Home Learning Booklet



Knowledge Goals Year 7 Half Term 1

How to self-test

Mind mapping

Mind mapping is simply a diagram to visually represent or outline information.

Use information gathered from your knowledge goals booklet to create mind maps, make sure to use colour and images, keep writing to the bare minimum.

How to mind map:



Information for parents on knowledge retrieval



Flash cards

Use your knowledge goals booklet to make flash cards. Write the questions on one side and on the other record the answer. Test yourself or work with a friend to make sure you know all the key information for each topic.

How to mind map:



How should students use the Knowledge Goals booklets?

Your Knowledge Goals booklet provide the essential knowledge that you need to learn in each subject this half term. You are **expected to spend one hour a night during the week 'learning' the content**. You will be assessed during lessons using 'low stake' quizzing. **Your teacher may choose to set you additional homework.**

How can parents support?

- Read through the organiser with your child if you don't understand the content then ask them to explain it to you 'teaching' you helps them to reinforce their learning.
- Test them regularly on the spellings of key words until they are perfect. Get them to make a glossary (list) of key words with definitions or a list of formulae.
- Read sections out to them, missing out key words or phrases that they have to fill in. Miss out more and more until they are word perfect.

Subject Index

Suggested Homework Schedule (1 hour of independent study per night).

To help you get organized, we have planned out your weekly home learning to cover all subjects. You may choose to create your own version:

Week A

Day	Subject 1 (20mins)	Subject 2 (20mins)	Subject 3 (20mins)
Monday	Art	English Language	Physics
Tuesday	Biology	Technology	Maths
Wednesday	Chemistry	Spanish	Music
Thursday	Computer Science	Geography	RS
Friday	Design Technology	History	PE

Week B

Day	Subject 1 (20mins)	Subject 2 (20mins)	Subject 3 (20mins)
Monday	Drama	Personal Development	Teir 2 Vocab
Tuesday	Maths	English	Physics
Wednesday	Chemistry	English	Music
Thursday	Teir 2 Vocab	Maths	Biology
Friday			

Page No Subject Teir 2 Vocabulary 4 Art 6 Biology 8 Chemistry 10 Computer Science 12 14 Drama English Language 16 Food technology 17 Geography 19 History 21 Materials 23 Pdev 25 PE 27 Physics 29 Maths 31 Music 34 RS 36 Spanish 38 Textiles 40 Freya model templates 42

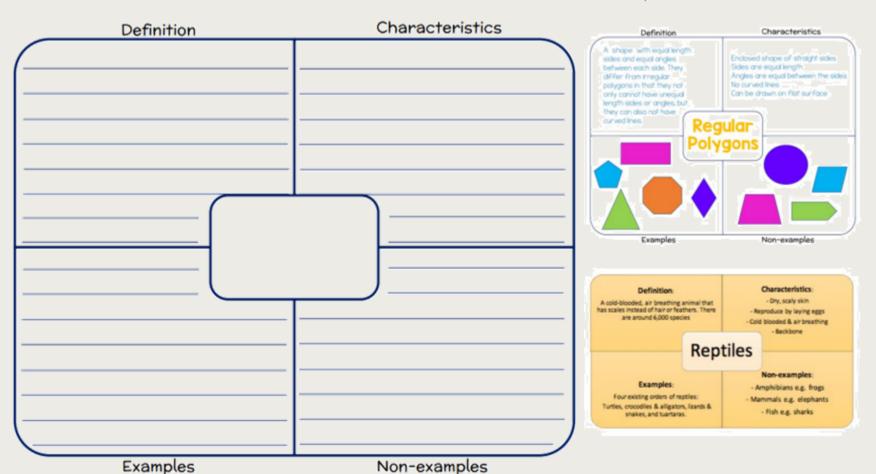
Literacy Tier 2 Vocabulary

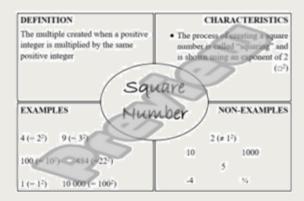
These words are all 'tier 2' words; in other words, they are seen as 'academic vocabulary' and if you know them, can understand them and use them, you will do better in your exams and be able to communicate more precisely and effectively in life.

#	Key word	Definition
1	Justify/justification	
2	Analyse	
3	Context	
4	Infer/inference	
5	Compare/compari son	
6	Imply/implication	
7	Annotate	
8	Exemplify	
9	Consequence	
10	Evaluate	

Literacy Tier 2 Frayer Model

examples







Have a go at creating a Frayer Model for each of the 6 tier 2 words from this term (blank templates are at the back of the booklet for you to complete this activity).

Art

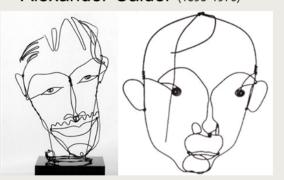
Module overview for the term

Using portraiture as your theme, you will create a self-portrait using wire in class. The skills of observation and imagination are developed through the creation of continues line drawings, creating a design that shows understanding of simplified forms and sculptural work with wire. You will develop skills in 3D modelling techniques by manipulating wire. Students research and are inspired by the work of Alexander Calder

Success Criteria—what will my work be marked on?

- ⇒ Clear detail in the facial features
- ⇒ Smoothness of outer face shape
- ⇒ Tightness of wire joints
- ⇒ Interesting/creative facial expression
- ⇒ Intricacy of shapes and patterns
- ⇒ A clear visual link to the artist's style
- ⇒ A clear visual link to your design drawing

Alexander Calder (1898-1976)



Alexander Calder facts and information

Who is he?

Alexander Calder, known to many as 'Sandy', was an American sculptor from Pennsylvania. He was the son of well-known sculptor Alexander Stirling Calder, and his grandfather and mother were also successful artists. Alexander Calder is known for inventing wire sculptures and the mobile, a type of kinetic art which relied on careful weighting to achieve balance and suspension in the air. Initially Calder used motors to make his works move, but soon abandoned this method and began using air currents alone



What is Calder's favourite material?

Calder always carried wire and pliers with him so that he could "sketch" in his favourite material. This has come to be known as 'drawing in space' because he would literally use the wire to create a drawing in the air.

The meaning behind his work

Calder avoided analysing his work, believing that: "theories may be all very well for the artist himself, but they shouldn't be broadcast to other people."

As a result this poem-like text which he wrote for the Abstraction-Création group magazine has often been taken as the closest thing to an explanation of his work:

How can art be realized?

Out of volumes, motion, spaces bounded by the great space, the universe.

Out of different masses, light, heavy, middling-indicated by variations of size or colour-directional line - vectors which represent speeds, velocities, accelerations, forces, etc...-these directions making between them meaningful angles, and senses, together defining one big conclusion or many.

Key words

Bend, Shape, Manipulate, Continues, Simplify, Exaggerate, Support, Fluent, Free, Controlled, Expressionistic, Strong, Angular, Delicate, Flowing, Simple, Thick, Thin, Horizontal, Vertical, Broken, Overlapping



Task

Using the information on the knowledge organiser you will be asked to create a research page on the artist Alexander Calder. This will be explained in lessons.

You need to include: a title, information on the artist, your opinion about the artists work and your own drawing of a face inspired by Calder's style.

