



**BRISTOL
METROPOLITAN
ACADEMY**

Knowledge Organisers 2021-22 Year 7 – Term 5

25 th April 2022	Week A
2 nd May 2022	Week B
9 th May 2022	Week A
16 th May 2022	Week B
23 rd May 2022	Week A

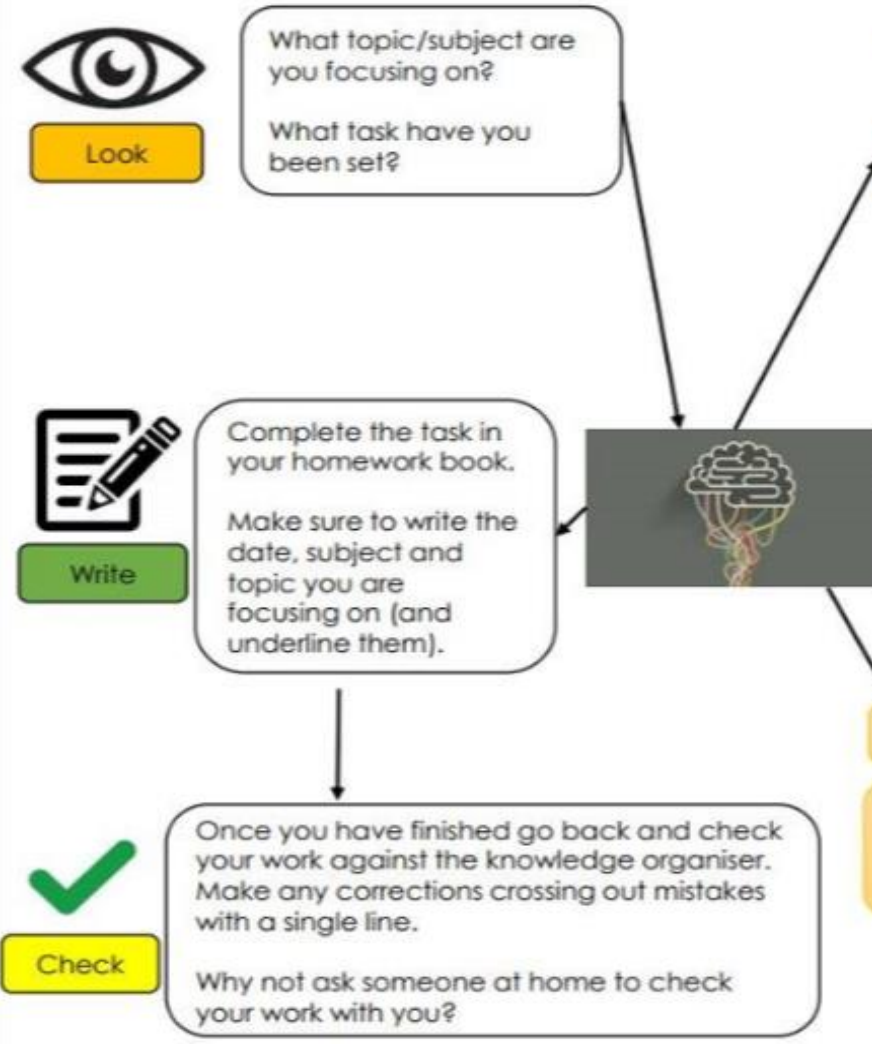
Complete your homework on the night stated e.g. if it is a Monday week A you will complete DT and English homework.

	Week A	Week B
Monday	English/DT	Science/MFL
Tuesday	Maths/Drama	ICT/PE
Wednesday	Science	English
Thursday	RS/Music	Geography/Art
Friday	History	Maths

How to use your knowledge organiser

Top tips:

1. Focus on the information you are most unsure of first
2. Follow the timetable in your homework book to make sure you are revisiting subjects equally
3. Don't panic if you don't remember all the information first time, keep revisiting it
4. You can ask your parents/carers to test you/check your work



Self quizzing

You need to create 5 questions (with their answers) about the content on the knowledge organisers.

Top tip! Use subject specific language e.g. function. If you aren't sure what they mean, look it up, ask an adult or ask your teacher.

What do we need carbohydrates for?

Functions

- Primary source of energy
- Store energy for later
- Build DNA
- Prevent the body from using proteins as an energy source

What happens if we have too much or too little?

Excess

- Tooth decay
- Type 2 diabetes
- Weight gain and obesity
- Hyperglycaemia

Deficiency

- Weight loss
- Lack of energy, tiredness
- Severe weakness
- Hypoglycaemia

Questions you might consider:

1. What is a key function of carbohydrates?

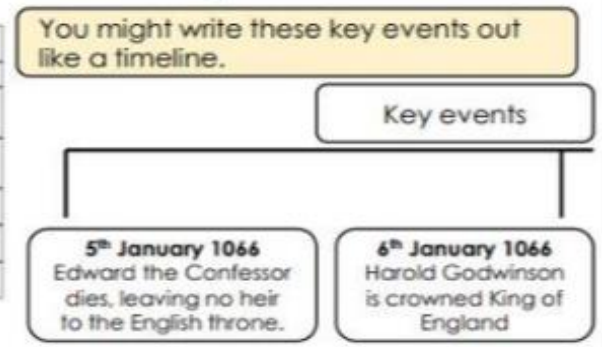
It is our primary source of energy.

Revision

Here you are recording key facts/concepts to help you remember them.

Key Events

1	5 th January 1066 - Edward the Confessor dies, leaving no heir to the English throne.
2	6 th January 1066 - Harold Godwinson is crowned King of England.
3	26 th September 1066 - Harold Godwinson, a Viking claiming the English throne, invades England with more than 10,000 men in 200 longboats.
4	23 rd September 1066 - The Battle of Stamford Bridge. Harold Godwinson, defeats and kills Harold Godwinson, but this loses Harold's army.
5	27 th September 1066 - William Duke of Normandy, invades the South of England.
6	14 th October 1066 - The Battle of Hastings. Harold marches south to meet William, where they battle at Hastings.
7	25 th December 1066 - William is crowned King of England at Westminster Abbey.



Keyword/theme development

Here you are focusing on keywords/ themes and practising memorising them.

Key Terms

Key Terms	Definitions
State of matter	Matter is divided into three states: solid, liquid, and gas
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid

Copying these words into your book can help you to remember them.

Contents:

Art - Pg 2	Drama – Pg 5	Food – Pg 8	German - Pg 12-13	Music – Pg 17	Science – Pg –20-23
Computing - Pg 3 -4	DT – Pg 6	French – Pg 9-10	History – Pg 14	PE – Pg 18	Spanish – Pg 24-25
English – Pg 7	Geog – Pg 11	Maths – Pg 15-16	RS – Pg 19	Textiles - Pg 26	

Year 7 The Natural World

Content: In this project you will

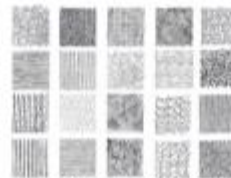
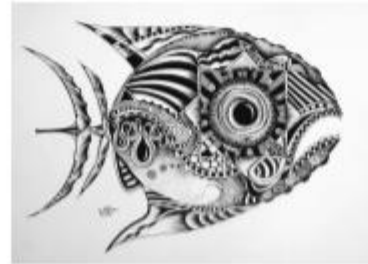
Knowledge—learn about different styles of drawing

Understand—The processes and techniques artists use to create their work and how to critically analyse artists work.

Skills—observational drawing, illustrative drawing, shading, mark making, and print making showing the influence of other artists in your own work and presentation.



Printmaking is the process of creating artworks by **printing**, normally on paper. A printing block can be carved from wood, lino, foam or even a potato. Artists use print making so they can reproduce the same image several times. Artists sometimes use print making to create a repeat pattern.



MARK MAKING IDEAS

Keywords

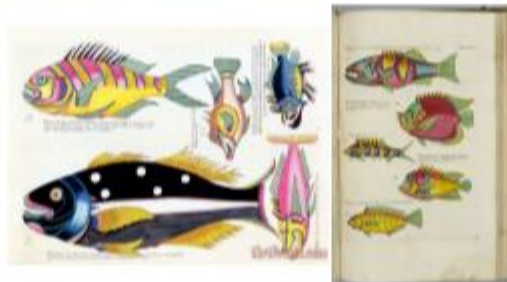
Natural—existing in or derived from nature; not made or caused by humankind.

Mural—a painting or other work of art executed directly on a wall.

Illustration—a picture illustrating an idea in a book, newspaper or leaflet etc.

Dmojo is a street artist from Kuala Lumpur, Malaysia. He uses acrylic paint and spray paint to create his murals. He draws his designs in a sketch book small before creating his murals (wall art). He uses pattern and colour in the background of his work for decoration.

Mark making is a term used to describe the different lines, patterns, and textures we create in a piece of **art**. It applies to any **art** material on any surface, not only paint on canvas or pencil on paper.



Louis Renard's 'Book of Fantastical Fish' was first published in 1719. This was the first known book of colourful fish illustrations.

The book supposedly shows marine life from the East Indies in 1719 when Europe knew very little about nature in that region. The marine life and fish paintings in the book have received a certain amount of artistic license. A few are even completely fictitious including a portrait of a mermaid.

Louis Renard's created these fish paintings without ever visiting the East Indies. He based the paintings on drawings and scientific notes of other artists.

Year 7 - Computer Systems

Strong Passwords

Prevents unauthorised access to a computer system.

- **Uppercase letters**
- **Lowercase letters**
- **Numbers**
- **Symbols**
- **8 or more characters**

Saving Files

It is important to regularly save files/work so that you do not lose your work.

How to save a file?

- Save in your area on the computer
- Save in your documents
- Save with an relevant file name
- Saved in an appropriate folder structure
- Save the file in a folder that is relevant to the topic

Save and Save As

- "Save" updates a file
- "Save As" creates another version of the file

Internet

The Internet is a network of computers around the world.

Networks

Computers connected together that share data and resources.

Social Network

- A network of social interactions and personal relationships.
- A dedicated website or other application which enables users to communicate with each other by posting information, comments, messages, images, etc

Personal Information (Safe to Share)

Information that cannot be used to identify you e.g. your favourite food

Private Information (NOT Safe to Share)

Information that can be used to identify you e.g. Mothers maiden name, Date of Birth, Phone number

Cloud Storage

Cloud computing is storage that you can access through the Internet.

Advantages

- Files can be accessed from anywhere
 - You have unlimited storage space and can store for free
 - Allows you to create more local storage
 - Good form of a backup storage
 - Does not require expensive hardware
- ### Disadvantages
- You need internet access
 - Has the potential to get hacked
 - Data could be seen by a third party
 - Can be expensive long term



Year 7 - Hardware

Hardware

Any physical component of a computer system.

