TRINITY ACADEMY

The Emmanuel Schools Foundation

HOMEWORK AT TRINITY ACADEMY

KNOWLEDGE ORGANISERS

When you join Trinity Academy, we want you to start great habits for learning. This means, that when you reach Year 11, you will be so organised that you will know how to revise, and you will ace your exams.

At Trinity Academy, we use Knowledge Organisers to help you learn the knowledge you will need in your subjects. When you join Trinity Academy, we will equip your with a Knowledge Organiser, and a Knowledge Book, where you will complete your Knowledge Organiser Homework.
In Core subjects such as Maths, English and Science, and in practical subjects, you may also be set other homework.

On the next page, you will find a Knowledge Organiser for Year 7 Science. You will receive one of these for all of your subjects, and will use them to learn the key information. For example, your teacher might ask you to learn the information in Box 1. Your job is to learn the information using one of techniques outlines in this booklet, ready for a quiz in the lesson. It doesn't matter if you can't remember everything – take a green pen and add the information that you couldn't remember. That way, your brain is always thinking hard and it will be easier to remember for next time.

What's great about this, is that you can ask your parents, friends or family to test you on the information once you have completed the homework.

EXAMPLE

Y7 Science

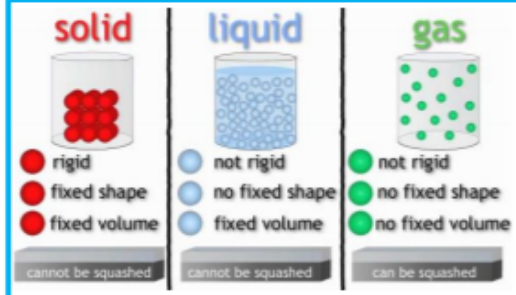
1.Biology Key Words

Cell membrane	Surrounds the cell and controls movement of substances in and out.
Nucleus	Contains genetic material (DNA) which controls the cell's activities.
Vacuole	Cell storage
Mitochondria	Part of the cell where energy is released from food molecules.
Cell wall	Strengthens the cell. In plant cells it is made of cellulose.
Chloroplast	Absorbs light energy so the plant can make food.
Cytoplasm	Jelly-like substance where most chemical processes happen.
Ribosome	Site of protein synthesis.

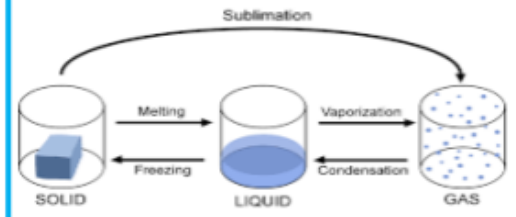
2.Biology Key Words

Cell:	The unit of a living organism, contains parts to carry out life processes.
Tissue	Group of cells of one type.
Organ	Group of different tissues working together to carry out a job.
Organ System	Many organs working together

3.Chemistry – States of Matter



4.Sublimation



5.Chemistry Key Words

Solvent	A substance, normally a liquid, that dissolves another substance.
Solute	A substance that can dissolve in a liquid.
Dissolve	When a solute mixes completely with a solvent.
Solution	Mixture formed when a solvent dissolves a solute.
Soluble (insoluble)	Property of a substance that will (will not) dissolve in a liquid.
Solubility	Maximum mass of solute that dissolves in a certain volume of solvent.

6.Physics Key Words

Speed	How much distance is covered in how much time.
Average speed	The overall distance travelled divided by overall time for a journey.
Relative motion	Different observers judge speeds differently if they are in motion too, so an object's speed is relative to the observer's speed.
Acceleration	How quickly speed increases or decreases.
Weight	The force of gravity on an object (N).
Non-contact force	One that acts without direct contact.
Mass	The amount of stuff in an object (kg).
Gravitational field strength, g	The force from gravity on 1 kg (N/kg).
Field	The area where other objects feel a gravitational force.

7.Formula

weight (N) = mass (kg) X gravitational field strength (N/kg).

speed = distance (m)/time (s)

Homework

How to self-test with a knowledge organiser

Knowledge organisers are designed to help you learn a wide range of knowledge which will support you in your learning journey at Trinity Academy. By studying and remembering the information in the organiser, you will be more prepared for your lessons as well as the new style GCSEs that you will sit in Year 11.

To gain the most out of your organiser, you will need to learn allocated sections of it and then self-test in your knowledge book.

Never, ever, just copy the work into your book.

Learning happens when we think hard. Copying does not allow us to learn as we are not thinking hard.