Knowledge Goals: Art

Half Term 1: Tier 3 Vocabulary		
#		Definition
1	Blend	mix (a substance) with another substance so that they combine together fluedly .
2	Manipulate	handle or control (a tool, mechanism, information, etc.) in a skilful manner.
3	continuous line	A continuous line drawing is one in which a single, unbroken line is used to develop the image. Although mostly created as an exercise, many continuous line drawings can stand on their own as finished works of art.
4	Simplify	make (something) simpler or easier to do or understand.
5	Exaggerate	represent (something) as being larger, better, or worse than it really is.
6	overlapping	extend over so as to cover partly.
7	Angular	having angles or sharp corners.
8	Controlled	it denotes a power to dictate, influence, maneuver, or direct a material

Notes:
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Knowledge Goals: Biology - Movement

MUSCLES IN THE BODY

Muscles are a type of tissue – lots of muscle cells work together to cause movement. Muscles can only pull – they work by getting shorter (contract). Muscles are attached to bones by tendons. When a muscle contracts, it pulls on a bone. If the bone is part of a joint, the bone will move.



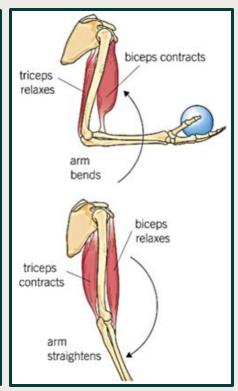
How do muscles work to bend and straighten the arm?

To bend the arm:

- Biceps muscle (front of the arm) contracts
- Triceps muscle relaxes
- Tendons of the biceps is attached to the radius. This allows the biceps to pull the lower arm up.

To straighten the arm:

- Biceps muscle relaxes
- Triceps muscle contracts
- Triceps pulls at the back of the elbow.



HEALTHY JOINT OSTEOARTHRITIS

skell jaw bone collar bone sternum humerus vertebral column (backbone) radius pelvis femur kneecap

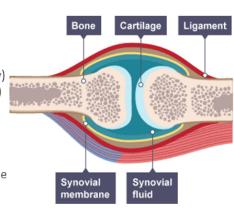
- Support → for the body and holds internal organs in place. Hard and strong bones create a framework for your muscles and organs.
- Protection → of vital internal organs from being damaged; the skull is protected by the skull.
- Movement → when a muscle pulls on a bone. The skeleton moves at joints.
- Making blood cells → bone marrow in some bones produce red blood cells and some white blood cells.

JOINTS

Most joints are flexible, some are joined rigidly and cannot move

Hinge joint → movement backwards and forwards (knee/elbow)
Ball & socket joint → movement in all directions (hip/ shoulder)
Fixed joint → do not allow any movement (skull)

If two bones just moved against each other, they would eventually wear away. This can happen in people who have a condition called arthritis. To stop this happening, the ends of the bones in a joint are covered with cartilage. This is kept slippery (reduces friction) by a liquid called synovial fluid.



Knowledge Goals: Biology - Movement

Half Term 1: Tier 3 Vocabulary		
#	Key word	Definition
1	joints	Parts of the skeleton where bones meet
2	ligament	Connect bones in joints
3	tendon	Connect muscle to bones
4	cartilage	Smooth tissue found at the end of bones which reduces friction between them preventing rubbing
5	antagonistic muscle pair	A pair of muscles working together to create movement at a joint – as one muscle contracts, the other relaxes
6	muscular skeletal system	Supports the body and causes movement
7	fracture	Broken bone, identified by X-ray and may be treated using a cast or metal pins - compound fractures break the skin
8	arthritis	Painful disease of joints – cartilage at the ends of bones wears away so bones rub together

Notes:

Knowledge Goals: Chemistry - Particle model

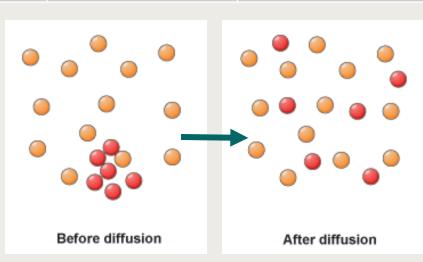
State	Solid	Liquid	Gas
Diagram			
Arrangement of particles	Regular arrangement with particles touching	Randomly arranged with particles touching	Randomly arranged with particles not touching
Movement of particles	Vibrate in a fixed position	Move around each other	Move quickly in all directions
Closeness of particles	Very close, all touching	Close, most touching	Far apart
Properties	Fixed volume Fixed shape	Fixed volume Take shape of container	Expand to fill container Take shape of container

Diffusion

Particles in a liquid or a gas **spread** out from an area of **high concentration** to an area of **low concentration** until the concentrations are equal.

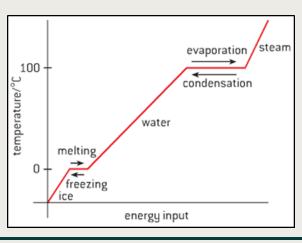
The **higher** the concentration **gradient** the **faster** the net diffusion.

The **higher** the **temperature** the **faster** the net diffusion.



Changes of State Granden Gran

As a substance is heated it gains **energy**. When the particles gain enough energy, they overcome the **forces** between them. Whilst a **change of state** is happening the **temperature** of the substance does not change.

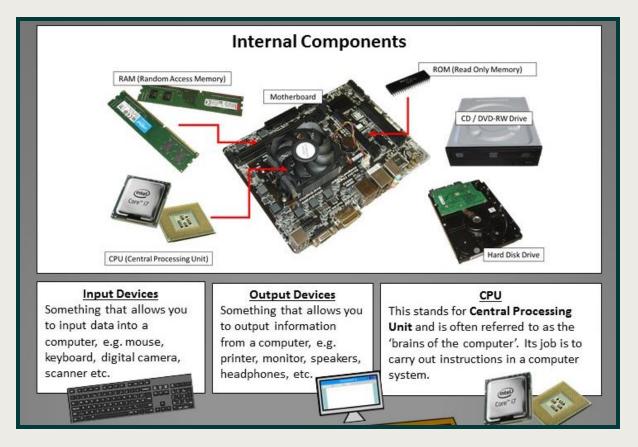


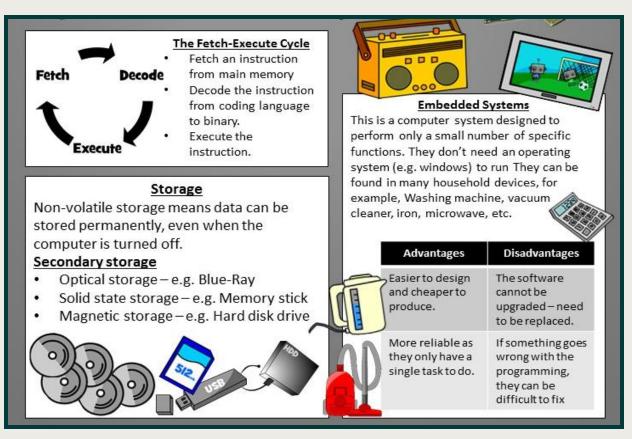
Knowledge Goals: Chemistry – Particle model

	Half Term 1: Tier 3 Vocabulary			
#	Key word	Definition		
1	diffusion	The process in which particles in a liquid or gas move from an area of high concentration to an area of low concentration		
2	gas pressure	Caused by collisions of particles with the walls of a container		
3	evaporation	Change from a liquid to a gas at the surface of the liquid – such as when water evaporates to form water vapour		
4	boiling	When all a liquid changes state to a gas, at the boiling point		
5	condensing	Change from a gas into a liquid when the temperature drops to the boiling point – as in water vapour condensing to liquid water		
6	melting	Change from solid to liquid when the temperature rises to the melting point		
7	freezing	Change from a liquid to a solid when the temperature drops to the melting point		
8	sublimation	Process where a solid changes directly into a gas; there is no liquid state		

Notes:

Knowledge Goals: Computer Science – Introduction, what is a Computer?