Internal Hardware: Found inside the computer

External Hardware: Found outside the computer

Peripheral Device

Addition hardware connected externally.

Input Device

Hardware used to put data into a system.



Output Device

Hardware used to present data to a user.



Embedded System

A computer inside of a larger system

Example: Microwave, Dishwasher, Fridge



RAM

Primary Memory - Memory accessed directly by the CPU

Volatile memory (lost when the power is off) used to store data in current use. The CPU fetches data from the RAM.



Storage Devices

Secondary Storage - Long term data store.

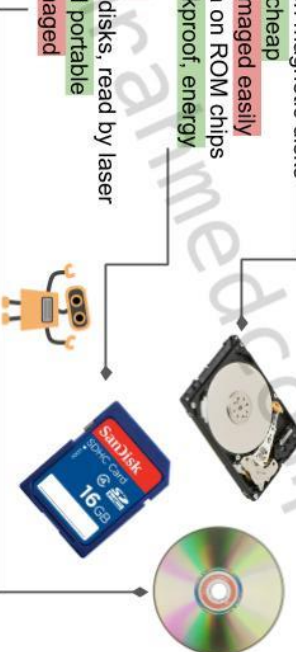
Non - Volatile memory (stays when off)

Magnetic - Data on magnetic disks

- + Relatively cheap
- Can be damaged easily
- + Solid State - Data on ROM chips
- + Fast, shockproof, energy usage
- Expensive

Optical - Data on disks, read by laser

- + Cheap and portable
- Easily damaged

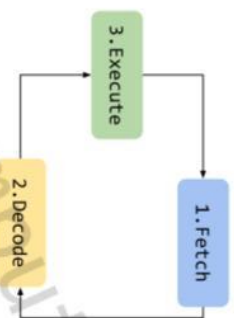


CPU

CPU is a component that processes data

The processor works by using the "Fetch Decode Execute Cycle".

- Instructions are fetched from memory.
- Instructions are then decoded to find out what processing needs to be done.
- Instructions are the executed.



Drama Year 7 Term 5 & 6 Knowledge organiser



Characterisation

Every person is a unique individual. Your role may have similarities to you but may also be vastly different. The way a person feels, thinks and the experiences they have had affect the way they move and speak.

Think about the role you are playing in detail. Consider where the person is from, what sort of accent they have and how old and how confident they are. Ask yourself how this affects their pace, weight on the ground and posture. No two characters are ever completely alike. A skilled actor is versatile and able to change vocal and physical characteristics to communicate a role effectively.

Mime

Mime could mean:

- working in silence, or with few sounds or words, to show activities, eg painting a wall or opening a door.
- working with dialogue but while miming any props or set, eg using the audience as a mirror to apply make-up while addressing another character onstage.
- Physical theatre, which often incorporates mime techniques and where actors can also mime items of set or props

Thought-tracking and hot-seating

A thought-track is when a character steps out of a scene to address the audience about how they're feeling. Sharing thoughts in this way provides deeper insight into the character for an audience.

In rehearsal it's an effective way of exploring characters and scenes in greater depth. Stopping the action and sharing thoughts enables the actor to fully understand how their character thinks or feels at any given moment. Sometimes the character might feel something different to the words they're speaking. This is called **subtext** and thought-tracking is a useful way of exploring it to realise the many layers within a scene.

Hot-seating

This is an exercise to deepen understanding of character. An actor sits in the hot-seat and is questioned **in role**, spontaneously answering questions they may not have considered before.

Hot-seating helps an actor become more familiar with their role. The questioners should also act as observers as feedback can be very useful.

Ask questions that force the actor to consider the life of their character in depth and beyond the world of the play. You could ask them about home life, childhood, family relationships, hopes, fears, hobbies and how they feel about other characters.

Make a note of any mannerisms that emerge which can be incorporated into performance, such as twisting hands out of nervousness or speaking slowly with a serious tone of voice and fixed eye contact. If something works for the character you are playing, keep it.

Narrating

Narrating is adding a spoken commentary for the audience about the action onstage. A narrator is like a storyteller informing the audience about the plot.

Narration is useful in making a story more understandable for the audience. It also makes the drama **stylised**. This means that it becomes non-naturalistic because the audience are aware throughout that a story is being told and the **fourth wall** is broken.

Narrating can make a drama more understandable or stylised in a number of ways:

- an actor can speak the commentary over the action happening in the drama
- a character can say out loud what they think the audience needs to know about the characters or the situation of which they're a part, which is known as self-narrating
- an actor can just tell the audience what they need to know in between scenes
- a character can read or write a diary or letter that informs the audience what is important for them to know about what is happening or going to happen

This explorative strategy would be effective if you were using Brecht, Theatre in education, Musical theatre or Artaud as your chosen style. Try it out in rehearsal to see if it works in your performance.



Still image

This is a frozen picture which communicates meaning. It's sometimes called a **freeze frame** or tableau. It can provide **insight** into character relationships with a clear focus upon use of space, levels, body language and facial expression.

Still images can be used in a variety of ways. During a long speech they might be used to punctuate the words with clear imagery, making the drama onstage more interesting by adding a visual dimension to the work. They can also be used for marking the moment to explore a key moment in time.

You could use still images to create a photo album as an insight into a character's past life and relationships. It would be possible to use them to break down a complicated plot into clear snapshots of its key moments in development. Still image is also a useful way to **storyboard** early devised work.

Still images can be **naturalistic**, a photograph of an important moment or **abstract**, more representational of feelings or an event.

A picture paints a thousand words. Condensing emotions, events or relationships into an image is an excellent way of ensuring these are communicated in a detailed and effective way.

Using mime and gesture on stage

Mime is the art of demonstrating an action with an object that doesn't exist. It's a very disciplined and precise act. The actor must pay real attention to detail for it to be effective. If you want the audience to 'believe' you're using an object, make sure that it doesn't just simply 'vanish' after you've finished with it. If you're miming drinking at a party and then need your hands for something else, put the imaginary glass down first.

The set can also be mimed and again, the same principles apply. If a table is mimed the actors need to be fully aware of where that 'table' is onstage. They mustn't move through it or the illusion is broken. They should all be able to place things on it so we see that it is a consistent size and height.

Messy mime can look amateurish. If you do use mime in a piece of theatre, ensure that you practise making your movements precise so that the audience can clearly see what it is you are doing.

Role play

This is the act of pretending to be somebody else, of taking on a role. The role may be from a script or a character you have created. Thinking, acting and even feeling differently to your ordinary self can help you empathise with that person and better understand an issue or theme.

This explorative strategy would be effective if you were using the work of Konstantin Stanislavski as your chosen style. He took the approach that the actor should inhabit the role that they're playing. The actor shouldn't only know what lines they need to say and the motivation for those lines, but should also know every detail of that character's life offstage as well as onstage.

You could use a role on the wall diagram to help you. Divide an outline of a person in two from top to bottom. Write down what the character thinks and feels on one side and what other characters think and feel about your character on the other side. You can also include factual information about the role you are playing around the outside of the figure. This will help you understand your character better.

Cross-cutting

Cross-cutting is a device to move between two or more scenes staged in the space at the same time. It's important that the audience know which part of the action they should follow so one part of the action remains in still image while another scene is played out, directing the audience's focus. Using this technique you can move backwards and forwards between separate locations and time frames.

For example, a theatre company is creating a piece of work exploring Christmas. The production team want to show the differences between a rich and poor family on this day. Two separate scenes are developed and placed onstage. Instead of playing simultaneously the rich family scene plays first with children opening many presents. This freezes in a still image and the poor family come to life with their simple gifts providing a contrast. This scene ends in a still image and the group cross-cut to the rich family once again who are having a lavish Christmas dinner. They freeze and the poorer family's dinner is enacted.

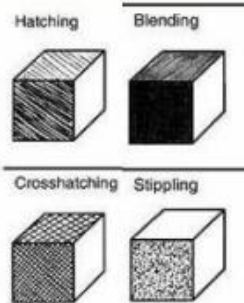
Cross-cutting is an excellent way to explore the contrast between situations by making differences clear for the audience. It can also be used to give them additional information. It enables performers to move quickly between locations and scenes without interrupting the flow of the drama they're creating. Whilst it's a performance technique it can also be used within a workshop to place characters within different time frames for explorative purposes.



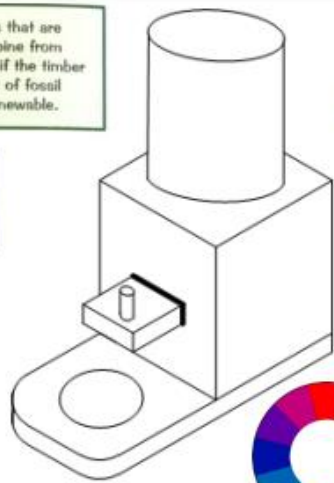
It's better to use materials from renewable resources — ones that are replaced naturally as fast as we use them up. For example, pine from well-managed plantations is quite a sustainable choice. (But if the timber has to be transported a long way that'll probably use up a lot of fossil fuels.) Natural fibres used for textiles (e.g. cotton) are all renewable.

Using recycled materials means that fewer new resources are needed, and often less energy is used. For example, recycling old food cans takes much less energy than mining and processing new metal.

1 km = 1000 m
1 m = 100 cm
1 cm = 10 mm



PINE Pine is a softwood which grows in most areas of the Northern Hemisphere. There are more than 100 species worldwide. **Properties:** Pine is a soft, white or pale yellow wood which is light weight, straight grained and lacks figure. It resists shrinking and swelling.



Analyse the above Gumball Machines using ACCESS FM.

We use **ACCESS FM** to help us write a **specification** - a list of reqs a design - and to help us **analyse and describe** an already existii

- A** is for **Aesthetics**
- C** is for **Cost**
- C** is for **Customer**
- E** is for **Environment**
- S** is for **Size**
- S** is for **Safety**
- F** is for **Function**
- M** is for **Material**

- What does it look like? What is the shape/ colours/ style/theme?
- How much does it cost to make? How much do I need to sell it for?
- Who is the product made for? Why will it appeal to them?
- Is this product environmentally friendly? How could it be better?
- What are the dimensions of the product? Is this a suitable size? Why?
- How has this product been made safe to use? Can the safety be improved?
- What does the product do? Does it do it well?
- What is this material made from? Is this a good material to use? Why?

Evaluation

Designers evaluate their finished products or prototypes in order to test whether they work well and if the design can be corrected or improved. Whatever you have designed it is important to evaluate your work constantly during the project. Evaluation can take a variety of forms:

- General discussion with other pupils, staff and others.
- Questionnaires / surveys carried out at any time during the project.
- Your personal views, what you think of existing designs.
- Most important of all - what do you think of your designs, prototypes and finished products ?
- Can you think of any other ways of evaluating your work ?

Remember to always suggest improvements when evaluating!

