

# Conservation of mass

Chemistry - Key Stage 3

Particles - Lesson 6

Miss Mason



# Recap

1. What causes the pressure in a gas?

***Pressure in a gas is caused by the particles colliding with the walls of their container.***

2. Compare the arrangement of particles in a liquid to the arrangement of particles in a gas.

***The particles in a liquid have a regular arrangement and are all touching. The particles in a gas also have a regular arrangement but the particles are far apart and only occasionally touch.***

3. Identify 3 factors that can affect pressure in a gas.

***Temperature, volume and area.***

4. Will diffusion happen more quickly through a thin membrane or a thick membrane?  
Why?

***Diffusion will happen more quickly through a thin membrane because there is less distance for the substances to travel/diffuse.***

5. Explain why solids can be described as having a high density.

***Because there are lots of particles within a given volume.***



**Describe the structure of this equation.**

***Make sure you use these words: reactants, products, arrow***

**Carbon + Oxygen → Carbon monoxide**

The reactants within this equation are...

The product within this equation is...

The arrow in this equation represents...



## Complete the missing values to show conservation of mass

1. Copper + Oxygen → Copper Oxide  
(14g)      (5g)      (???)
2. Lithium + Sulphuric acid → Lithium Sulphate + Hydrogen  
(35g)      (20g)      (???)      (15g)
3. Hydrochloric acid + Sodium Hydroxide → Sodium Chloride + Water  
(???)      (210g)      (75g)      (335g)



# Copy and complete the following...

Conservation of mass is...

When something is burnt, the gas **c**\_\_\_\_\_ **d**\_\_\_\_\_ is released.

If this gas is not captured in some way, it will...

This results in the final mass of the products being...

