

Expansion of metals Teacher/Technician notes

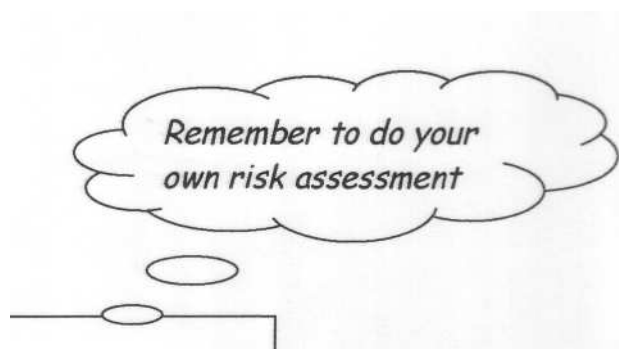
Resources

2 x Comboplates® 2 wooden
pegs
1 expansion meter 1 pin
1 x microburner
Laminated worksheet (1 per student)
Goggles
Stop watch/timer

Metal rods –
Brass
Aluminium
Copper
Iron

Optional glass rod

Chemicals - supplied in dropper bottles: Fuel for microburner
(Flammable)



The aim of this practical is to demonstrate the expansion of metals.

Objectives

Students work safely.

Students work independently.

Students work accurately and neatly.

Students can see that different metals expand at different rates.

Students develop the idea of fair tests - need to have same thickness & length of rod, same heat over the same time period etc.

Other comments

Students should be made aware of the need to keep the microburner upright to prevent fuel spillage. The microburner can be kept in another **Comboplate**® or a stand can be made from an old measuring cylinder base.