Health and safety rules



1. Always listen carefully to the teacher and follow instructions.
2. Do not run in the workshop, you could 'bump' into another pupil and cause an accident.
3. Know where the emergency stop buttons are positioned in the workshop.
4. Always wear an apron as it will protect your clothes and hold loose clothing such as ties in place.
5. When attempting practical work all stools should be put away.
6. Bags need to be left in the cubicles and not under desks
7. Do not use a machine if you have not been shown how to operate it safely by the teacher.

Target Market

Who is the customer?

A **target market** is the set of **customers** sharing common needs, wants & expectations that a business tries design a product for.



Plot			Themes	Characters			
1	Ch. 1-6	Christmas Eve, afternoon: Pip meets the convict (Abel Magwitch); Pip asked to steal food and "wittles" for them. Joe and Mrs. Joe introduced; guns signal escaped convicts; Pip steals food and suffers from "wild fancies" in his guilt. The soldiers; Magwitch and Compeyson; Magwitch "confesses" to Pip's crime. Pip's guilt; Pumblechook describes Magwitch's "theft".	Ambition & Self	Pip Pirrip The Bildungsroman's protagonist, Pip is an orphan, the apprentice of the gentle blacksmith Joe. When he unexpectedly comes into a fortune, Pip aspires to become worthy of the upper-class Estella. Pip becomes cruelly disloyal to Joe and Biddy, avoiding them because of their class. Eventually, Pip learns to judge people by internal rather than superficial standards and redeems himself.	Miss Havisham The wealthy and decrepit Miss Havisham was abandoned on her wedding day by her fiancée (Compeyson) and traumatized, so she shuts out the world for over twenty years. In her revenge on men, Miss Havisham adopts and raises Estella to be beautiful and desirable but completely heartless.		
	Ch. 7-13	The reader is introduced to Pip's limited education (from Biddy). This is compared with Joe's lack of learning. Miss Havisham wants Pip to visit; Pip sees Estella, Miss Havisham at Satis House: the gothic conventions are prevalent throughout Chapter 8. Estella seen as "a star" is Pip's eyes and she derides him as he "calls knaves, Jacks" demonstrating his poor breeding. Pip lies about Satis House and what he sees. Pumblechook pretends to know; Pip tells Joe the truth. Joe Gargery goes to Satis House and is given twenty-five guineas for Pip's time, he is now bound into an apprenticeship with Joe which he feels	Social Class				
	Ch. 14-19	Retrospective narrative reflection on Pip's shame and ingratitude – juxtaposed with this, Joe's virtues are described. The half-holiday: Joe fights Dolge Orlick and Mrs. Joe is assaulted. Biddy moves in to look after Mrs Joe. Jaggers tells Pip of his "great expectations" and secrecy of benefactor. Pip undergoes transition point in Chapter 19 as he	Crime & Guilt				
	Ch. 20-26	Pip lodges with Herbert. Wemmick takes Pip to Barnard's Inn; Pip recognizes Herbert as "pale young gentleman". Herbert tells Miss Havisham's story. Pip takes up rowing and living the life of a 'gentleman' as he spends his fortune. Mr Jaggers flaunts his housekeeper, Molly's wrists in a scene of social power and male dominance. Pip is yet	Innocence & Familial Connec-				
2	Ch. 27-33	Biddy writes to Pip asking if Joe can visit Barnard's Inn; he calls Pip "Sir" highlighting Joe's "simple dignity" that does not fit with the figure of the 'gentleman'. Pip reads in local paper that Pumblechook is his "patron". Pip visits Miss Havisham; Orlick is gatekeeper. Pip declares his love for Estella. Pip waits for Estella who is visiting London. Wemmick shows him Newgate (convict motif).	Revenge	Estella The adopted daughter of Miss Havisham, Estella is proud, refined, beautiful, but cold: raised by Miss Havisham to "wreak revenge on the male sex". She initially marries Bentley Drummle — a bad decision.	Biddy Pip's school friend, Biddy moves into the forge to help out after Mrs. Joe's attack and later becomes a schoolteacher. Humble, kind and moral, she is also sharply perceptive and sees through everyone's pretensions, calling Pip out on his delusions and snobbery long before Pip can		
	Ch. 34-39	Pip and Herbert accumulate rather large debts and Mrs. Joe dies. Pip comes of age (November) and becomes responsible for his finances; asks Wemmick's advice for Herbert. Pip is to escort Estella and take her to Satis House; quarrels with Miss Havisham and discovers Bentley Drummle as Estella's suitor. He leaves heartbroken. Pip is 23 now and Magwitch returns - revealing he is Pip's benefactor.	Redemption				
	Ch. 40-44	The man on the stairs, "Provis" comes to stay; Jaggers confirms his story as Pip's benefactor. Herbert then meets Magwitch/"Provis". Herbert advises Pip to take Magwitch out of the country; they ask him about his life. Pip tells Estella he loves her but Estella is	Avarice			Joe Gargery Joe is a father figure for Pip whose tender kindness protects Pip from Mrs. Joe's harsh parenting. With no formal education, but a deep sense of integrity and an unflinching moral compass, Joe is loyal, generous, and kind, and acts lovingly towards Pip even when Pip's is ungrateful.	Mrs Joe Mrs. Joe is fiery, tyrannical, and false, and abuses Pip and Joe. She is obsessed with social status and reputation. Yet, after the attack by Orlick that gives her brain damage, Mrs. Joe's personality changes completely and she becomes patient, compassionate, and docile.
	Ch. 45-50	Pip feels he is being watched...He fears Estella is married but will not make sure. Pip dines with Jaggers; Estella is married. Pip recognizes Molly as her mother and Wemmick tells of Molly's trial. Chapter 49 sees Miss Havisham's confession and repentance; Estella's adoption and the fire. Pip says "I forgive her". Herbert tells of Magwitch's child and Pip knows Estella is his. Magwitch said that Pip reminded him of her.	Setting				
Ch. 51-59	Jaggers explains Estella's adoption and advises that Pip keep it secret. Orlick's confession and attempted revenge; Pip rescued by Trabb's boy and Herbert. Magwitch's escape is thwarted; Compeyson drowned and Pip reconciled to his benefactor, Magwitch. Pip's wealth is forfeited to the crown. Magwitch convicted and sentenced; Pip tells him, before his death, of Estella. Pip becomes ill and is arrested for debts but rescued by Joe. Orlick ends up in jail. Miss Havisham's will is read and Pip plans to propose to Biddy. Satis House goes up for auction and Joe marries Biddy. Eleven years later, Pip returns; sees young Pip and meets (widowed) Estella at Satis; "no shadow of...parting".	Vocabulary	Mr Jaggers A famous lawyer in London, Mr. Jaggers is Pip's guardian and the middleman between him and his patron. Mr. Jaggers also works for Miss Havisham. He is rational, sharp-minded, and intimidating. He prides himself on neither expressing nor responding to human emotion.				
		faded opulence		Bentley Drummle Bentley Drummle studies with Pip. He is a wealthy heir to a baronetcy, upper class according to the old system of inherited rank. Described as "idle, proud...and suspicious," Drummle is Pip's nemesis. He marries Estella.	Herbert Pocket Pip's best friend, Herbert is compassionate, honest, and unpretentious. He and Pip live together in London where he works in a counting house as a merchant. He cheerfully helps Pip through all of Pip's struggles.		
		dilapidated					
		hereditary privilege					
		superior					
3			ostracised	Provis (a.k.a. Abel Magwitch the convict) The same escaped convict Pip helps in the novel's opening scenes. Provis' gratitude towards Pip inspires him to devote his life-savings to him and become his anonymous benefactor. Cruelly swindled by Compeyson, Provis has lived a life in and out of prison. Still, his criminal record is largely the result of unfortunate circumstances, not character, for Provis is kind, good-hearted, and immensely generous.			
			genteel				
			reticent				
			prosperous				
			corrupt				
			woebegone				
			incongruous				
			paradoxical				
			pathetic fallacy				
			impudent				
			venerate				
			disparity				
			remuneration				
		episodic					
		ostentatious					
		propitiation					
		benefactor					
		prolix					
		revenant					
		malignant					
		portentous					
		clemency					

What do we need proteins for?

- Functions**
- Build enzymes and hormones
 - Build cell membranes
 - Repair and maintain tissues
 - Defend the body (antibodies)
 - Secondary source of energy

What happens if we have too much or too little?

- Excess**
- Kidney and liver diseases
 - Weight gain
- Deficiency**
- Kwashiorkor
 - Slowing growth rate
 - Swelling

What do we need carbohydrates for?

- Functions**
- Primary source of energy
 - Store energy for later
 - Build DNA
 - Prevent the body from using proteins as an energy source

What happens if we have too much or too little?

- Excess**
- Tooth decay
 - Type 2 diabetes
 - Weight gain and obesity
 - Hyperglycaemia
- Deficiency**
- Weight loss
 - Lack of energy, tiredness
 - Severe weakness
 - Hypoglycaemia

Keywords:
Macronutrients – nutrients we need in large amounts: carbohydrates, proteins, fats.
Food miles – how far food has travelled from farm to fork.
Intensive farming – a method of farming aimed at increasing the amount of food produced.
Food provenance (origins) – how food is grown, reared and caught and how it is produced and transported.
Allergen – a substance or food that may cause an allergic reaction.

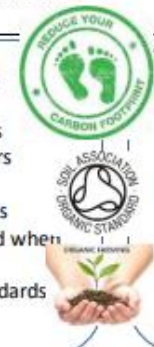
Food intolerance – a reaction to food.
Celiac disease – an intolerance to gluten.
Allergy – when the body reacts suddenly and seriously to an allergen.
Vegan: Someone who doesn't include any products from an animal in their diet.

Food miles: The distance from the field to the plate of the consumer – importing food products from distant countries increases food miles.



Food provenance (UK):
Food that is caught: Fish such as mackerel, haddock and salmon and shellfish such as mussels and scallops.
Food that is grown: Crops: wheat and barley. Fruit and vegetables: apples, potatoes, carrots, lettuce, sprouts and soft fruits like raspberries and strawberries.
Food that is reared: cows for milk and meat, sheep, pigs and chickens for meat and eggs.

- Organic farming**
- ✓ No chemicals
 - ✓ Few or no pesticides
 - ✓ No artificial fertilisers
 - ✓ No herbicides
 - ✓ No GM feed or seeds
 - ✓ Antibiotics only used when necessary
 - ✓ Animal welfare standards are kept



Carbon footprint
A carbon footprint is defined as: The total amount of greenhouse gases produced to directly and indirectly support to produce a product. This is usually expressed in equivalent tons of carbon dioxide (CO2)

14 common allergens.



