# **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 c\_\_\_\_\_ with the walls of their c\_\_\_\_\_.

2. Compare the arrangement of particles in a liquid to the arrangement of particles in a gas. The particles in a liquid have a r\_\_\_\_\_ arrangement and are all t\_\_\_\_\_. The particles in a gas also have a r\_\_\_\_\_ arrangement but the particles are f\_\_\_\_ a\_\_\_\_ and only occasionally t\_\_\_\_\_.

3. Identify 3 factors that can affect pressure in a gas. *T\_\_\_\_\_, v\_\_\_\_\_ and a\_\_\_\_\_.* 

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

Diffusion will happen more quickly through a \_\_\_\_\_ membrane because there is less d\_\_\_\_\_ for the substances to travel/diffuse.

5. Explain why solids can be described as having a high density. Because there are lots of p\_\_\_\_\_ within a given v\_\_\_\_\_.



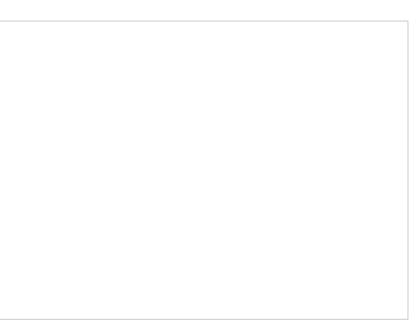
### **Describe the structure of this equation.** Make sure you use these words: reactants, products, arrow

## 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 (5g) (14g) (???)
- 2. Lithium + Sulphuric acid  $\rightarrow$  Lithium Sulphate + Hydrogen <u>(???</u>) (35g)(20g)
- 3. Hydrochloric acid + Sodium Hydroxide → Sodium Chloride + Water (210g)(<u>???</u>)

(15g)

### (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...

