

19: Burning Food

Food is a source of energy - as this experiment shows in a dramatic way!

What you will need

glass funnel
long clean piece of rubber tubing
disinfectant
2 Bunsen burners
2 clamp stands
heat proof mats
spatula
newspapers

a variety of powdered food substances
(e.g. custard powder, hot chocolate, flour, etc.)
do not use spices or other substances likely
to cause an allergic reaction

safety screens
eye protection



eye protection
must be worn



fine dust

What you do

1.  

Set up the equipment as shown in the diagram. Put heat proof mats underneath it.

2. The experiment makes a lot of mess so cover the surrounding benches with newspaper before you start.

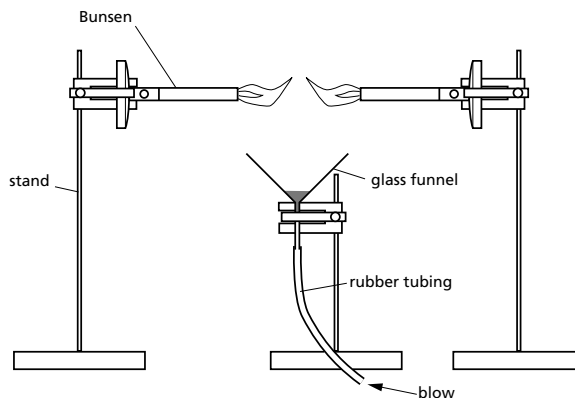
3. Work with a safety screen between you and the Bunsen burners and another screen on the other side to protect other people.

4. Light your Bunsen.

5. Put a spatula measure of powder in the funnel and blow. Do not use more powder or the flame will be dangerously large. Mixtures of substances are allowed provided the total does not exceed one spatula measure. Always dip the end of the tube you have blown in, into disinfectant between different blowers.

6. Make a note of the colour of the flame.

7. Your teacher may demonstrate the flame colours obtained from a selection of metal salts.



OTHER THINGS TO INVESTIGATE

Does each metal produce a different colour?

Did you get any of the same colour flames with the food you tested?

Do the foods you tested have metals in them? (You can check the packet.)