Factors that affect food choice
Coeliac – cannot eat products containing gluten.
Lactose intolerance – the body can't digest the sugar lactose in dairy products.
Vegetarian: No meat in the diet
Vegan: No products from animals in the diet e.g. meat, milk or honey.
Religion:
Islam: Requires Halal meat, no alcohol, no pork
Judaism: Requires Kosher food, no meat and dairy together, no pork
Hinduism: No beef

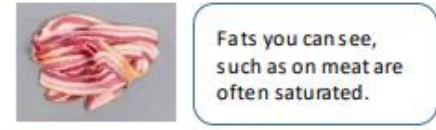
What do we need fats for?

- Functions**
- Source of energy
 - Insulation
 - Dissolve vitamins
 - Build hormones
 - Build cell membranes

What happens if we have too much or too little?

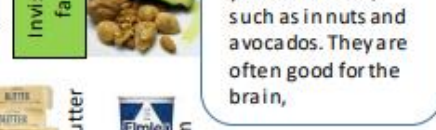
- Excess**
- Obesity
 - Hypertension
 - Coronary heart disease
 - Fatty liver disease
 - Type 2 diabetes
- Deficiency**
- Weight loss
 - Vitamin deficiency
 - Heart disease
 - Feeling cold

Visible fats



Fats you can see, such as on meat are often saturated.

Invisible fats



Unsaturated fats you cannot see, such as in nuts and avocados. They are often good for the brain,



Protein alternatives

Vegetarians and vegans don't consume meat so instead they use protein alternative products which are manufactured in order to provide protein in a diet and protein rich foods.



The **eatwell guide** (formerly the eatwell plate) has been produced by the government. The Eatwell Guide shows how much of what we eat overall should come from each food group to achieve a healthy, balanced diet.

- The eatwell guide is split into the following categories:
- Fruits and vegetables
 - Potatoes, bread, rice, pasta and other starchy carbohydrates
 - Oils and spreads
 - Dairy and alternatives
 - Beans, pulses, fish, eggs, meat and other proteins.

Porter is a regular verb which follows the pattern below. The verb “**aller**” is irregular but an important verb.

Pronouns	Porter – to wear
Je (I)	Je porte – I wear
Tu (you)	Tu portes – you wear
il (he), elle (she)	il /elle porte - He/she wears
Nous (we)	Nous portons – we wear
Vous (you) (pl. or formal)	Vous portez – you wear(pl. or formal)
ils /elles (they)	ils/elles portent – they wear

Aller – to go

Je vais - I go
 Tu vas – you go
 il /elle va– he/she goes
 Nous allons –we go
 Vous allez – you (pl) go
 ils/elles vont– they go

Comparisons

Plus...que - more...than Paul est **plus** sérieux **que** Thomas
 Moins...que - less ...than Thomas est **moins** sérieux **que** Paul
 Aussi...que - as...as Paul est **aussi** sérieux **que** Jacques

Superlative

Le / la plus – the most Julie est la plus intelligente
 Le / la moins – the least Marie est la moins grincheuse

Opinion phrases help to make our work more interesting – have a look at your vocabulary list. Try to use a range of different ones in your work e.g. **J'aime** (I like)/**Je pense que** (I think that)/ **à mon avis** (in my opinion).

Time phrases help to make our work more detailed by telling us when things happen - have a look at your vocabulary list e.g. **normalement** (normally), **rarement** (rarely), **deux fois par semaine** (twice a week).

7.3 My life at school

<p>Quelle est ta matière préférée?</p> L'anglais L'espagnol Le français Le théâtre Le dessin Le sport / l'EPS L'informatique L'éducation civique L'histoire La musique La technologie La géographie La religion Les mathématiques Les sciences Les sciences humaines	<p>What is your favourite subject?</p> English Spanish French Drama Art PE Computer Science PSHE History Music Technology Geography RE Maths Science Humanities	<p>Comment est ton uniforme?</p> <p>Je porte ...</p> Une veste Un pull Une chemise Un T-shirt Un pantalon Une cravate Une jupe Des chaussettes Des chaussures Des collants	<p>What is your school uniform like?</p> <p>I wear..</p> Blazer Jumper Shirt T-shirt Trousers Tie Skirt Socks Shoes Tights	<p>Comment est ton prof ?</p> Gentil (-le) Agréable Ennuyeux (-se) Organisé (e) Content (e) Difficile Facile Amusant (e) Coléreux (-se) Strict (e) Grincheux (-se) Fort (e) Joli (e) Horrible Fascinant(e) Jeune Mature Petit(e) Grand (e) Parfait(e) Rapide Riche Bruyant(e) Sage Sérieux(-se) Timide Travailleur(-se) Triste Âgé(e)	<p>What is your teacher like?</p> Kind Pleasant Boring Organised Happy Difficult Easy Fun Angry Strict Grumpy Strong Handsome/ pretty Awful Exciting Young Mature Small Tall Perfect Fast Rich Noisy Wise Serious Shy Hard working Sad Old
<p>Que penses-tu?</p> C'est Ce n'est pas Créatif Intéressant Pratique Utile (in)confortable Cher Bon marché À la mode Démodé Sale Propre Moche	<p>What do you think?</p> It is It isn't Creative Interesting Practical Useful (un)comfortable Expensive Cheap Fashionable Unfashionable Dirty Clean Ugly	<p>Verbes au collège</p> Étudier Écouter Bavarder Travailler Passer Jouer Se reposer Se relaxer	<p>Verbs at school</p> To study To listen To chat To work To spend To play To rest To relax	<p> onze heures une heure dix heures deux heures neuf heures trois heures huit heures quatre heures sept heures cinq heures six heures </p> <p> moins cinq cinq moins dix dix moins le quart et quart moins vingt vingt moins vingt-cinq vingt-cinq et demie </p>	



Year 7 Geography

Term 5

Why is Russia a vast wilderness?

Biomes of Russia

Steppe	An area of grassland, too dry for forests but with really fertile, good for farming soils called chernozems
Taiga	An area of coniferous trees (evergreen) that covers 60% of Russia.
Temperate forest	An area containing deciduous trees, such as oak and ask, can be found in the west of Russia
Tundra	An area found in the north, where temperatures drop to -50°C in the winter. Trees cannot grow because the ground is frozen all year, this is called permafrost .

Temperature = line graph



Precipitation = bar chart

A **climate graph** shows average annual **precipitation** (rainfall) and **temperature** throughout the year for a particular area.

Russia has a **continental climate** with two main seasons:
Long, dark, cold winters
Brief, often warm, summers.

Adaptations – how do plants and animals survive in the tundra?

Grow close to ground to protect them from the wind and cold

Darker leaves help absorb energy from sun



Cottongrass

Shallow root system because soil is often frozen

Two layers of fur to trap heat



Musk ox

Huddle together in winter to retain heat

Large, hard hooves to break ice to find water

- Russia shares borders with many countries including: China, Ukraine, North Korea and Norway.
- Russia is the largest country in the world, in terms of land area and covers 17 million km²

Physical landscapes of Russia

Russia's longest river is the Volga. at 3692km long (Europe's longest river).

- Caucasus Mountains** where the highest peak is Mount Elbrus
- Lake Baikal** was formed by a rift valley. It is the oldest and deepest lake in the world
- Ural Mountains** form a spine in west-central Russia
- Kamchatka peninsula** has 70 volcanoes and is a wilderness of rivers and hot springs.





German Year 7.3 My Life at School

Was denkst du?

Es ist
Ich mag
Ich liebe
Ich mag...nicht
Ich hasse
Ich finde
interessant
praktisch
nützlich
(un)bequem
modisch/hässlich
altmodisch
teuer/billig
schmutzig/sauber

What do you think?

It is
I like
I love
I don't like
I hate
I find
Interesting
Practical
Useful
Uncomfortable
Fashionable/ugly
Old fashioned
Expensive/cheap
dirty/clean



Was ist dein Lieblingsfach?

Englisch
Informatik
Geschichte
Spanisch
Französisch
Deutsch
Theater
Kunst
Sport
Musik
Technologie
Erdkunde
Religion
Mathe/Mathematik
Naturwissenschaften

What is your favourite subject?

English
Computer Science
History
Spanish
French
German
Drama
Art
PE
Music
Technology
Geography
RS
Maths
Science

Beschreib deine Schuluniform

Ich trage...

eine Jacke / einen Blazer
einen Pullover
ein Hemd
ein T-Shirt
eine Krawatte/einen Schlips
einen Rock
eine Hose
Socken
Schuhe
eine Strumpfhose

Describe your school uniform

I wear..

Blazer
Jumper
Shirt
T-shirt
Tie
Skirt
Trouser
Socks
Shoes
Tights



Verben in der Schule

studieren
hören
plaudern
arbeiten
verbringen
spielen
lesen
sich entspannen

Verbs in School

To study
To hear
To chat
To work
To spend (time)
To play
To read
To relax

Wie spät ist es ? What is the time?

Es istUhr = ...o'clock
Es ist Viertel nach vier = 4.15
Es ist Viertel vor drei = 2.45
Es ist halb acht = 7.30
Es ist zehn nach neun = 9.10
Es ist zwanzig vor elf = 10.40
Es ist fünf vor vier = 3.55

Lehrer

nett
angenehm
langweilig
froh/glücklich
lustig
streng
stark
schwach
jung
alt
klein/groß
laut
klug
intelligent
ernst
schüchtern
fleißig
faul
gemein/böse

Teachers

Nice
Pleasant
Boring
Happy
Funny
Strict
Strong
Weak
Young
Old
Small/tall
Loud
Clever
Intelligent
Serious
Shy
Hardworking
Lazy
mean/nasty

Meinungen

schlecht
einfach
toll
schwierig
gut
furchtbar

Opinions

Bad
Easy
Great
Difficult
Good
awful

German 7.3 German My Life at School
Knowledge Organiser

School – Subjects, uniform and time.
Opinions and verbs + comparisons and superlatives



machen and spielen are regular/weak verbs which follows the pattern below; which we have seen before. The verb “tragen” is irregular/strong but only changes slightly in the ‘du’ and ‘er/sie/es’ versions.

Pronouns	tragen – to wear	spielen – to play	machen – to do/to make
ich (I)	ich trag e – I wear	ich spiel e – I play	ich mach e – I do
du (you – informal/singular)	du tr ä gst – you wear	Tu spiel st – you play	du mach st – you do
er (he), sie (she), es (it)	er/sie/es tr ä gt - He/she/it wears	er/sie/es spiel t - He/she/it play(s)	er/sie/es mach t – he/she/it do(es)
wir (we)	wir trag en – we wear	wir spiel en – we play	wir mach en – we do
ihr (you) (plural + informal)	ihr trag t – you wear (pl. informal)	ihr spiel t – you play (pl. + informal)	Ihr mach t – you do (pl.+ informal)
Sie (you formal singular + plural) sie (they)	Sie trag en (you wear)/– Sie trag en (they wear)	Sie spiel en (you play)– Sie spiel en (they play)	Sie mach en (you do)/– Sie mach en (they do)

You will have seen lots of questions since September...

e.g. Wie heißt du?,
Wie alt bist du? Hast du
Geschwister?

