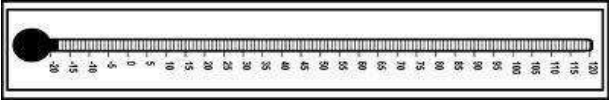
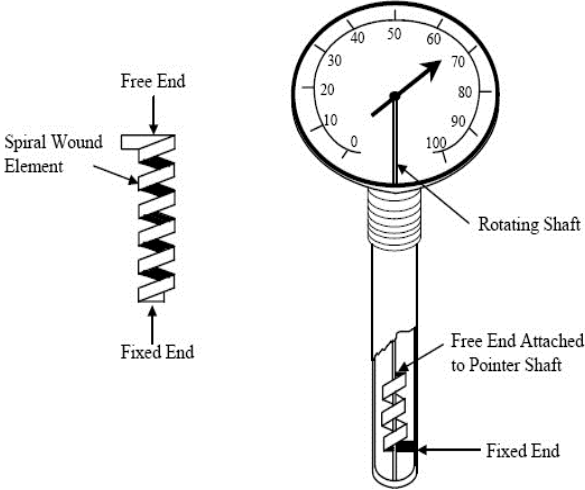
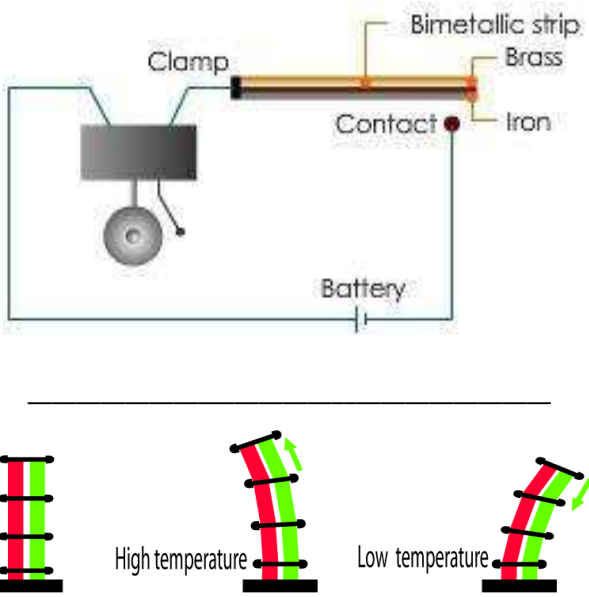
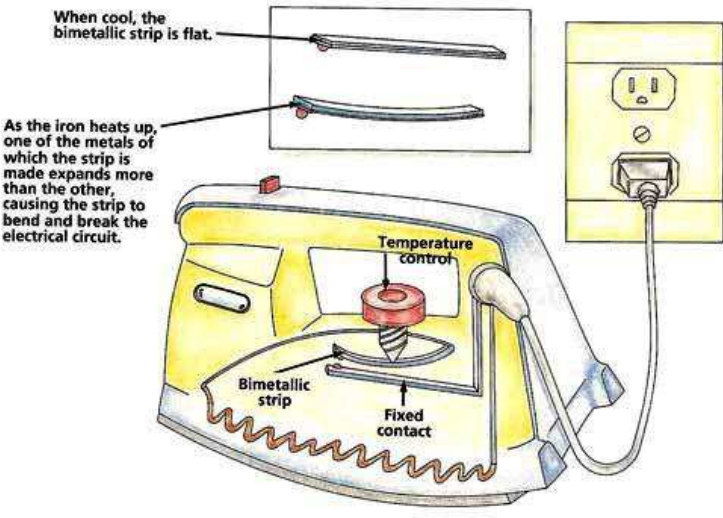

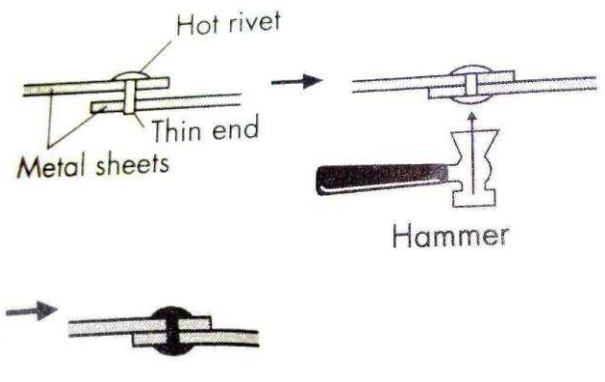


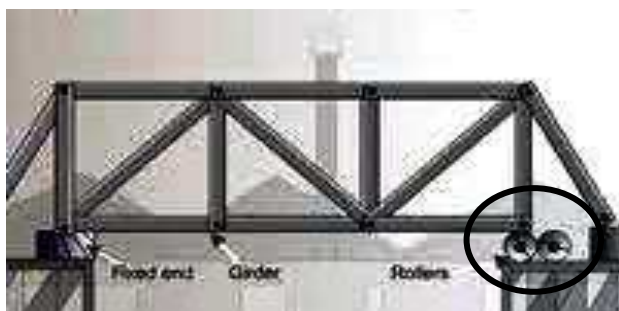
## USING THE PRINCIPLE OF EXPANSION & CONTRACTION IN APPLIANCES

 <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 &amp; 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>

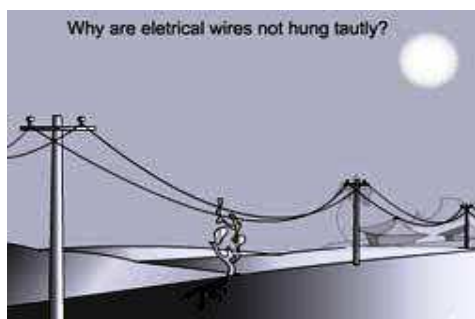
 <p>When cool, the bimetallic strip is flat.</p> <p>As the iron heats up, one of the metals of which the strip is made expands more than the other, causing the strip to bend and break the electrical circuit.</p> <p>Temperature control</p> <p>Bimetallic strip</p> <p>Fixed contact</p>	<p>a) _____ is a device that can control the _____ of an electrical equipment by turning it on or off.</p> <p>b) It consists of a _____ similar to the one used in fire alarm.</p>
	<p>a) Metal tyre is slightly _____ than the wheel frame.</p> <p>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.</p>
	<p>a) Metal _____ are used to bind two _____ sheets together. They are heated strongly first before being placed into the _____ in the metal sheets.</p> <p>b) While the rivet is still _____, the thin end is hit with a _____</p> <p>c) Upon cooling, the rivet contracts and pulls the two metal sheets tightly together.</p>



- 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.