Step 1

Read through the section of your knowledge organiser that you have been given for homework. Make sure that you understand the vocabulary and the meaning of the text or diagram that you are learning.

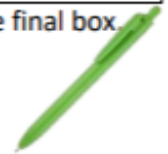
Step 2

Choose a method that suits you to practise learning the information. On the next few pages there are some suggestions, but you may have your own methods.

Look, Cover, Write, Check, Correct

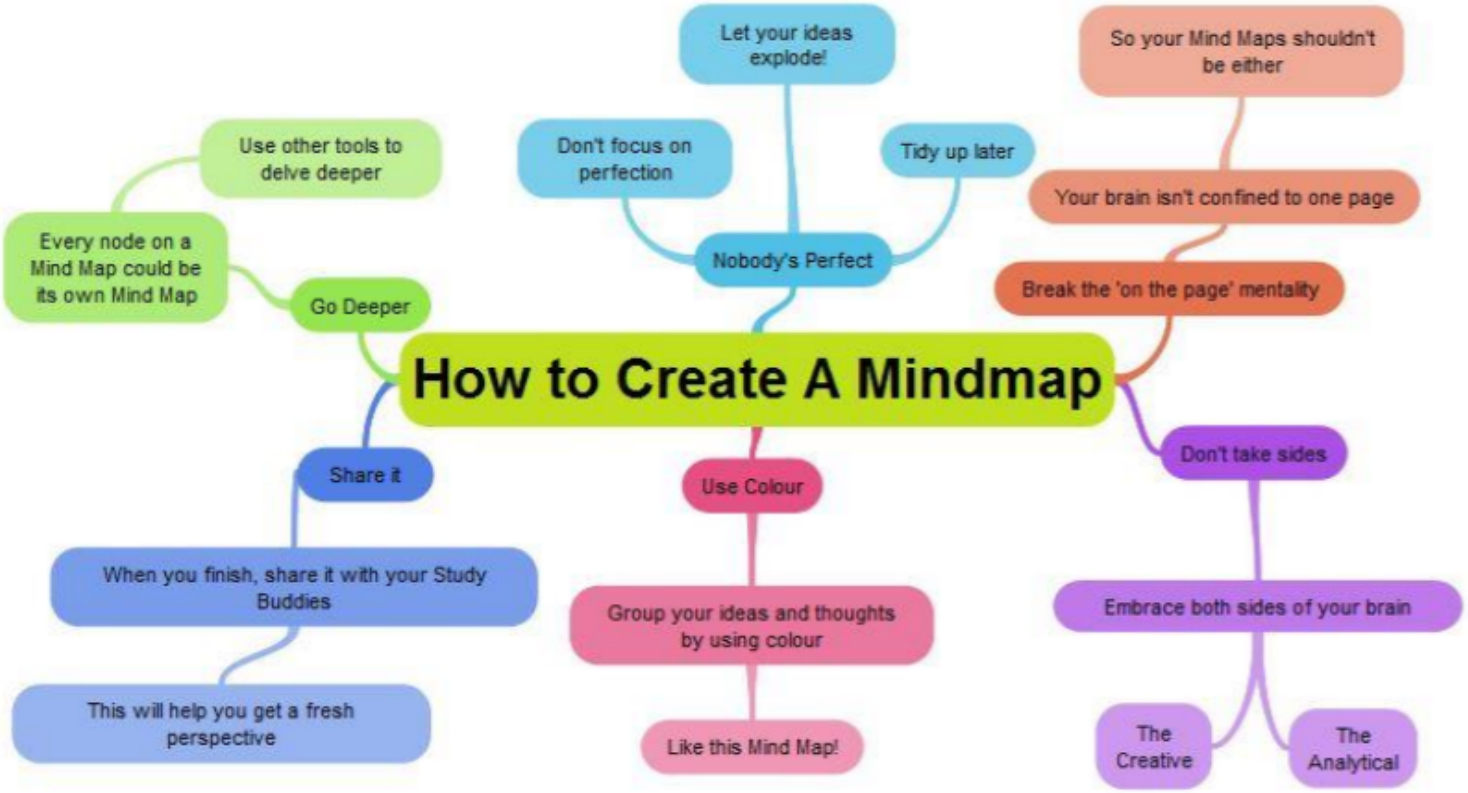
Look	Write	Check	Correct (green pen)
Glacial	A landscape that is made up of ice or produced by ice. There are three different scales: ice caps, glaciers and ice-sheets.		
Glacier	A tongue of ice that moves slowly downhill. There are Polar glaciers which are found at the edge of ice sheets. There are Alpine glaciers that flow from near the top of large mountains.		...like a frozen river.
How do glaciers move?	Glaciers move slowly downwards and gravity and the weight help this.		Glaciers are like frozen rivers. They move downhill very slowly under the influence of gravity and under the pressure of their own weight.