Now you should be able to create some of your own questions using the question words below.

Wann? – When?
Wer? – Who?
Wo? – Where?
Wie viel(e)? – How many?
Was...? What?
Wie? – How?
Warum? – Why?
Welche? – Which?

Opinion phrases help to make our work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. ich mag (I like)/ich denke, dass..... (I think that)/ Meiner Meinung nach – *you must then write the verb!* (in my opinion).

Time phrases help to make our work more detailed by telling us when things happen have a look at the list on your vocabulary list e.g. normalerweise (normally), selten (rarely), zweimal pro Woche (twice a week).

Comparisons

Add ‘er’ to the adjective. You can’t add the word ‘mehr’ = more. Er ist kleiner = he is smaller – es ist billiger = it is cheaper **Exceptions are besser (better)/größer(bigger)/älter(older)**

Enquiry: What changed in the reformation?Summary

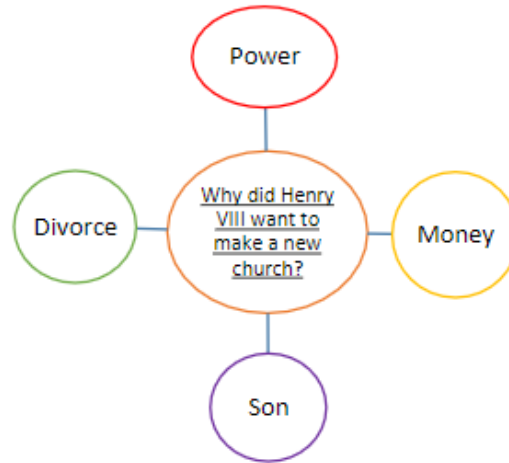
1	The reformation	Attempts to reform the Catholic Church and the development of Protestant Churches in western Europe are known as the Reformation.
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Key Events

2	1509 – Henry VIII becomes King of England
3	1517 - Martin Luther nailed 95 problems with the Catholic church to a church door sparking the Protestant Reformation .
4	25th January 1533 – Henry VIII secretly married Anne Boleyn.
5	23 May 1533 – Henry VIII marriage to Catherine of Aragon was annulled, they were divorced.
6	1536-1540 – The closure of English Monasteries by Henry VIII.

Key People

7	Martin Luther	A German monk that thought that the Catholic Church had too much power and was corrupt he set up the new Protestant church.
8	Pope Clement II	The head of the Catholic Church that refused to give Henry VIII a divorce.
9	Henry VIII	King of England from 1509-1547. Head of the Church of England.
10	Thomas Cromwell	Henry VIII put him in charge of getting rid of the monasteries.

History – Year 7
Knowledge
Organiser
Topic 5PEE Paragraphs

To write a paragraph you explain your points in history we use PEE.

Point: Make your point to answer the question.

One reason Henry VIII made a new church was because he needed money.

Evidence: Give facts that support your point.

He didn't have any money because...

Explain: Give reasons why this evidence backs up your point.

By making a new church Henry VIII knew he would be able to gain money as...

Key Terms

11	heir	Next in line to the throne.
12	Roman Catholic	The Christian church of which the Pope, or bishop of Rome, is the supreme head.
13	Protestant	Someone who follows the principle of Christianity using beliefs developed from the Reformation.
14	Break with Rome	Henry VIII decided to do this when the Pope would not authorise his divorce from Catherine of Aragon. He decided to break away from the Catholic Church and become head of the Church of England.
15	Dissolution of the Monasteries	The monasteries that were run by the Catholic Church and were homes for Monks and Nuns were closed down. They also provided hospital care and charity to the local people.

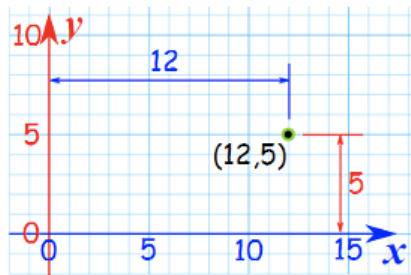
Six Wives of Henry VIII

Coordinates

A set of values that show an exact position.

On graphs it is usually a **pair of numbers**: the first number shows the distance along, and the second number shows the distance up or down.

Example: the point (12,5) is 12 units along, and 5 units up.



Axis

x The left-right (**horizontal**) direction is commonly called X.

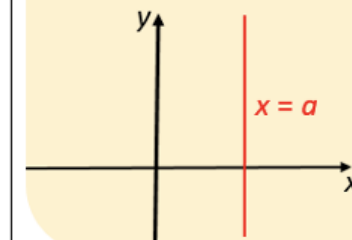
y The up-down (**vertical**) direction is commonly called Y.

Put them together on a graph ...



... and we are ready to go

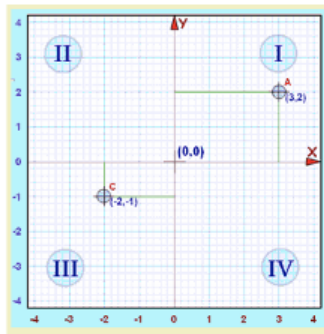
A **vertical line** has an equation of the form $x = a$. It has an undefined slope.



The Origin

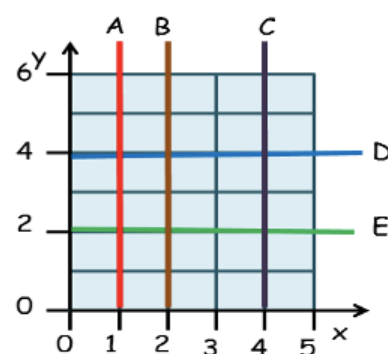
The point (0,0) is given the special name "The Origin", and is sometimes given the letter "O".

Four Quadrants When we include negative values, the x and y axes divide the space up into 4 pieces:



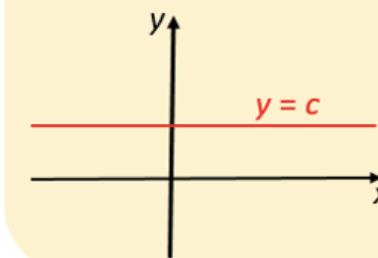
Quadrant	X (horizontal)	Y (vertical)
I	Positive	Positive
II	Negative	Positive
III	Negative	Negative
IV	Positive	Negative

Write the equations for each of these lines.



- A $x = 1$
- B $x = 2$
- C $x = 4$
- D $y = 4$
- E $y = 2$

A **horizontal line** has an equation of the form $y = c$. It has a slope of 0.



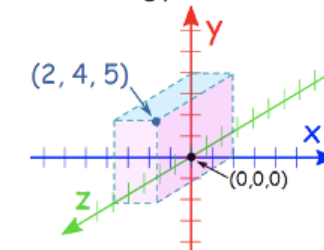
Useful Links

- <https://vle.mathswatch.co.uk/vle/>
- <https://corbettmaths.com/contents/>
- <https://www.bbc.co.uk/bitesize/guides/zg3rd2p/revision/1>

Keywords

- Quadrant:** four quarters of the coordinate plane
- Coordinate:** a set of values that show an exact position
- Horizontal:** a straight line from left to right (parallel to the x axis)
- Vertical:** a straight line from top to bottom (parallel to the y axis)
- Origin:** (0,0) on a graph. The point the two axes cross
- Parallel:** Lines that never meet

3D coordinates – Cartesian coordinates can be used for locating points in 3 dimensions



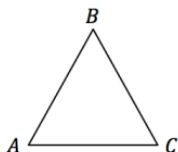
Here the point (2, 4, 5) is shown in three-dimensional Cartesian coordinates.

Angle and Line notation

When we describe angles and lines we use mathematical notation.

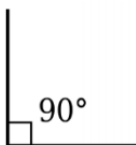
Triangles:

We can describe this triangle as $\triangle ABC$



Right Angle (90°)

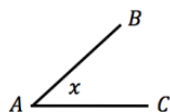
We can show a right angle by using a small square.



Angles:

We can describe angle x as $\angle BAC$

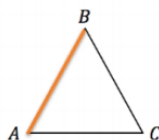
This is an angle produced by drawing a line from vertex B to A, then to C. We could also describe this angle $\angle CAB$



Sides

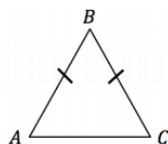
We can use describe the orange side of this triangle as **side AB**

It goes between vertex A and vertex B

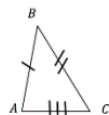


Sides of equal length

We can use small lines to show equal sides. In this triangle **side AB and BC are equal**

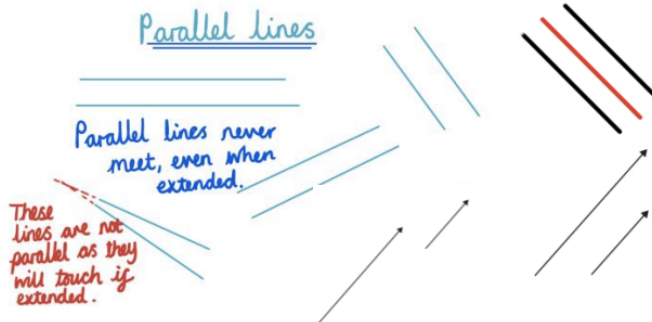


This triangle has no equal sides.

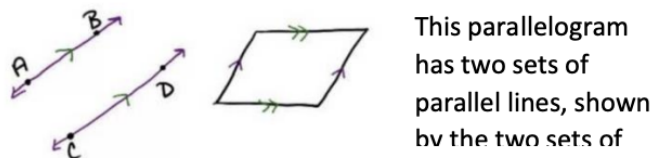


Parallel and Perpendicular Lines

Lines are parallel if they are always the same distance apart (called "equidistant"), and will never meet.

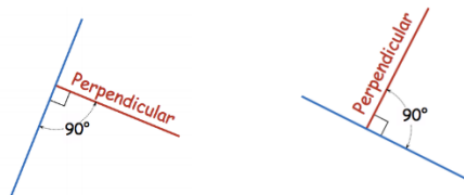


We use arrows to show lines are parallel to each other.

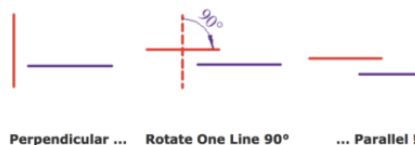


This parallelogram has two sets of parallel lines, shown by the two sets of

Lines are perpendicular if they are at a right angle (90°) to each other. We use the right angle symbol to show this



What is the difference between perpendicular and parallel lines?