What is a network? A network is two or more computers (or other electronic devices) that are connected together, usually by cables or Wi-Fi. Some computer networks will have a server. A server is a powerful computer that often acts as a central hub for services in a network, e.g. emails, internet access and file storage. Each computer connected to a server is called a client



Knowledge Goals: Computer Science – Introduction, what is a Computer?

	Half Term 1: Tier 3 Vocabulary		
#	Key word	Definition	
1	CPU	Central processing unit - the brain of the computer that processes program instructions.	
2	RAM	Random access memory. This is volatile memory that is constantly being written to and read from.	
3	Secondary storage	Non-volatile memory external to the CPU and used for long-term storage of programs and data.	
4	Sever	A computer that holds data to be shared with other computers. Servers require server software.	
5	Client	The computer on a network that request data from a server.	
6	Volatile	A form of computer memory that does not retain its contents without a constant supply of power.	
7	Non-volatile	A form of computer memory that stores data even when not powered	

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Knowledge Goals: Drama – Introduction to Drama

Key Skills

How to create character in performance using vocal, physical and spatial skills.

Characterisation in devising, scripted work and improvisation.

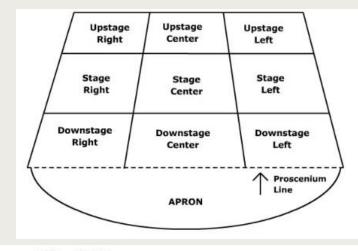
Developing ensemble skills and collaboration to scripted and devised performance work.

Performance and confidence skill development.

Narrating a story through movement, soundscape and physical theatre influences (including movement and sequence).

Our three areas of assessment:

Voice, Physicality and Use of Space



ACTI SCENE

Set in 1950's style diner, "McDenny's", in the present day England. BERYL is sitting at the back of a "u" shaped booth. She is tucking into a large burger and reading a gas bill

Enter LYNDA, SUSAN and RODERICK

LYNDA: (speaking to SUSAN and ROD as they make their way over to BERYL) ...put your back into it man, I said, use some elbow grease, don't just tickle it. I want to see my face in it... Hi Beryl...

BERYL hides the burger under the table

BERYL: Oh h

SUSAN: (sits at the table at the left side of BERYL) He was doing his best.

ROD: H

LYNDA: I don't want to see any smear marks and don't bend the aerial or I'll stop it

Given Circumstances: These are the factual information that we know about a character, this could be given to us by the playwright or through analysing what other characters say about who you are playing/reading for.

Dramatic Convention and Storytelling

The first term in Drama is all about Dramatic convention, learning what the areas of the stage are and how we can tell a narrative to the audience with or without words. We develop some basic stagecraft techniques and begin to look at a practical style of theatre to ensure you can both portray a character but also develop your own ideas in response to a given stimulus (such as an image, poem, picture or piece of music). This then lays the foundation for building on these skills and developing performance work and collaborative skills.

Our main practical focus: being able to portray character and a storyline to the audience with a notable change in the actor. We also use this term to educate you how to work in a practical Drama studio space, and how to work as an ensemble to develop your creativity.



Knowledge Goals: Drama - Introduction to Drama

	Half Term 1: Tier 3 Vocabulary				
	Key word	Definition			
1	Stagecraft	This is a combination of all the elements that create a performance, this includes stage positioning, rehearsals, performing, lighting, sound and blocking.			
2	Physical Theatre	A style of theatre that uses movement and the body as the primary storytelling technique.			
3	Ensemble	A group of actors who collaborate to create a performance, or who act as one group.			
4	Devising	Creation of your own performance work in response to the stimulus.			
5	Scripted	Working on a scripted extract in performance. Using knowledge of time-period and context to create character. Being able to follow stage directions.			
6	Stimulus	The starting point or idea, this could be a poem, picture, piece of music, newspaper headline.			
7	Characterisation	Creation/portrayal of character using vocal skills, physical skills and adapting our use of space to perform as a person different to ourselves.			
8	Improvisation	Being able to react and perform in the moment alongside others with no previous rehearsal to the performance.			

Key Areas of the Stage:

Stage – this is where the actors perform, it can come in different layouts.

Wings - this is space either side or behind the stage for Actors to use as entrances and exits within performance. Items of set and costume can be stored here.

Audience – these are the people that watch the performance. Their positioning can change depending on the stage layout.

Apron – A small section of stage that sticks out beyond the main stage into the audience.

Entrances/Exits - Where actors come on and go off during the performance.

Assessment: for this unit you will be assessed on a short practical performance, you will be assessed on your ability to use vocal and physical skills to demonstrate character and to perform/create your own work using your knowledge of dramatic convention/the stage.

Key Practitioners: Physical Theatre companies include DV8 and Frantic Assembly. You can discover more of their work here or through

Google: https://www.franticassembly.co.uk/

Knowledge Goals: English Lang

TEXTS COVERED

- · First Day at School by Roald Dahl
- First Day at School Poem by R.McGough
- · Sweet Shop by R Dahl
- Extracts from Anne Frank's Diary
 - Chinese <u>Cinderalla</u> by Adeline Yen Mah
- School extract by Stephen Fry
 - Can You See Me? by Libby Scott and Rebecca Westcott
- Rylan extract
- · Jill Scott article
- Simone Biles: Working towards Success

CORE ASSESSMENT SKILLS AND WHAT STUDENTS ARE AIMING TO BE ABLE TO WRITE:

(AV) Use ambitious vocabulary

(ALT) Application of literary devices

(AP): Use ambitious punctuation

(SV): Vary sentence structures

But by far the most loathsome thing about Mrs Pratchett was the filth that clung around her. Her apron was grey and greasy. Her blouse had bits of breakfast all over it, toast-crumbs and tea stains and splotches of dried egg-yolk. It was her hands, however, that disturbed us most; they were disgusting. They were black with dirt and grime. They looked as though they had been putting lumps of coal on the fire all day long. And do not forget please that it was these very hands and fingers that she plunged into the sweet jars when we asked for a pennyworth of Treacle Toffee or Wine Gums or Nut Clusters or whatever. The mere sight of her grimy right hand, with its black fingernails, digging an ounce of Chocolate Fudge out of a jar would have caused a starving tramp to go running from the shop. But not us. Sweets were our life-blood. We would have put up with far worse than that to get them. So we simply stood and watched in sullen silence while this disgusting old woman stirred around inside the jars with her foul fingers.

Home Learning Tasks:

- Complete 15 minutes of reading every night, using your AR book.
- Complete the vocabulary acquisition quizzes, set on Teams every fortnight.
- Learn and review elements of autobiography using this knowledge organiser.
- Pre-read some of the extracts we will cover and look for key features of the genre.
- Read at least one text from the wider reading list!

Half a Creature From the Sea: a life in stories by David ALLMOND	Alexander the Great & His Claim to Fame (Dead Famous) by Phil ROBINS	D-Day: Lieutenant Andy Pope, Normandy 1944 by Bryan PERRETT	Roald Dahl and His Chocolate Factory (Dead Famous) by Andrew DONKIN	Wartime Princess by Valerie WILDING
The Loch Ness Monster by Catherine CHAMBERS	Count Dracula by Catherine CHAMBERS	Blitz: the diary of Edie Benson, London, 1940 – 1941 by Vince CROSS	Titanic: an Edwardian Girl's Diary 1912 by Ellen Emerson WHITE	Berlin Olympics by Vince CROSS
Andrew Flintoff: a life in pictures by Andrew FLINTOFF	Spy Smuggler: Paul Lelaud, France, 1942- 1944 by Jim ELDRIDGE	Princess of Egypt: an Egyptian Girl's Diary, 1490 BC by Vince CROSS	Pompeii by Sue REID	Mill Girl by Sue REID
Desert Danger: Tim Jackson, North Africa WWII by Jim ELDRIDGE	The Hunger by Carol DRINKWATER	Henry VIII & His Chopping Block (Dead Famous) by Alan MacDONALD	Battle of Britain: a Second World War Spitfire Pilot, 1939 – 1941 by Chris PRIESTLEY	Suffragette: the diary of Dollie Baxter, London, 1909 – 1913 by Carol DRINKWATER

Knowledge Goals: Food Technology

Personal Hygeine

Good personal hygiene is vital when cooking to avoid the risk of food poisoning.

