

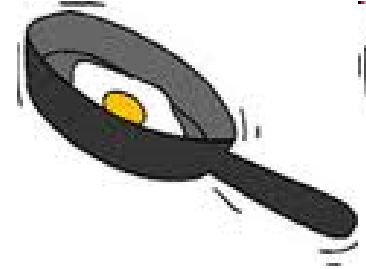
Chapter 1.1: Physical and Chemical Changes

+ Starter



- Choose a row, column or diagonal of 3 pictures
- Choose one of the 3 pictures and decide which is the odd one out, and give a reason for your choice.

Group these into two



Which of these is a chemical change?
Why?



Write your ideas in your books.

Title: Physical or Chemical?

LO: Work out the difference between a physical and a chemical change.

Homework:

Give three examples of physical and chemical changes in everyday life.

EXPLAIN why the changes are physical or chemical.

What's our definition of a physical change?

What's our definition of a chemical change?

What about an ice cube? Is this a physical or a chemical change?



If you burn Magnesium, do you think there will be a physical or a chemical change?



+ How do we know a chemical reaction has taken place?



If there is a chemical reaction one of the following will happen.

1. It will change colour.
2. The temperature will change.
3. It fizzes, meaning a gas is given off.
4. There might be a different smell.

Chemical Reactions



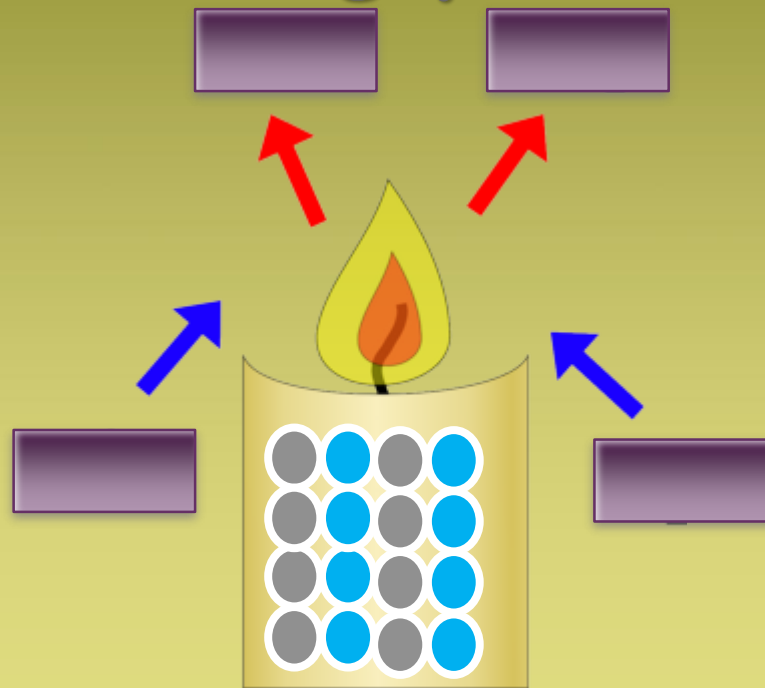
If you add two substances together sometimes you get a chemical reaction. This is when a new substance is made.

It is very difficult to reverse the reaction and get the original substances back.

Signs that a chemical reaction has taken place include a change in colour, heat being given off or bubbles of gas being made.

Burning a Candle

When a candle burns we have a physical and a chemical change taking place



Burning a Candle

What is the physical change?

What is the chemical change?

Burning a Candle

What happens if I had to cover the top of the candle?

What does this mean?

Burning a Candle

When a candle burns what gas is given off?

What does this mean?

Burning a Candle

Carbon + Oxygen



Carbon Dioxide

Hydrogen + Oxygen

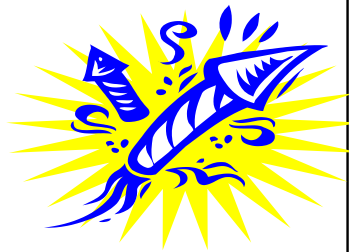


Water

Adding acid to alkali



Fireworks



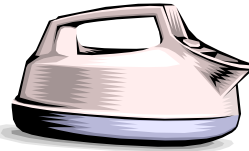
Driving a car



Ice cream melting



Boiling the kettle



frying an egg

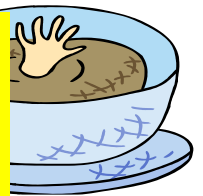


Burning a candle



The changes that are not chemical changes are called physical changes

car



Lighting a match



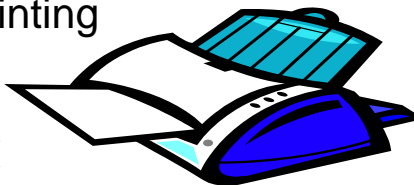
Making ice cubes



Ironing clothes



Printing



Baking a cake



Launching a space rocket

