

1. State four forms of energy? **Heat, Electrical, Sound and Solar energy**
2. What are the three forms of heat transfer? **Conduction, Convection and Radiation**
3. Define the following? Give examples.

i) Conduction –

Conduction transfers heat within a body or between two bodies that are touching. It is a point-by-point process of heat transfer. Example, a metal heats up when left inside a hot cup of tea.

ii) Convection –

is the transfer of heat from one fluid to another by the movement of the fluid itself. Example, boiling of water in a pot.

iii) Radiation –

A form of energy such as heat, light, X-rays, Microwave or radio waves. Also includes dangerous high energy nuclear radiation. (Heat wave). Example, warming yourself up by standing close to a fire place/ camp fire.

iv) Conductors - **Any material through which energy can flow. Example, metal.**

v) Insulators - **A material that does not conduct heat or electricity easily. Example, wood.**

4. Paul left a metal spoon in a hot cup of tea.



i) What will happen to the soon after some time?

The metal spoon will become hot.

ii) Why does this happen?

Since metal is good conductor of heat, the metal spoon will let the energy pass through hence heat itself up.