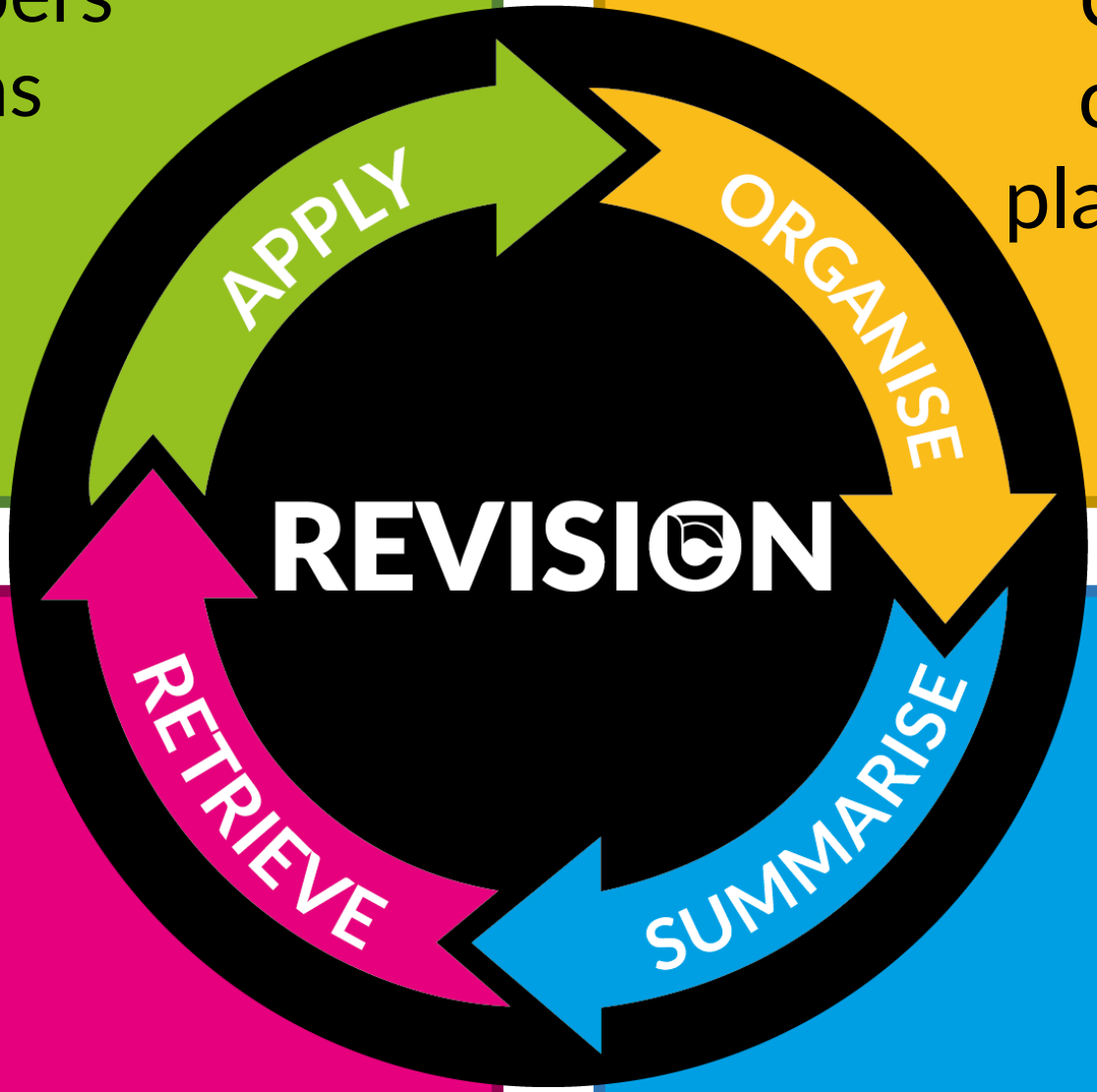

REVISION
STRATEGIES

Use past papers and questions to apply knowledge

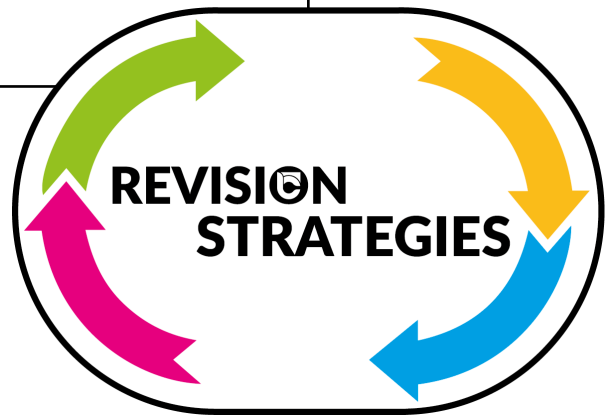
Use learning checklists to plan your time effectively

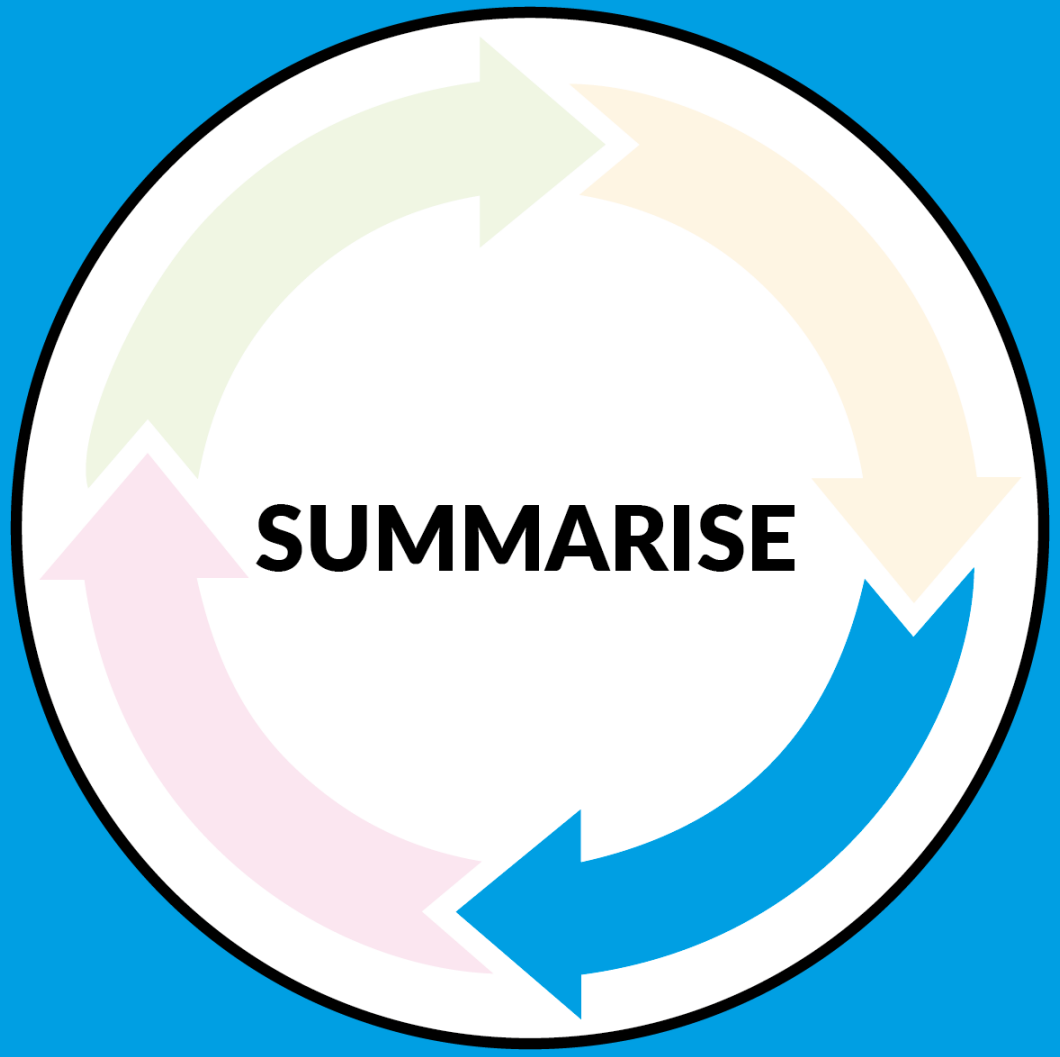


Active recall

Condense topics into notes

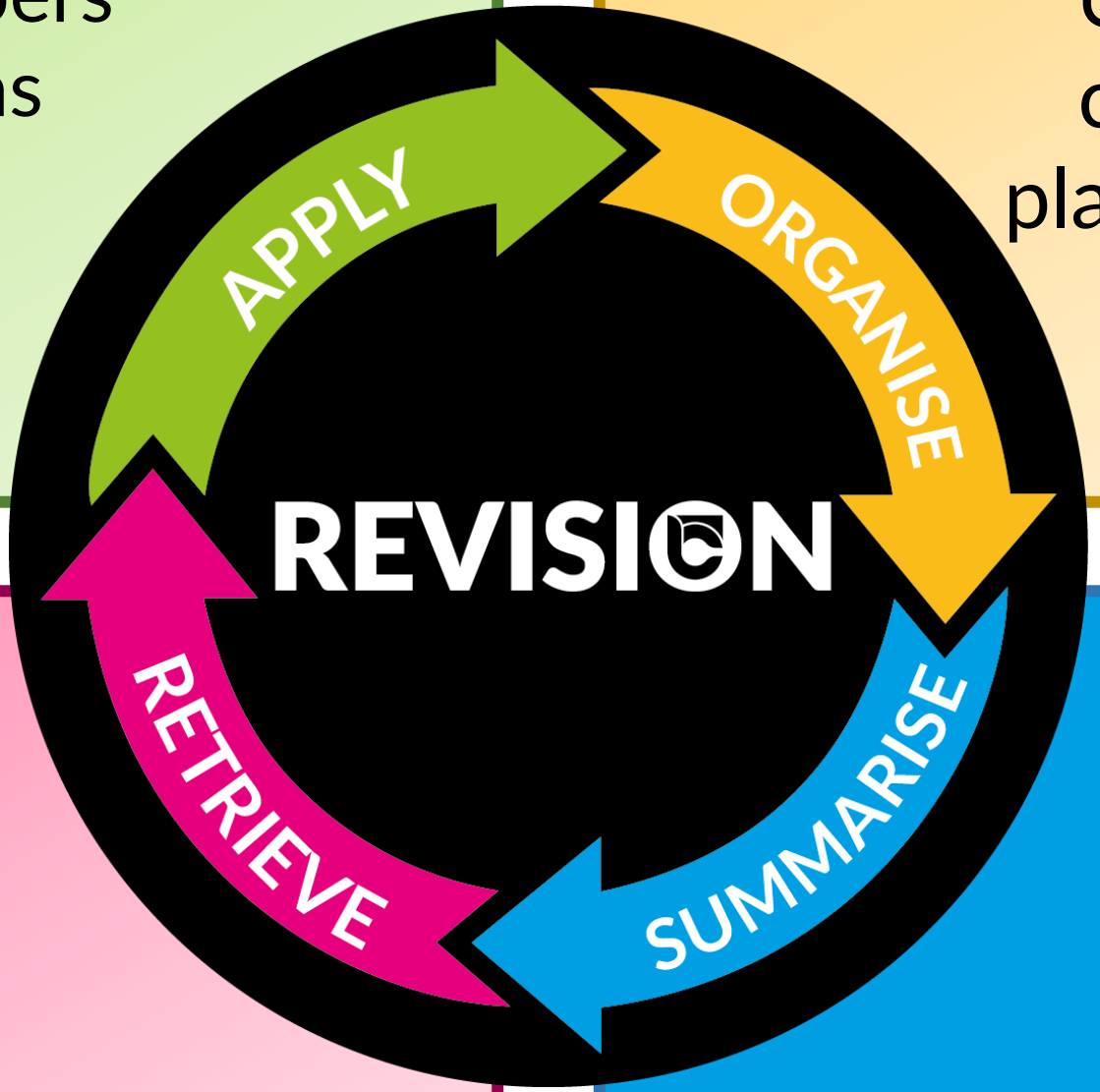
Organise	Summarise	Retrieve	Apply
How long do you revise for? Should you be using colour when revising? How often should you revise? How many topics do you revise in one session? How does learning happen?	Mind Mapping One Page Summaries Read and Highlighting Sequencing Flashcards Revision Clocks	Revision Clocks Flashcards Self- Quizzing Folding Frenzy A-Z keywords Brain dumps	Question bank




SUMMARISE

Use past papers and questions to apply knowledge

Use learning checklists to plan your time effectively



Active recall

Condense topics into notes

Mind Mapping

One page Summaries

Sequencing

Revision Clocks

Reading and Highlighting

Flashcards

Reading and Highlighting

SUMMARISE

Reading and Highlighting

How many of you think just reading your notes as a form of revision?