- Short Fingernails
- Hair Tied back
- Cuts covered with a BLUE plaster
- Wear clean apron
- Jewellery removed
- Wash hands before cooking, after blowing nose, visiting toilet or touching face or hair

Health and Safety These are essential for everyone's safety

- Wash in hot soapy water
- Don't put hot food in fridge
- Turn saucepan handles when using
- Don't touch electrical appliances with wet hands
- Store high risk food in fridges
- Use oven gloves

Food Senses

taste, smell, touch, sight, hear

Eatwell Guide and the 8 government guidelines



Eight Guidelines for a Healthy Diet



The Balance of Good Health is based on the Government's Eight Tips for Eating Well:

- 1. Base your meals on starchy foods
- 2. Eat lots of fruit and veg
- 3. Eat more fish
- 4. Cut down on saturated fat and sugar
- 5. Try to eat less salt no more than 6g a day
- 6. Get active and try to be a healthy weight
- 7. Drink plenty of water
- 8. Don't skip breakfast



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Colour Coded Chopping Boards

Blue - fish

White – bread and dairy

Brown – root vegetables

Red – raw meat

Yellow – cooked meat

Green - vegetables and salad



Knife Skills

Bridge Hold

Claw Hold

Knife pointing down







Knowledge Goals: Food Technology

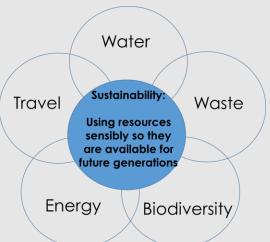
	Half Term 1: Tier 3 Vocabulary				
#	Key word	Definition			
1	Hygiene	The degree to which people keep themselves or their environment clean, especially to prevent disease			
2	Nutrient	A nutrient is an essential substance that the body needs. There are different types of nutrients, such as carbohydrates, proteins, fats, vitamins and minerals			
3	Protein	Protein is a macronutrient that we need for growth, repair and maintenance in the body, especially for bones and muscles			
4	Carbohydrate	There are two types of carbohydrates: 1. simple carbohydrates or sugars such as biscuits and jam 2. complex carbohydrates or starches such as bread and rice Complex carbohydrates give a steadier source of energy.			
5	Fat	There are two types of fat – saturated fat and unsaturated fat, fat is needed in the body to protect internal organs, to provide warmth and energy			
6	Mineral	Iron and calcium are examples of minerals which the body needs			
7	Hydration	Hydration means adding back water that has been lost.			

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Knowledge Goals: Geography What will happen to our future world?





How is our school sustainable? How can we be more sustainable?

What is climate change and the greenhouse effect?

Climate change is a naturally occurring process where, over time, the Earth's climate changes. Sometimes it has become warmer, others it has become much colder. Our planet has a natural 'blanket' of gasses such as carbon dioxide (CO2) which help to keep us just the right temperature. However, humans have been adding more and more CO2 into the atmosphere through actions such as burning fossil fuels. This has been adding more and more CO2 into the atmosphere, making our 'blanket' too good at holding the heat from the sun in, meaning we are getting warmer!





Local actions, global consequences...

Individually, the actions that each of us take to be more sustainable may seem small. If we all do them, they become big! By all making small changes, we can have a big impact.

Making small we can all help to reduce our carbon footprint and help reduce the impacts of climate change on our planet and future.

What is renewable energy?

Renewable energy is energy which comes from renewable sources. Historically, most of our energy has come from burning fossil fuels (coal, oil and gas), which are a finite resource (they will run out!). We now know that this adds huge amounts of CO2 into the atmosphere, which is increasing rate of climate change. Renewable energy comes from sources which don't produce CO2, but are also limitless in their supply. Here are some examples of different types of renewable energy sources.

This will be a great future career as renewable energy becomes the norm!



Find out more!



How can we save energy?

There are many steps each of us can take to reduce the amount of energy which we use. This can include actions such as; using public transport, walking, buying locally produced food, flying less, using less electricity, taking shorter showers, not wasting food and recycling as much as possible. There are many more actions that can be taken on a larger scale, by large multi-national corporations and governments.



Knowledge Goals: Geography What will happen to our future world?



Half Term 1: Tier 3 Vocabulary				
#	Key word	Definition		
1	Sustainability	Sustainability is using resources responsibly today so that we conserve (look after) our future planet.		
2	Resources	Any physical material constituting part of Earth that people need and value.		
3	Conservation	Conservation is the act of protecting Earth's natural resources and habitats for current and future generations.		
4	Renewable energy	An energy source that cannot be depleted and are able to supply a continuous source of clean energy.		
5	Enquiry	An enquiry is a question that you set out to prove or disprove.		
6	Pollution	Pollution is the introduction of harmful materials into the environment. These harmful materials are called pollutants.		
7	Climate change	Climate change refers to changes in the climate on a long-term time scale. This includes global temperatures, as well as other climatic components.		
8	Environment	Everything that is around us, which includes both living and non-living things such as soil, water, animals and plants, which adapt themselves to their surroundings.		
9	Habitats	The natural home or environment of an animal, plant, or other organism.		
10	Species extinction	Extinction is the complete disappearance of a species from Earth.		

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Knowledge Goals: History - Migration



















55 BC
Julius Caesar first
lands in Britain

43 AD Emperor Claudius invades

60 AD Boudican Revolt against Romans

410 AD Romans are recalled to 410 – c. 625 AD Movement of Germanic tribes to 793 AD Vikings ransack 849 AD 886 AD
Birth of Danelaw established
Alfred the Great

1016 AD
Canute becomes
King of England

Who invaded Britain?

- Romans first came to Britain with Julius Caesar in 55BCE, but they were beaten back by the British. They came back in 54BCE and won. They couldn't stay however, as the soldiers were needed back in Europe.
- The Romans did not return to Britain until 43AD. This time, the invasion was launched by Emperor Claudius, who set 25,000 men to invade different areas of Britain. The attack was successful and within 4 years the Romans controlled southern England. They were here until 410AD.
- The Romans had a secure grip on the southern half of Britain, and people there began to live like Romans too, building similar houses. But in Northern Britain people pushed back against the Roman Empire and the area was controlled by the military.
- The Romans brought many new ideas to Britain including: sanitation medicine.

 Who was including: sanitation medicine.

 The permanary including: sanitation medicine.

 Roman Britain was then under threat from other groups who wanted to take over. Groups from modern day Scotland, Irish raiders and armies from Scandinavia all wanted some of the many riches of Britain. The people of Roman Britain were worried and sent a message to Roma asking for help. Rome said they had to protect themselves!
- People from Europe began to move over, including the Jutes, Saxon and Angles. They were looking for new places to live because their land was either too wet, over populated or they wanted some new opportunities. Britain looked like a good place to go.
- These tribes settled in areas near each other, and sent messages home saying it
 was a good place to live. More of their family and friends came to join them.
- · These settlement areas became the earldoms of Mercia, Wessex,

Northumberland and East Anglia.

