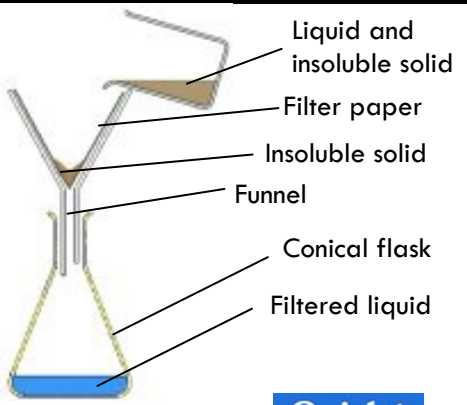
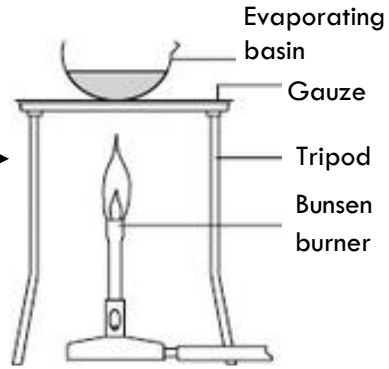
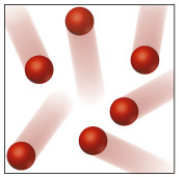
Year 7– Earth chemistry (part 1)

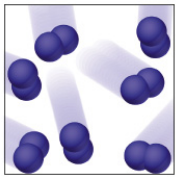
Element	A **substance made** of **one type** of **atom** only.
Compound	A substance formed when **two or more different elements are bonded** (stuck) **together.**
Mixture	Made from **different substances** that are **not bonded** (stuck) **together.**
Solubility	The **ability** of a **solute** to **dissolve** in a **solvent.**
Solvent	**A liquid substance capable of dissolving other substances.**
Solution	**A mixture of a solute dissolved in a solvent.**
Solute	**A substance that is dissolves in a solvent.**
Insoluble	**Unable to dissolve in a particular solvent. For example, sand is insoluble in water.**
Filtration	**The process used to separate insoluble solids from a liquid using a filter.** This method can be used to separate sand and water.
Boiling point	**The temperature at which a substance changes from a liquid to a gas.**
Boiling	**When there is liquid turning into gas in all parts of the liquid, creating bubbles of gas in the liquid.**
Evaporation	**When a liquid changes state to a gas.**
Heat to dryness	**Heating a solution until all the solvent has evaporated.**
Risks	**A danger linked to a scientific experiment.**
Acid	**Corrosive substance which has a pH lower than 7.**
Alkali	**A base which is soluble in water and has a pH higher than 7.**
Base	**A substance that reacts with an acid to neutralise it and produce a salt.**
Corrosive	**Able to damage metal, stonework, clothes and skin.** Strong acids and alkalis are corrosive.
Neutralise reaction	**A reaction where a substance is made neutral (pH 7) by removing any acidic or alkali nature.**
pH Indicator	**A substance that changes colour based on the pH of the solution,** for example universal indicator.

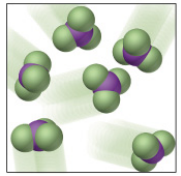


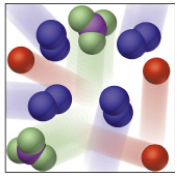
Quizlet



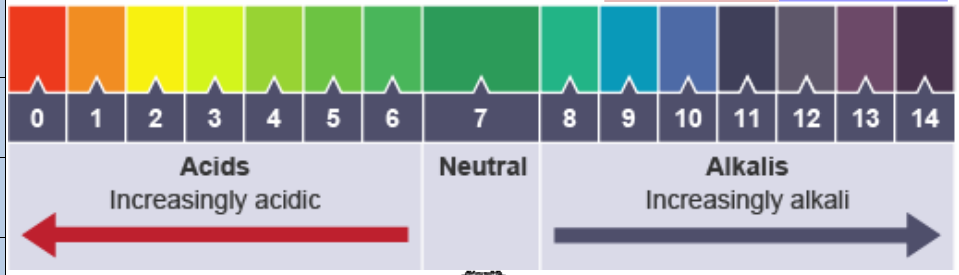

Atoms of an element


Molecules of an element


Molecules of a compound


Mixture of elements and a compound

Bitesize Bitesize



PRIDE THROUGH SUCCESS

What is a knowledge organiser?

A revision tool containing all the key information about a particular topic of science. The table section of the knowledge organiser houses key scientific terms or concepts each with a description or definition.

How can I use my knowledge organiser?

Each week you will be asked to use your knowledge organiser to create one of the following:

Flash cards

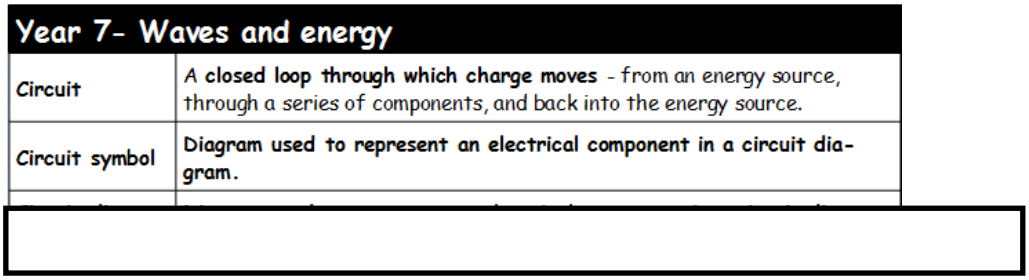
Cut out small squares of paper or card (approx. 7cmx7cm).

On one side write a keyword or concept and the definition/ description it on the reverse side. Repeat this for all the keywords on the knowledge organiser.

You can use these flash cards to quiz yourself or partner.

Self-quizzing

Memorise 2-3 rows of the table on the knowledge organiser.

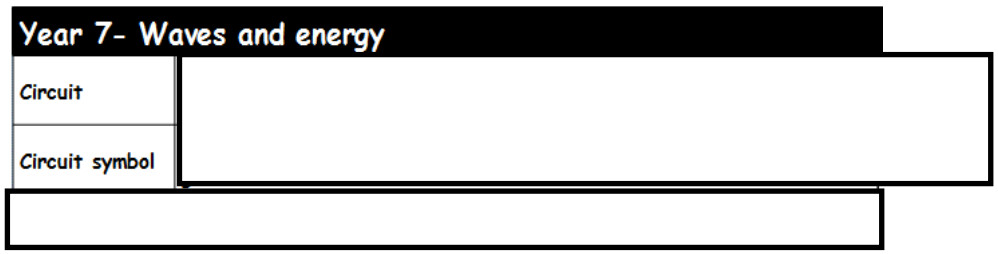


Year 7- Waves and energy	
Circuit	A **closed loop through which charge moves** - from an energy source, through a series of components, and back into the energy source.
Circuit symbol	**Diagram used to represent an electrical component in a circuit dia-gram.**

Cover the right column of the table and attempt to write the definition/ description down for the words you have memorised (bold words are mandatory).

Check every word in bold on the knowledge organiser is present and spelt correctly (making correction is green pen).

Repeat this process for the entire table on the knowledge organiser.



Year 7- Waves and energy	
Circuit	
Circuit symbol	

Concept map

Place the name of the topic in the centre a blank A3/A4 page.

Use arrows to link phrases, keywords, ideas and concepts for the topics from your own knowledge or from the knowledge organiser. Write words on the arrows that explain why you have made connections.

If you require any further information then do not hesitate to ask your science teacher.