

YEAR 7

**KNOWLEDGE
ORGANISERS**

Autumn Term 2024-2025



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Helping you to Master the Minimum!

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What are Knowledge Organisers?

A Knowledge Organiser specifies the essential knowledge that you need to memorise and retain for a unit of work. It is contained on a single A4 page and organised in a way to aid learning. The knowledge they contain are the building blocks of effective learning; it does not include everything you could and should know about a unit of work but the essential knowledge that you need to memorise.

This booklet contains all of the Knowledge Organisers for the units you will study in your subjects between September and Christmas.

Why are Knowledge Organisers important?

At secondary school you will study complex ideas and be asked to think in an analytical way; this is what makes learning an enjoyable process. To be able to think about difficult problems and question new ideas, you need know core factual detail to help you think critically. For example, if you have memorised your times tables your brain can focus on a complex Mathematics problem rather than working out 9×4 . Being confident in your knowledge of the basics frees up your brain to focus on the complex. Once you have a secure knowledge of a unit of work, future learning is easier. Cognitive Scientists, who study how memory works, have shown us that we learn new information by linking it to knowledge we already have. The more knowledge we have, the easier it is to learn.

Knowledge Organisers are also useful as a reference point if you are struggling to remember information in a lesson or if you have been absent in a lesson. They will help you to be more effective learners.

How to use Knowledge Organisers effectively

Just having a Knowledge Organiser stuck into your exercise book or having this booklet in your bag will not help your learning.

You need to spend time, both in lessons and at home, memorising the content within them. Your teachers will help you do this by using them in lessons and setting homework tasks based upon them. Learning information can be uncomfortable and difficult but that is okay. That is how we improve.

Making sure we remember knowledge in the long term requires some hard work. You are probably confident with your Times Tables because your primary school teachers tested you on them regularly and you played online games to test yourself. The reason this works, is because you have been doing something called **retrieval practice**. Through the act of remembering, our memory is strengthened and forgetting is less likely. Every time you have to remember information it changes the original memory to make it stronger.

Retrieval Practice techniques you can use at home:

Look, Cover, Say, Write, Check

- Exactly as it sounds. Look at a section of the Knowledge Organiser, cover the information you are trying to remember, say it aloud or write it down and then check you are correct. Keep doing this until you consistently get the answers correct. This works particularly when learning new vocabulary.

Quizzing

- Write your own quiz questions based on the information on your Knowledge Organiser. You could work with your peers or those you live with to quiz you until you have memorised the information.

Flash Cards

- Create your own set of flash cards. Write a question on one side and the answer on the other. You could even create these online using quizlet.com

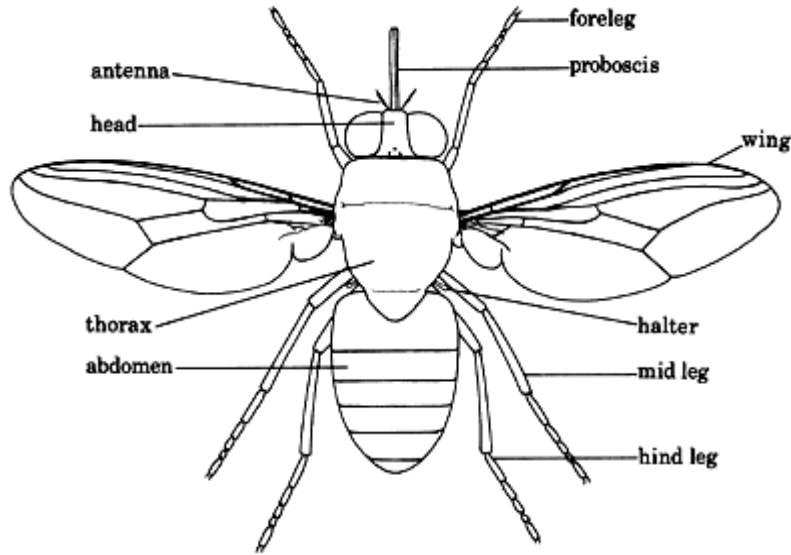
Mind Dump

- Write down all of the key information you can remember on a topic or unit of work. Compare this to your Knowledge Organiser to see if there is anything you have missed.

Make sure that you carry out these memorising strategies regularly. Can you remember what you did last week, last month, last term? The more often you recall information from your memory, the stronger that memory becomes.

Art & Design Unit 1: Insects

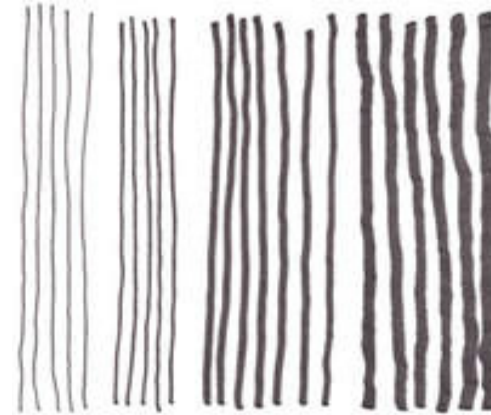
Entomology = the study of insects



KEY WORDS

- Line
- Tone
- Texture
- Blending
- Contrast
- Layering
- Pattern
- Symmetry
- Geometric

Weight of line is the lightness, darkness and width of a line. These include light,



Value scale = How light or dark a tone is.



