

Knowledge



Name _____

Form _____



"An investment in knowledge
pays the best interest."

Benjamin Franklin

(research 10 facts about Benjamin Franklin)

Year 7 Knowledge Organiser:
Term 2A

Instructions for using your Knowledge Organiser

The timetable on the next page tells you which subjects you should be studying on which days (it doesn't matter if you have that subject on that day or not, you should follow the timetable).

You are to use your exercise book to show the work you have done. Each evening you should start a new page and put the date clearly at the top.

You need to bring your KO and exercise book with you EVERY DAY to school. Your KO and exercise book will be checked regularly in form time.

You will also be tested in your lessons on knowledge from the organisers.



You must use the revision strategy **Look - Say - Cover - Write - Check** to learn the knowledge. You can also use your KOs and book in a number of different ways but you **should not just copy** from the Knowledge Organiser into your book.

Presentation

You should take pride in how you present your work:

- Each page should be clearly dated at the top right hand side with the **Subject** written in the middle e.g. English.
- Half way down the page a line should divide it in two with **Next Subject e.g. Maths** written above the dividing line.
- Each half of the page should be neatly filled with evidence of self-testing. There should be an appropriate amount of work.
- Failure to show pride in your presentation or wasting space on your page with large writing or starting a number of lines down will result in a **negative ATL**.



Year 7 Knowledge Organiser Homework Timetable

You are expected to **study the subjects shown on your timetable each day**. You need to **spend 20 minutes on each subject** and you will need to **evidence your work in your exercise book**.

WEEK A	Subject 1	Subject 2	Subject 3
MONDAY	English	Spanish	Geography
TUESDAY	Science	Maths	PD
WEDNESDAY	History	Music	Science
THURSDAY	RE	Maths	Food
FRIDAY	Computing	Technology	English

WEEK B	Subject 1	Subject 2	Subject 3
MONDAY	English	Drama	Geography
TUESDAY	Science	Maths	RE
WEDNESDAY	History	PE	Science
THURSDAY	RE	Maths	Spanish
FRIDAY	Computing	Art	English



Reading Log

"The more that you read, the more things you will know. The more that you learn, the more places you'll go"

Dr Seuss

Use this reading log to record the books you read and how long you have spent reading.

Week	MON	TUE	WED	THURS	FRI	SAT	SUN	Book(s) read (title and author)	Time spent reading	Parent comment/signature
Week 1										
Week 2										
Week 3										
Week 4										
Week 5										



Myth- a traditional story, especially one concerning the early history of a people or explaining a natural or social phenomenon, and typically involving supernatural beings or events.



Legend - a traditional story sometimes popularly regarded as historical but not authenticated.



TASK 1. Myths

- Myths often included gods, demigods or supernatural characters.
- Gods will often behave in a similar way to humans and experience human emotions.
- Myths can sometimes be used to provide an explanation about how the world was originally created.
- They often have moral lessons - they aim to teach the audience something.
- Myths often contain magic and the supernatural.
- Sometimes characters will change or transform in what is known as a 'metamorphosis'.

TASK 2. Legends

- Unlike myths, legends focus on people rather than gods.
- The characters can sometimes be based on real people.
- As the stories were often told through speaking rather than being written down, often many changes would occur over time.
- Legends are told as if they actually happened in the past, but often they did not.



Type of character:	What is their role?
Protagonist	In myths and legends, the protagonist (main character) is a type of hero - a representation of goodness, virtue and morality that usually looks to maintain order and justice in a society and thwart or stop a villain's attempts to do the opposite.
Antagonist	Opposes the protagonist and is similar to a villain, although isn't as hyperbolic or exaggerated in terms of personality. They are usually a bad or dishonest person, although this sometimes isn't the case.
Confidante	Someone that the protagonist confides in. This helps readers to find out more about the protagonist's personality. They can help to bring the best out in the hero or protagonist.
Dynamic character	This type of character changes as the story progresses. Sometimes a good character may turn bad, or the other way around, but it is usually a permanent change.
Static/ stock character	A character that doesn't change and we learn little about them. They serve a purpose in terms of moving a plot (story) forward. They can sometimes be quite stereotypical or play a specific role, perhaps to make people laugh.

4. Big	Colossal	Enormous	Monstrous
	Huge	Gigantic	Immense
	Substantial	Mammoth	Vast
	Hefty	Sizable	Massive

5. Evil	Wicked	Immoral	Pernicious
	Vile	Nefarious	Dishonourable
	Base	Depraved	Destructive
	Foul	Villainous	Hateful

5. Sharp	Knife-edged	Spiky	Serrated
	Acuminate	Barbed	Needle-like
	Pronged	Prickly	Razor-sharp
	Acuate		

4. Common themes in Myths and Legends:

- Good against evil
- Friends against foes
- Strength and weakness
- Justice and injustice
- Journeys
- Tests, trials and forfeits

A fantastic writer will choose their vocabulary carefully so they can convey their ideas as accurately as possible to a reader, they can build a consistent tone and atmosphere, and they can engage a reader more effectively.



6. Angry	Vexed	Raging	Enraged
	Hostile	Provoked	Tempestuous
	Maddened	Ferocious	Tumultuous
	Incensed	Infuriated	Fiery

7. Negative adjectives: disgusting, sickening, repulsive, abominable, awful, loathsome, repugnant,

6. Scary	Chilling	Creepy	Terrifying
	Horrifying	Intimidating	Shocking
	Alarming	Hair-raising	Blood-curdling
	Spine-chilling	Horrendous	Petrifying

7. Size adjectives: broad, deep, heavy, narrow, shallow, short, colossal, immense, vast, microscopic,

6. Strong	Powerful	Robust	Muscular
	Hefty	Indestructible	Unassailable
	Burly	Sinewy	Well-built
	Brawny	Strapping	Herculean

7. Powerful verbs: thrust, destroyed, punched, hammered, bombarded, smothered, trashed, thudded, thundered,

Year 7 Maths - Term 2A

TOPIC - Problem solving at St Cuthbert's.

Key information. Highlight the important information you will need.

List the maths. What maths topic do you need to use. Write them down.

**K
L
A
P
S**

Attach numbers. Relate the problem to one you can already do. E.g $3 \times 4 = 12$.

Picture. Label the diagram with any information that can help you. Draw a picture to help you visualise the problem.

Sensible. Check! Does your answers make sense?

Don't forget
Always show your working out
Never round half way through a question

Keywords:
Take care with your spellings of these words

Percentage

Negative

Indices

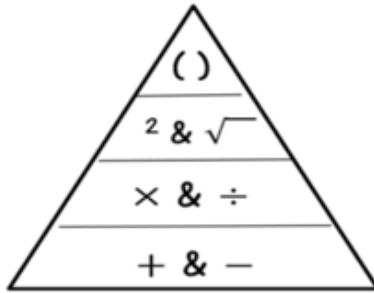
Triangle

Parallelogram



Using the BIDMAS rule

The BIDMAS rule tells us what order we need to carry out the operations in, to ensure we get the correct answer.



This diagram displays the hierarchy (**order**) of the operations. We can also use BIDMAS:

- B - Brackets
- I- Indices
- D - Division
- M - Multiplication
- A - Addition
- S - Subtraction

Percentages of amounts

We find percentages of any amount by remembering 3 key calculations:

$$50\% = \frac{50}{100} = \frac{1}{2}$$

So we can find 50% by dividing by 2

$$10\% = \frac{10}{100} = \frac{1}{10}$$

So we can find 10% by dividing by 10

$$1\% = \frac{1}{100}$$

So we can find 1% by dividing by 100

If we can find these key values, then we can multiply them and combine them to get any percentage we need.