- **Vikings** d Viking is a job description for a Dane who was looking for things to steal in a raid. Vikings came from Scandinavia for example Norway and Sweden.
- The first big Viking raid was in 793 CE at the monastery of Lindisfarne, off the coast
 of Northumberland. The monks didn't stand a chance and the Vikings took all the
 gold and other riches, slaughtering the monks.
- There were many more attacks focused on stealing, but then the Danes started to migrate to live in Britain. Norway was becoming crowded and the farm land wasn't rich as it was in Britain.
- The Anglo Saxon Kings tried to pay the Danes to go away, but it didn't work! King Alfred, the famous Anglo Saxon King decided to allow the Danes to stay in

Why was Britain attractive to Timber -Romans other people? for building To Easy to make steal from mone Good farm Trade land opportunities Better Slaves climat – to catch and sell Metals -Space to gold, silver, live

Did these different groups of people invade or migrate to

Fact File: Alfred the Great

- 1. He had 4 older brothers, who all ruled before him.
- 2. He went to Rome when he was 4 years old on pilgrimage.
- Alfred fought lots of battles against the Vikings, winning some, loosing others.
- 4. He believed all free-born English boys should have an education.
- 5. He was passionate about people learning to read.
- It is said that while hiding from Vikings in the Norfolk fens, he hid with a poor family in disguise and burnt their cakes that he should have

Fact File: King Canute

- 1. He was Danish but ruled England for 20 years.
- 2. He conquered England in 1016 after defeating King Edmund Ironside.
- 3. He was also King of Denmark and Norway.
- He was buried in Winchester Cathedral but after the Civil War his bones were scattered.
- 5. He probably had 2 wives! One married in Church who lived in southern England and one who was 'handfast' meaning a non religious ceremony, living in norther England.
- 6. His name can also be spelt Cnut.

Knowledge Goals: History Migration

	Half Term 1: Tier 3 Vocabulary				
#	Key word	Definition			
1	Angles	One of the Germanic people who settled mainly in East Anglia.			
2	Aqueduct	A large system for carrying water from one place to another.			
3	Change	to make or become different.			
4	Danelaw	The area of England given to the Vikings by Alfred the Great.			
5	Invasion	an act or instance of invading by an enemy or hostile army.			
6	Migration	Movement from one area to another area.			
7	Paganism	When your religion does not belong to a major religion.			
8	Pilgrimage	A journey to a place of religious significance.			
9	Sanitation	Providing clean drinking water and removing sewage.			
10	Saxons	One of the Germanic people who settled mainly in Essex, Sussex and Wessex.			

Notes:

Knowledge Goals: Materials

Health and Safety

It is really important we ASSESS the RISK and REDUCE the RISK of Injury by LISTENING To the TRAINING and following the correct PPE usage

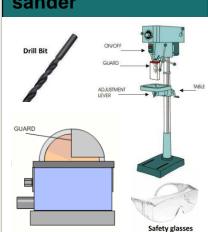
Manufactured

boards

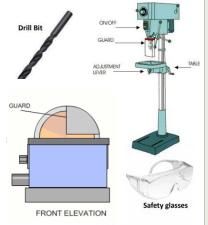
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- Hair must be tied up in the workshop
- Blazers and ties must be removed
- Jewellery must be removed
- Only use machines you have been told to use and have been demonstrated to you
- Ensure you know where the emergency stop button is
- Do not eat or drink in the workshop
- No running

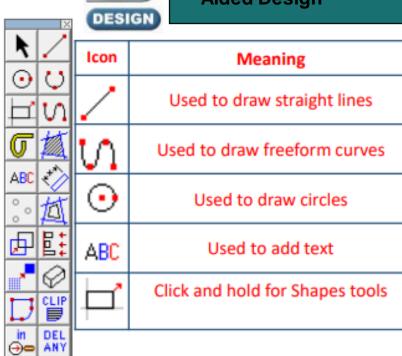
Softwoods



Pillar drill and disc sander



CAD: Computer Aided Design



is trees - Trees stay evergreen ous trees will grow at a faster rate Examples of softwoods

Hardwoods **

CAM: Computer Aided Manufacture

Laser cutter

Laser cutting works by directing the output of a high-power laser The focused laser beam is directed at the material. which then cuts the material leaving an edge with a high-quality surface finish. In school we mainly cut and engrave on Plywood and Acrylic

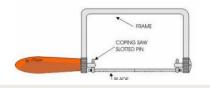


Saws

Tenon Saw For straight lines

Coping Saw For cutting curves





Knowledge Goals: Materials

	Half Term 1: Tier 3 Vocabulary				
#	Key word	Definition			
1	Product Analysis	Investigating existing products in terms of their aesthetics, cost, customer, environment, size, safety and function to determine the advantages and disadvantages of the product as part of research			
2	Aesthetics	The look of a product e.g. the colour, theme, texture, finish etc			
3	Tessellation	A tessellation is a pattern of shapes that fit together perfectly, without any gaps or overlaps			
4	Computer Aided Design	Computer-aided design (CAD) is the use of computers to help in the creation of a design, 2D is a piece of software that can allow designs to be laser cut accurately			
5	Timbers	Timbers are different forms of wood that can be used, they are categorised into hardwoods, softwoods and man-made/manufactured boards			
6	Isometric	A design strategy which shows projection or perspective in which the three principal dimensions are represented by three axes 120° apart. They are are a good way of showing measurements and how components fit together.			
7	Scale Drawing	A drawing that shows a real object with accurate sizes reduced or enlarged by a certain amount (called the scale).			

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Knowledge Goals: PDEV



Knowledge Goals: PDEV

	Half Term 1: Tier 3 Vocabulary				
#	Key word	Definition			
1	organise	To prepare for something, to make arrangements			
2	manage	To take control over, to use sensibly			
3	responsibility	To behave correctly, to have control over, to make your own decisions			
4	challenge	A task or situation that tests your ability			
5	positivity	Looking on the bright side, focusing on the best in a situation			
6	role model	A person who is looked upon as someone to be copied			
7	media	The mass communication of news and ideas			
8	influence	To have an effect on someone or something else in terms of character and behaviour			

Notes:					
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Knowledge Goals: PE



Badminton

- □ Serving I am able to hold the racket using the correct grip for a forehand + backhand serve
- ☐ The Clears To be able to shadow the correct movement and hit the shuttle using an overhead shot, with a forehand grip
- ☐ The Drop Shot I can perform a mid court rally with a partner, using overhead shots
- ☐ The Smash I can hit the shuttle with power in a downward direction using no net
- □ Net Play- I can hit the shuttle softly over the net
- ☐ Game Play I understand which court lines are used for singles and doubles.



Hockey

- □ Ball Control I can identify the different parts of the stick and how to hold the stick correctly.
- ☐ Passing I can execute the sweep pass introducing power and speed but often make mistakes in the accuracy of the pass.
- □ **Dribbling** I can dribble the ball on my forehand side quickly. I can also dribble the ball in a zig zag pattern on the forehand side but sometimes lose control of the ball.
- ☐ Tackling I understand the rules associated with tackling.
- ☐ Game Situations At restarts, I can pass the ball to my own players or when receiving attempt to move to get free from defenders.

- ☐ Ball Control I can control the ball when it comes to me using my feet while not under pressure.
- ☐ Passing I can pass the ball with some accuracy using my inside foot while not under pressure over a short distance.
- □ **Dribbling** I can dribble with the ball with some control over a short distance.
- □ **Defending** I can successfully tackle an opponent in a 1v1 situation.
- ☐ Shooting I can shoot from close range with some accuracy ☐ Performance I can perform a 6 balance routine using the inside of my foot.
- ☐ Game Situations I understand the importance of getting into space to make myself available for a teammate.



