why is scientific reason to wear white and light coloured clothes in summer

Ans 1: White and light coloured surfaces reflect more heat than coloured or black surfaces. That why we wear white or light coloured clothes in summer which reflect most of heat radiations reaching us during hot day
