

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

Q1. What measurements do you suggest to converse energy in houses

**Ans 1:** Measurements to converse energy

We should switch off extra electric equipment's in order to conserve energy in houses

The use to LED lights can also conserve electricity.

Q2. Define conduction with example.

**Ans 1:** Conduction: The mode of transfer of heat by vibrating atoms and free electrons in solids from hot to cold parts of a body is called conduction heat. Example: All metals are good conductors of heat.

Q3. Differentiate between conductors and insulator

**Ans 1:** Conductors: A conductor easily transfers energy in the form of electricity and heat

Good conductors are used when quick transfer of heat is required through a body Thus cookers, cooking plate etc.

Metal boxes are used for making ice, ice cream etc

**Ans 2:** Non-Conductor: Non-conductor does not easily transfer of energy in the form of electricity and heat

Ceiling of rooms is covered by insulating materials because transfer of heat is low

Insulators or non-conductors are used in home utensils such as handles of sauce-pans hot plates, spoon etc, They are made up of wood or plastic.

Q4. Why metal 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. What are the factors on which rate of emission of radiation depends

**Ans 1:** The rate at which radiation are emitted depends upon various factors such

Color and texture of the surface

Surface temperature

Surface area

Q6. Define rate of flow of heat

**Ans 1:** The amount of heat that flow in unit time is called rate of flow heat

**Ans 2:** Unit: Its unit is js

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Q7. How many sides of a Leslie cube are

**Ans 1:** A shining silvered surface, A dull black surface, A white surface, A coloured surface

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Q8. Write any two measures to save energy

**Ans 1:** Hot water tanks are insulated by plastic or foam lagging Wall cavities are filled with plastic foam or mineral wool Ceiling of rooms is covered by insulating materials ceiling

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Q9. 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

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Q10. What happen when burner remove under beaker

**Ans 1:** When the burner has removed under the breaker gets hot, it expands, become lighter and rises. While the cold but denser water moves downward to take its place.