Worked examples:

Find 23% of 6300 =

- 10% = 630
- 20% = 1260
- 1% = 63
- 3% = 189

$$\text{So } 23\% = 1260 + 189 = 1443$$

Worked examples:

Find 67% of 5000 =

- 50% = 2500
- 10% = 500
- 5% = 250
- 1% = 50
- 2% = 100

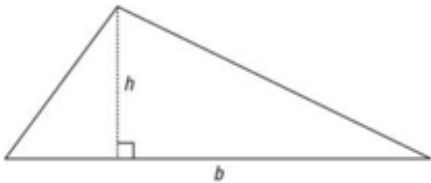
$$\text{So } 67\% = 2500 + 500 + 250 + 100 = 3350$$



Finding the Area for triangles and parallelograms:

$$A = \frac{b \times h}{2}$$

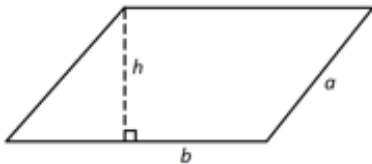
Where b = base length
And h = perpendicular height



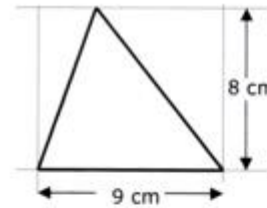
Area of a Parallelogram:

$$A = b \times h$$

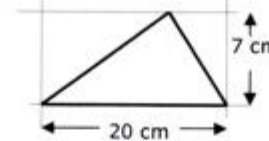
Where b = base length
And h = perpendicular height



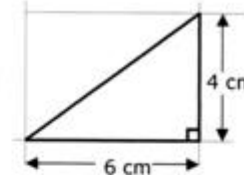
Worked Examples



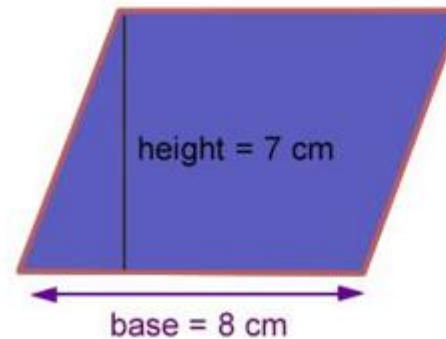
$$\begin{aligned} \text{Area} &= \frac{9 \times 8}{2} \\ &= \frac{72}{2} \\ &= 36 \text{ cm}^2 \end{aligned}$$



$$\begin{aligned} \text{Area} &= \frac{20 \times 7}{2} \\ &= \frac{140}{2} \\ &= 70 \text{ cm}^2 \end{aligned}$$



$$\begin{aligned} \text{Area} &= \frac{6 \times 4}{2} \\ &= \frac{24}{2} \\ &= 12 \text{ cm}^2 \end{aligned}$$



$$A = b \times h$$

$$A = 8 \times 7$$

$$A = 56 \text{ cm}^2$$



Organs are made of tissues - one organ can contain several tissues.

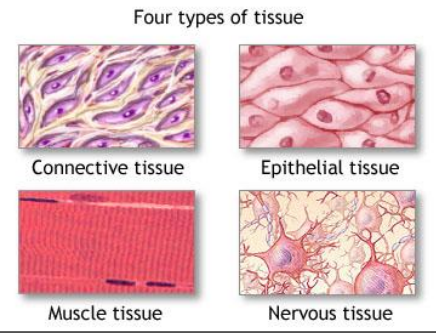
E.g. the **stomach**:

Muscular tissue **contracts** to churn food.

Glandular tissue to **produce enzymes**.

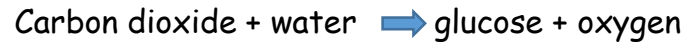
Epithelial tissue to **cover** the organ.

Nervous tissue to **carry impulses** to control contractions.



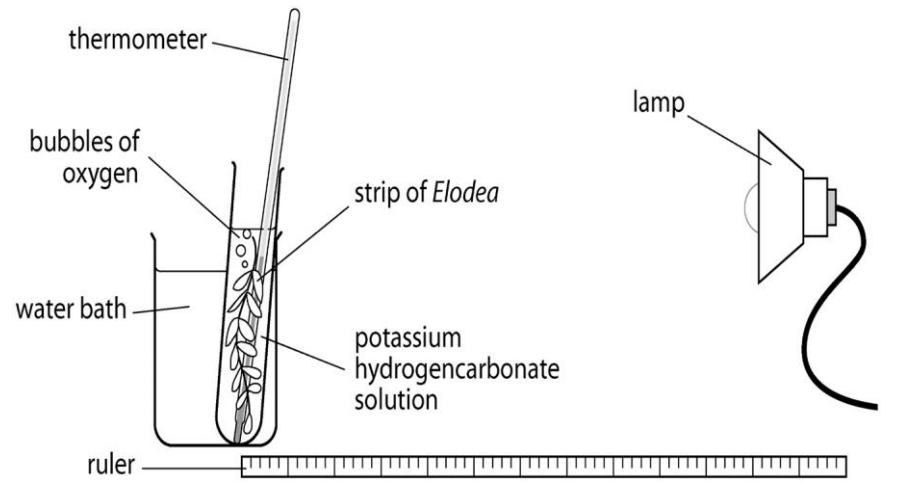
Key Term	Definition
Cell	The building block of life and the <u>smallest structural unit of an organism</u>
Tissue	A <u>group of cells</u> working together to <u>perform a particular function</u>
Organ	A <u>group of tissues</u> working together to form a particular function
Organ system	A <u>group of organs</u> working together to perform a particular function
Organism	An individual life form, can be unicellular or multicellular

Photosynthesis

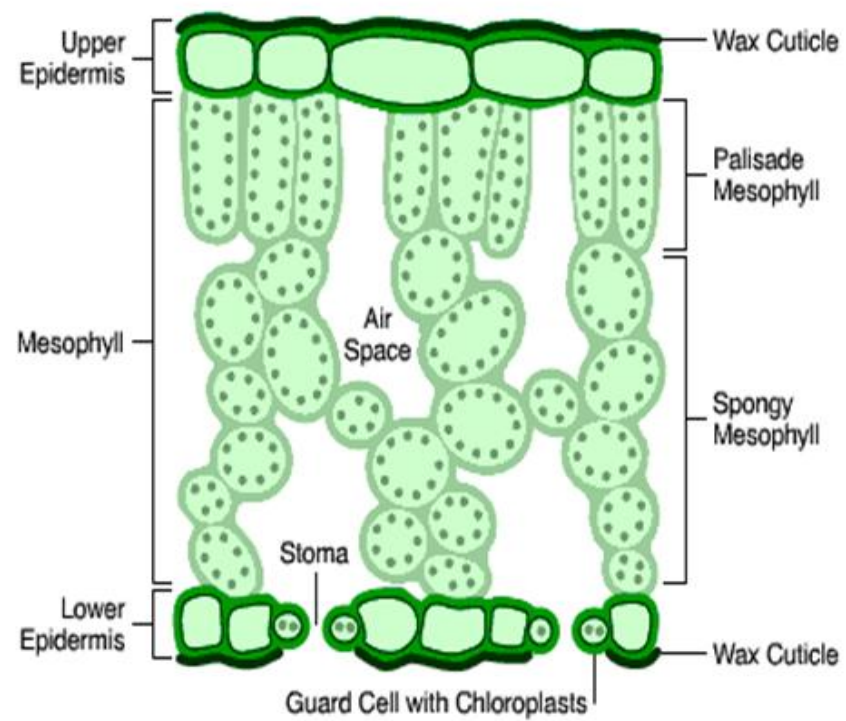


Chloroplasts in the palisade cells contain chlorophyll, a green pigment which absorbs light. This is used to convert carbon dioxide and water into glucose and oxygen.

The rate of photosynthesis can be measured by counting bubbles or measuring volume of oxygen produced, like in the diagram below:



Structure of the Leaf



Palisade cells - where photosynthesis takes place, adapted to absorb as much light as possible

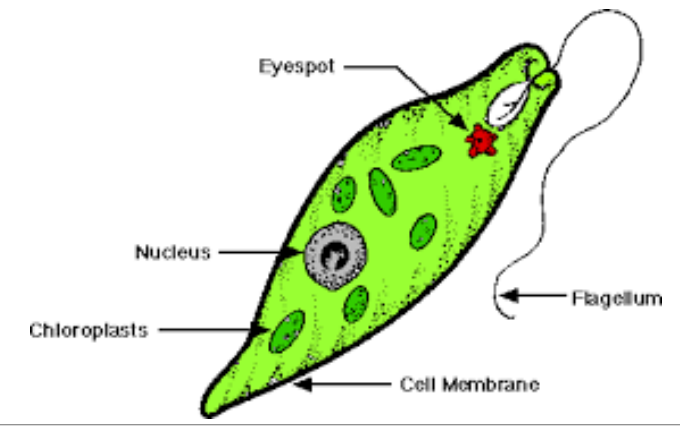
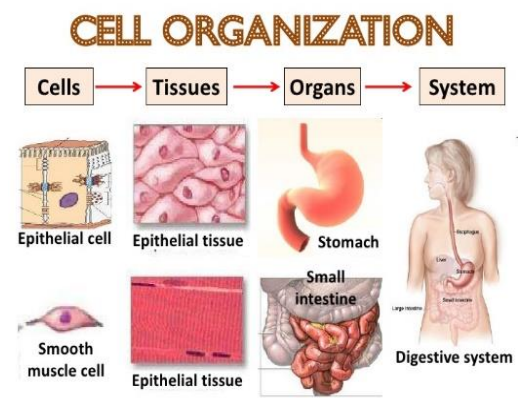
Guard cells - open and close stomata to allow gases in and out, and control water loss.