Reading and Highlighting

How many of you highlight key points?

Do you end up with most of the document highlighted?

If you answered yes to either question you are *passive* reading.

SUMMARISE

Active Reading - Summary

How?

- Read through the information from start to finish to build-up a big picture of the topic. Paying particular attention to the title and to any sub-titles, diagrams, tables and graphs. Do not highlight/underline.
- Read the information again and underline the key words and highlight important information. This should be no more than **three words per sentence** and in some cases there are no key words at all.
- After you have read and highlighted key points try the following techniques.

Prioritise – underline the three most important sentences. Rank 1-3.
Reduce – Reduce the key information into 12 words
Transform – Transform the information into four pictures or images
Categorise – Sort this information into different categories, use a different colour for each one
Extend – Write 3 questions on the information you have just read

Mind Mapping

One page Summaries

Sequencing

Revision Clocks

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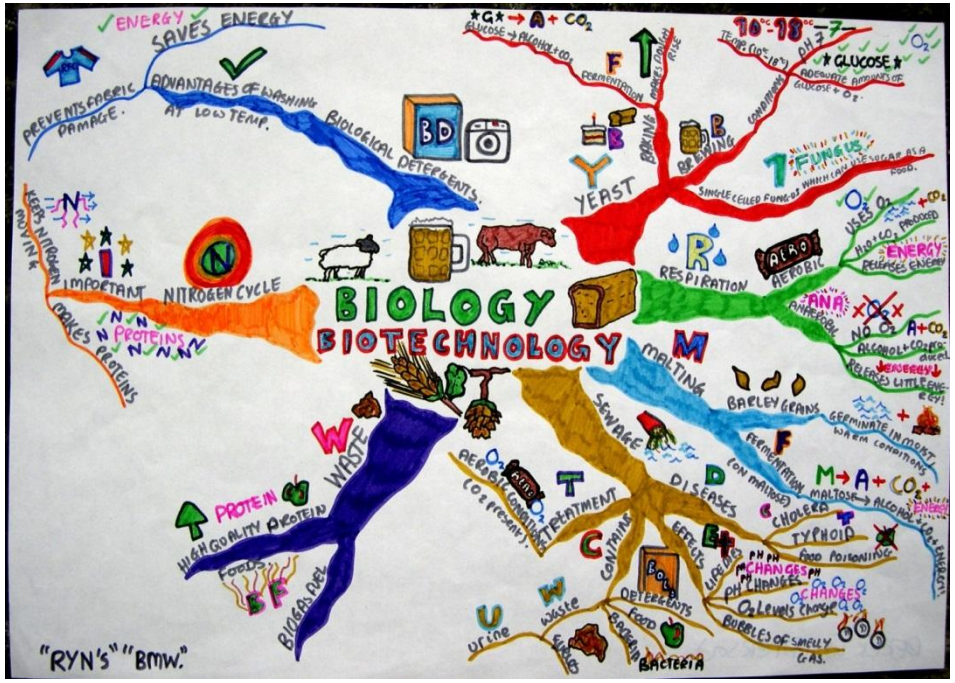
Flashcards

Mind Mapping

SUMMARISE

Mind Mapping

- A great way to get an overview of a topic
- Allows you to summarise your notes to understand the 'big ideas'

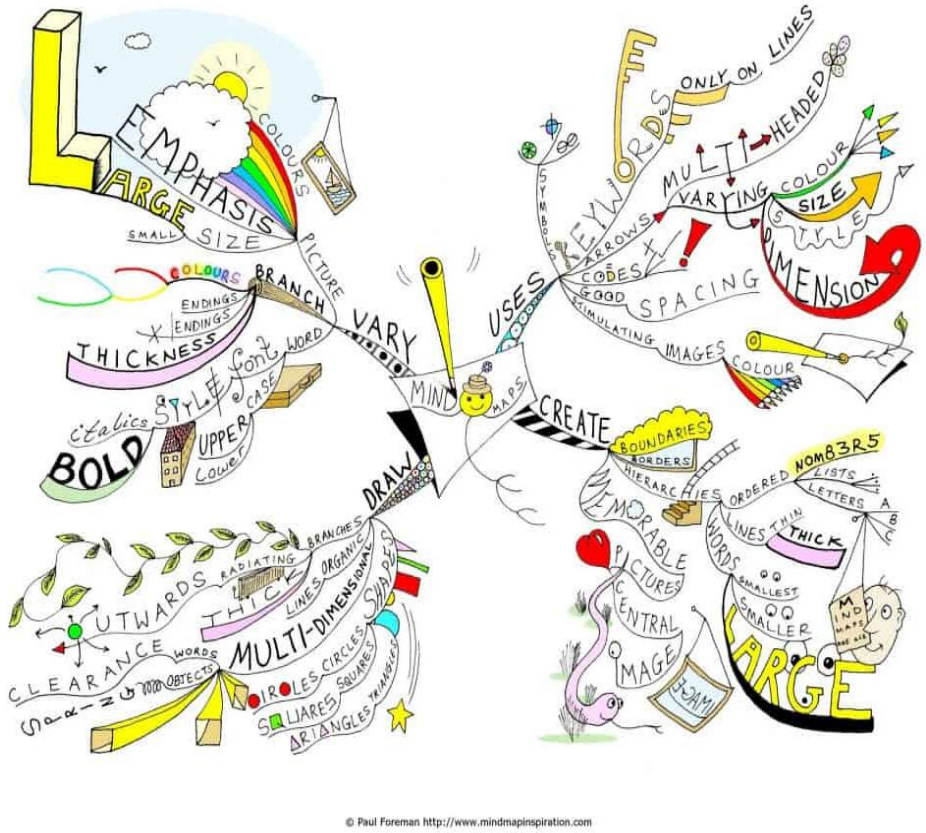


Mind Mapping - summary

SUMMARISE

How?

- Only ***plain paper*** in **'landscape'** This allows our eyes to skim read all the information quickly
- Begin with a **central image**, preferably using **three** colours.
- **Thick** branches are drawn from the centre. A **different colour** for each. Each thick branch can represent a main part of the topic.
- Branches **become thinner** as they reach the edges as finer details are added.
- **Single words** should be printed clearly along the length of the line (not at the end).
- ***Symbols, illustrations*** and so on, can be used to create memory associations.



Mind Mapping

One page Summaries

Sequencing

Revision Clocks

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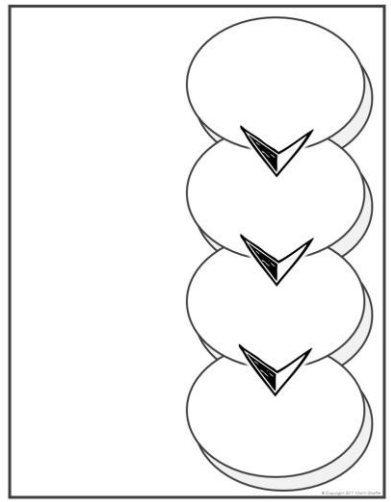
Sequencing

SUMMARISE

Sequencing

Why?

This summarising strategy will be useful if you need in a certain order, a sequence. For example, the order of a play or plot in English or a timeline to record key events in History. You might use this to remember a list of instructions in Science or Technology.



SUMMARISE

Sequencing - Timeline

Timelines can be used to summarise longer texts into key points that follow an order.

Evolution of the atmosphere

The early atmosphere

Scientists believe that the Earth was formed about 4.5 billion years ago. Its early atmosphere was probably **formed from the gases given out by volcanoes**. It is believed that there was intense volcanic activity for the first billion years of the Earth's existence.

The early atmosphere was probably mostly carbon dioxide, with little or no oxygen. There were smaller proportions of water vapour, ammonia and methane. As the Earth cooled down, most of the **water vapour** **condensed** and **formed the oceans**.

It is thought that the atmospheres of Mars and Venus today, which contain mostly carbon dioxide, are similar to the early atmosphere of the Earth.

Scientists can't be sure about the early atmosphere and can only draw evidence from other sources. For example, volcanoes release high quantities of carbon dioxide. Iron-based **compounds** are present in very old rocks that could only have formed if there was little or no oxygen at the time.

Changes in the atmosphere

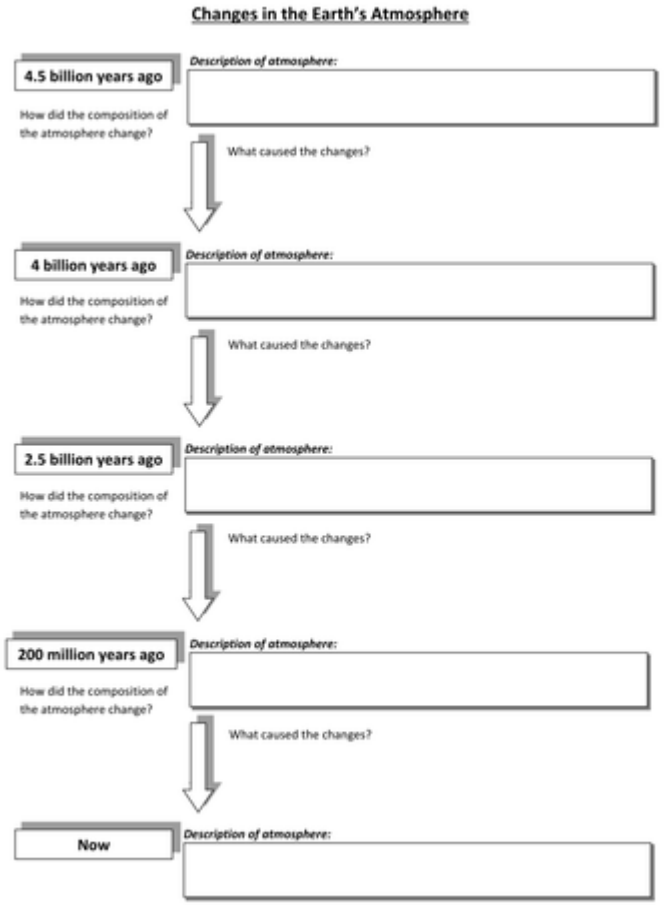
So how did the proportion of carbon dioxide in the atmosphere go down, and the proportion of oxygen go up?