☐ Passing – I am able to chest pass the ball to a partner using the correct technique. I am also able to shoulder pass to a partner with less accuracy.

Netball

- ☐ Footwork I can recognise which foot I am allowed to move when I have caught the ball and which one I need to keep still.
- ☐ Attacking skills I am able to move in to a space and catch a ball in a closed skill situation.
- ☐ Defending skills I am able to shadow a player in a closed skill situation.
- ☐ Games Situations I can identify all 7 positions on the court.

Gymnastics

- ☐ Floor I can perform simple movements and balances, rolls and jump movements and include these in a sequence, holding them for 5 seconds with tension.
- ☐ **Jumps** I can recognise the correct take off technique. Perform flight movements (tuck) from the bench and springboard.
- ☐ Apparatus I can take off a springboard or trampette with two feet and squat onto a box.
- showing tension and extension.





Rugby

- □ Evasion/Support Play I can run with the ball and step out of the way of a defender using a lot of space as part of a conditioned drill, working out methods to get past the defence. Demonstrating the 1st 'principle of play' - go forward.
- ☐ Passing & Catching I can pass the ball to a teammate whilst moving slowly forward. I can perform the pop pass whilst moving.
- ☐ Tackling/Defensive Strategies I can perform a side tackle from my knees or front tackle from crouching.
- ☐ Rucks & Mauls I can present the ball safely and correctly during contact.
- ☐ Game Play I can perform basic skills in a mini rugby game of 'tag' or 'touch' against players of similar standard.

Knowledge Goals: PE

Half Term 1: Tier 3 Vocabulary			
#	Key word	Definition	
1	Receiving	Getting the ball quickly into a position to execute the next skill. With good receiving players are able to set-up the next play efficiently and easily.	
2	Sweep Pass	The stick comes parallel to the ground, only to swing and hit the ball with an arclike motion.	
3	Ready Positions	Players can react more quickly and with more power to their opponent's hits. To perform a proper badminton stance, the body should be turned to face the opponent's side of the court with the non-racket leg forward and legs at a shoulder width apart	
4	Pressure/Pressing	Pressing is when pressure is applied on the player or the team that's in possession. It's a skill used in all areas of the pitch – to win the ball back, dictate play, or delay the opposition.	
5	Possession	Control of the ball or other implement of play by one team, which typically gives that team the opportunity to score	
6	Tension	Gymnasts can control the action of their body more easily when their body is held tight than when it is a loose collection of individual parts	
7	Extension	pointing toes and fingers, keeping the head up and making the limbs long.	
8	Kick offs/Restarts	Kick-offs are used to start each half of the match or period of extra-time. Restart kicks are used to resume play. 22-drop out	
9	Off-loading	An off load is when a tackled player passes the ball to a teammate before the tackle is completed.	
10	Scrum	The scrum is a means of restarting play after a stoppage which has been caused by a minor infringement of the Laws (for example, a forward pass or knock-on)	

Notes:	







Badminton

Football

Hockey





Netball

Rugby Union

Knowledge Goals: Physics - Speed

Calculating speed

- The speed of an object is worked out from how far it has travelled and how long it took.
- When you are travelling fast your speed is high. You cover a longer distance in a certain time.
- · We use a formula to calculate speed.

speed = distance ÷ time

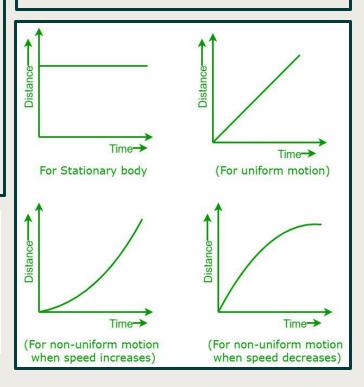
• The formula can be rearranged in three ways:

- Speed can be measured in many units such as metres per second (m/s), miles per hour (mph), kilometres per hour (km/h).
- Speed may change during a journey. The average speed is the total journey distance divided by the total journey time.

Distance	Time	Speed	Unit
40 m	60 s	40÷60 = 0.67	m/s
52 cm	640 s	52÷640 = 0.08	cm/s
20 km	2 hours	20÷2 = 10	km/hour

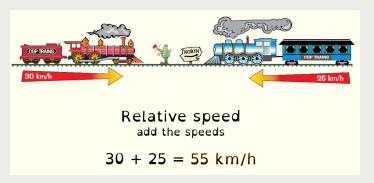
Distance-time graphs

- Shows the distance that an object has travelled at different times in a journey.
- A horizontal straight line means an object is stationary (stopped).
- A straight sloped line means the object is travelling at constant speed. The steeper the line the greater the speed.
- A curved line means the object is speeding up or slowing down. When an object changes speed like this, it is called acceleration.

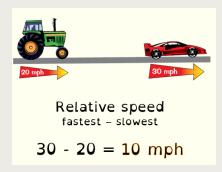


Relative motion

- When scientists compare the movement of two objects they talk about relative motion.
- When two objects are heading towards each other, the relative speed is the sum of the speeds of the two objects.



 When objects are travelling in the same direction, the relative speed is the fastest speed subtract the slowest speed.



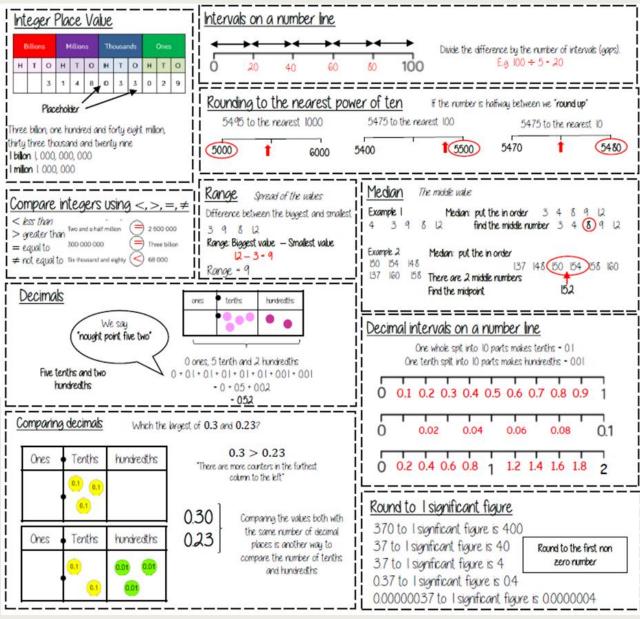
Knowledge Goals: Physics - Speed

Half Term 1: Tier 3 Vocabulary		
#	Key word	Definition
1	distance	Length of a path covered in a journey
2	speed	How fast something is travelling – how much distance is covered on how much time
3	unit	Standard amount used to measure a physical quantity e.g. metre, kilogram, and second
4	formula	In Physics, equations that show the relationship between different quantities using words or symbols
5	average speed	The total distance travelled divided by the total journey time
6	accelerate	To change speed (speed up or slow down)
7	stationary	Still, not moving