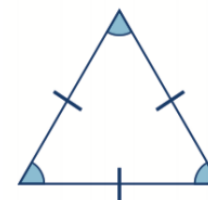


When we rotate a perpendicular line by 90° it becomes parallel (but not if it touches!) Likewise, parallel lines become perpendicular when one line is rotated 90°.

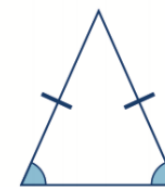
Properties of Triangles

A vertex, is point where two or more line segments meet. This is often called a corner.

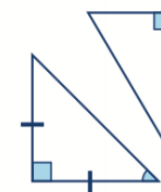
Triangles have 3 sides and 3 vertices. The total of the angles in a triangle is 180°.



An equilateral triangle is a regular polygon. It has sides of equal length and each angle is 60°.

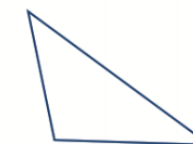


An isosceles triangle has two sides of equal length and two angles of equal size.



A right-angled triangle always has one 90° angle.

It can be isosceles or scalene.



A scalene triangle has no equal sides or angles.

Useful links

[BBC Bitesize](#)

[Maths is fun](#)

[MathsWatch](#)



The Elements of Music

- **Tempo** (Speed)
- **Timbre** (Sound of the Instrument)
- **Pitch** (High or Low Notes)
- **Dynamics** (Loud or Soft)
- **Texture** (Layers of Music)
- **Duration** (Length of Notes)
- **Silence** (No Sound)
- **Structure** (Order of Sections)
- **Rhythm** (Long and Short Notes)



Drums



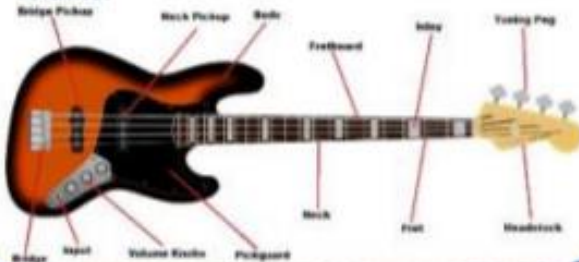
- Played with drum sticks
- Keeps the rhythm and timing for an ensemble



Performing skill keywords: Fluency, Timing, Confidence, Solo, and Ensemble.

Bass Guitar

- Often has 4 strings
- Low in pitch
- Often read TAB to learn music
- It has pickups and needs an amplifier for volume.



Guitar

- Often has 6 strings
- Often read TAB to learn music
- But it can be acoustic or electric. Electric has pickups and needs an amplifier for



Vocals

- Good posture and breathing are important when singing.
- It is important to project your voice.



Knowledge Organiser – PE Term 5: Anatomy & Physiology



	Benefits of exercise
Physical health and well-being	Improves fitness levels, heart function and efficiency of the body systems e.g. cardio-vascular system. Reduced risk of some illness e.g. diabetes, helps to prevent obesity, enables you to carry out everyday tasks without getting tired.
Mental health (emotional) and well-being	Reduces stress, release feel-good hormones in the body such as serotonin, increases confidence, helps us to control our emotions and increase resilience.
Social health and well-being	Provides opportunities to socialise/make friends, encourages cooperation and teamwork.



Muscle	Static Stretch
Triceps	
Hamstring	
Pectorals	
Quadriceps	
Gluteals	
Biceps	
Deltoids	
Abdominals	
Gastrocnemius	
Latissimus dorsi	

Sikhism Knowledge Organiser

Picture	Key Concept	Meaning
	Guru	Teacher. Sikhs have 10 human Gurus and one Guru which is a book.
	Guru Granth Sahib	The Sikh holy book, which is the final Guru.
	Langar	The food that is freely shared at the Gurdwara and the kitchen and hall where the Sikh community eat.
	Khalsa	The community of baptised Sikhs that was started by Guru Gobind Singh.
	Waheguru	This is the Sikh name for the one God. It means the 'great teacher who brings light and ends darkness'.
	Gurdwara	The Sikh place of worship, it means 'the doorway to the Guru' because the Guru Granth Sahib is kept there.
	Equality	The belief that all people are equally valuable because they have God's spark in them, for example in Sikhism both women and men can join the Khalsa.
	Khanda	The Sikh symbol showing 3 swords and the kara - it represents Sikh responsibility to God and to protect the weak in society.



Equality in Sikhism

In the Langar, everyone eats the same vegetarian food and sits together on the floor. Anyone can eat in the Langar for free no matter what their background, wealth or beliefs.

Taking Singh and Kaur as a surname means they have rejected the Caste System.

Sikhs believe there are many ways to God, they do not think Sikhism is a better religion than any others.

Men and women and children can wear the 5 Ks if they choose.

How do Sikhs show equality?

In the Gurdwara everyone sits on the floor to show they are the same level.

Men and women are equal in worship - both can read the Guru Granth Sahib and take care of it.

Men cannot have more than one wife in Sikhism

Both men and women can join the Khalsa and take Amrit, to become a saintly soldier.

Guru Nanak



Nanak was born in an area of India called the Punjab in 1469. his family was Hindu. There were Sikhs and Muslims living in the Punjab and they were often in conflict.

Nanak was sent to a school for Hindu boys, but he left because he only wanted to learn about God.

Nanak's father gave him a job looking after cows, one day the cows ate all the crops in a poor man's field. The poor man got angry and went to see how much damage there had been in the field. When he got there was no damage and no crops missing. Sikhs think this was a miracle.

When he was 30 Nanak went to the river to wash and pray, but he vanished and his friends thought he had died. He reappeared after 3 days and said he had talked to God. Nanak said:
"There is no Hindu or Muslim, only man. Whose path shall I follow? God is not Hindu or Muslim, I shall follow Gods path"

People started following Nanak and called him Guru. He taught that although there are many religions there is only one God. Guru Nanak was a pluralist (someone who believes there are many ways to God.)

When Nanak died he told the Muslims and the Hindus to plant flowers around his grave. The Muslims would plant on one side and the Hindus would plant on the other. Nanak said the flowers would bloom on the side that represented the correct religion. The day after he dies, flowers bloomed on both sides of his grave.

Guru	What they did
1. Guru Nanak	The first Guru who started Sikhism
2. Guru Angad	He was chosen by Guru Nanak even though they were not related. He invented Gurmukhi (the language of the Guru) and he collected 974 of Nanak's hymns together so people could read them.
3. Guru Amar Das	He started the Langar, and even when the emperor came to visit him insisted that he would sit on the floor and eat with everyone else to show equality.
4. Guru Ram Das	He laid the foundation for the Golden Temple in Amritsar.
5. Guru Arjan	He made sure the Golden temple was completed, he asked a Muslim to lay the first stone of the building. He was the first Sikh Martyr (killed for his beliefs) possibly by being made to sit on a burning plate of metal.
6. Guru Hargobind	He was Guru Arjan's sons. He wore two swords to show miri-piri - being a saint and being a soldier. He was Guru for 38 years and won many battles against the Mughal empire.
7. Guru Har Rai	He was Guru during a peaceful time. He stated a hospital so that everyone could have fair healthcare.
8. Guru Harkrishan	He was only 5 when he became Guru. He died 3 years later of smallpox, a disease he probably caught while helping to look after other people when they were sick.
9. Guru Tegh Bahadur	He was Guru at a time when there was a really cruel Mughal emperor. He was captured and tortured to try and make him convert to Islam. He did not so he was beheaded.
10. Guru Gobind Singh	He started the Khalsa.. He told his followers that he would be the last Human Guru. He put together the Guru Granth Sahib and taught that this book would be the next and eternal Guru.
11. Guru Granth Sahib	The book that is the Guru for all Sikhs today. It is a collection of hymns from lots of the Gurus, and other writings from other holy books. This book it is respected as much as a living Guru.

Sikhs who are in the Khalsa do not:

- ❖ Drink alcohol,
- ❖ Use tobacco or drugs,
- ❖ Eat meat,
- ❖ Cut their hair,
- ❖ Have sex outside of marriage



They also commit to:

- Be honest at all times,
- Treat everyone as equal
- Meditate on Waheguru
- Wear the 5Ks

The Khalsa

❖Guru Gobind Singh created the Khalsa, a worldwide family of *pure* Sikhs. It started sth the festival of Vaishakhi where the Guru asked for volunteers who would be willing to die for Sikhis.. He did not really kill them though. These were the first members of the Khalsa.

❖Sikhs who have been through the Amrit ceremony of initiation become Khalsa initiated Sikhs. They take new names (Singh or Kaur) and wear the 5Ks

Kanga	Kesh	Kara	Kirpan	Kachera
A special comb that represents cleanliness		A steel bangle, symbolising unity, of self and a process of constant learning		A special pair of shorts. These are a symbol of modesty

In India, when Sikhism started, many people followed the Hindu Caste System. Most Hindus do not follow it today.

Each family was believed to belong to a particular caste. Your surname would tell people which caste your family were from. Your caste would dictate your job, who you could marry, who could look down on and who you should look up to. Hindus believe in reincarnation, so they thought people were born into a caste as a result of their actions in a past life.

Sikhs do believe in reincarnation but they do NOT believe in the caste system because they believe God's spark is in everyone.

1. Safety

Irritant

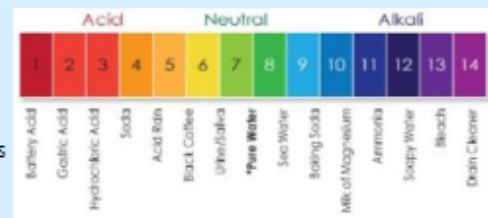


Corrosive

- When handling acids and alkalis in the lab we need to take safety precautions, for example wearing goggles.
- Concentrated Acid is corrosive, and will destroy skin cells.
- Dilute acids have lots of water added, they are an irritant and cause redness or blistering of the skin.

4. pH Scale

- The pH scale measures the strength of acids and alkalis, it runs from 0-14
- neutral solutions are pH 7 exactly
- acidic solutions have pH values less than 7
- alkaline solutions have pH values more than 7
- the closer to pH 0 you go, the more strongly acidic a solution is
- the closer to pH 14 you go, the more strongly alkaline a solution is

**2. Acids (pH 1-6)**

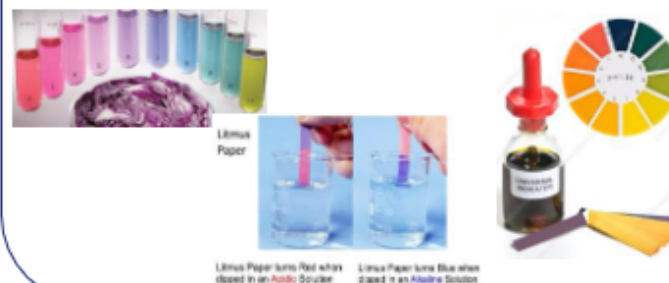
- **Acids** are a family of chemicals, examples are lemon juice, vinegar and Coca Cola. There is also acid in our stomach.
- Acids contain Hydrogen (H^+) ions.
- **Strong acids** like hydrochloric acid are very corrosive this means they destroy skin cells and cause burns.
- **Weak acids** like vinegar are safe to eat but are still irritant to sensitive parts of the body.