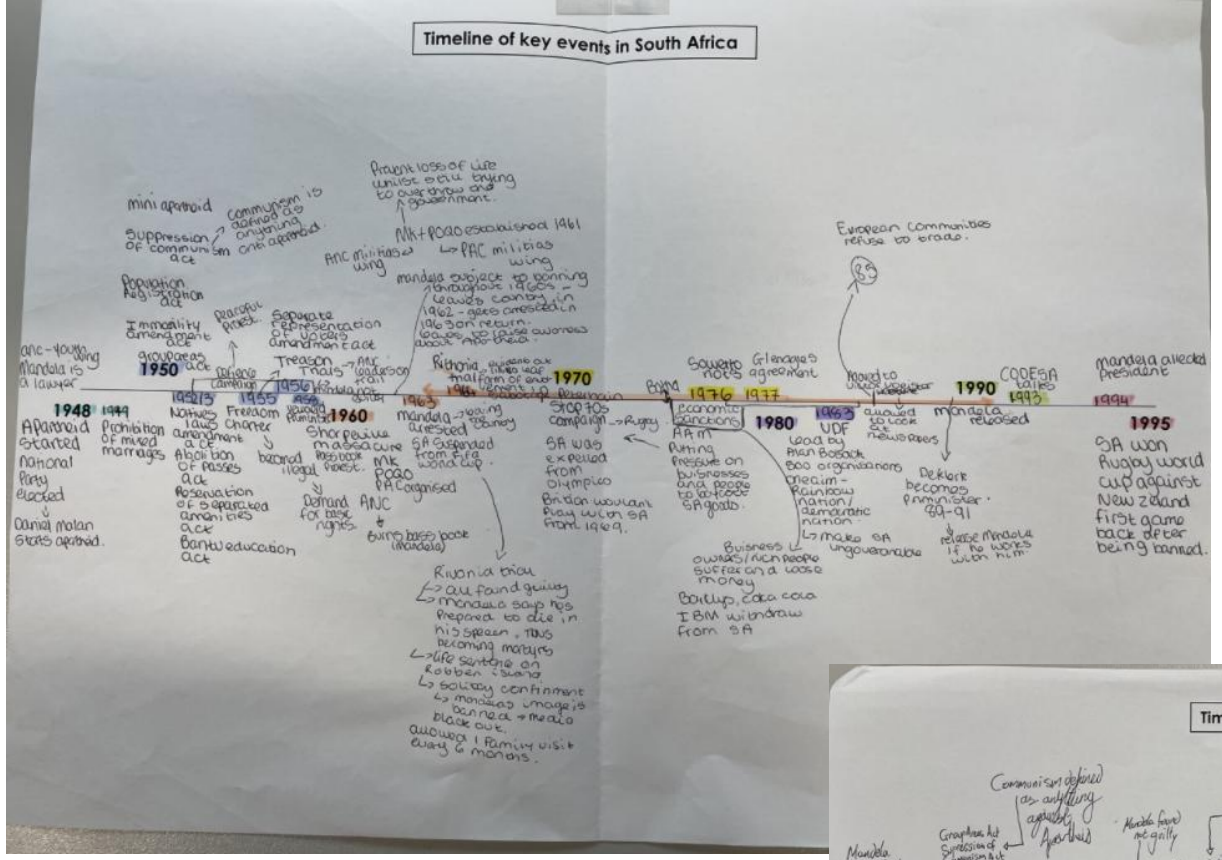
The proportion of oxygen went up because of **photosynthesis** by plants.

The proportion of carbon dioxide went down because:

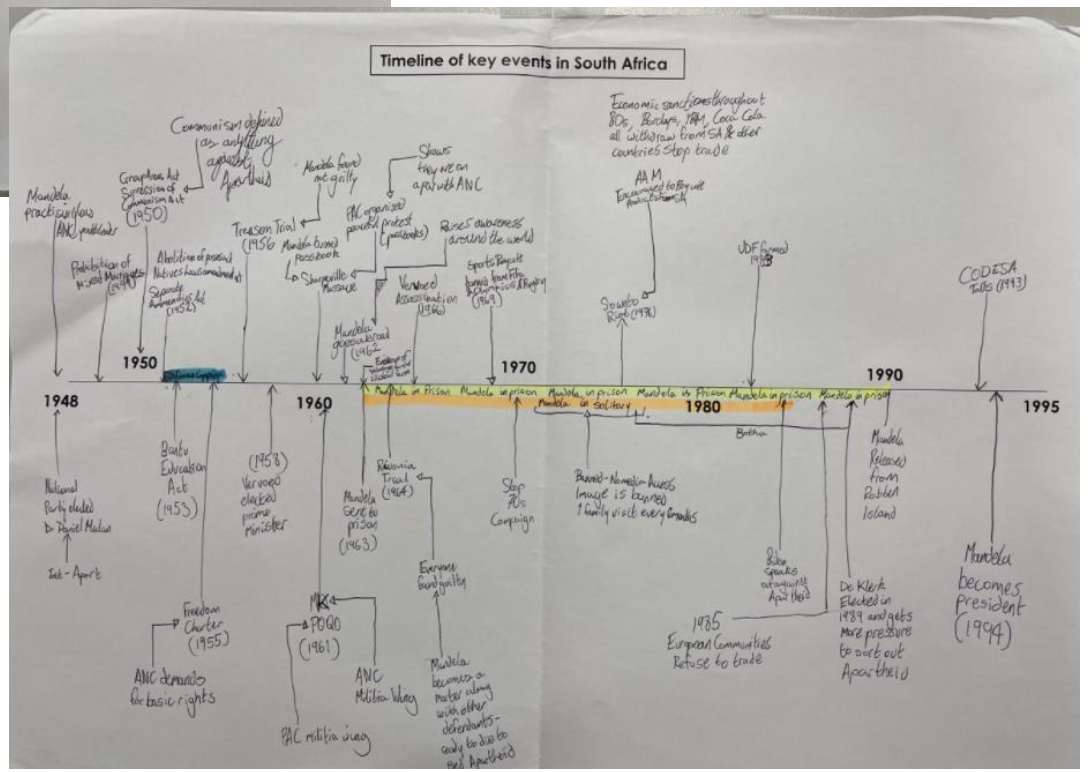
- it was locked up in **sedimentary rocks** (such as limestone) and in **fossil fuels**
- it was absorbed by plants for photosynthesis
- it dissolved in the oceans

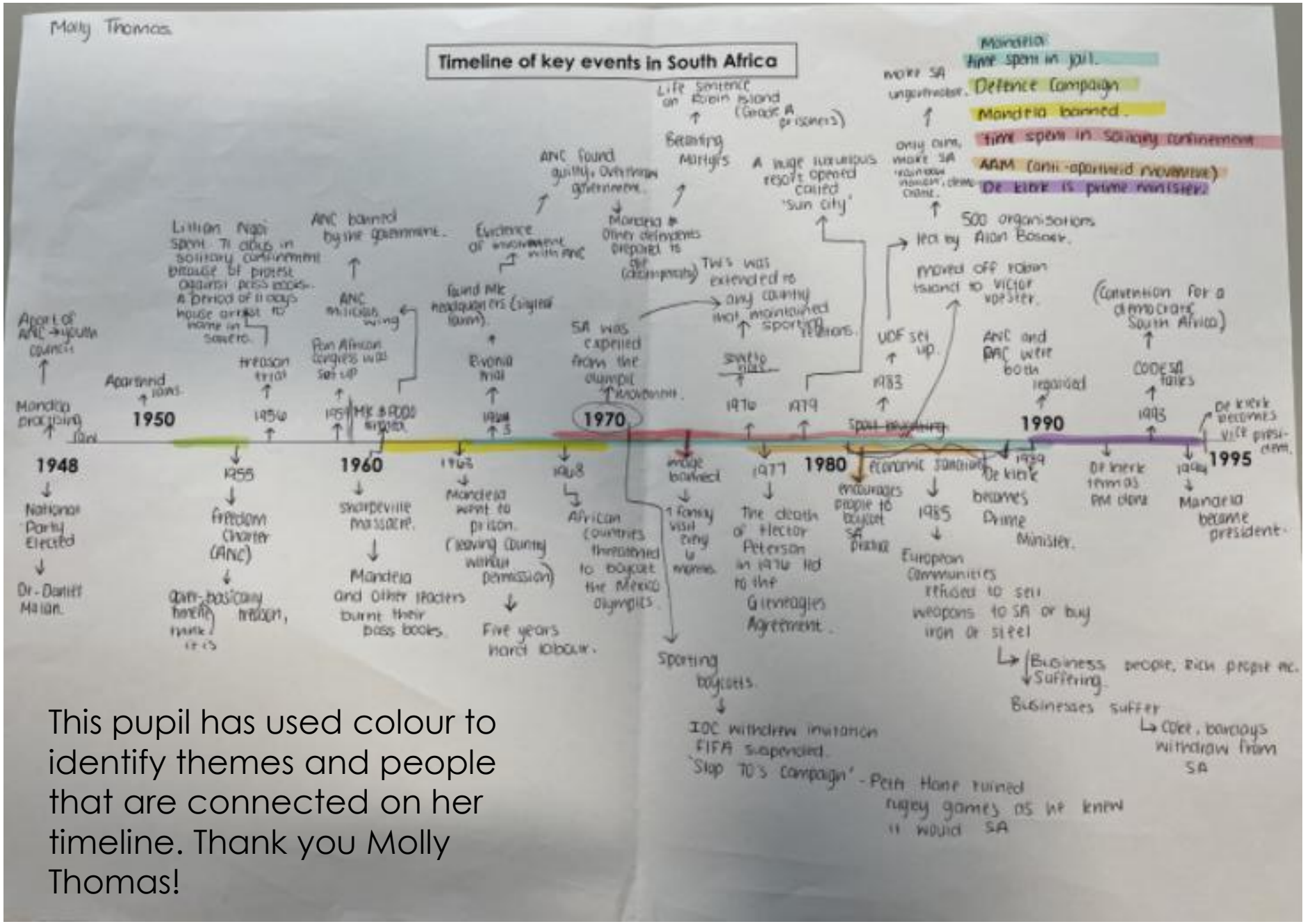
The burning of fossil fuels is adding carbon dioxide to the atmosphere faster than it can be removed. This means that the level of carbon dioxide in the atmosphere is increasing.





Use dates/ key events/ themes/ people to sequence information.

