

Name:

Burning metals

You are going to burn two different metals in the air. Fire can be dangerous! You must wear goggles and make sure that long hair is tied back. You should also check that loose clothing (sleeves and so on) are not going to dangle in any flames.

Experiment 1 - burning magnesium ribbon in air

Your teacher will demonstrate this experiment first and give you the appropriate safety precautions.

What do you see before you heat the magnesium ribbon?

What do you see after you have ignited the magnesium ribbon?

Experiment 2 - burning copper in air

Repeat experiment 1 using a strip of copper. You may have to heat it more vigorously than you did the magnesium.

What do you see before you heat the copper?

What do you see after you have heated the copper?

Experiment 3 - burning magnesium ribbon in oxygen

Your teacher will demonstrate burning magnesium ribbon in a gas jar of pure oxygen.

How does this reaction compare with the reaction between magnesium ribbon and air?

Name:

Use pages 132 and 133 of your text book to help you with these questions

1. What gas in the air do the metals react with when they are heated?
2. What is the general equation for the reaction of a metal with this gas?
3. What is the equation for the reaction of magnesium with this gas?
4. What is the equation for the reaction of copper with this gas?
5. Chemists say that different metals have different reactivities. Use your observations overleaf to say which of magnesium and copper is the more reactive metal.