Xylem - moves water and minerals up from the roots

Phloem - transports sugars around the plant.

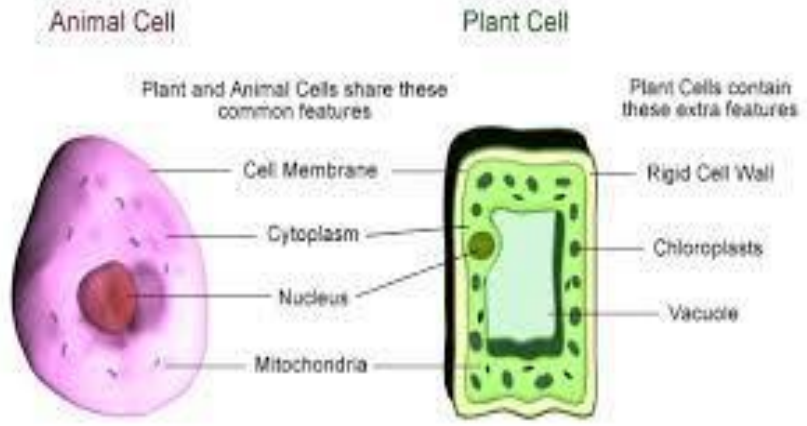
Unicellular Organisms

Unicellular organisms are made of one cell. There are no tissues, organs or organ systems. They have structural adaptations to help them survive, for example Euglena have a flagellum (tail) to help them move and chloroplasts so they can make their own food.



Cells

Cells are the building blocks of all living organisms. They contain organelles which have different functions

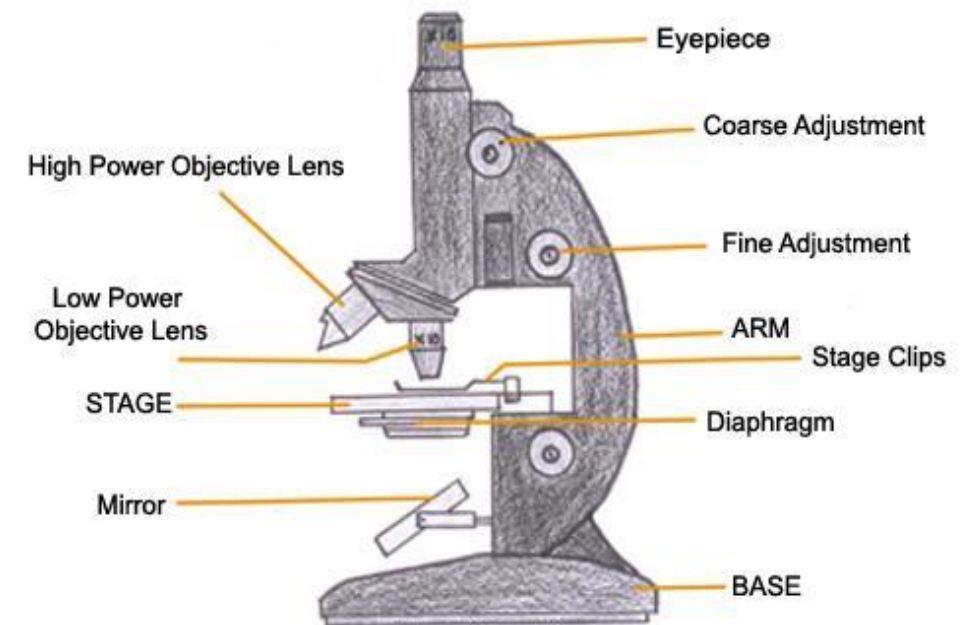
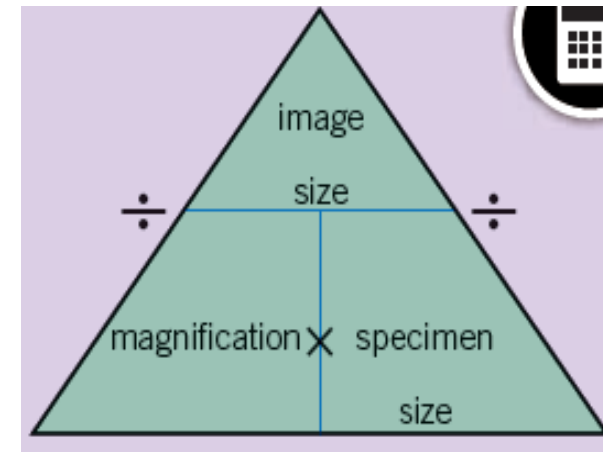


Plant and animal cells
Copyright © 2009 science-resources.co.uk

Key Term	Definition
Cell wall	Made of <u>cellulose</u> , which supports the cell
Cell membrane	Controls <u>movement of substances</u> into and out of the cell
Cytoplasm	Jelly-like substance where <u>chemical reactions happen</u>
Nucleus	Contains <u>genetic information</u> and controls what happens inside the cell
Vacuole	Contains a <u>liquid called cell sap</u> which keeps the cell firm
Mitochondria	Where <u>respiration</u> takes place
Chloroplast	Where <u>photosynthesis</u> takes place
Ribosome	Where <u>proteins are synthesised</u>

How to Set up a Microscope


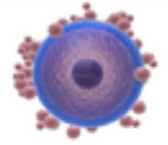


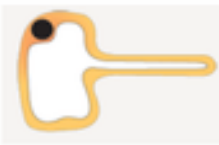
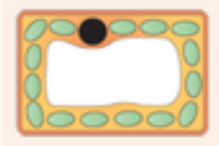

1. Place the microscope with the eyepiece facing towards you and tilted back.
2. Turn the lenses so that the lowest power objective lens is in place.
3. Place the slide onto the stage and secure with the stage clips.
4. Use the course adjustment to lower the lowest power objective lens to as low as it can go without touching the slide.
5. Turn on or adjust the light source.
6. Look through the eyepiece and slowly turn the course focus to move the objective lens away from the slide, until the image comes into focus.
7. Use the fine adjustment if needed for fine focussing.
8. You can then change to a higher power objective lens, adjusting the fine focus to see the image.



Specialised Cells

Multicellular organisms are made up of specialised cells.

Each cell has a particular function.

	SPERM CELL	Long tail for swimming Head for getting into the female cell
	EGG CELL	Large Contains lots of cytoplasm
	NERVE CELL	Long connections at each end Can carry electrical signals
	RED BLOOD CELL	Large surface area Contains haemoglobin, which joins with oxygen
	ROOT HAIR CELL	Large surface area
	LEAF PALISADE CELL	Large surface area Lots of chloroplasts
	XYLEM CELL	Hollow so it conducts water Strong cell walls

Year 7 Religious Education - Term 2A: Galilee to Jerusalem

Big Questions:

- Who is Jesus?
- What do the different names or titles for Jesus mean?
- What is incarnation?
- What is the trinity?
- How is Jesus a model of holiness?



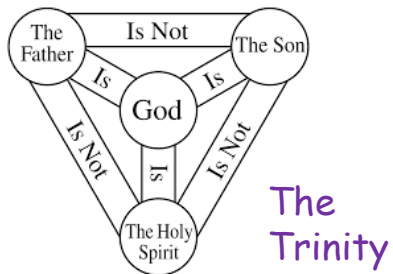
Section 1:




Christians believe that Jesus is the full and final revelation of God. Revelation is the way that God makes himself known to humans. Christians believe that Jesus is God! - he is the incarnation, which means he is God made into a person. He is fully God and fully human. This is a difficult idea to understand and in the days of the early Church there was some disagreement about it.

Section 2:

Christians believe in the trinity. This is the belief in one God known through three persons - father, son and holy spirit. This belief is expressed in prayer, including a special prayer called the Nicene Creed. A creed is a statement of belief - the Latin 'credo' means 'I believe'. Belief about trinity is also expressed in art.

Jesus has lots of different titles in the Bible; Son of God. Son of Man, Lord. They express Christian beliefs about him. For Christians Jesus is the model of perfect human living and they try to live as he did. They follow his example of service and love.



Key words	Definition
Incarnation	'made into flesh' - Jesus is the incarnation = God made into flesh / a human
Trinity	One God known through 3 persons; the father the son and the holy spirit
Son of Man / son of God / Lord	Titles for Jesus  
Christ	Anointed one / messiah - from the Greek 'christos'
Heresy	When someone who is a baptised Catholic deliberately denies or questions Church teaching 
Arianism	The belief that Jesus was not fully God. Arius was an early Christian priest, who was found guilty of heresy
lex orandi, lex credendi	Latin for 'the law of prayer, The law of belief'
service	Selflessly working for the benefit of other people

Year 7 Religious Education - Term 2A: Galilee to Jerusalem

Sources of Wisdom and Authority (SOWAA)

(1) The Nicene Creed
'I believe in one God..'