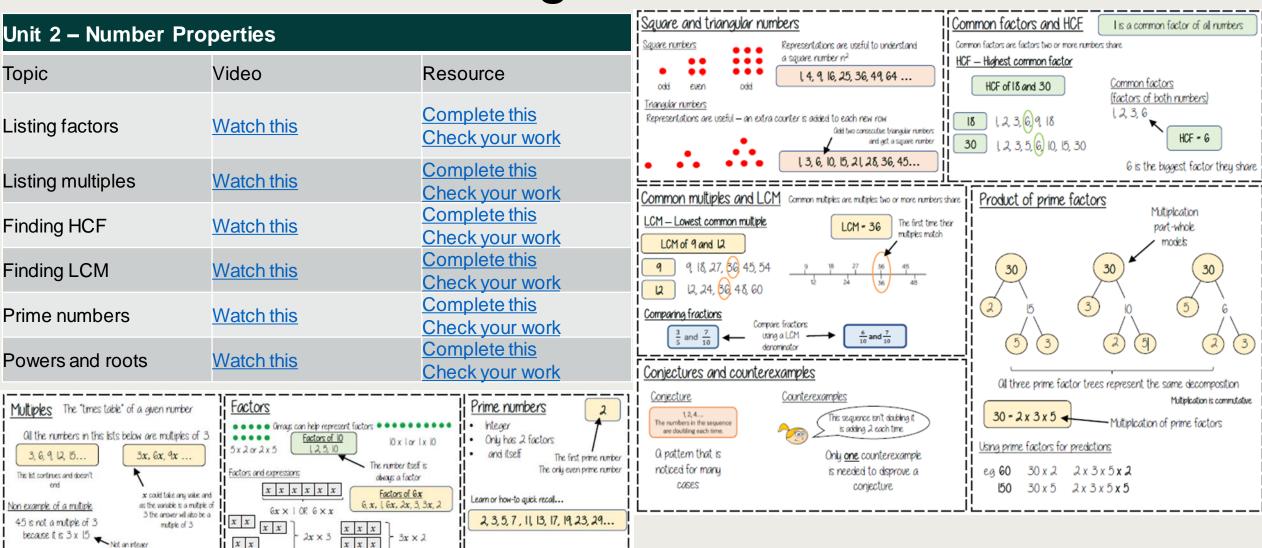
Notes:

Knowledge Goals: Maths

Unit 1 – Place Value				
Topic	Video	Resource		
Ordering numbers	Watch this	Complete Q1 & 2 Check your work		
Greater than and less than < >	Watch this	Complete Q3 Check your work		
Multiplying & dividing decimals by 10, 100 & 1000	Watch This Multiply Watch This Divide	Multiply Worksheet Check your answers Divide Worksheet Check your answers Online Quick Practice		
Round to the nearest integer, 10, 100 & 1000	Watch This 10 Watch This 100	Bitesize Activities		
Round to decimals places	Watch This	Online 1dp practice Online 2dp practice		



Knowledge Goals: Maths



Knowledge Goals: Maths

Half Term 1: Tier 3 Vocabulary		
#	Key word	Definition
1	Prime number	A whole number greater than 1 that cannot be exactly divided by any whole number other than itself and 1 (e.g. 2, 3, 5, 7, 11).
2	Factor	A factor is a number that divides another number, leaving no remainder (e.g. 8 is a factor of 24).
3	Multiple	A number that we get when we multiply one whole number by another whole number (e.g. 10 is a multiple of 2).
4	Square number	A square number is the result when a number has been multiplied by itself (e.g. 25 is a square number as it is the answer to 5 x 5).
5	Square root	The square root of a number is the number that, when multiplied by itself, gives the original number (e.g. 4 is the square root of 16).
6	Highest Common Factor (HCF)	The Highest Common Factor (HCF) of two numbers is the highest possible number that divides both the numbers completely (e.g. the HCF of 12 and 16 is 4).
7	Lowest Common Multiple (LCM)	The Lowest Common Multiple (LCM) is defined as the smallest multiple that two or more numbers have in common (e.g. the LCM of 10 and 4 is 20).

Notes:	

Knowledge Goals: Music

The Elements of Music

Why are the elements of music important?

The pulse and the rhythm are two of the most important ingredients of any piece of music, but there are many more things that can influence how a piece of music sounds. In this unit you will learn about some of the most important elements of music and the impact they can have. You will learn some of the professional terms for these elements and learn to describe them in a piece of music. You will learn how to read and play a simple rhythm using note values, and you will also get the chance to explore the elements of music through the composition of a graphic score.

Rhythm and Pulse

The pulse is the constant (like your heartbeat)

The rhythm is made up of long and short notes played in a combination Rhythm Helps Your Two Hips Move

Graphic Scores

A graphic score is an alternative way of writing down a piece of music. The idea combines music with art. It is up to the performer to decide how the images or symbols should be interpreted and performed.





Great Composers

György Ligeti Artikulation

Cathy Beberian Stripsody

Note Values

NAME	LENGTH	SYMBOL	REST
Semibreve	4 beats	o	-
Minim	2 beats	J	_
Crotchet	1beat		*
Quaver	½ beat)	7
Semiquaver	1/4 beat	,	7

Dynamic and Tempo Markings

SYMBOL	ITALIAN	ENGLISH
f	Forte	Loud
mf	Mezzo Forte	Moderately Loud
mp	Mezzo Piano	Moderately Quiet
\boldsymbol{p}	Piano	Quiet (soft)
<	Crescendo	Getting Louder
>	Diminuendo	Getting Quieter

Knowledge Goals: Music

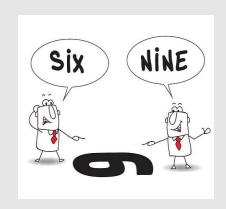
Half Term 1: Tier 3 Vocabulary		
#	Key word	Definition
1	Pitch	The 'high' or 'low' of a sound or musical note
2	Rhythm	The combination of note values (rhythm helps your two hips move!)
3	Pulse	The constant beat in a piece of music, like your heartbeat
4	Dynamics	The volume of a sound or musical note
5	Duration	The length of a sound or musical note
6	Melody	The tune of the music
7	Tempo	The speed of the music
8	Timbre/Sonority	The sound or tone quality of different instruments and sounds
9	Texture	The mix and layer of musical sounds (how much we hear)
10	Articulation	How individual notes or sounds are played
11	Harmony	When notes are played at the same time to create chords

Notes:	
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Knowledge Goals: Philosophy, Religion & Ethics PRE and ME

Different ways of seeing

Everybody sees the same things in the world but we perceive the things we see differently. People who believe in different religions have different ideas about the world. In PRE we do not tell people what to see or what to think. We are respectful of different opinions and different views.



What is PRE

PRE stands for religion, philosophy and ethics. Over the next three years you will study plenty of religions and worldviews including Christianity, Buddhism, Judaism, Humanism and Islam. You will also get the opportunity to explore philosophical questions and explore big questions about our purpose and existence, whether God exists and whether there is life after death. We also look at ethical issues ranging across a whole variety of subjects from animal testing to capital punishment where you will have the opportunity to explore your views and form well thought out opinions.

Why is it important to learn about other beliefs?

About 85% of the world's people identify with a religion so PRE is a fantastic opportunity to understand the world we live in a little better. Have a look at these statistics below to see just how significant it is across the world.

- · Christianity 2.38 billion
- Islam 1.91 billion
- Hinduism 1.16 billion
- Buddhism 507 million
- Folk Religions 430 million
- Other Religions 61 million
- Judaism 14.6 million
- Atheist 1.19 billion

Learning both about and from religion helps us to become more tolerant and more informed in how other people live their lives and what might impact upon their world view.



Find out more!



Why study PRE?

There are loads of excellent reasons to study PRE, here are a few. What other reasons can you think of?

