

HW
23/11/2021

Heat

Home Assignment

Page No. : _____
Date :

1. What do you ~~mean~~ understand by thermal expansion of a substance?

Ans- Thermal expansion occurs when an object expands and becomes larger due to a change in the object's temperature.

2. Why do telephone wires sag in summer?

Ans- The telephone wires will sag in summer due to expansions and will break in winter due to contraction. Therefore while putting up the wires between the poles care is taken that in summer they are kept slightly loose so that they may not break in winter they are kept tight so that they may not sag too much in summer due to expansions.

3. Iron rims are heated before they are fixed on the wooden wheels. Explain the reason.

Ans- Iron rims are made slightly smaller in diameter. that the wooden wheel and on heating, wheel expands and can easily slip over the wooden wheel and on cooling the rim contracts and makes a tight fit over the wooden wheel.

4. Why are gaps left between successive rails on a railway track?

Ans- The rails of railway track are made of steel. while laying the railway track a small gap is left between the two successive lengths of rails. The reason is that the rails expand in summer. The gap is provided to allow for this expansion. If no gap is left, the expansion in summer will cause the rails to bend sideways. This may result in a train accident.