(2) And a voice came from heaven ' you are my beloved son; with you I am well pleased'
Mark's Gospel

(3) 'Truly this man was the Son of God'
Matthew 27:54



(4) But who do you say I am? Peter answered him; 'you are the Christ'

Mark 8:29

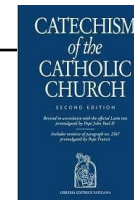
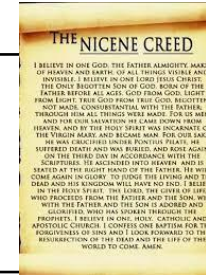
(5) 'The son of man came not to be served but to serve'

Mark 10:45

(6) He reveals the invisible God...He was born, died and rose again for us....He is the one who knows us and loves us; He is our companion and the friend of our life' Pope St Paul VI 1970

(7) For the Liturgy is indeed a sacred thing, since by it we are raised to God and united to Him, thereby professing our faith and our deep obligation to Him for the benefits we have received and the help of which we stand in constant need. Pope Pius XI in 1928

(8) Christ, the Son of God made man is the father's one perfect and Unsurpassable Word. In him he has said everything; there will be no other word than this one (Catechism)



Complete the learning homework for each week; work in your yellow book

Jan 22nd 2024

Section 2 and trinity diagram

Jan 8th 2024

Key words and definitions

Jan 29th 2024

SOWAA 1 - 5

Jan 15th 2024

Section 1

5th Feb 2024

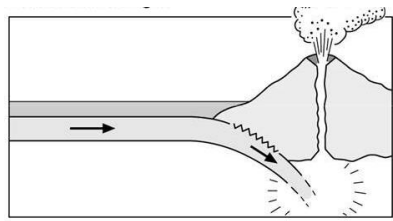
SOWAA 7 - 8

Year 7 Geography - Term 2A: Tectonics

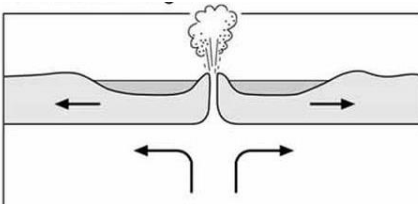
Key Vocabulary...

Natural hazard	Natural hazards are extreme natural events that can cause loss of life, extreme damage to property and disrupt human activities.
Earthquake	An earthquake is the shaking and vibration of the Earth's crust due to movement of the Earth's plates.
Volcano	A volcano is an opening in Earth's crust that allows molten rock from beneath the crust to reach the surface.
Impacts	How the natural hazards effects people, the economy or the environment.
Three Ps	Prediction, protection and preparation.
Aid	Aid is assistance given from one country to another.

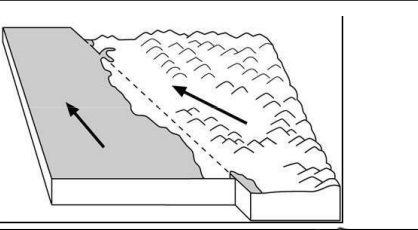
Destructive plate margin- two plates moving towards each other



Constructive plate margin- two plates moving away from each other



Conservative plate margin- two plates sliding past each other



Key Plates...

Deeper Learning...

As we know earthquakes are very difficult to predict.

How can we make it safe for all countries and not just HICs during an earthquake.

The BIG questions..

Explain how aid can be a huge help to LICs after a tectonic hazard.

The eruption of Vesuvius on 24th and 25th August 79 AD

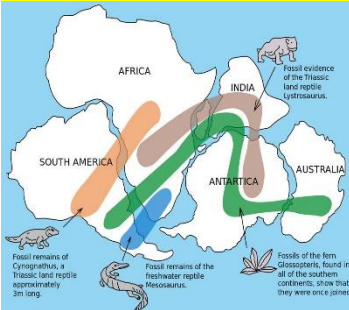
The eruption caught the local population of Pompeii and Herculaneum utterly unprepared. Although at the same time, as we now know in retrospect, all the tell-tale signs were there to warn them.

It was the first time Mount Vesuvius had erupted for 1,800 years.

The pyroclastic flow (molten and ash) moved down the mountain as fast as 450 miles per hour and was hot as 999°C. Mount Vesuvius is thought to be one of the most dangerous volcanoes in the world and is the only active volcano on the mainland of Europe.

Mount Vesuvius erupted most recently in 1944, but it wasn't as powerful as in 79AD. It has a history of having a catastrophic eruption every 2,000 years or so... and it is almost 2,000 years since 79AD...

A long time ago...

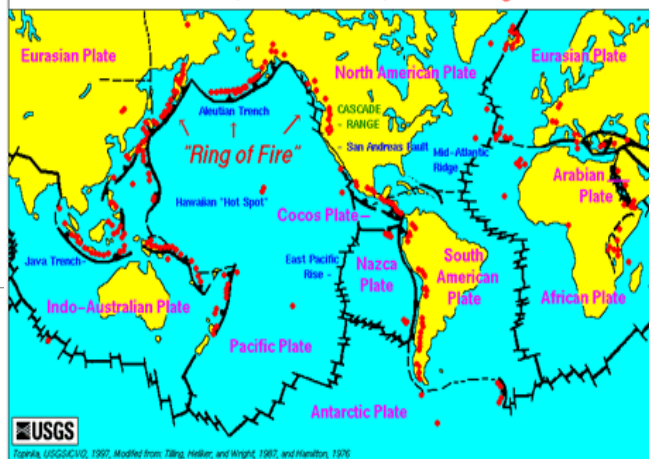


Continental drift describes one of the earliest ways geologists thought continents moved over time. This map displays an early "supercontinent," Pangea, which eventually moved to form the continents we know today.

Picture this...



Active Volcanoes, Plate Tectonics, and the "Ring of Fire"



St Cuthbert's Catholic High School
Live life in all its fullness

Case study: earthquake

Haiti lies right on the **boundary** of the Caribbean and North American plates. There was slippage along a **conservative plate boundary** that runs through Haiti.

On 12 January 2010, a magnitude 7 earthquake hit Haiti at 16:53 local time. The earthquake's **epicenter** was 25 km west of Port-au-Prince, the capital.

Social impacts of the earthquake (effects on people)

- 3 million people affected.
- Over 220,000 deaths.
- 300,000 injured.
- 1.3 million made homeless.
- Several hospitals collapsed.

Economic impacts of the earthquake (effects on money and jobs)

- 30,000 commercial buildings collapsed.
- Businesses destroyed.
- Damage to the main clothing industry.
- Airport and port damaged.



Response to the earthquake

Haiti is a very poor country without the money and **resources** to redevelop. Because there were few **earthquake-resistant buildings**, the devastation was massive. Many buildings simply collapsed or were damaged beyond repair.

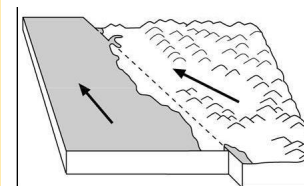
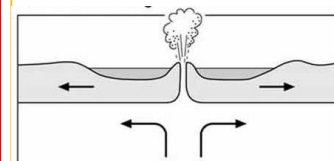
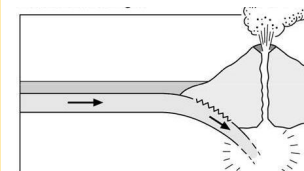
Primary responses

- Neighbouring Dominican Republic provided **emergency water** and **medical supplies** as well as heavy machinery to help with search and rescue underneath the rubble, but most people were left to dig through the rubble by hand.
- Emergency **rescue teams** arrived from a number of countries, eg Iceland.
- **GIS** was used to provide satellite images and maps of the area, to assist aid organisations.

Secondary responses

- Money was pledged by organisations and governments to assist in rebuilding, but only slow progress had been made after one year.
- After one year, there were still 1,300 camps.
- Small farmers are being supported - so crops can be grown.
- Schools are being rebuilt.

Using the diagrams below describe the movements of the plates and explain the hazard this could create, use labels in your answer.



Questions

1. How do countries respond to a tectonic hazard?
2. Explain the economic factors of a tectonic hazard?
3. Explain why it is important to plan for a tectonic hazard and give examples of planning methods.

Challenge: Compare and contrast the social and environmental impacts of a tectonic hazard in an LIC and HIC.

