

## Homework

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

A) The expansion of a substance on heating is called thermal expansion of the substance.

2. Why do telephone wires sag in summer?

A) Telephone wires will sag in summer due to expansions and will break in winter due to contraction.

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

A) Iron rims are heated before they are fixed on the wooden wheel, to ensure a tight fit, the tyre is made slightly smaller in diameter than the wheel. The heated rim is then fitted on the wheel. When the rim cools, it contracts and makes a tight fit on the wheel.

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

A) While laying the railway, a small gap is left between two successive lengths of rails. The reason is that the rails expand in summer. The gap is provided

ded to allow for this expansion<sup>is</sup>. If no gap is left, the expansions in summer will cause the rails to bend sideways. This may result in train accidents<sup>ts</sup>.