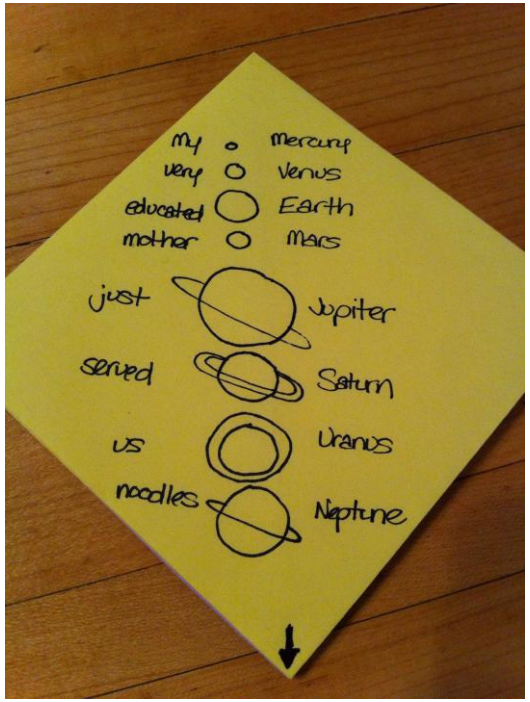




This pupil has used colour to identify themes and people that are connected on her timeline. Thank you Molly Thomas!

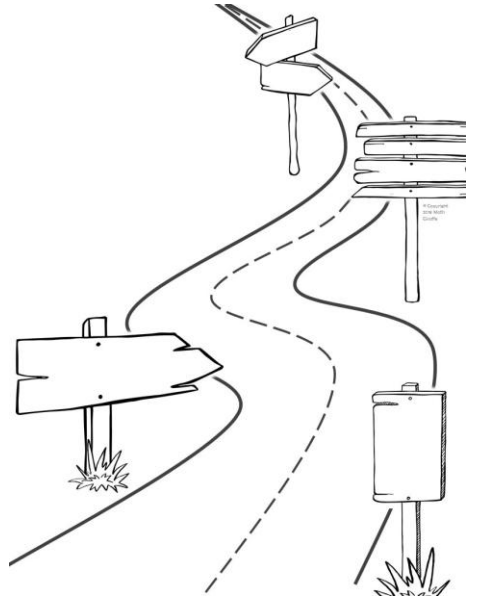
Sequencing – Mnemonics

A mnemonic is a system for learning a sequence of information.
It uses a rhyme or memorable words to remember a sequence of information.



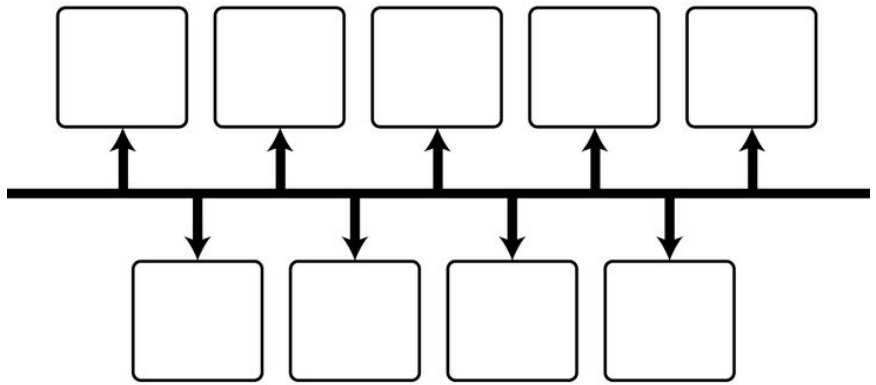
SUMMARISE

Sequencing - Summary



How?

- Start with a plain piece of paper.
- Choose how your sequence is going to look.
- Think about whether you want to use pictures and words (dual coding) and if you think it will help you remember the events/ plot/ themes/ instructions.
- Identify what the key pieces of information are that you are attempting to summarise and plot them in order.



Mind Mapping

One page Summaries

Sequencing

Revision Clocks

Reading and Highlighting

Flashcards

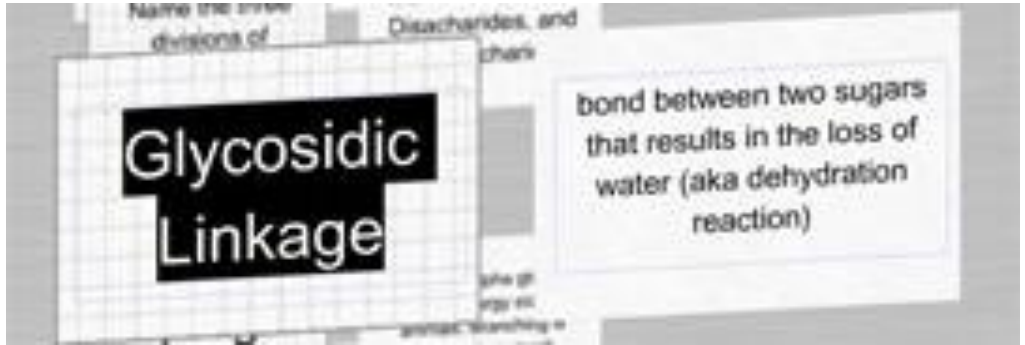
Flashcards

SUMMARISE

Flashcards

- A great way to revise with friends!
- Practise your key words and definitions and/or your summarising skills
- Look for the assessment statements that use the word **'Define'**
- Why not try making a set for all the key words and definitions you have learnt for one of the topics and then get someone to test you!

Find the definitions in your notes and make a set of cards!



SUMMARISE

Flashcards

•Revision cards don't need to be any bigger than this.
•You can use them to include the **key points** that you have to learn for a particular topic.
•You can use a particular **colour card** for topics that are related to one another. For example, if making revision cards for RS you might decide to use red when creating cards about relationships to match the colour of the booklet.
•You might include a **picture** that relates to the topic or a useful quotation.
•You might include **key words** or **key questions**.

•You can display your revision cards on your bedroom wall or stick them into a scrapbook or even display them in a photograph album!

SUMMARISE

The purpose of you having flashcards is to build a set of revision notes.

You will then be able to use the flashcards to test yourself and revisit topics and words you have learnt through the year.

SUMMARISE

Key words and definitions

Put the key word you want to learn on the front of your card.
On the back write the meaning and definition.

Question and the answer

If you are trying to learn a topic, write a question linked to the topic on the front and then write the answer on the back.

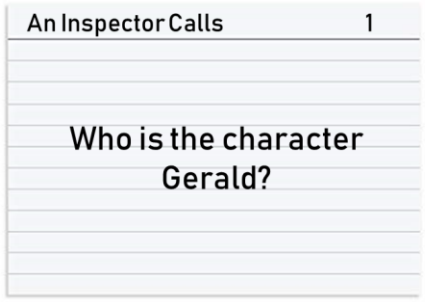
Practical example of using your cards

So once you have made you card:

- Look at it and study it.
- Cover it up.
- Write it out from memory. (I call it mind dumping)
- Look again
- Fill in any gaps.

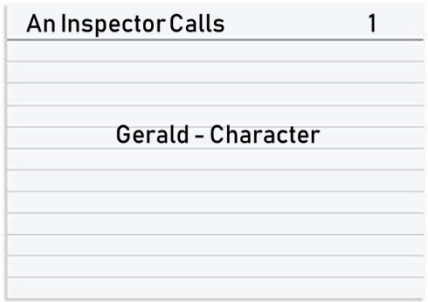
Perfect Revision Cards:

- ✓ Keep it simple.
- ✓ Clearly labelled and organised.
- ✓ No more than 6 bits of information on.
- ✓ They should have diagrams and drawings to help.



Front

Back



Front

Back

Mind Mapping

One page Summaries

Sequencing

Revision Clocks

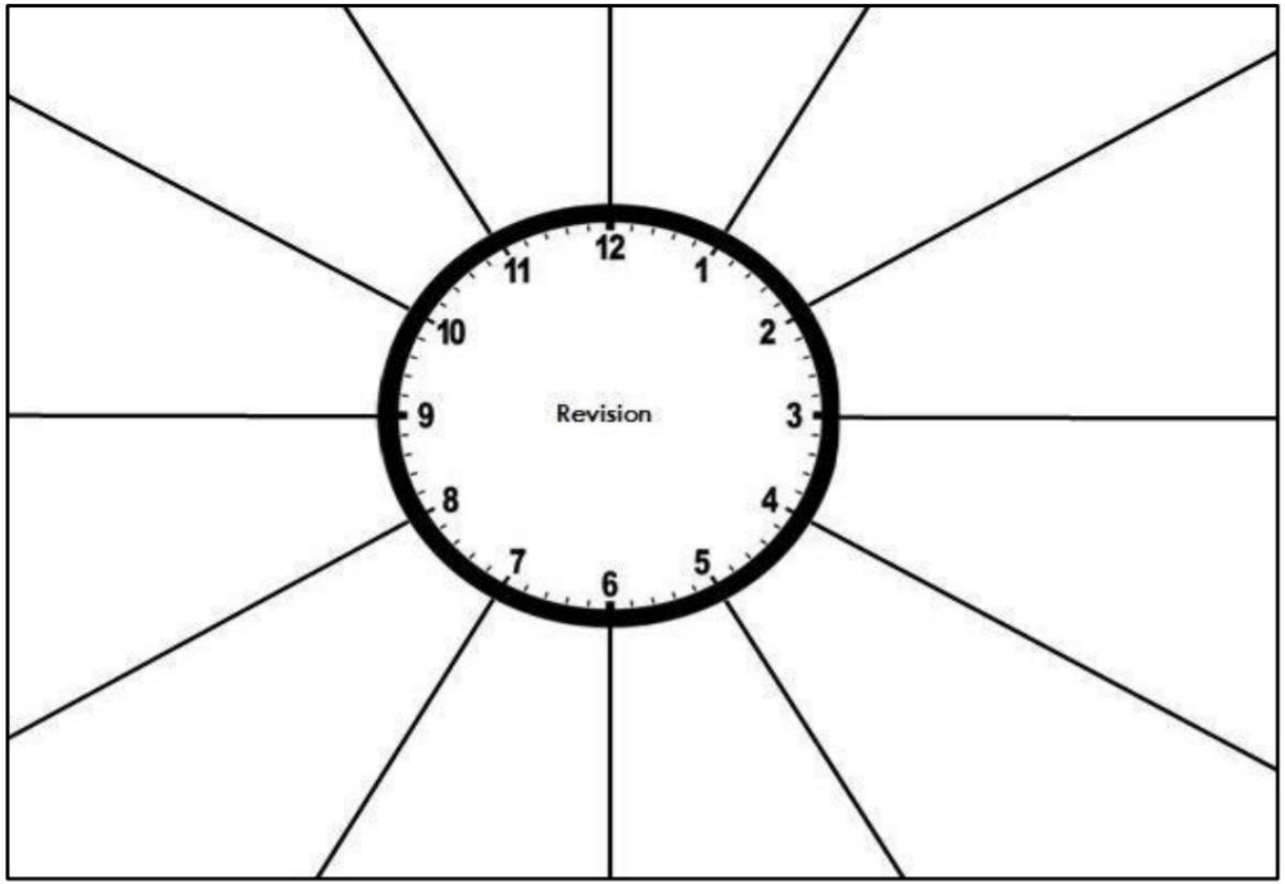
Reading and Highlighting

Flashcards

Revision Clocks

SUMMARISE

Revision Clocks



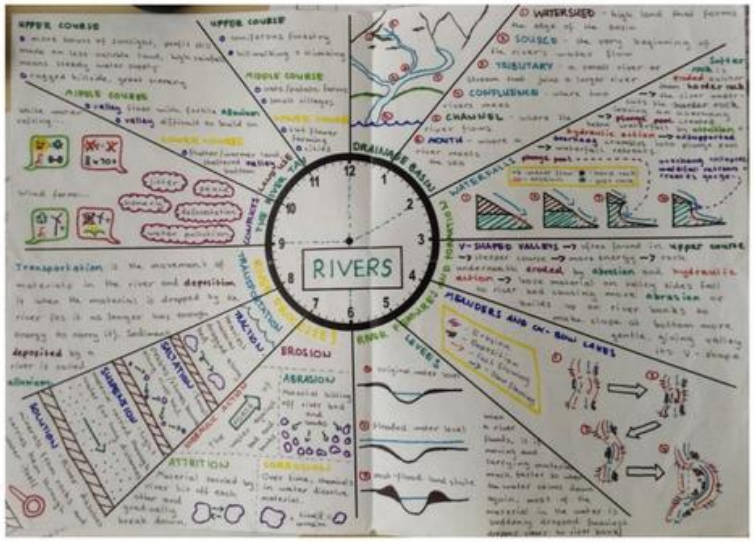
Revision clocks are a great way of summarising a topic onto one page.