Who were the Normans?

1

William was born in 1028 and ruled Normandy from 1035. He was a large man and someone who had grown up fighting. William is said to have had great determination and ambition and was sometimes brutal. William was born when his mother and father weren't married. Nowadays, this doesn't matter but in the eleventh century it made someone seem less respectable. This made some people see William's rule as illegitimate which made his control over Normandy weaker. As a result, when William was young, many powerful people in Normandy fought against him to try and take control over Normandy. William had to crush many rebellions and fought for his right to rule. As he got older, William was able to better control Normandy. William's thoughts then turned to taking more land.

William and Matilda

2

William and Matilda married in 1051.

Matilda's family was powerful in France and Flanders. Flanders was also important because lots of trade between England and the rest of Europe passed through it. Matilda was also legitimate which meant that she was born to two married parents. Matilda was therefore very important to William as their marriage made William's standing in Normandy stronger. Matilda was considered calmer than her husband and their marriage produced several children.



3 The death of Edward the Confessor in January 1066 started a year of turmoil. Three key contenders all had strong claims to become the next king of England.

Contender 1: Harold Godwinson

Anglo-Saxon Earl of Wessex, one of the most powerful men in England. Harold's sister was married to King Edward. Harold was a brave and respected soldier with a tough streak. The Witan, wanted Harold to be the next King. Edward promised the throne to William on his deathbed.

Contender 2: William of Normandy

Duke of Normandy, France. William came from a fighting family. He was a brave soldier. Edward's cousin. Edward had lived in Normandy from 1016-1042. Edward had supposedly promised that William should become King of England. Harold had promised to support William.

Contender 3: Harald Hardrada

Viking King of Norman Vikings, had ruled Britain before. He was the most feared warrior in Europe. Hardrada means 'hard ruler' and his nickname was 'The Ruthless'. Harald was supported by Tostig, Harold Godwinson's brother who wanted revenge.



The Battle of Stamford Bridge

4

In September 1066, Harald Hardrada and a force of 8000 Viking warriors invaded the north of England. The new king, Harold Godwinson, had been waiting in the south of England, anticipating an invasion from William from France. He quickly marched his army 185 miles north and reached Harald Hardrada's men in just four days, taking them by surprise. The two sides went to battle at Stamford Bridge, just outside of York. After a violent battle, Harold Godwinson was victorious.

5 The Battle of Hastings

At the Battle of Hastings on October 14, 1066, King Harold II of England was defeated by the invading Norman forces of William the Conqueror. By the end of the bloody, all-day battle, Harold was dead and his forces were destroyed.

6 The Bayeux Tapestry

The Bayeux Tapestry was produced by the Normans following William's conquest. Its origins are not known for certain, but some historians believe it was arranged by William's half-brother, Odo, and sewn by English women. The tapestry is 70 metres long and gives an account of events from 1064 - 1066.



7 **Conquest** - is the act of conquering a country or group of people.

Migrated - movement of a group of people from one place to another

Illegitimate - People in the 11th century were considered illegitimate if they were born but their parents weren't married (nowadays this doesn't matter!). If rulers were illegitimate they were often seen as less respected and had a weaker claim to rule.

Legitimate - Someone who is seen as a rightful ruler because their birth was 'respectable'.

Rebellions - armed resistance against a leader or country.



Core British Values

Tolerance - Understanding that we all don't share the same beliefs and values.

Responsibility - Something that it is your duty to deal with

Law - The need for rules to make a happy, safe and secure environment to live and work.

Democracy - A culture built upon freedom and equality, where everyone is aware of their rights and responsibilities.

Liberty - Protection of your rights and the right of others you are with.

Respect - Respecting the values, ideas and beliefs of others whilst not imposing our own onto others.



Social - **M**oral - **S**piritual - **C**ultural



Year 7 Art - Term 2A

Colour Theory

Primary Colours



Secondary Colours



Red, Yellow and Blue are the most important colours. These are The **Primary** or first colours in Art, because by mixing these together (in different amounts) all other colours in the **spectrum**/colour wheel are created.

The **secondary** colours are created by mixing the **primary colours** together.

Red + Blue = Purple.

Blue + Yellow = Green.

Yellow + Red = Orange.

In this project you will need to experiment with mixing colours, to create your skin tone, blazer colour and hair colour.

Key Words and Specialist Vocabulary:

Primary Colours—The most important colours from which all others are mixed.

Secondary Colours—The colours mixed from the Primaries.

Sketching—A first rough attempt at a drawing.

Tone—The light and dark shading added to an image.

Form—The illusion of depth created through the use of tone.





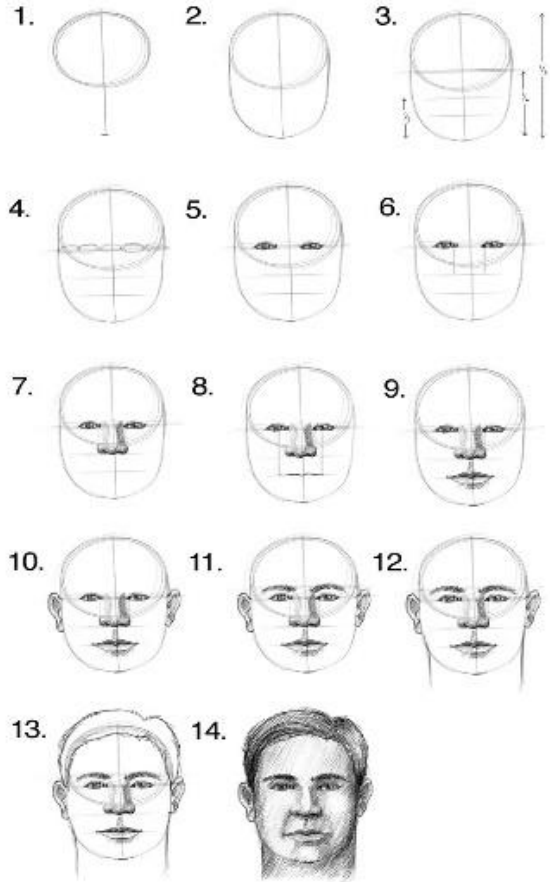
The Colour Wheel

In order to successfully mix colours in Art, you need an understanding of COLOUR THEORY. In this wheel you can see that the primary colours mix together to create the secondary colours.

It is also good practice to learn the correct name for colours used in Art. Use this wheel to help you to learn them .



Year 7 Art - Term 2A

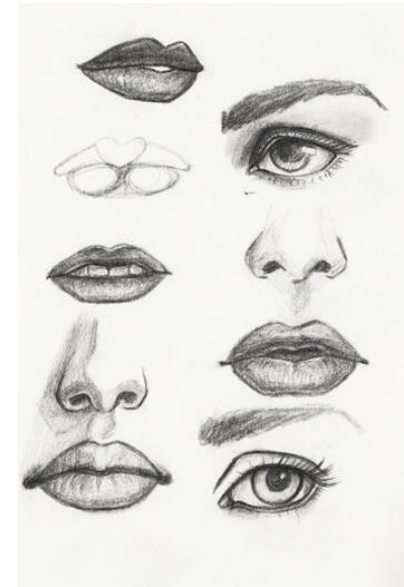


This diagram shows step by step how to create a realistic human face. If you try out this technique at home, it will transform every face drawing that you draw.

Watching YouTube tutorials about how to draw the face, and facial features and practising these techniques in your own time will enhance your understanding and knowledge before we do this work in class.

When you draw yourself a good idea is to use a mirror so that you can get really close to the details and shapes that you will need to draw. All artists have drawn themselves throughout the history of Art. Give it a go.

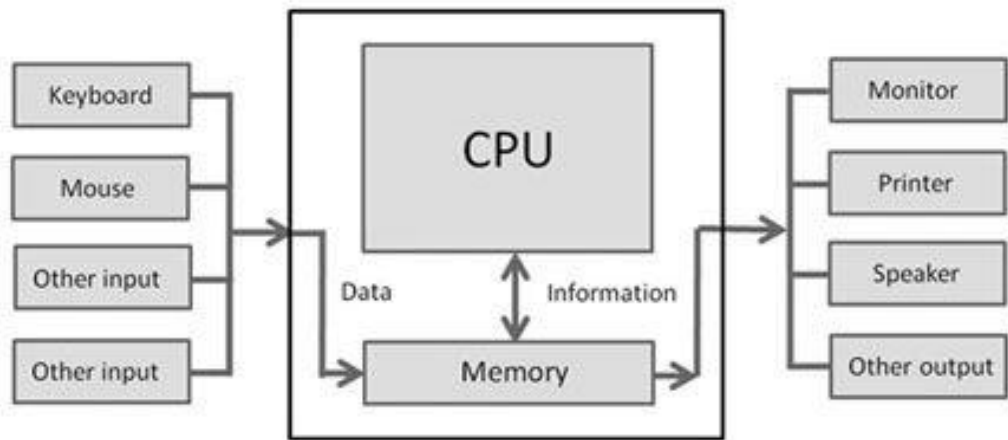
Facial Features



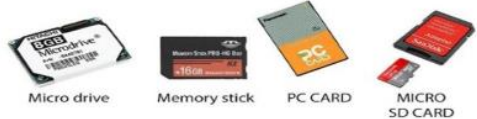
In this project you will need to experiment with mixing colours, to create your skin tone, blazer colour and hair colour.