Always try to write the information from memory. When you are certain you have written all you can, make any corrections in green pen in the final box.



TIPS

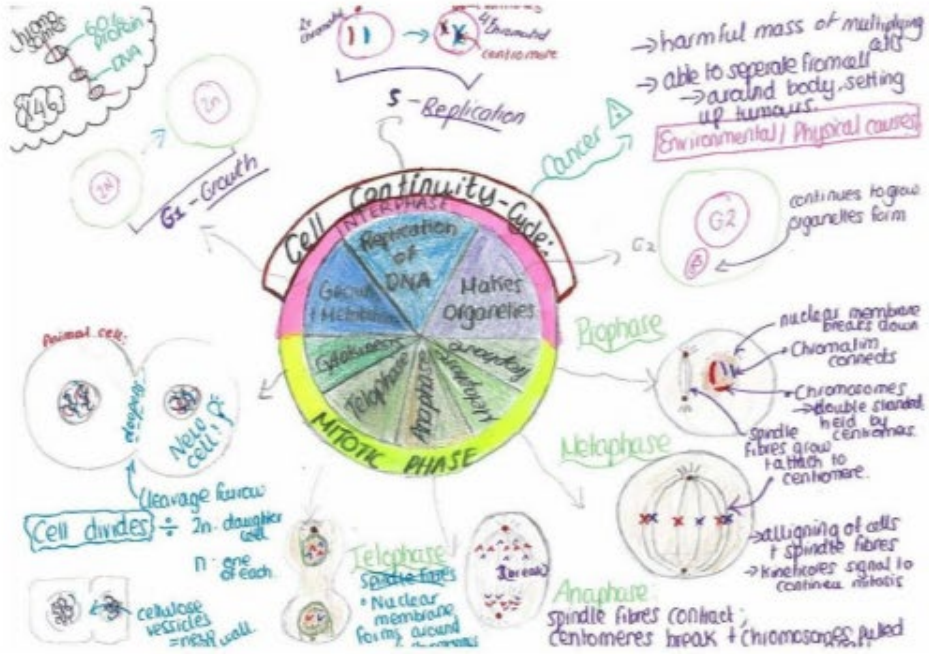
Mind maps



Mind Mapping is a process that involves a distinct combination of imagery, colour and visual-spatial arrangement. The technique maps out your thoughts using keywords that trigger associations in the brain to spark further ideas. Once you have made your map, cover it and test yourself on different strands, eg. How much of the blue strand can you recall?

1. Read all of the information you have to remember.
2. Start your mind map in the middle of a page adding a colourful image to the centre.
3. Start in the middle with the name of your topic. Add branches for each sub topic that you need to revise.
4. Build your network of information using colours and/or images.
5. The map that develops will be a vibrant and colourful network of knowledge thanks links and organises the information radiating out from the central theme.
6. When you have finished, try turning it back into sentences without looking at your subject knowledge organiser. Don't forget to green pen it.

Examples:

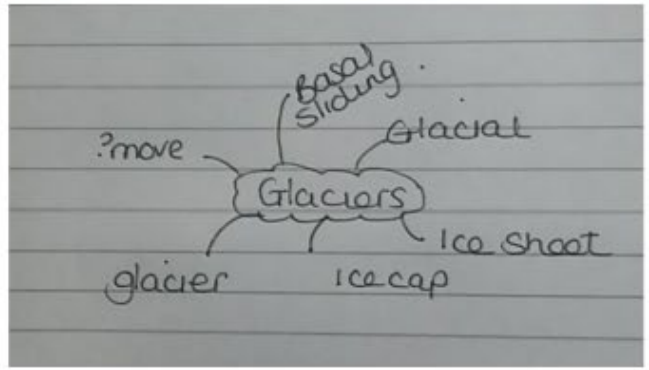


Once you have created a mind map from the information that you need to learn, turn it back into information. See if you can turn your map into paragraphs or recreate the table from your knowledge organiser and fill it back in – without looking of course!