As the name suggests you start with a central 'clock' – you can then separate your page into 12 different sections.

Each section becomes one part of the topic. You have to summarise the information to fit into a small area.

SUMMARISE

Revision Clocks – Why?



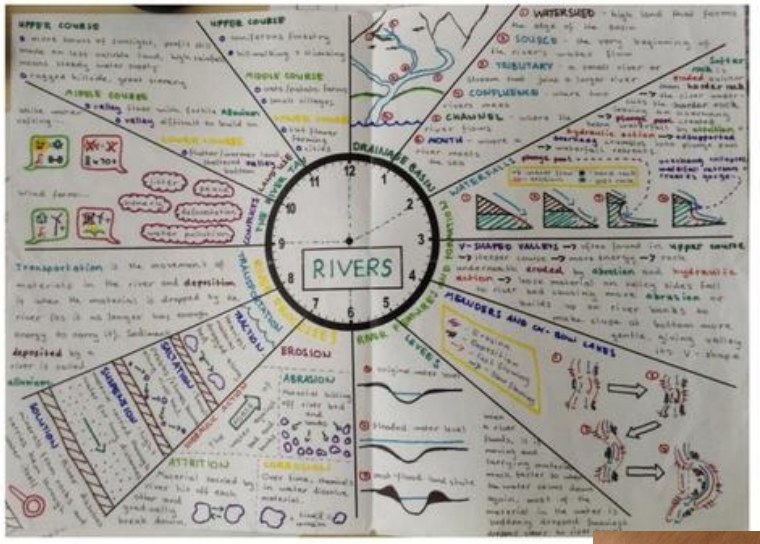
Dual Coding

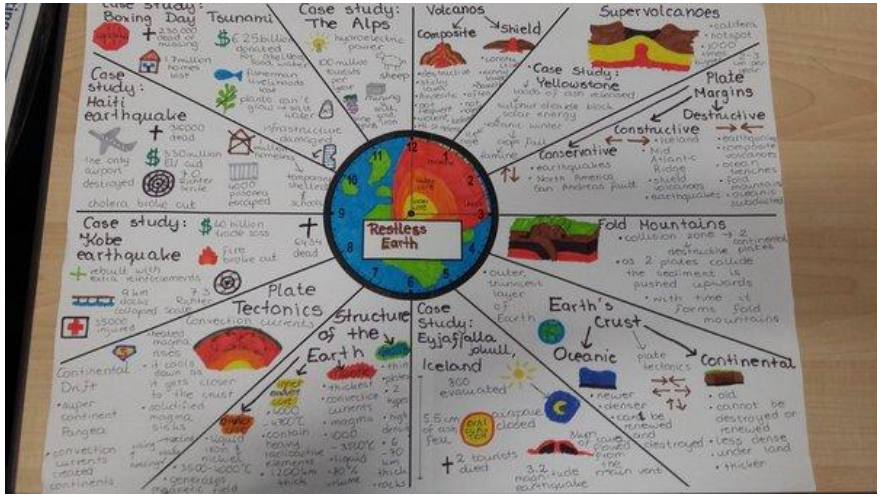
Revision clocks can be used as an example of **Dual coding.**

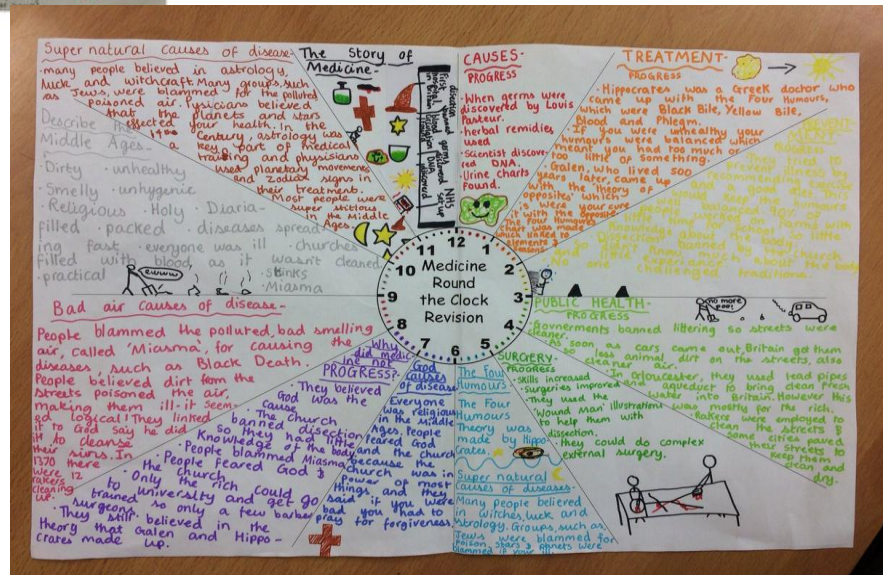
Using colour and words engages both sides of the brain. This strengthen the memory pathways in the brain. It makes the information more memorable.

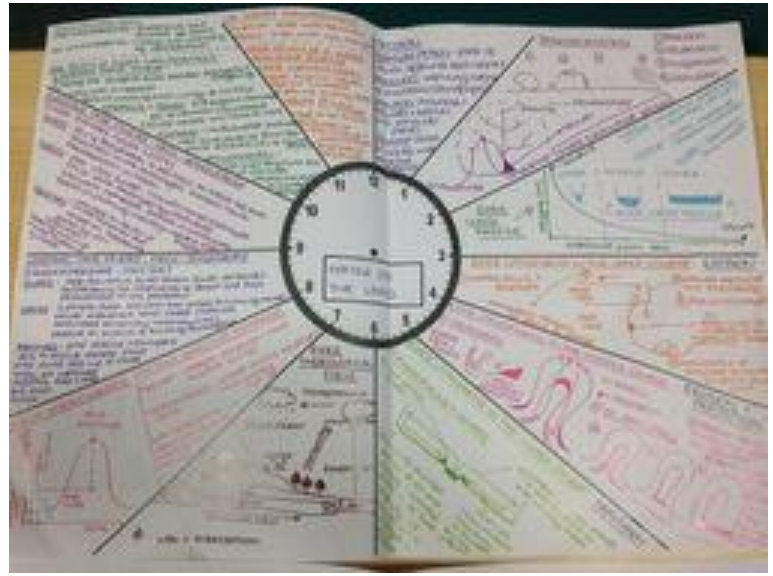
SUMMARISE

Revision Clocks









https://www.youtube.com/watch?v=j5ofs1jQsiE

Watch from 2:05 → 5:35

Mind Mapping

One page Summaries

Sequencing

Revision Clocks

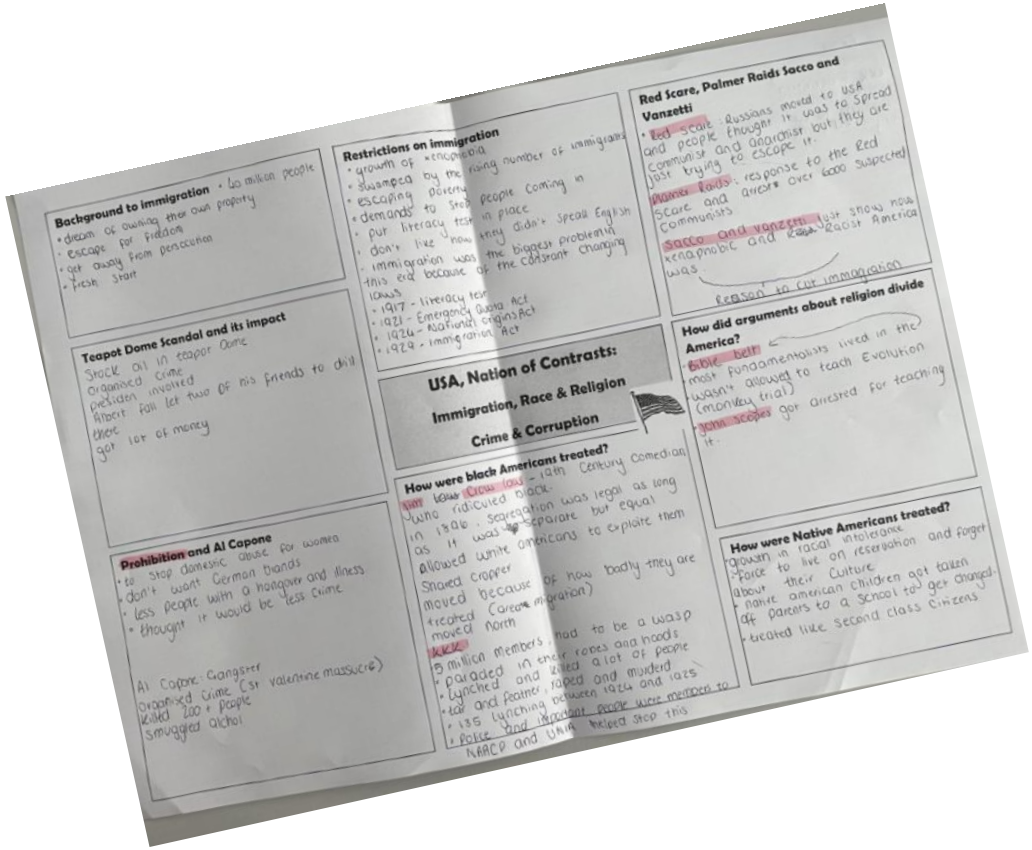
Reading and Highlighting

Flashcards

One page Summaries

SUMMARISE

One Page Summaries



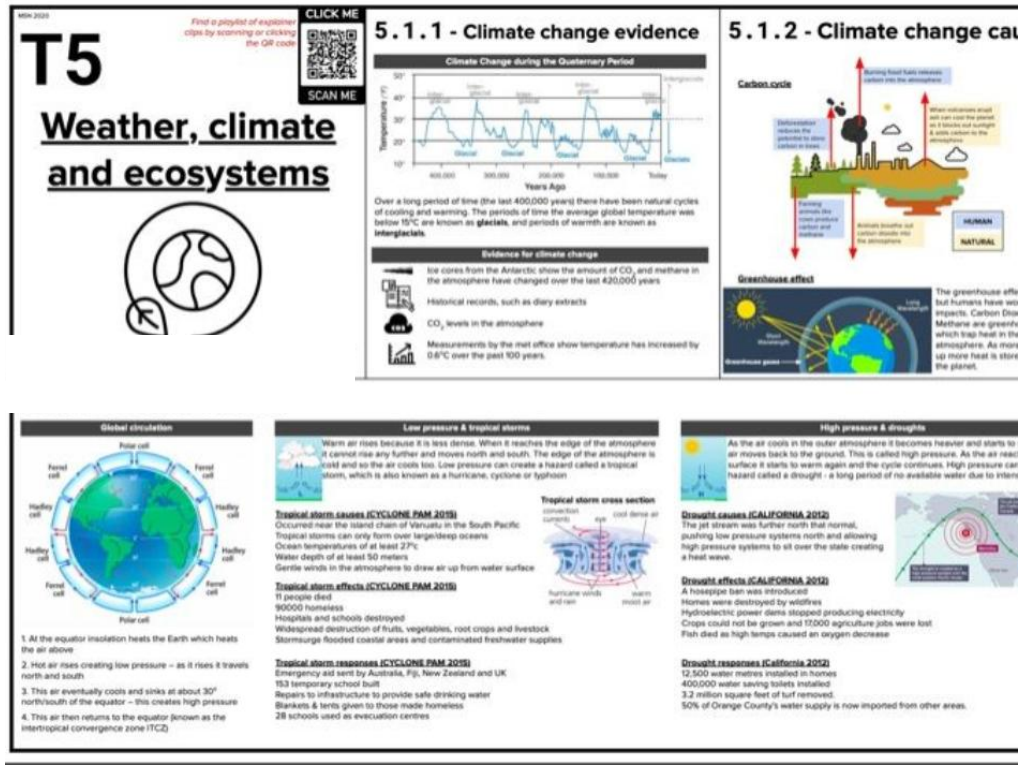
The purpose of a one page summary is to take a lot of information and condense it down to one page.