To make your Self-Portrait look realistic you will have to look carefully at your face and try to carefully record all of the details that you see. This image (by Artist Manugen) shows how adding TONE (shading) and detail can help to bring your drawing to life.

What is a Computer?

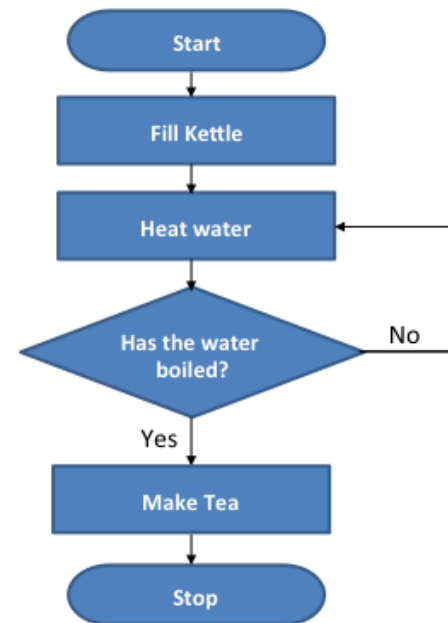


Storage



Flow Diagrams

Example (Making the Tea)

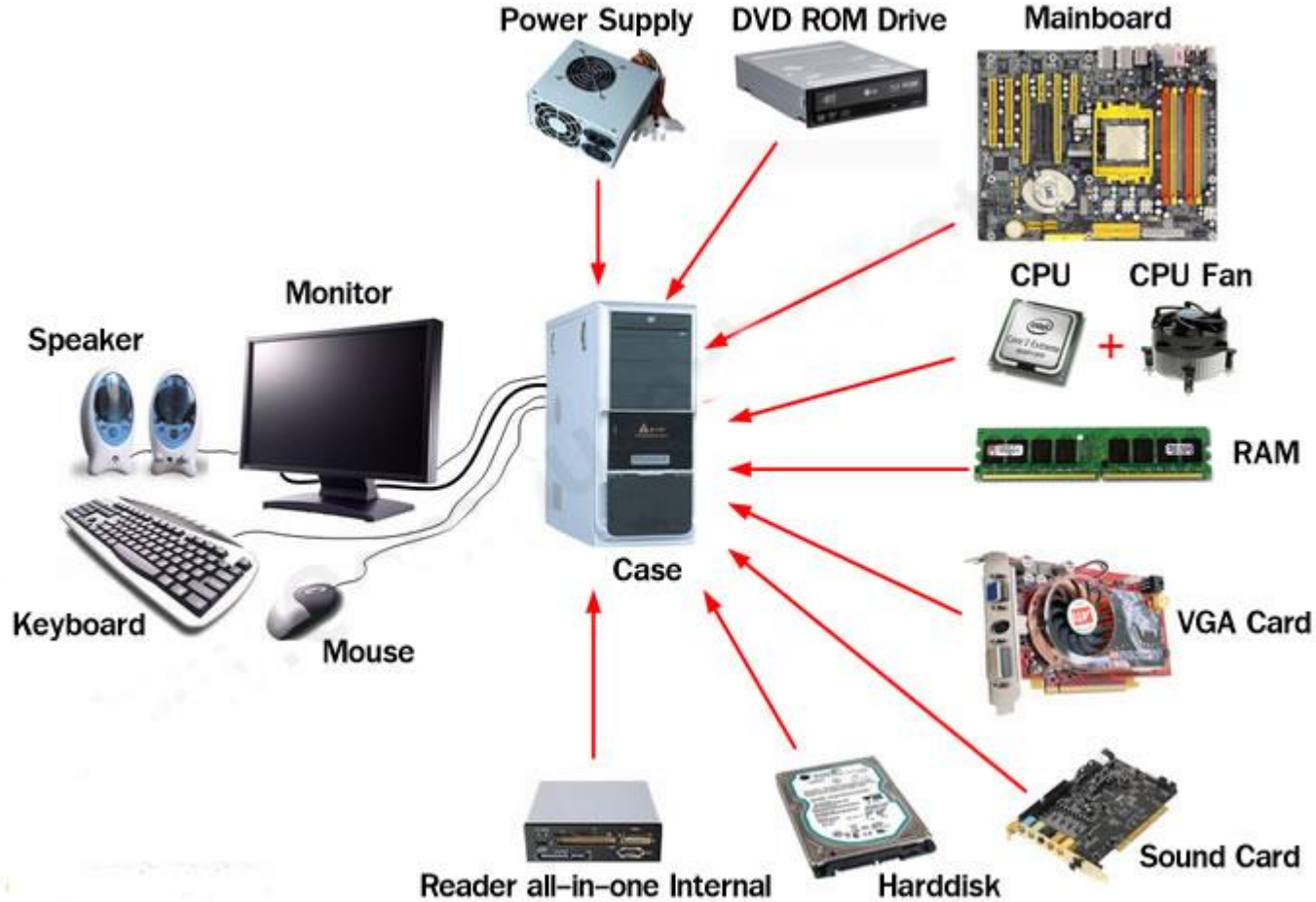


What is a computer system

A computer system is made up of different parts and each has a special job. Some will be inside the computer and others will be outside. Some parts are connected by wires and others are wireless.

The parts that make up a computer are called hardware . There are also Programs which tell a computer what to do, they are called software.

Listing parts of a Computer System



“Computers are magnificent tools for the realisation of our dreams, but no machine can replace the human spark of spirit, compassion, love, and understanding.”

Key vocabulary	Definition
Quality control	A process through which a business seeks to ensure that product quality is maintained or improved.
Prototype	An early sample, model, or release of a product built to test a concept or process.
Finite resource	Are non-renewable and will eventually run out. Metals, plastics and fossil fuels. (coal, natural gas and oil) are all examples of finite resources.
Manufacturing specification	Contains all the information that is needed to make the product.
Sustainable	Able to be maintained at a certain rate or level.
Smart material	Materials that sense and react to environmental conditions or stimuli.
One-off production	The manufacture of a single product/item.
Thermoplastic	Plastic that can be softened through heating.
Line Bending	A manufacturing process used to create bends within a sheet of plastic.
Manufactured board	A range of sheet materials produced by pressing and bonding together wood particles, fibres or veneers to achieve particular characteristics.