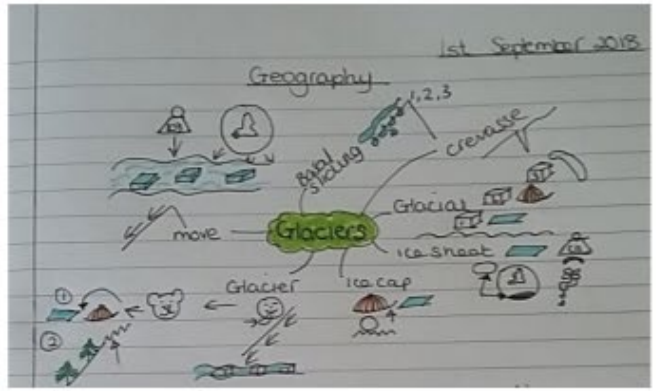
Don't forget to green pen your work at the end.

Knowledge map using images

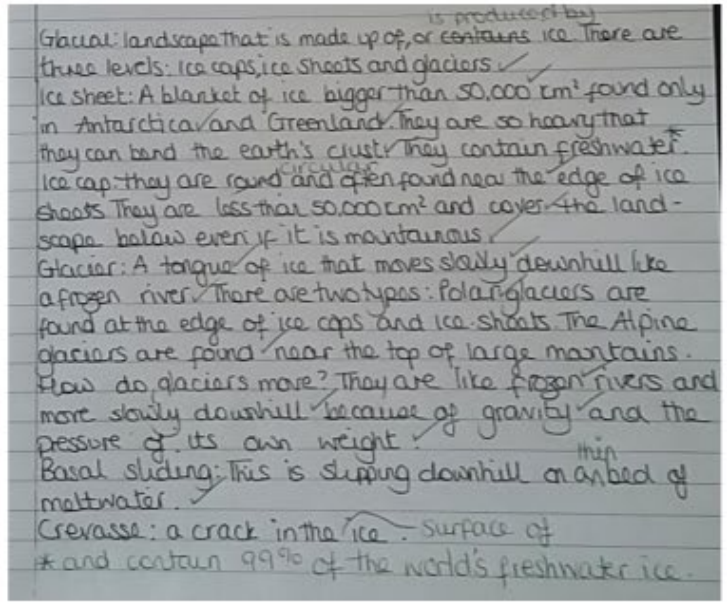
1. Create a mind map using the key words from your knowledge organiser