KS3 Science

Acids & Alkalis

5. pH Indicators

- **Indicators** are chemicals that show whether a substance is an **acid** or an **alkali**
- There are many different indicators, for example **litmus paper** and **universal indicator**
- There are also natural indicators such as **red cabbage**

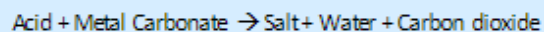
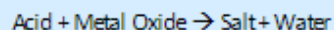
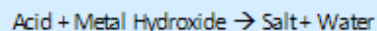
**3. Alkalis (pH 8-14)**

- Alkalis, are a family of chemicals that have a soapy feel, they are also corrosive, examples of these are toothpaste, soap and oven cleaner.
- Alkalis contain Hydroxide (OH^-) ions.
- Alkalis are bases that dissolve in water. Therefore not all bases are alkalis.

6. Neutralisation

- A chemical reaction happens if you mix together an acid and a base. The reaction is called **neutralisation**. A neutral solution is made if you add just the right amount of acid and base together.
- Neutralisation reactions form **salts** the name of the salt depends on the name of the acid, and the metal in the base
- Hydrochloric acid makes "**chlorides**", Nitric acid make "**nitrates**", Sulphuric acid makes "**sulphates**"

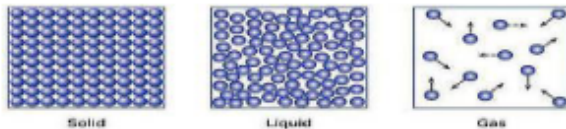
General equations for neutralisation reactions:



Farmers use lime (calcium oxide) to neutralise acid soils. Your stomach contains hydrochloric acid, too much of this causes indigestion. Antacid tablets contain bases to neutralise the extra acid. Wasp stings are alkaline, they can be neutralised using vinegar.

1. Particle Theory

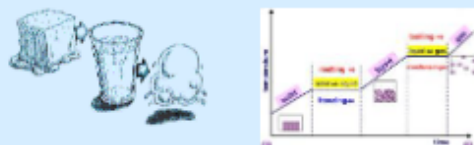
All matter is made up of particles.



- Solids - arranged in a regular pattern and can only vibrate in a fixed position.
- Liquids - arranged randomly but are still touching each other, can move.
- Gases, particles are far apart and are arranged randomly.

2. Physical Changes

In a physical change, the matter's physical appearance is changed, but no chemical bonds are broken or formed. For example, when water is heated from liquid water to gaseous steam, only the appearance of water is changed – both steam and liquid water have the chemical formula H_2O .



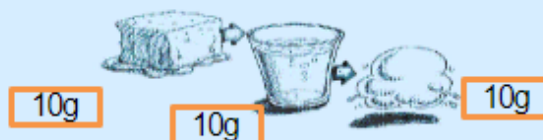
3. Chemical Changes

- Chemical reactions create new substances.
- Chemical reactions can also be used to transfer energy by burning fuels.
- In a chemical reaction the atoms rearrange themselves and then join back together in a different way.



4. Conservation of Mass

The Law of Conservation of Mass states that mass cannot be created or destroyed. Therefore, mass stays the same before and after a change of state. For example, 10g of ice melts into 10g of water and 10g of water evaporates into 10g of water vapour. The same applies to other substances.



KS3 Science Physical and Chemical Changes

6. Diffusion

Diffusion is the movement of particles from a higher concentration to a lower concentration.

Diffusion will stop when particles spread themselves evenly. Diffusion occurs in liquids and gases but not in solids, because particles in a solid are not free to move.



7. Factors affecting Diffusion

There are 2 factors affecting the rate of diffusion:

- Temperature: When temperature increases, particles gain more energy. They can then move and spread out at a higher rate.
- Concentration: When concentration increases, the rate of diffusion increases because there is a steeper concentration gradient.



5. Conservation of mass in chemical change

No atoms are created or destroyed in a chemical reaction. Instead, they just join together in a different way than they were before the reaction, and form products. This means that the total mass of the products in a chemical reaction will be the same as the total mass of the reactants.



8. Brownian Motion



Particles in fluids (liquids and gases) move randomly. This is called Brownian motion. They do this because they are bombarded by the other moving particles in the fluid. Larger particles can be moved by light, fast-moving molecules.

Brownian motion is named after the botanist Robert Brown, who first observed this in 1827. He used a microscope to look at pollen grains moving randomly in water. At this point, he could not explain why this occurred.

1. Magnetic Materials

Most materials are not **magnetic**, but some are. A magnetic material can be magnetised or will be attracted to a magnet. These metals are magnetic:

- Iron
- Cobalt
- nickel

Steel is mostly iron, so steel is magnetic too.

26	27	28
Fe	Co	Ni
Iron	Cobalt	Nickel

2. Permanent magnets

A bar magnet is a **permanent magnet**. This means that its magnetism is there all the time and cannot be turned on or off. A bar magnet has two magnetic poles:

- **north pole** (or north-seeking pole)
- **south pole** (or south-seeking pole)



3. Attract or repel?

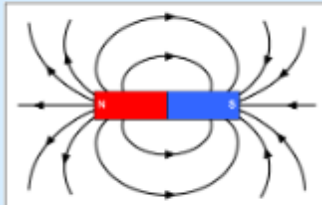
Magnets have two poles, a North pole (N) and a South pole (S).

- **opposite poles attract** (N and S)
- **like poles repel** (N and N, OR S and S)

How can you test if a piece of metal is actually a magnet? Seeing if it sticks to a magnet is not a good test, because unmagnetised iron, steel, cobalt and nickel objects will also do this. So you can only show that an object is a magnet if it **repels a known magnet**.

4. Magnetic fields

A magnet creates a **magnetic field** around it. You cannot see a magnetic field, but you can observe its effects. A force is exerted on a magnetic material brought into a magnetic field. The force is a **non-contact force** because the magnet and the material do not have to touch each other.



KS3 Science Magnetism

5. More Magnetic Fields

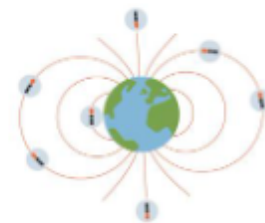
Although we cannot see magnetic fields, we can detect them using iron filings and plot them with a plotting compass

- field lines point from north to south pole
- field lines are more concentrated at the poles.
- The magnetic field is strongest at the poles, where the field lines are most concentrated.



6. The Earth's Magnetic Field

The Earth behaves as if it contains a giant magnet. It produces a magnetic field in which the field lines are most concentrated at the poles. This magnetic field can be detected using magnetic materials or magnets.



7. Navigating with a compass

A compass comprises:

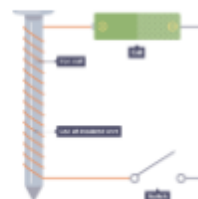
- a magnetic needle mounted on a pivot (so it can turn freely)
- a dial to show the direction



The north pole (north-seeking pole) of the compass needle points towards the Earth's north pole. If the needle points to the N on the dial, you know that the compass is pointing north. This lets you navigate outdoors using a map.

8. Electromagnets – extra content

When an electric current flows in a wire, it creates a magnetic field around the wire. This effect can be used to make an **electromagnet**. A simple electromagnet comprises a length of wire turned into a coil and connected to a battery or power supply.

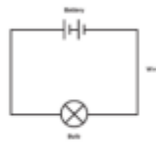


1. Electric current

An **electric current** is a flow of charge, and in a wire this will be a flow of electrons. We need two things for an electric current to flow:

- something to transfer energy to the electrons, such as a battery or power pack
- a complete path for the electrons to flow

To do something useful with the electric current, you need to put an electrical component into the circuit (such as a lamp), that can use the current in a useful way



4. Potential difference

Potential difference is a measure of the difference in energy between two parts of a circuit. The bigger the difference in energy, the bigger the potential difference. Potential difference is measured in **volts**, the symbol is V. Potential difference is measured using a device called a **voltmeter**, unlike an ammeter, you must connect the voltmeter **in parallel** to measure the potential difference across a component in a circuit.



6. Parallel Circuits

Components in parallel circuits are connected on different branches of the circuit.

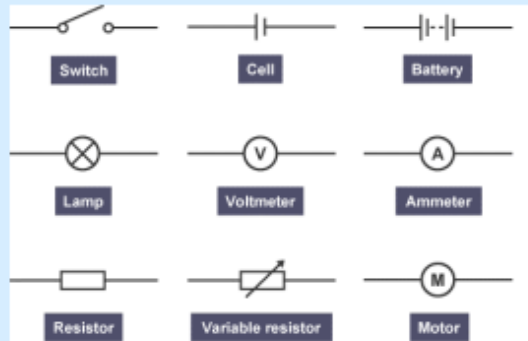
If one component connected in parallel fails, the other components are not affected.

Current is shared between the components in a parallel circuit.

Parallel circuits are useful if you want to switch components on and off independently, our homes are wired this way.



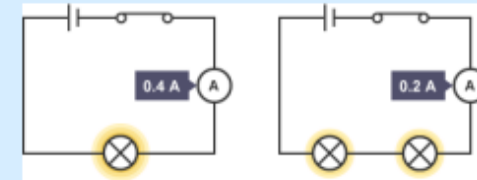
2. Circuit symbols



KS3 Science Electricity and Circuits

7. Resistance

The wires and the other components in a circuit reduces the flow of charge through them. This is called resistance. The unit of **resistance** is the **ohm**, and it has the symbol Ω . Resistance increases if you add more components to a circuit.



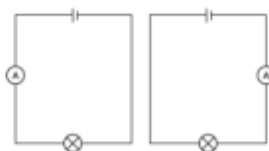
3. Current

Current is a measure of how much electric charge flows through a circuit. The more charge that flows, the bigger the current.

Current is measured in amperes (amps), the symbol is A.

To measure the current flowing through a component in a circuit, you must connect the ammeter **in series** with it.

Current is not used up in a circuit



5. Series circuits

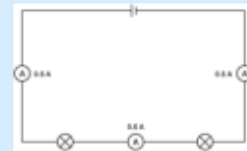
A series circuit contains components connected one after the other, like the episodes of a series on TV.

In series circuits, if one component fails, all the components stop working.

Current is the same everywhere in a series circuit.

Current is shared between the Components in a series circuit.

Series circuits use less wire than parallel circuits.