A one page summary will help you remember information and make revision more manageable. One page is easier than lots of lots of notes!

One page summaries can be made using pictures, key words, infographics and general information linked to a topic/ concept.

SUMMARISE

One Page Summaries – how?

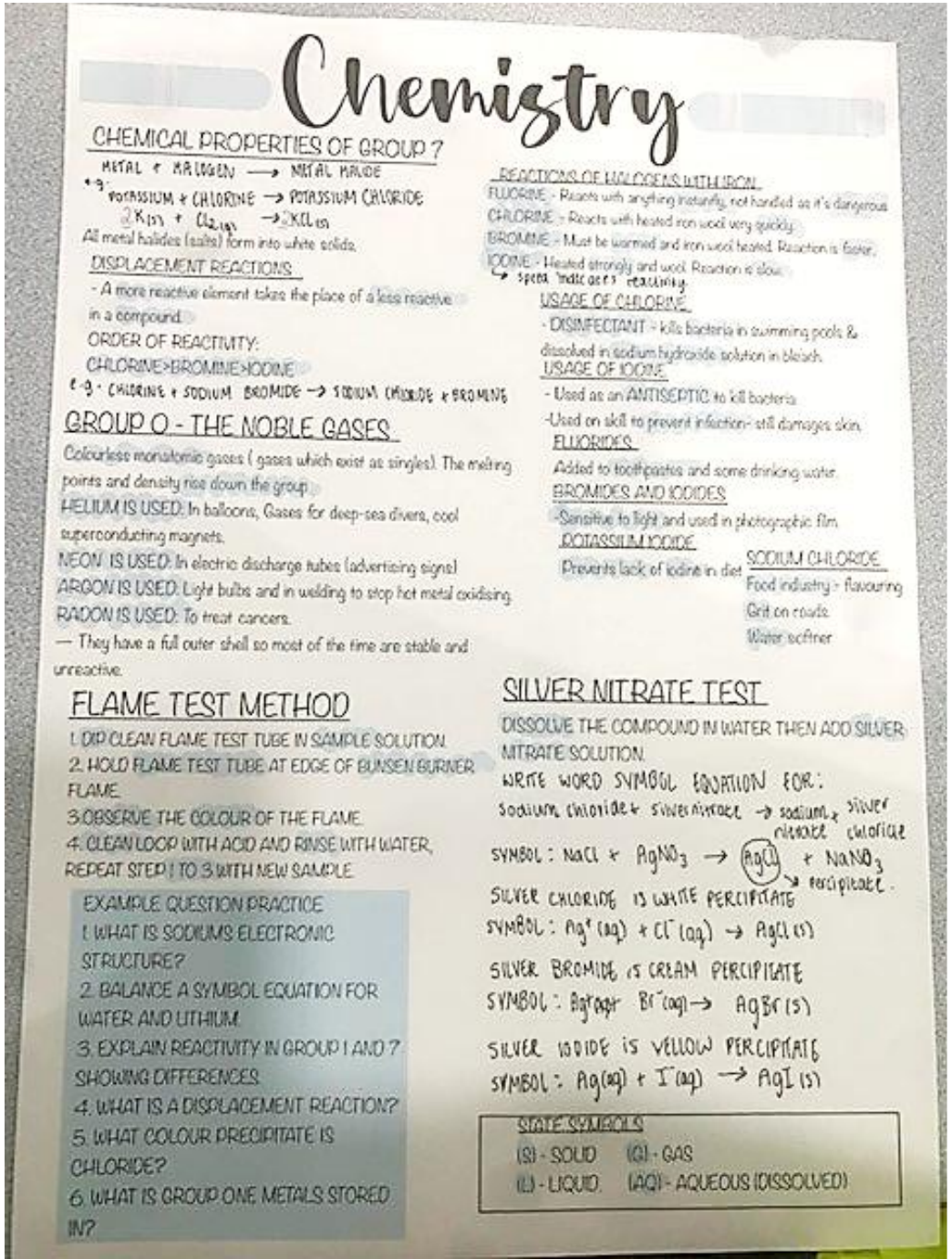


Use exam specifications and class notes to break a topic into areas under headings.

Aim to summarise key information/ facts/ concepts.

The summary could contain any of the following:

- Concise information
- A series of diagrams
- Key words and definitions
- Subtitles
- Simple images and text (dual coding)



Chemistry

CHEMICAL PROPERTIES OF GROUP 7

METAL + HALOGEN → METAL HALIDE

e.g. POTASSIUM + CHLORINE → POTASSIUM CHLORIDE

$2K_{(s)} + Cl_{2(g)} \rightarrow 2KCl_{(s)}$

All metal halides (salts) form into white solids.

DISPLACEMENT REACTIONS

- A more reactive element takes the place of a less reactive in a compound.

ORDER OF REACTIVITY:

CHLORINE>BROMINE>IODINE

e.g. CHLORINE + SODIUM BROMIDE → SODIUM CHLORIDE + BROMINE

GROUP 0 - THE NOBLE GASES

Colourless monatomic gases (gases which exist as singles). The melting points and density rise down the group.

HELIUM IS USED: In balloons, Gases for deep-sea divers, cool superconducting magnets.

NEON IS USED: In electric discharge tubes (advertising signs)

ARGON IS USED: Light bulbs and in welding to stop hot metal oxidising.

RADON IS USED: To treat cancers.

— They have a full outer shell so most of the time are stable and unreactive.

REACTIONS OF HALOGENS WITH IRON

FLUORINE - Reacts with anything instantly, not handled as it's dangerous

CHLORINE - Reacts with heated iron wool very quickly.

BROMINE - Must be warmed and iron wool heated. Reaction is faster.

IODINE - Heated strongly and wool. Reaction is slow.

→ speed indicates reactivity

USAGE OF CHLORINE

- DISINFECTANT - kills bacteria in swimming pools & dissolved in sodium hydroxide solution in bleach.

USAGE OF IODINE

- Used as an ANTISEPTIC to kill bacteria

-Used on skin to prevent infection- still damages skin.

FLUORIDES

Added to toothpastes and some drinking water.

BROMIDES AND IODIDES

Sensitive to light and used in photographic film.

POTASSIUM IODIDE

Prevents lack of iodine in diet

SODIUM CHLORIDE

Food industry - flavouring

Grit on roads

Water softner

FLAME TEST METHOD

1. DIP CLEAN FLAME TEST TUBE IN SAMPLE SOLUTION.
2. HOLD FLAME TEST TUBE AT EDGE OF BUNSEN BURNER FLAME.
3. OBSERVE THE COLOUR OF THE FLAME.
4. CLEAN LOOP WITH ACID AND RINSE WITH WATER, REPEAT STEP 1 TO 3 WITH NEW SAMPLE.

EXAMPLE QUESTION PRACTICE

1. WHAT IS SODIUMS ELECTRONIC STRUCTURE?
2. BALANCE A SYMBOL EQUATION FOR WATER AND LITHIUM
3. EXPLAIN REACTIVITY IN GROUP 1 AND 7 SHOWING DIFFERENCES
4. WHAT IS A DISPLACEMENT REACTION?
5. WHAT COLOUR PRECIPITATE IS CHLORIDE?
6. WHAT IS GROUP ONE METALS STORED IN?

SILVER NITRATE TEST

DISSOLVE THE COMPOUND IN WATER THEN ADD SILVER NITRATE SOLUTION.

WRITE WORD SYMBOL EQUATION FOR:

Sodium chloride + silver nitrate → sodium nitrate + silver chloride

SYMBOL: $NaCl + AgNO_3 \rightarrow AgCl + NaNO_3$ (AgCl → precipitate)

SILVER CHLORIDE IS WHITE PERCIPITATE

SYMBOL: $Ag^+(aq) + Cl^-(aq) \rightarrow AgCl(s)$

SILVER BROMIDE IS CREAM PERCIPITATE

SYMBOL: $Ag^+(aq) + Br^-(aq) \rightarrow AgBr(s)$

SILVER IODIDE IS YELLOW PERCIPITATE

SYMBOL: $Ag(aq) + I^-(aq) \rightarrow AgI(s)$

STATE SYMBOLS

(S) - SOLID (G) - GAS

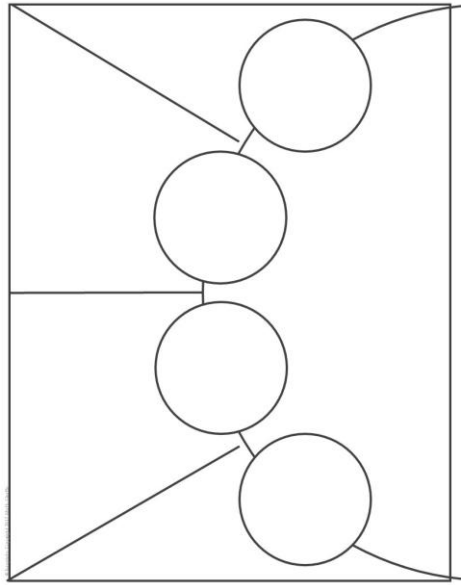
(L) - LIQUID (AQ) - AQUEOUS (DISSOLVED)

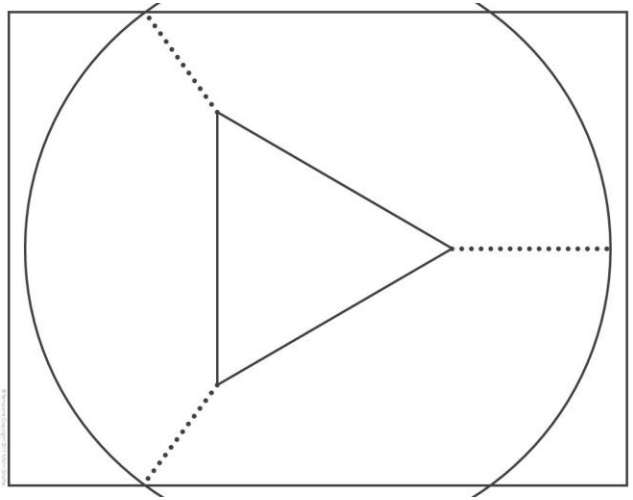
This one page summary is from a year 10 pupil. She types part of her notes on her iPad and then hand writes some additional parts.