2. Use images to help you remember the detail

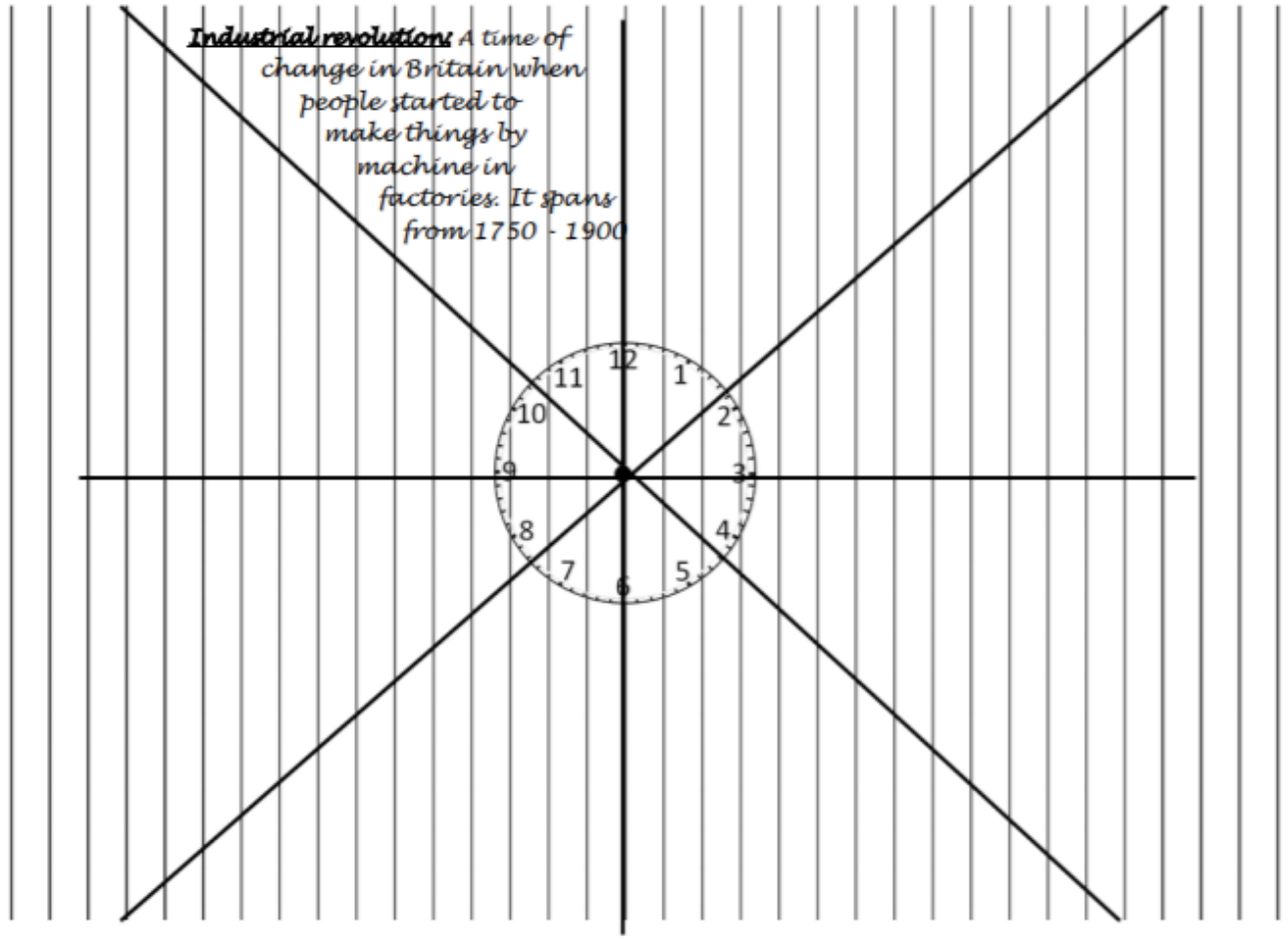


3. Test yourself by recreating the definitions/detail in full. When you have finished, check the detail and correct or add missing detail in green pen.



Clock revision

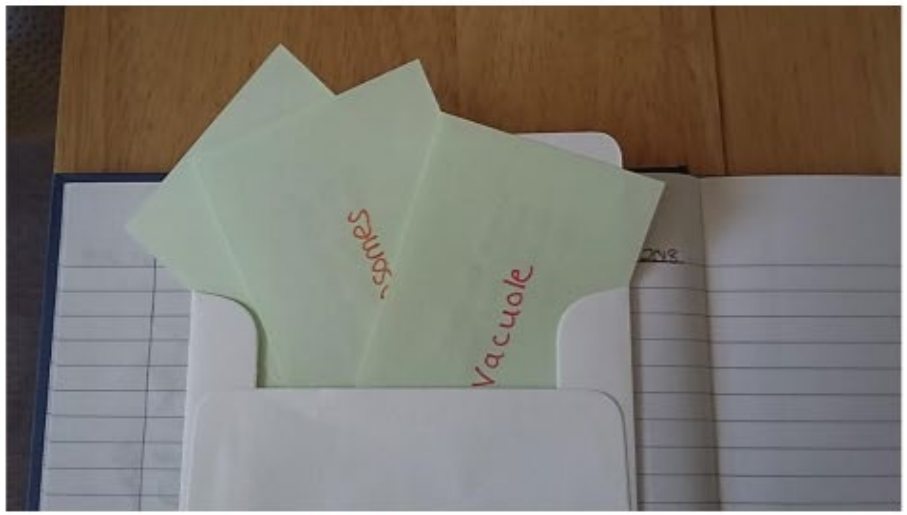
Draw a clock face in the middle of a landscape page. Divide the clock into enough sections for your revision. Label each section, with your topics. Revise the material and then cover the information up, and try to recreate the information in each section.



1. Key Words:	
Industrial Revolution	A time of change in Britain when people started to make things by machine in factories. It spans from 1750-1900
Urban	Built up areas in which people live near. It refers to either towns or cities.
Rural	Countryside areas in which the population in spread thinly.
Population	The number of people living in a particular place.
Invention	Something new which is created, can be an idea or an object.
Factories	Places which items are made on mass
Cholera	Infections and fatal disease of the small intestine. Typically, contracted form infected water supplies and causing severe vomiting and diarrhoea
Workhouse	An institution which would house and look after the poor. People were expected to work for food and lodging.

