

Name:

Heating substances experiment

Safety: You must wear goggles during these experiments.
Use a Bunsen with a half-open air hole.

Experiment 1:

Heat a spatula full of blue copper sulphate crystals in a test tube. Write down what you observe happen. Look at the powder in the bottom of the tube and at the upper end of the tube as well.

Wait a few minutes for the tube to cool. Add a 1 or 2 drops of water (add them carefully from a wash bottle). What do you observe?

Are these chemical or physical changes?

Experiment 2:

Heat a spatula full of zinc oxide in a test tube. Write down what you observe. Leave the test tube to cool for a few minutes. Write down what you observe.

Is this a chemical change or a physical change?

Experiment 3:

Your teacher will show you the heating of copper (II) carbonate. They will also show you how to test the gas given off. Draw a diagram of the apparatus for this experiment.

What is the equation for the reaction of copper (II) carbonate?

Why do some bubbles appear in the limewater before the carbonate begins to react?

What happens if you leave the apparatus to cool with the delivery tube still immersed in the limewater?

Is this a chemical or a physical change?