SUMMARISE

One Page Summaries

Think about how you want your one page summary to look.
Below are some ideas:





Have a look at this StudyTuber's suggestions and tips to create an effective summary page:

https://www.youtube.com/watch?v=7A5HqEs1z-Q

Background to immigration

Restrictions on immigration

Red Scare, Palmer Raids Sacco and Vanzetti

Teapot Dome Scandal and its impact

USA, Nation of Contrasts:

Immigration, Race & Religion

Crime & Corruption

How did arguments about religion divide America?

How were black Americans treated?

Prohibition and Al Capone

How were Native Americans treated?

Some departments have made them for you using the specifications. How could you use this example to create your own?

SUMMARISE

Chunking

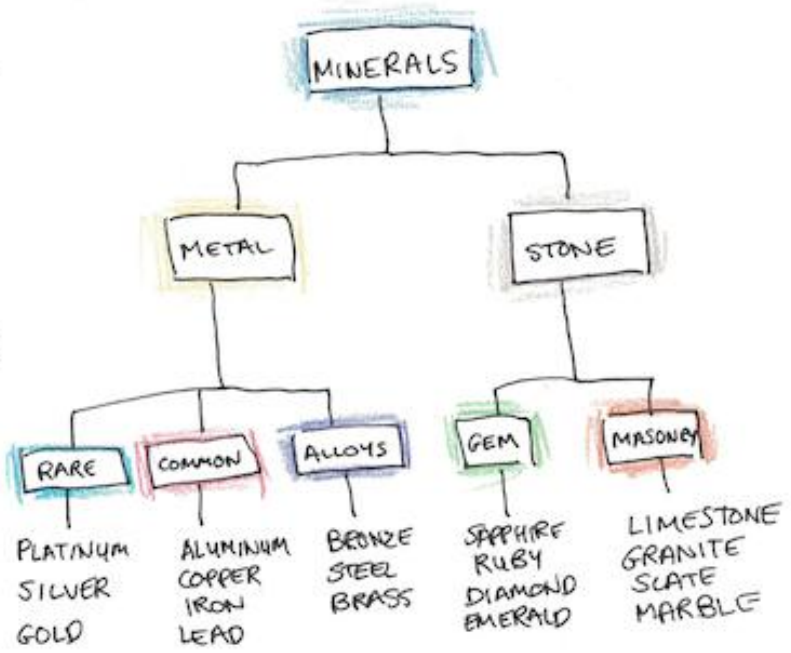
- You all have experience of sub-consciously chunking small pieces information, such as your mobile phone number!

- 07542986521 = 07542 – 986 - 521

Chunking

SUMMARISE

VS



- Chunking is a technique used to break up large pieces of information, such as notes in your exercise book, into small chunks which are much easier to remember.
- Chunking has been proven to improve your short term memory
- Imagine it like steps of a ladder. Chunking is great to memorise phrases and numbers, or even large pieces of texts.

5. LIC Case Study: Haiti Earthquake 2010

Causes

- On a conservative plate margin, which involves the Caribbean and North American plates.
- The magnitude 7.0 earthquake was only 15 miles from the capital Port au Prince. With a very shallow focus of 13km deep , Haiti (the poorest county in the western hemisphere) became more vulnerable.

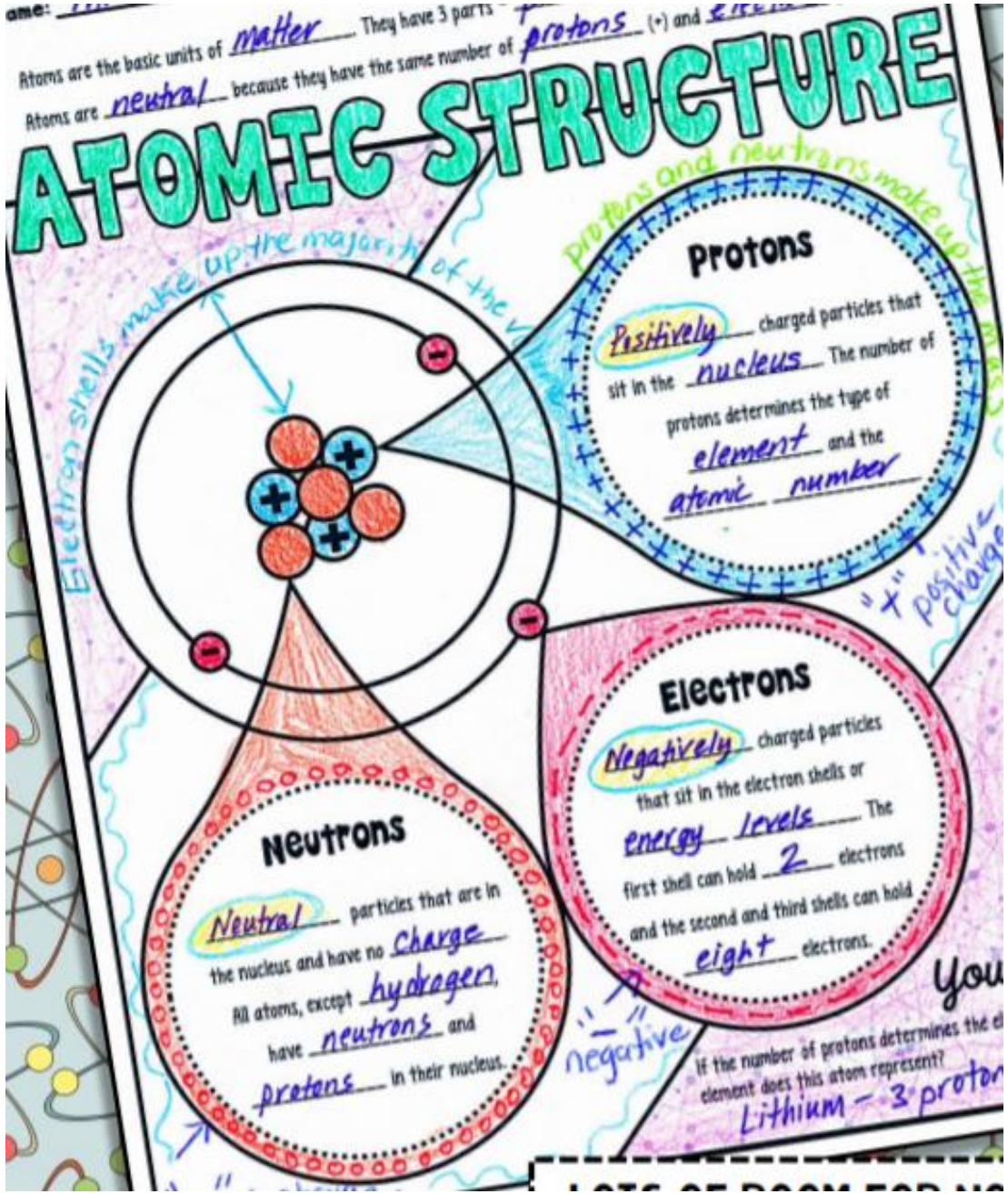
Short-Term Effects	Long-Term Effects
• 230,000 people died and 3 million affected. • 250,000 homes and 30,00 business had collapsed or were damaged. • Rubble blocked roads and shut down ports.	• 1 in 5 jobs were lost due to the quake.. • Millions became homeless, some for years. • The spread of disease became a big risk due to sanitation damage and unburied corpses.
Immediate Management	**Long-term Management**
• Individuals tried to recover buildings and people. • Many countries responded with appeals or despatched rescue teams.	• Heavily relied on international aid, such as the $330 million from the EU. • 6 months after, 98% of the rubble still remained.

