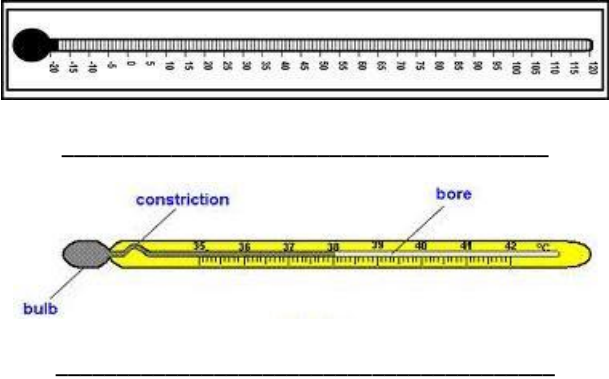
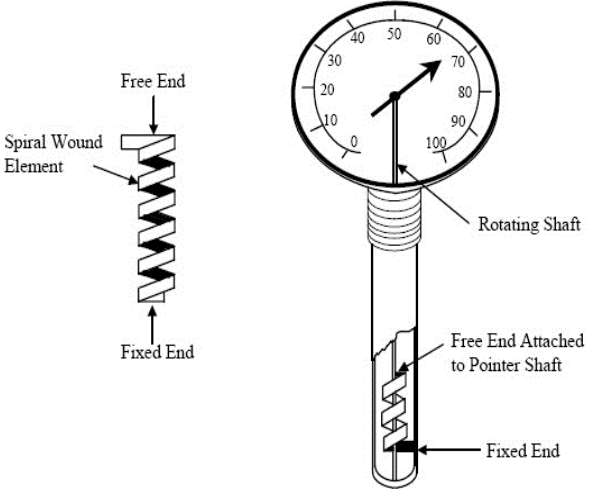
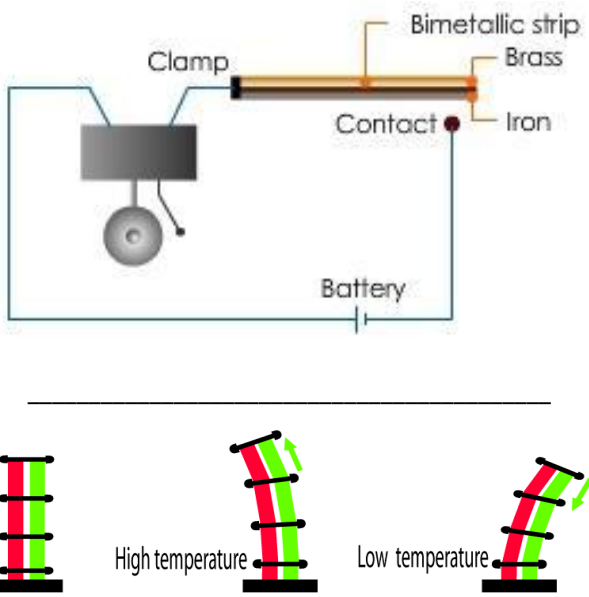


Form 1 Science – Unit 7.4 : Application of Expansion & Contraction of Matter

USING THE PRINCIPLE OF EXPANSION & CONTRACTION IN APPLIANCES

 <p>_____</p> <p>_____</p>	<p>a) It works based on the _____ and _____ of the liquid mercury.</p> <p>b) The _____ in the thermometer responds quickly to _____ changes by expanding & contracting uniformly.</p>
 <p>_____</p>	<p>a) Within it, there is a _____ made of _____ (outer part) and _____ (inner part).</p> <p>b) Heat from hot objects causes _____ to expand more than _____ and the coil turns and moves the _____.</p> <p>c) This type of thermometer is used in _____ and _____.</p>
 <p>_____</p>	<p>a) _____ inside the fire alarm _____ and _____ to open and close the circuit.</p> <p>b) It is made of two metals attached together, _____ and _____</p> <p>c) When the strip is heated, _____ expands more than _____ and the strip curls.</p> <p>d) The strip will curl in opposite direction when it _____ as _____ contracts more than _____</p>

a) _____ is a device that can control the _____ of an electrical equipment by turning it on or off.

b) It consists of a _____ similar to the one used in fire alarm.

a) Metal tyre is slightly _____ than the wheel frame.

b) The tyre is heated so that it _____ and then is fitted onto the wheel frame and left to _____. On cooling, the tyre _____ to its original size and now firmly attached to the wheel.

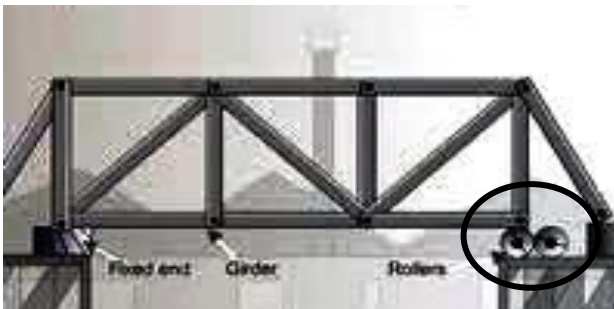
a) Metal _____ are used to bind two _____ sheets together. They are heated strongly first before being placed into the _____ in the metal sheets.

b) While the rivet is still _____, the thin end is hit with a _____

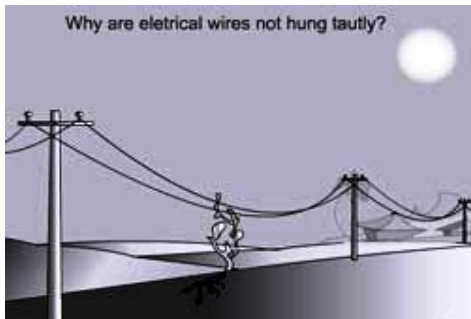
c) Upon cooling, the rivet contracts and pulls the two metal sheets tightly together.



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



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



- a) _____ and _____ are hung loosely to make allowance for _____
- b) This prevents the wires and cables to _____ when they contract on a _____ day



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