Most used measurements

Centimetre = 10mm

$cm \times 10 = mm$

Right Angles = 90°

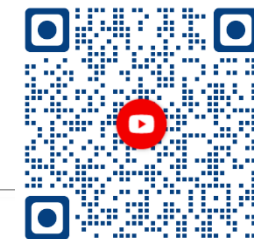
Techsoft

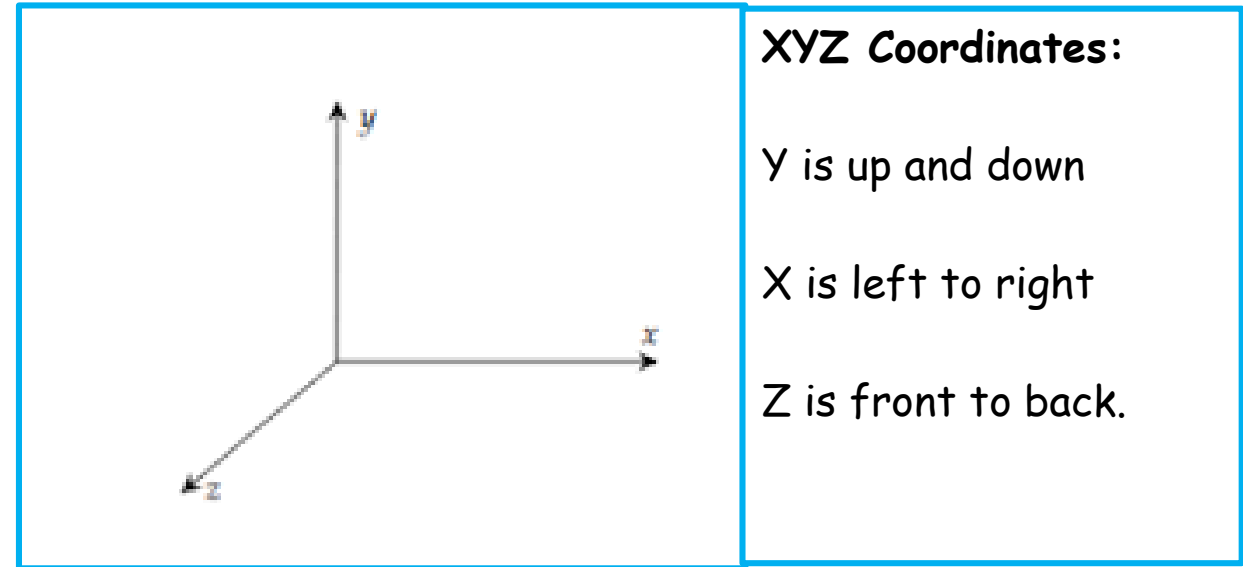
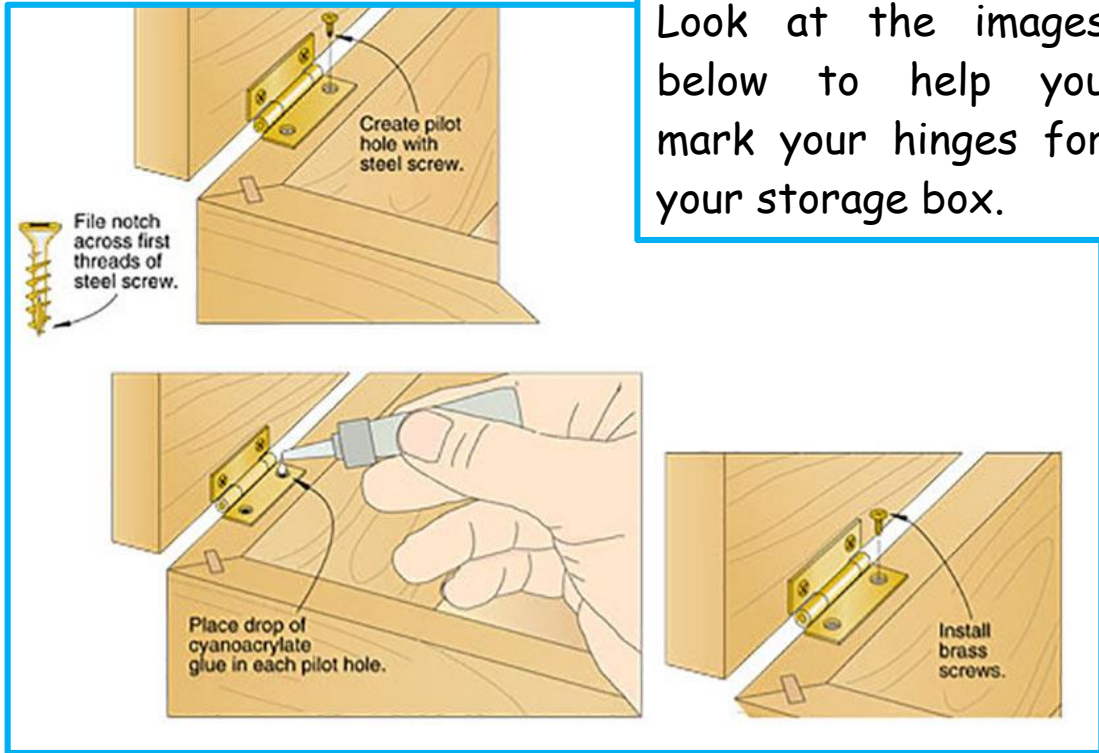
Scan the QR code view a manual to help you with Techsoft.



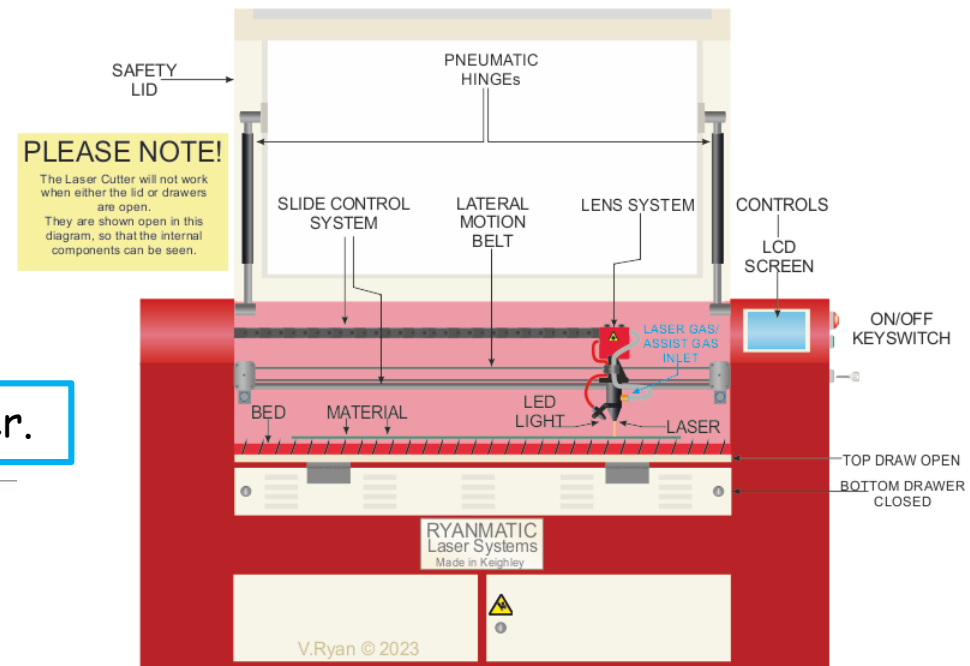
Techsoft

Scan the QR code to watch a tutorial about Techsoft





A Laser Cutter.



Year 7 Drama - Term 2A: Practicing vocal and physical skills

Key terminology	Definition
Pace	The speed at which an actor speaks
Pitch	How high or low an actors voice is
Volume	How loud or quiet an actors voice is
Accent	How an actor speaks based on where the character comes from
Clarity	How clear our words and phrases are
Pause	A temporary stop in action or speech
Emphasis	Stress given to a word or words when speaking to indicate particular importance.
Facial expression	How we communicate our emotions through use of our facial features
Gesture	A movement of part of the body, especially a hand or the head, to express an idea or meaning.
Emotion	A strong feeling deriving from one's circumstances, mood, or relationships with others.
Still image	When actors create a stage image using their bodies with no movement
Slow motion	Students reduce the speed at which a drama is enacted, to highlight a scene or bring a big moment into focus. It can also be used to create dramatic tension by slowing the action when building up to an important event.
Mime	A technique of suggesting action, character, or emotion without words, using only gesture, expression, and movement.
Tension	The development of suspense in drama, usually due to conflict.



Breakfast

Breakfast is the first and the most important meal of the day because it **'breaks the fast'** when we have not eaten for many hours.

Breakfast cereals are the most popular breakfast food in the UK, they are made from different types of cereal which are a good source of carbohydrate for energy and fibre.

Many breakfast cereals are fortified with vitamins and minerals, so are important sources of iron, folic acid and vitamins B and D. Lots of people do not eat breakfast, but it provides us with energy that we need to start the day, and eating breakfast can help us concentrate at school and work.

Scan the QR codes to watch a video about breakfast around the world and complete your homework quiz 1.



SCAN TO WATCH



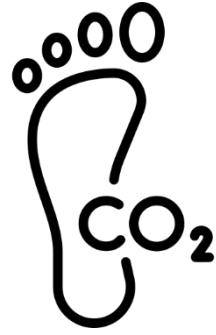
SCAN FOR QUIZ

Food provenance is knowing...

- where food is grown, caught or reared
- how it is produced
- how it is transported.

Grown	Crops like wheat and barley are grown in the UK. Apples, potatoes, carrots, lettuce, sprouts and soft fruits like strawberries and raspberries are suited to our climate.
Reared	Animals that are reared on farms in the UK include cows for meat and milk, sheep, pigs and chickens for meat and eggs.
Caught	Fish and shellfish such as mackerel, haddock, mussels, scallop and salmon can be caught in the seas around the UK.