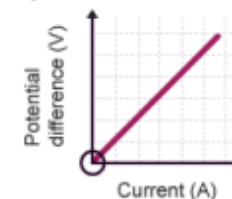


8. Calculating resistance

The equation for calculating resistance is:

Resistance = current x potential difference

If you plot a graph of current against potential difference for a wire, you get a straight line.



7.3 My life at school

¿Cuál es tu asignatura favorita?

El inglés
El español
El francés
El teatro
El dibujo
El deporte
La informática
La música
La tecnología
La geografía
La historia
La religión
La educación personal y social
Las matemáticas
Las ciencias
Las humanidades

¿Qué Piensas?

Es
No es
Interesante
Práctico
Útil
Fácil
Difícil
Aburrido
Emocionante
(in)cómodo
Caro
Barato
De moda
Pasado de moda

What is your favourite subject?

English
Spanish
French
Drama
Art
PE
Computer Science
Music
Technology
Geography
History
RE
PSHE
Maths
Science
Humanities

What do you think?

It is
It isn't
Interesting
Practical
Useful
Easy
Difficult
Boring
Exciting
(un) comfortable
Expensive
Cheap
Fashionable
Unfashionable

¿Cómo es tu uniforme escolar?Llevo...

Una chaqueta
Un jersey
Una camisa
Una camiseta
Una corbata
Una falda
Unos calcetines
Unos pantalones
Unos zapatos
Unas medias

What is your school uniform like?I wear..

Blazer
Jumper
Shirt
T-shirt
Tie
Skirt
Socks
Trousers
Shoes
Tights

Verbos en el colegio

Estudiar
Escuchar
Charlar
Trabajar
Pasar
Jugar
Descansar
Relajar

Verbs at school

To study
To listen
To chat
To work
To spend
To play
To rest
To relax

¿Cómo es tu profe...?

Amable
Agradable
Aburrido/a
Asqueroso/a
Cómodo/a
Contento/a
Difícil
Divertido/a
Enfadado/a
Estricto /a
Feo/a
Fuerte
Grande
Guapo/a
Horrible
Emocionante
Joven
Limpio/a
Maduro/a
Pequeño/a
Perfecto/a
Rápido/a
Rico/a
Ruidoso/a
Sabio/a
Serio/a
Sucio/a
Tímido/a
Trabajador/a
Triste
Viejo/a

What is your teacher like?

Kind
Pleasant
Boring
Disgusting
Comfortable
Happy
Difficult
Fun
Angry
Strict
Ugly
Strong
big
Handsome
Awful
Exciting
Young
Clean
Mature
Small
Perfect
Fast
Rich
Noisy
Wise
Serious
Dirty
Shy
Hard working
Sad
old

Llevar is a regular verbs which follow the pattern below. The verbs “jugar” is irregular but an important verb.

Pronouns	llevar – to wear
Yo (I)	Llevo – I wear
tú (you)	Llevas – you wear
el (he), ella (she),	Lleva - He/she wears
nosotros (we)	Llevamos – we wear
vosotros (you) (pl. or formal)	Lleváis – you wear(pl. or formal)
Ellos/ellas (they)	Llevan – they wear

Jugar– to play

Yo juego- I play
 Tu juegas – you play
 Él/ella juega – he/she plays
 Nosotros jugamos –we play
 Vosotros jugáis – you (pl) play
 Ellos/ellas juegan – they play

Comparisons

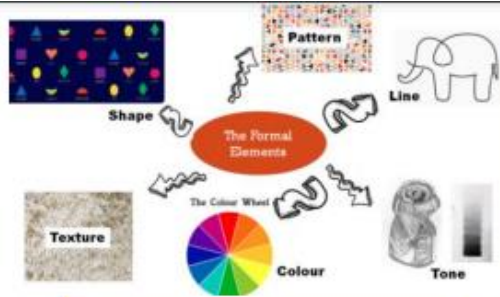
más	- more	Juán es más interesante que Pablo
menos	- less	Pablo es menos interesante que Juan
tan...como	- as...as	Pablo es tan interesante como Juan

Superlative

El/la más	– the most	Juan es el más inteligente
El/la menos	– the least	María es la menos simpática

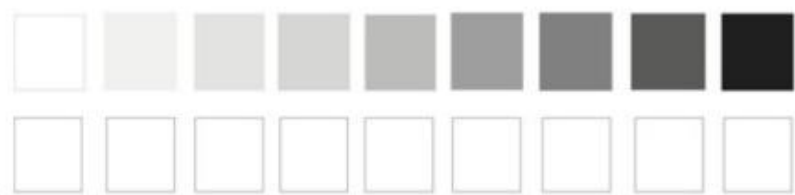
Opinion phrases help to make our work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. Me gusta (I like)/Pienso que (I think that)/ En mi opinión (in my opinion).

Time phrases help to make our work more detailed by telling us when things happen have a look at the list on your vocabulary list e.g. Normalmente (normally), raramente (rarely), dos veces a la semana (twice a week).



The formal elements are **Line, Colour, Tone, Shape, Pattern and Texture**. They are used together and determine how your work will look.

Practice your tonal drawing skill here

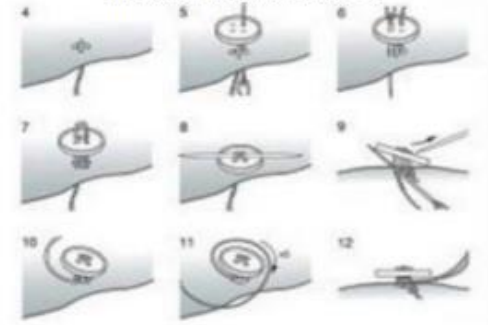







Year 7 Textiles Knowledge Organiser



1. Bags must be kept in the cubes
2. Do not run
3. Hair must be tied back
4. Only one person to use a sewing machine at a time
5. Chairs must be tucked in and sat on correctly
6. Always listen to the teacher and follow instructions
7. No food or drink in the textiles room
8. Use all equipment respectfully and as you have been shown how to

Pictorial Instructions- how to sew on a button (practice and take photos)



Equipment	Use
Bobbin 	A bobbin is a cylinder, to which cotton thread is wrapped around. It is found in the bottom part of a sewing machine, which is called the bobbin holder.
Thread 	Cotton thread is used to attach fabric together by using a sewing machine or a hand needle. It is positioned on the thread spool when being used on a sewing machine.
Fabric scissors 	Fabric scissors are used to cut fabric ONLY! They should not be used to cut paper.
Pins 	Pins are used to position and secure fabric in to place before sewing fabric together.
Measuring Tape 	It is a flexible ruler that can be used for body measurements, tailoring and dressmaking. It is flexible to measure fabric and curves of the body.

	Textiles Hierarchy of Key words	
'Academic' keywords. Tier 3	analyse embellishment Woven/ bonded/ knitted Free machine embroidery	Plain seam sustainable function develop
Valuable keywords used in most lessons every lesson. Tier 2	contrast compare context effect	complementary colours environment fastening embroidery equipment appliqué improve
Basic keywords used in almost every lesson. Tier 1	colour pattern theme thread	design machine line Fabric shape Texture tone sew

Questions and activities – hints and tips

Summarising a lesson:

Answer the following questions to help you summarise your learning in a lesson. This will help you recap and think again about your learning, and will be useful to look back on in the future.

- What key words did you use in the lesson?
- Can you define those key words and use them in a sentence?
- What new content did you cover?
- How does this link to your previous learning?
- Can you summarise your learning into one sentence?

Revision:

If you have an assessment approaching, you could create some revision material based on your knowledge organiser.

Can you get down the key information in a spider diagram?

Can you use diagrams, pictures, symbols etc to recall your knowledge?

Knowledge quizzes:

Create a set of questions using the information from your knowledge organiser, or from your lesson.

You could make them about key words, and maybe even give multiple choice answers.

Go over the questions you keep getting wrong.

Try the questions out with those at home, or maybe your teacher could use them for their starter quiz in class.

Keyword Development:

Practise the spellings of key words. Use the look-cover-write-check method to help you.

Can you explain what the key words mean?

Can you link the key words together?

Copy out the key words with their definitions.

What might it look like?

Geography Thursday 1st October
Topic: Our Place in the World

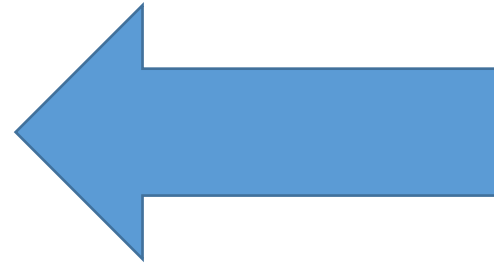
Lesson Summary:

Longitude - the distance, in degrees, E or W of the Prime Meridian.

Latitude - the distance, in degrees, N or S of the Equator.

Today we learnt about how the world is divided up using lines of latitude + longitude. The Equator is an 0° latitude, and the poles are 90° N + S.

This links to our previous learning because now I can say where the continents are using longitude + latitude to find them on a map.



Lesson summary:

Science

Topic: cells

Monday 28th September

Knowledge Quiz:

1.) What is the name of the part of the microscope where the specimen is placed?

A = Stage

2.) How many cells are there in a 'unicellular' organism?

A = one

3.) What does the 'cell membrane' do?

A = controls movement of substances in + out of the cell

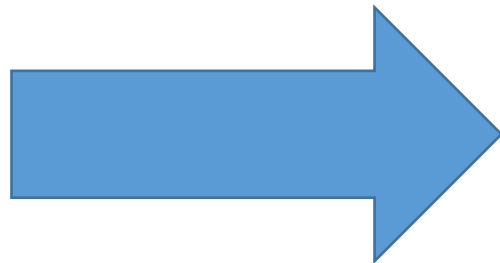
4.) Where does photosynthesis take place in a cell?

A = Chloroplast

5.) What is the function of the red blood cells?

A = to carry oxygen

Knowledge Quiz:



How to present your homework:

Subject written on the left-hand side of the page and underlined.
For example: Food

Topic written on the centre of the page and underlined.
For example: Sugars

One single straight line between both pieces of homework.

Subject: Food Tuesday 25th June 2019

Topic: Sugars

Keyword	Definition
Monosaccharides	
Disaccharides	
Intinsic sugars	
Polysaccharides	

Subject: English

Topic: Macbeth

1. Who are the four most important characters in Macbeth?
Macbeth, Lady Macbeth, Banquo and Macduff.
2. What are three character traits of Banquo?
Gullible, superstitious and ambitious.
3. How would you describe Lady Macbeth?
She is manipulative, cold-blooded and cruel.
4. How is Lady Macbeth two-faced?
She is warm and welcoming to Duncan, and then manipulates her husband to kill him.
5. What is the name of Banquo's son?
Fleance

Date written fully on the right hand side of the page and underlined – this should be the day you complete the homework.