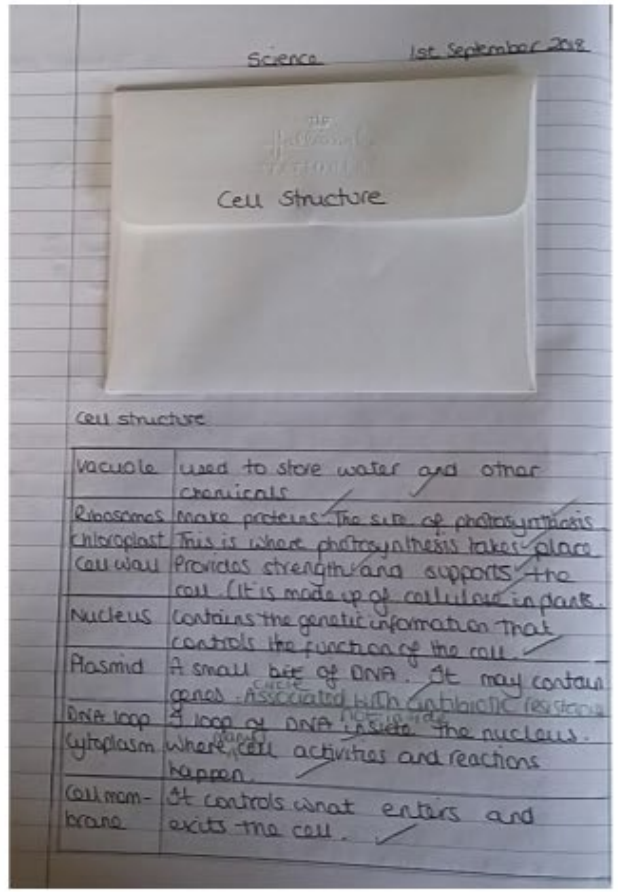
Don't forget to green pen your work when you have finished.

Create your own flash cards



Create a set of flashcards and ask a parent, guardian or study buddie to test you.

You can keep the flash cards in your knowledge book by gluing in an envelope and slotting them inside.



Create cards by cutting up paper into rectangles that will fit into your envelope. Write questions or clues on one side, and the answers on the other side.

When you have learnt your flash cards, try writing out the information in full in your knowledge book. When you have finished, check the detail and correct or add missing detail in green pen.

Ask someone to quiz you on the detail or set you some questions. When you have learnt it, write what you can remember in your knowledge book.

Try this:

Ask a parent of a friend to read the definitions. You try to remember the key word.

Ask a parent or a friend to create some multiple choice questions. Have a go at answering them.

Ask a parent or friend to read sections out to you, missing out key words or phrases that you have to fill in. Ask them to miss out more and more each time.

Ask someone to test you on the key word spellings.

Try creating flashcards here: www.quizlet.com or www.getrevising.co.uk

Create an online mind map here at www.mindmup.com or www.getrevising.co.uk

Don't forget to green pen your work when you have finished.

Record it

Record yourself on your phone or tablet, reading out the information. You can then listen to your recording as many times as you need. Once you have remembered it, write it out in full in your knowledge book.

Use a green pen to fill in any missing detail.

Hide and Seek

Read through your knowledge organiser, put it down and try to write the information out. Keep adding to it until all of the information is there.

Post its

Using a pack of post it notes, write out as many of the key words and definitions as you can in 5 minutes.

Check the detail. Once you have remembered it, write it out in full in your knowledge book.

Use a green pen to fill in any missing detail.

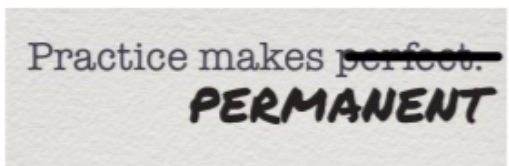
Teach it

Teach someone the key facts and information and get them to test you, or even test them! Once you have remembered it, write it out in full in your knowledge book. Use a green pen to fill in any missing detail.

Reach for the sky and create new ways to revise and remember.

Practice

Some students find that they remember by simply writing the facts over and over again. Once you have remembered the information, write it out in full in your knowledge book. Use a green pen to fill in any missing detail.



Back to front

Write down the answers and then write out the questions that the teacher may ask.
Once you have remembered the information, write it out in full in your knowledge book. Use a green pen to fill in any missing detail.

Read aloud

Simply speak the facts and information out loud as you are reading. You could even try to act out some of the facts and information to help you remember. Once you have remembered the information, write it out in full in your knowledge book. Use a green pen to fill in any missing detail.

Sketch it

Draw pictures to represent each concept or idea. It could be a simple sketch or something that reminds you of the information. Once you have remembered the information, write it out in full in your knowledge book. Use a green pen to fill in any missing detail.