- · It is really interesting
- You get to have debates and discussions
- It helps you to form opinions on big topics and questions
- You can learn to see things from other people's points of view



Knowledge Goals: PRE PRE and ME



		Term 1: Tier 3 Vocabulary
#	Key word	Definition
1	Worldview	A set of beliefs that influence someone's thinking
2	Belief	An acceptance that something exists or is true
3	Opinion	A view or judgement formed about something
4	Tolerance	Allowing and being understanding of different views or practices
5	Respect	Showing consideration for other beliefs and values
6	Atheist	A person who does not believe in a God or gods
7	Theist	A person who believes in a God or gods
8	Agnostic	A person who is unsure whether a God or gods exist
9	Spirituality	Looking for a sense of belonging, peace and purpose
10	Philosophy	The study of the nature of knowledge, reality and existence

Notes:	
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Estrategia

Here are five simple steps to help you learn any word:

Look carefully at the word for 1 LOOK 10 seconds or more.

Practise saying the word to yourself 2 SAY - remember that some letters are

pronounced differently in Spanish. 3 COVER Cover up the word, but only when you think you know it.

4 WRITE Write the word out from memory.

5 CHECK Did you write it correctly? If not,

what did you get wrong? Repeat the five steps until you get it right - and try not to make the same

mistake again.

Tú y yo

¿Cómo te llamas? Me llamo Juan. ¿Dónde vives? Vivo en Madrid. ¿Qué tal? ¿Cómo estás? Bien, gracias. fenomenal regular fatal ¿Y tú? ¿Cuántos años tienes? Tengo 13 años.

¿Cuándo es tu

cumpleaños?

Mi cumpleaños es el

uno de enero.

¡Feliz cumpleaños!

You and me

What are you called? I'm called Juan. Where do vou live? I live in Madrid. How are you? How are you? Fine, thanks. great not bad awful And you? How old are you? I'm 13 years old. When is your birthday? My birthday is

1st January.

Happy birthday!

Saludos

¡Hola! ¡Buenos días! iBuenas tardes! ¡Buenas noches! ¡Adiós! ¡Hasta luego!

Greetings

Hello! Good morning! Good afternoon! Good evening! Goodbye! See you later!

Los meses

The months enero febrero marzo abril mayo iunio julio agosto septiembre octubre noviembre diciembre

¿Cuál es la fecha de hoy?

Es el uno de agosto. Es el dos de mayo.

January February March April May June July August September October November December

What date is it today?

It's 1st August. It's 2nd May.

Palabras muy útiles

Very useful words yes no no and but . pero also también I have tengo necesito I need there is/are hay

Knowledge Goals: Spanish

Los números	Numbers
cero	0
uno	1
dos -	2
tres	3
cuatro	4
cinco	5
seis	6
siete	7
ocho	8
nueve	9
diez	10
once	11
doce	12
trece	13
catorce	14
quince	. 15
dieciséis	16
diecisiete	17
dieciocho	18
diecinueve	19
veinte	20
veintiuno	21
veintidós	22
veintitrés	23
veinticuatro	24
veinticinco	25
veintiséis	26
veintisiete	27
veintiocho	28
veintinueve	29
treinta	30
treinta y uno	31

En clase

¿Cómo se escribe ... ? Se escribe ... Tengo ... No tengo ... ¿No tienes ... ? Necesito ... ¿Oué hay en la clase? Hay ... No hay ...

In the classroom How do you spell ... ? You spell it ... I have ... I don't have ... Don't you have ... ? I need ... What is there in the classroom? There is/are ... There isn't/There aren't ...

En mi-mochila

un bolígrafo/boli un cuaderno un libro un monedero un diccionario un lápiz un estuche un móvil un sacapuntas una agenda una calculadora una goma una mochila

in my schoolbag

a pen an exercise book a textbook a purse a dictionary a pencil a pencil case a mobile phone a pencil sharpener a diary a calculator a rubber a schoolbag a ruler una regla

Knowledge Goals: Spanish

Half Term 1: Tier 3 Vocabulary			
1	SSC	Symbol-Sound Correspondence: the sound that letters or combination of letters make in a language	
2	cognate	A cognate is a word which looks the same or very similar to a word in English. E.g.: le cinéma, le football	
3	connective	A word which links sentences together. E.g.: and, but	
4	Opinion verb/phrase	A verb or a phrase which you use to give an opinion: I like, I dislike, in my opinion etc	
5	Justifier	A way of giving a reason, a justification of an opinion. I like because it is	
6	qualifier	A word which changes the intensity of an adjective: quite, very, extremely	
7	adjective	A describing word: big, small, green, interesting, amusing etc	
8	Time phrase	A phrase used to say when something is happening: normally, on Mondays, yesterday, next weekend	
9	Tenses	Past, present, future	
10	Infinitive	A verb as you find it in the dictionary: to play, to eat. This is the form of the verb when it is not used with a pronoun (I, he, she)	

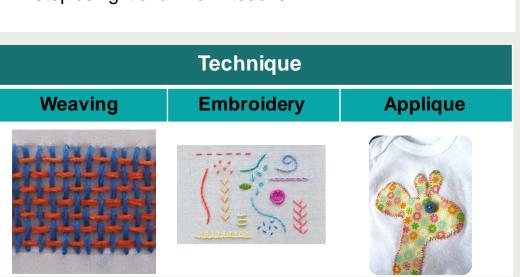
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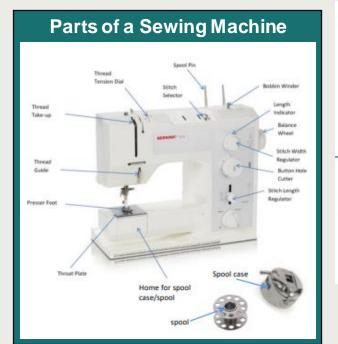
Knowledge Goals: Textiles

Health and Safety

It is really important we ASSESS the RISK and REDUCE the RISK of Injury by LISTENING To the TRAINING and following the correct PPE usage

- You must walk with scissors facing downwards next to your side
- Watch where you are sewing on the machine
- Do not press the foot pedal to the floor when using the sewing machine
- Make sure you had in Bodkin needles at the end of the lessons
- If the sewing machine makes an unusual noise, please stop using it and inform teacher







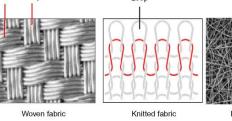




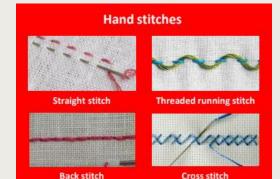


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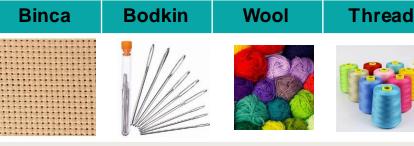




c Nonwoven fabric



Textile equipment



Knowledge Goals: Textiles

Half Term 1: Tier 3 Vocabulary			
#	Key word	Definition	
1	Properties	The qualities the fibres/material have e.g. absorbancy, resistant to abrasion, elasticity etc	
2	Natural fibres	Natural fibres come from plants, animals or insects. They are easily <u>renewable</u> and <u>biodegradable</u> .e.g. cotton, silk, wool	
3	Synthetic fibres	Synthetic fibres are made mainly from <u>non-renewable</u> coal and oil. They do not <u>degrade</u> easily but they can be made into any length (continuous filament) and thickness and for any purpose.	
4	Weft and Warp	Woven fabrics have warps and wefts. The warp runs from left to right and the weft runs 90 degrees to this. Weft yarns are woven over and under warp yarns, and where the weft yarns loop back to form an edge that doesn't fray ,	
5	Smart materials	Smart materials are materials that react to the environment around them, this could be light, temperature, pH level etc	
6	Photochromic	Photochromic is a smart material that reacts to light	
7	Applique	Layers of fabric are placed on top of other fabric in a decorative way and stitched in place	

Notes:	
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