

# Elements, Compounds and Mixtures: Combustion

Year 6

WC 8<sup>th</sup> October 2012

Week 6

# Combustion

**WALT: Define combustion and explain what is produced when things burn**

- I must define the word “combustion”
- I should be able to state the products of combustion
- I could explain a practical to show the products of combustion

# Last lesson we learnt....

- That when magnesium is heated in air .....
- That the mass of ..... is less than the mass of .....

# For combustion to take place we need:

- Heat
- Fuel
- Oxygen

1. Why can fire blankets put out a fire?
2. Why does blowing on a fire when you are out camping help it light?

# FUEL

- Fuels are made of hydrocarbons
- What elements are present in a hydrocarbon?
  - Hydrogen
  - Carbon
- Ethanol, candle wax and methane gas are all hydrocarbons

# Last week you burned a candle

1. What was produced?
  - Carbon dioxide
2. Today you will burn another candle and demonstrate that another product is also produced when a candle is burned. Can you guess what it is?

Hydrocarbon + oxygen >>>>> carbon dioxide + ?

Hydrocarbon + oxygen  $\Rightarrow$  carbon dioxide and water

# Prep

1. Stick in the handout sheet and explain the experiment (see below slide)
2. Do Exercise 16.3 on page 220 – **Questions 1, 2 and 3a and 3b (NOT c) only**

# Plenary

- In pairs, number 1 explain the burning reaction

Number 2s explain how you would test for the things that are produced when a hydrocarbon burns.

# Follow these instructions

1. Place a lit candle in a gas jar
2. Place a beaker of cold water on top of the gas jar
3. Do you see any condensation?
4. Do the carbon dioxide test using a lit splint rather than limewater this time.
5. Write up what you observed
6. **WHEN YOU ARE FINISHED**, look at what is happening in the experiment on the sheet you have been given. **Describe the experiment and what it shows. State how you could test that the substance produced in the middle is water.**