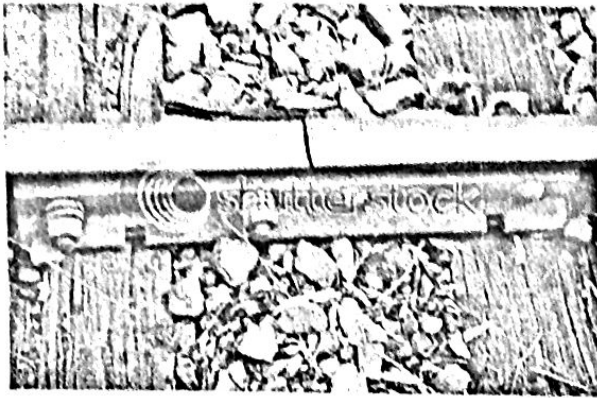
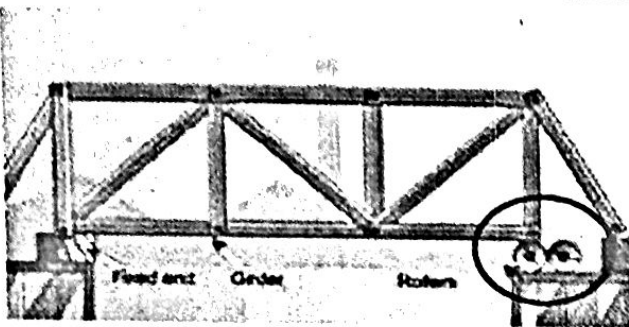


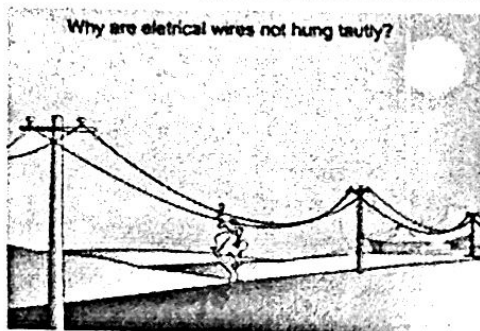
Form 1 Science – Unit 7.4 : Application of Expansion & Contraction of Matter



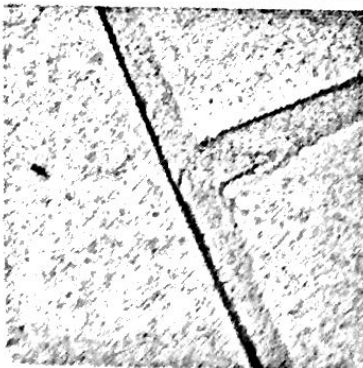
- a) The heat from the SUN may cause the metallic railway tracks to EXPAND.
- b) A continuous track without any Joints will be distorted due to expansion. Trains travelling on it may get derailed.
- c) Thus, it is necessary to make small CUTS/BREAKS in the tracks to allow expansion to occur.



- a) ROADS and BRIDGES are built with gaps too.
- b) They are made such as that one end is fixed and the other is mounted on ROLLERS.
- c) A GAP is left at the roller end of the bridge.
- d) This prevents the bridge from being damaged when it EXPANDS or CONTRACTS.



- a) TELEPHONE LINES and POWER LINES are hung loosely to make allowance for CONTRACTION.
- b) This prevents the wires and cables to SNAP/BREAK when they contract on a COLD day.



- a) Tiled walls and FLOORS are usually laid with GROUT.
- b) This prevents the tiles and concrete slabs from MOVING or BREAKING due to expansion on a hot day.