Representing Chemical Reactions

It takes much less time to write about chemical reactions using word equations than in proper sentences.

You are going to use some cards to write word equations for some chemical reactions.

Equipment

- scissors
- glue stick

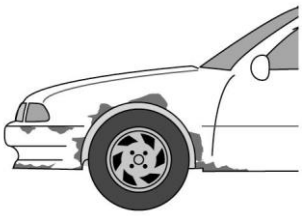
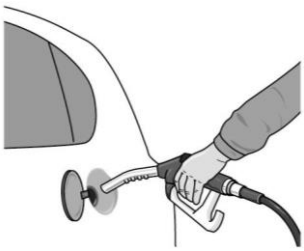
Writing word equations

1 Read the reaction cards. Each card gives you some information about a chemical reaction.

2 Use the equation cards to make equations for each reaction. For each reaction, the reaction card does not tell you all the names of the substances in the equation – you need to work some of them out yourself!

3 Cut out and stick the equations and reaction cards into your book.

Reaction cards

Magnesium is used in emergency flares for boats. The sailor lights the flare and the burning magnesium reacts quickly with oxygen in the air. The flare shoots into the air like a brilliant firework so rescue boats can see it 	Iron is used to make cars. It is covered with a layer of rust protection. If the layer is damaged, the iron starts to react and it forms red iron oxide, which we call rust. 	Sodium is a very reactive metal. An exciting reaction happens when hot sodium is dropped into a jar of chlorine gas. A bright flash happens and a white solid is left behind. 	Hydrogen is a 'fuel of the future' for cars. One way of making hydrogen is to split up water (hydrogen oxide) using electricity. This is expensive because of the cost of the electricity. 

Equation cards

+	+	+	+
→	→	→	→
magnesium	sodium	iron	oxygen
sodium chloride	water	magnesium oxide	chlorine
oxygen	iron oxide	hydrogen	oxygen