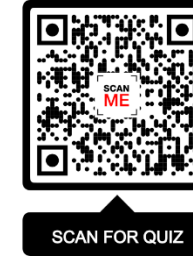
Key vocabulary	Definition
Caught	Fish and shellfish caught in seas by trawling, line-caught and pots.
Commodity	Groups of food, e.g., cereals, milk, cheese and yogurt, fruit and vegetables.
Dough	A mixture of dry ingredients and a liquid that is mixed, kneaded and baked.
Food provenance	Knowing where food is grown, reared and caught and how it is produced.
Grown	Crops such as wheat/oats/barley. Fruits and vegetables.
Harvest	When it is time to pick the crop and send for further processing.
Knead	To stretch the gluten by pushing dough across a work surface and back.
Reared	Animals that are reared for food, e.g., cows/sheep/pigs/chickens.
Slaughter	To kill an animal for food.
Sustainable	Meets the needs of the present, without making it difficult for the future.



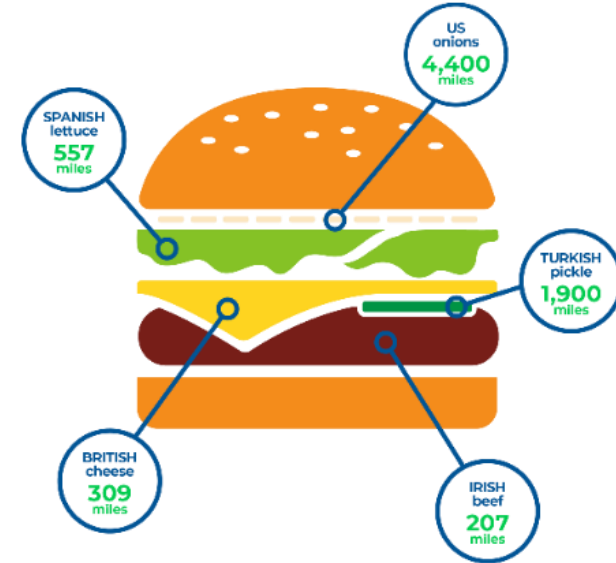
Carbon footprint
A **carbon footprint** is the total amount of greenhouse gas emissions generated by our actions, from production to consumption. Every product has a carbon footprint. Product carbon footprints are generated by all the elements that go into developing, making and transporting the product from beginning to end. It includes carbon dioxide emissions from factories through production, transportation (food miles), production of packaging and removal of waste.

Food miles

Scan the QR codes to watch a video about food miles and complete your homework quiz 2.



A food mile is the distance which food travels, from its production until it reaches the consumer. Look at how many miles the ingredients for this burger have travelled. Could the miles be less?



Food miles contribute to a person's carbon footprint (see note on the left).

Year 7 Music - Term 2A:

The Ukulele

The ukulele is a member of the guitar family of instruments. It generally employs four nylon strings.

The ukulele originated in the 19th century as a Hawaiian adaptation of the Portuguese machete, a small guitar-like instrument, which was introduced to Hawaii by Portuguese immigrants, mainly from Madeira and the Azores. It gained great popularity elsewhere in the United States during the early 20th century and from there spread internationally.

Chords

A chord, in music, is any harmonic set of pitches consisting of multiple notes (also called "pitches") that are heard as if sounding simultaneously.

Chords and sequences of chords are frequently used in modern West African and Oceanic music, Western classical music, and Western popular music; yet, they are absent from the music of many other parts of the world.

The Four Chord Song

One popular chord progression used in popular music is the 'four chord sequence', and it uses chords: I - V - vi - IV.

It is one of the most commonly used chord sequences.

Next time you are listening to some music, see if you can identify it in any songs you are listening to.

The Piano

The piano is a stringed keyboard instrument in which the strings are struck by wooden hammers that are coated with a softer material (modern hammers are covered with dense wool felt; some early pianos used leather).



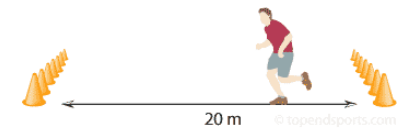
The Guitar

The strings run between the headstock of the guitar, where they are affixed to tuning pegs that can be rotated to tighten and slacken them, and the bridge, where they're fixed to the guitar's body. On an acoustic guitar, the strings are fixed to the bridge with removable pegs, and on an electric guitar the strings are generally strung through an eyelet.

The neck of the guitar is the long wooden piece of wood, flat on one side (this is called the fretboard) and curved on the other. The fretboard is inlaid with metal frets that demarcate the different notes.

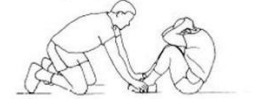


Year 7 Physical Education - Term 2A



Fitness Tests

Test	Component Measured	How to complete the test?
Bleep Test	Cardiovascular Endurance	Cones 20m apart, run back and forth in time with the bleep.
Sit up bleep test	Muscular Endurance	Perform a full sit up in time with the bleep / or as many as possible in One minute.
Grip test	Muscular Strength	Using the grip dynamometer, return the dial to 0, hold above your head with a straight arm. Clench as hard as you can and pull towards your side.
Sit and Reach Test	Flexibility	Feet flat against the sit and reach box, keeping your legs straight, slide the ruler with your hands and hold for 3 seconds.



Sport specific key terms/techniques

Handball	
Key terms	Meaning.
Double dribble	Handball players cannot receive the ball and bounce it, then hold the ball, and bounce it again.
'Walking'	If a handball player takes more than three steps without dribbling or holds the ball for more than 3 seconds without bouncing it, shooting or passing, then that is deemed 'walking' and possession is lost.
Penalty throw-in	Awarded when denying a clear goal scoring opportunity.
Distance	Defenders are required to stay 3m (9.84ft) away from the person taking the free-throw.

Basketball	
Key terms	Meaning.
Heart Rate	Measured in Bpm.
RHR	"Resting Heart Rate" - how fast our heart beats before we exercise.
WHR	"Working Heart Rate" - how fast our heart is beating immediately after exercise.
RR	"Recovery Rate" - measured every minute after finishing exercise - to see how long it takes to get back to our resting heart rate (RHR).
BPM	Beats per minute.



Year 7 Spanish - Term 2A

1. Mi equipaje

a pencil case	un estuche	a school bag	una mochila
a pencil	un lápiz	a rubber	una goma
some pencils	unos lapices	a sharpener	un sacapuntas
some scissors	unas tijeras	a ruler	una regla
a text book	un libro	an exercise book	un cuaderno
a glue	un pegamento	a pen	un bolí/bolígrafo
a marker pen	un rotulador	a fountain pen	una pluma
a calculator	una calculadora	my PE kit	mi equipo

2. Mis asignaturas

Spanish	el español	French	el francés
English	el inglés	Chinese	el chino
German	el alemán	Italian	el italiano
Art	el dibujo	IT	la informática
RE	la religión	Drama	la drama
Technology	la tecnología	Music	la música
Sport	los deportes	PE	la educación física
Maths	las matemáticas	Science	las ciencias
Biology	la biología	Physics	la física



Year 7 Spanish - Term 2A

3. Vocabulario útil

the school	el colegio /instituto	the class(es)	la(s) clase(s)
(they) start	empiezan	(they) finish	terminan
the teacher	el profesor la profesora	my classmates	mis compañer@s de clase
my friends	mis amig@s	pupil	alumn@
dining room	la cantina	the classroom	la aula
homework	los deberes	the library	la biblioteca
the yard	el patio	lunch time	la comida
timetable	el horario	breaktime	el recreo
before lunch	antes de la comida	after school	después del colegio
during	durante	complicated	complicad@
I study	estudio	I prefer	prefiero
I like (it)	me gusta	I like (them)	me gustan
I hate	odio	I love (it)	me encanta
I hate	detesto	I love (them)	me encantan
because it's	porque es	because they are	porque son
useful	útil	useless	inutil
difficult	difícil	easy	facíl
the best (thing)	lo mejor	the worst (thing)	lo peor
the good (thing)	lo bueno	the bad (thing)	lo malo
I go	voy	I travel	viajo
to school	al colegio (a+el=al)	to the canteen	a la cantina
by car	en coche	by bike	en bici/bicicleta
by bus	en autocar	on foot	a pie
my favourite ...	mi ... preferid@	subject	asignatura
my favourite...	mi ...favorit@	in my opinion	en mi opinión

my= mi(s)
your= tu(s)
his/her= su(s)
our= nostr@s

En mi opinión el español es muy divertido pero según mi amigo Alberto, es complicado en su opinión. Sus asignaturas preferidas son el dibujo y la música.

¿Cuál es tu opinión ?

Accents go on vowels to make you sound that letter a little more...

it's easy (facíl)

á é í ó ú all in the same direction & ñ (ny sound like 'new')





St Cuthbert's Catholic High School

Live life in all its fullness