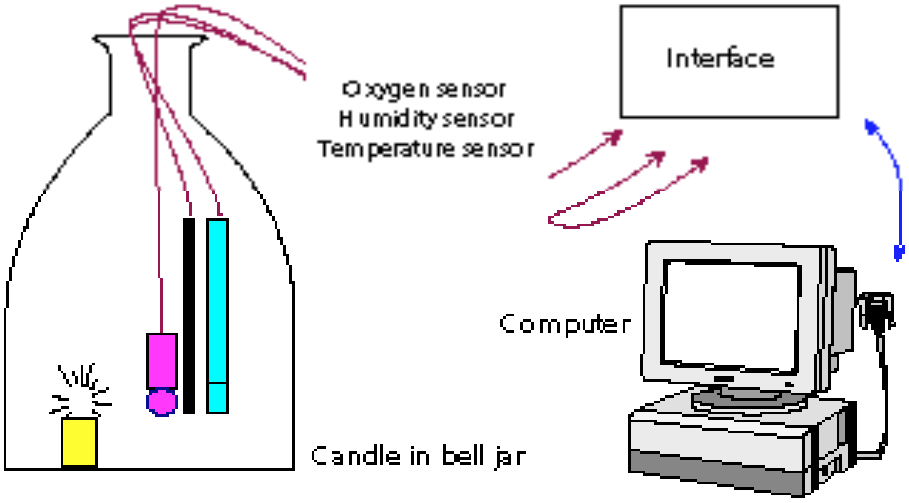
# Burning a candle




As a candle burns oxygen is used and heat and water are produced. A few sensors can be used to monitor this process - including a light sensor to indicate when the candle is extinguished.

## Apparatus

Candle, bell jar, matches, interface and sensors: temperature, light, oxygen and humidity sensors.

## Setting up

Set up the candle and sensors inside the bell jar and arrange them so that the probes will be well away from the candle flame.

Connect the sensors to the interface. Allow an oxygen sensor time to stabilise. Some systems recognise the sensors you attach automatically, in others you do this yourself.

## Recording the data

Record for 3 minutes. Light the candle, cover it with the bell jar. When the candle has extinguished, readmit air into the bell jar.

## Using the results

How does the graph show you the candle produces heat?

How does the graph show you the candle produces water?

How does the graph show you the candle produces light?

How does the graph show you the candle uses oxygen?

When is the oxygen level at its lowest?

Why does the oxygen level increase at the end?

Save your data and print the graph.