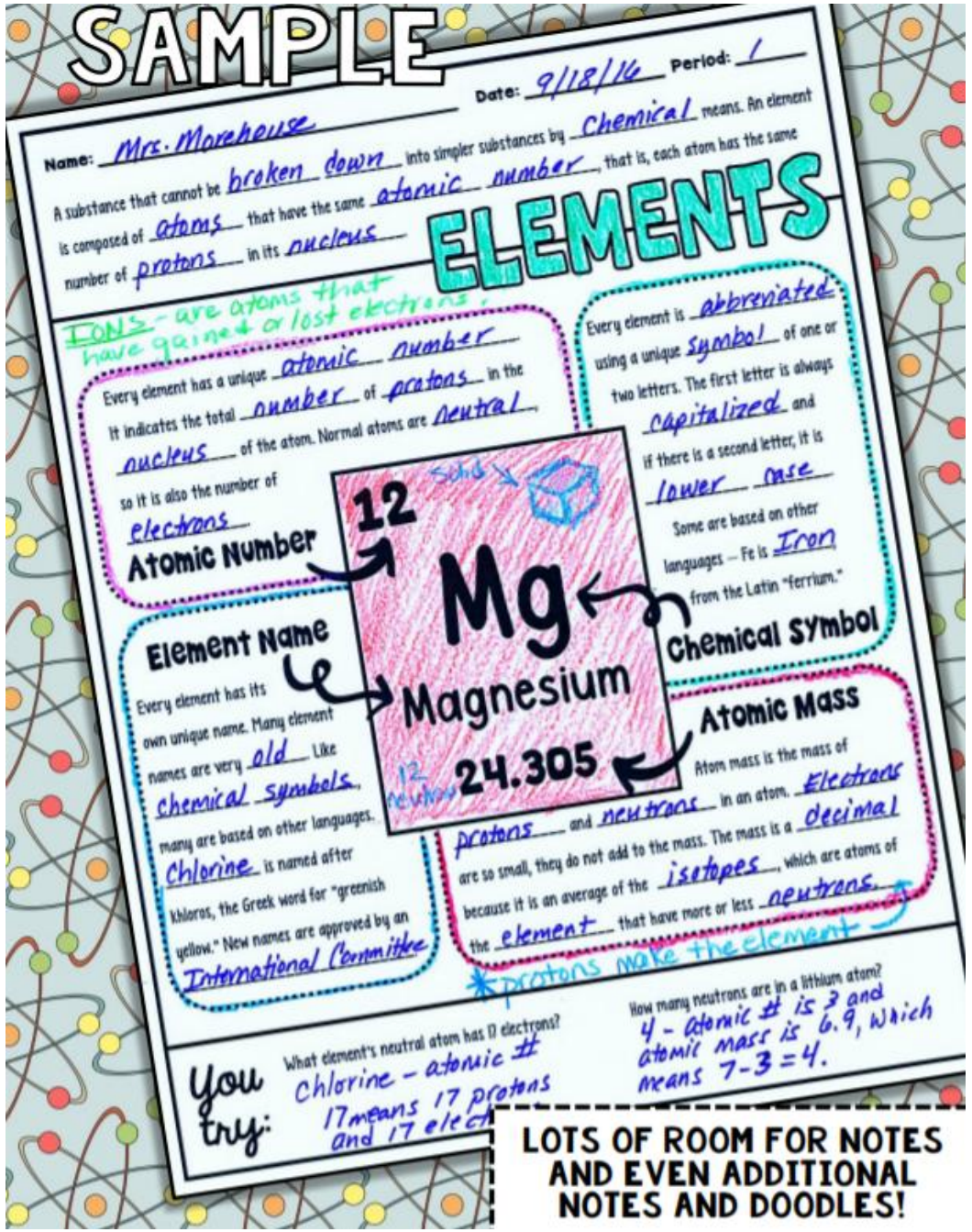
6. HIC Case Study: New Zealand 2011

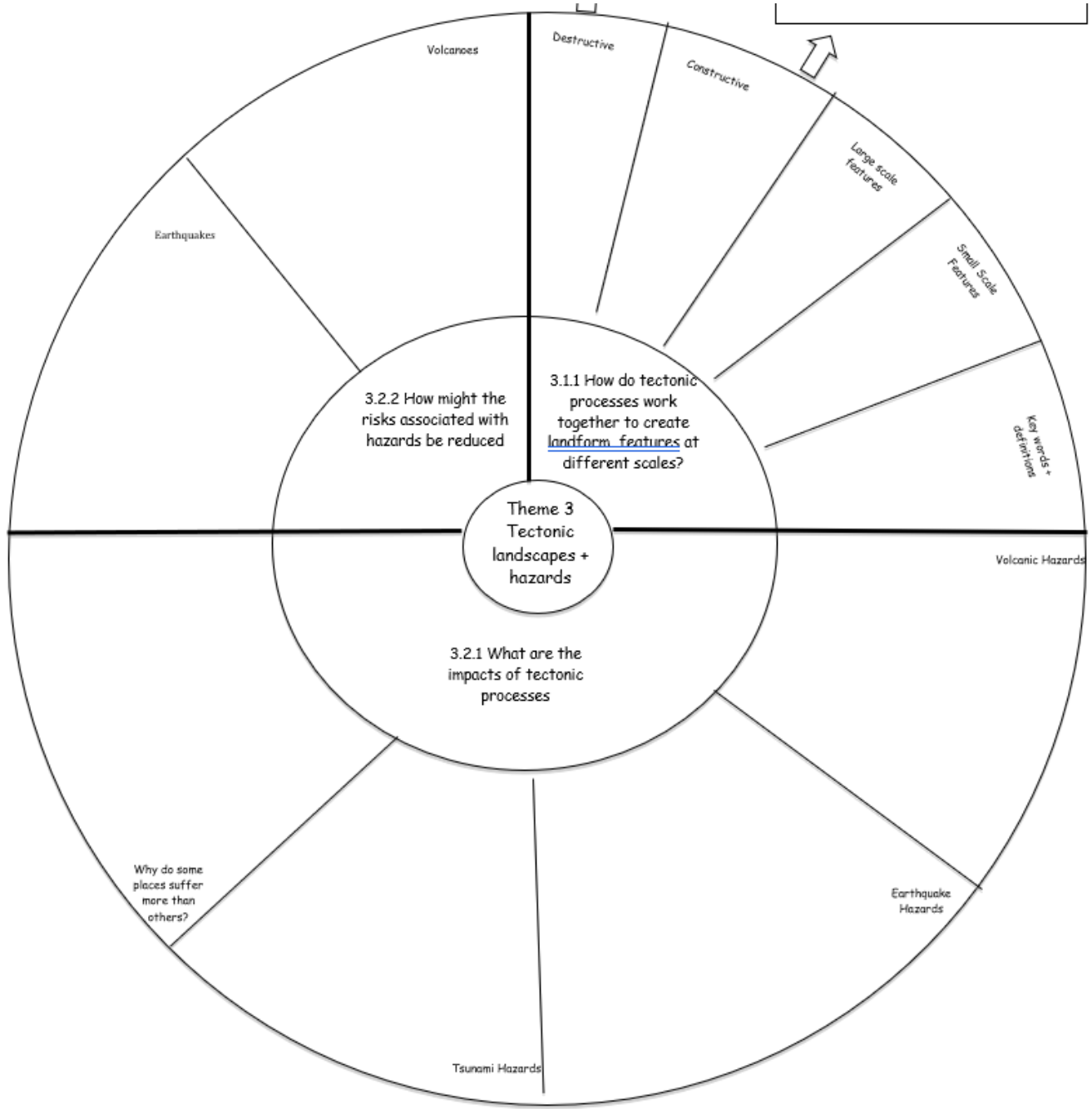
Causes

- The epicentre was 6 miles South East of Christchurch and the focus was very shallow at 3.1 miles.
- conservative plate margin where the Pacific Plate slid past the Australian Plate in the opposite direction

Short-Term Effects	Long-Term Effects
• 181 people were killed and around 2,000 people were injured • Liquefaction (where the ground gets saturated and loses strength) caused lots of damage to roads and buildings • 80% of the city was without electricity	• Business were put out of action for long periods causing losses of income and jobs • Damage to roads through liquefaction made it difficult for people and emergency services to move around • Christchurch could no longer host Rugby World Cup matches so lost the benefits, e.g. tourism and income, they would bring
Immediate Management	**Long-term Management**
• Cared for the most vulnerable people and ensured people were safe from dangerous buildings • Chemical toilets were provided for 30,000 residents	• Provided temporary housing and ensured all damaged housing was kept water tight • Roads and houses were cleared of silt from liquefaction by August and 80% of roads/50% of footpaths were repaired


Atoms are the basic units of matter. They have 3 parts
Atoms are neutral because they have the same number of protons (+) and
ATOMIC STRUCTURE
Electron shells make up the majority of the
protons and neutrons make up the
Protons
Positively charged particles that sit in the nucleus. The number of protons determines the type of element and the atomic number
"+" positive charge
Electrons
Negatively charged particles that sit in the electron shells or energy levels. The first shell can hold 2 electrons and the second and third shells can hold eight electrons.
"-" negative
Neutrons
Neutral particles that are in the nucleus and have no charge. All atoms, except hydrogen, have neutrons and protons in their nucleus.
If the number of protons determines the element does this atom represent?
Lithium - 3 proton
You


SAMPLE
Name: Mrs. Morehouse
Date: 9/18/16 Period: 1
ELEMENTS
A substance that cannot be broken down into simpler substances by chemical means. An element is composed of atoms that have the same atomic number, that is, each atom has the same number of protons in its nucleus
Ions - are atoms that have gained or lost electrons.
Every element has a unique atomic number. It indicates the total number of protons in the nucleus of the atom. Normal atoms are neutral so it is also the number of electrons.
Atomic Number
12
Mg
Magnesium
24.305
12 neutrons
Every element is abbreviated using a unique symbol of one or two letters. The first letter is always capitalized and if there is a second letter, it is lower case. Some are based on other languages - Fe is Iron from the Latin "ferrum."
Chemical Symbol
Element Name
Every element has its own unique name. Many element names are very old. Like chemical symbols, many are based on other languages. Chlorine is named after Khloros, the Greek word for "greenish yellow." New names are approved by an International Committee
Atomic Mass
Atom mass is the mass of protons and neutrons in an atom. Electrons are so small, they do not add to the mass. The mass is a decimal because it is an average of the isotopes, which are atoms of the element that have more or less neutrons.
*protons make the element
You try:
What element's neutral atom has 17 electrons?
Chlorine - atomic # 17 means 17 protons and 17 elect
How many neutrons are in a lithium atom?
4 - Atomic # is 3 and atomic mass is 6.9, which means 7-3=4.
LOTS OF ROOM FOR NOTES AND EVEN ADDITIONAL NOTES AND DOODLES!


Theme 3
Tectonic landscapes + hazards
3.1.1 How do tectonic processes work together to create landform features at different scales?
3.2.1 What are the impacts of tectonic processes
3.2.2 How might the risks associated with hazards be reduced
Volcanoes
Earthquakes
Destructive
Constructive
Large scale features
Small Scale Features
Key words + definitions
Volcanic Hazards
Earthquake Hazards
Tsunami Hazards
Why do some places suffer more than others?

One page summary- Success Criteria

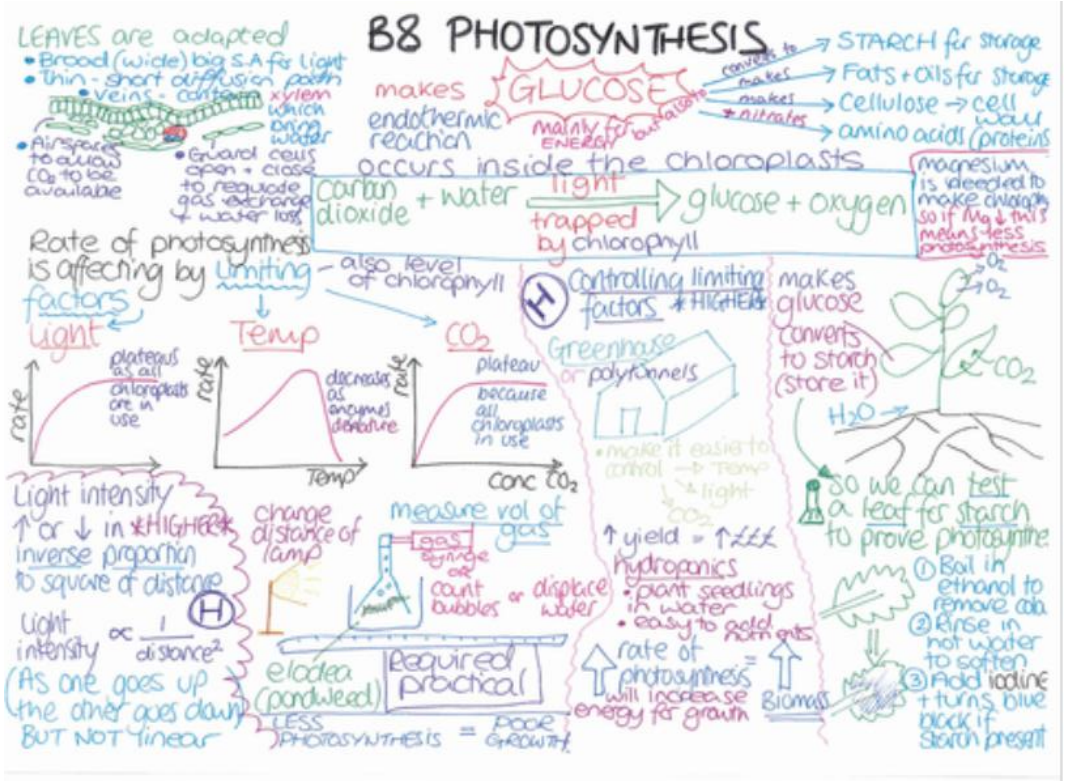
- ✓ Read through your notes to make sure you understand
- ✓ Use lesson titles/sub titles to help group and organise information
- ✓ Use brief bullet points to summarise key points
- ✓ Be creative – whatever helps you recall and remember key info is the right way for you!
- ✓ Use colour or images to help make links – dual coding

One Page Summaries

Summary

How?

- Begin by choosing a subject you are going to summarise.
- Decide on the layout. How do you want to present your ideas?
- Think about your subheadings, how are you going to break down the information?
- Using pictures and words to summarise information works best.



Knowledge Organisers

SUMMARISE

You may have heard of Knowledge Organisers, these are one page summaries. There are also lots you can find on the WJEC website ready to use. You might want to look at these for ideas.

https://www.wjec.co.uk/home/student-support/free-learning-tools-and-resources/new-knowledge-organisers/