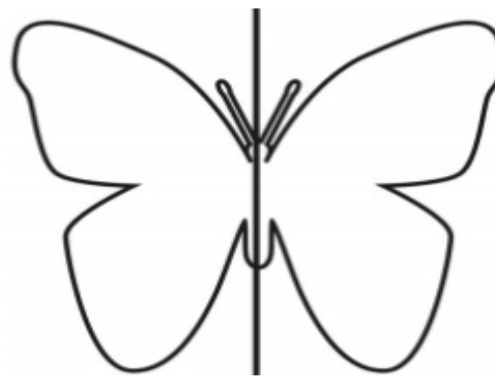
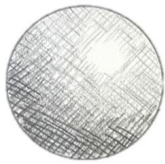
Tonal Drawing Techniques

Hatching

Cross Hatching

Stumping/
Scumbling

Stippling



A line of symmetry is a line that cuts a shape exactly in half.

Drawing skills/ techniques

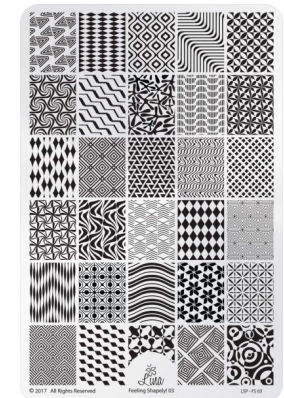
1. Proportion
2. Weight of line
3. Varied tone
4. Blending from dark to light
5. Illusion of texture
2. Neat edges
3. Repetitive pattern
4. Layering/collage

Idea/Context

Manchester's connection with the worker bee



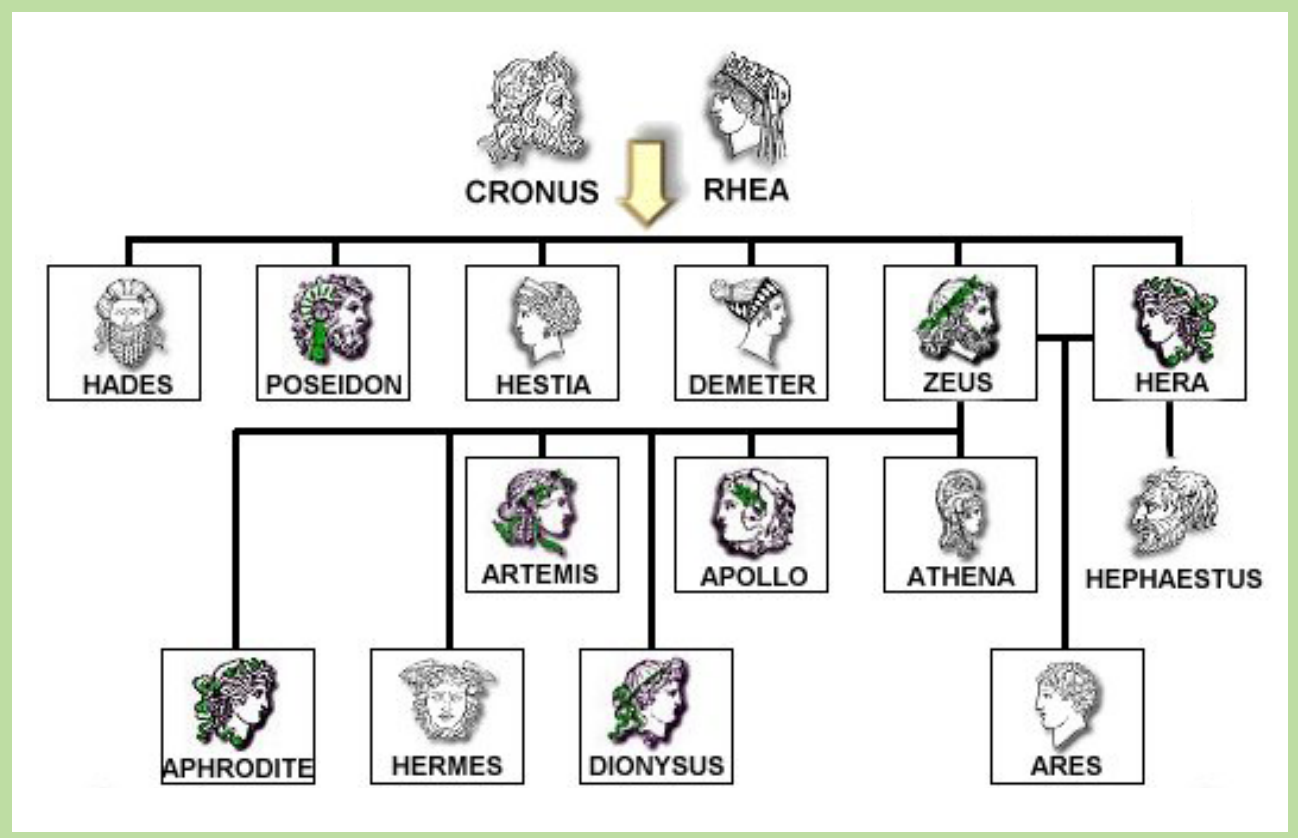
Zentangles



Key Vocabulary - The Gods



1	Zeus	God of thunder, King of the Gods.
2	Poseidon	God of the sea, horses and earthquakes.
3	Hera	Goddess of Marriage. Wife of Zeus.
4	Hades	Gods of the Underworld.
5	Athena	Goddess of war and wisdom. Patroness of Athens.
6	Aphrodite	Goddess of love & beauty.
7	Apollo	God of music, poetry, archery, the sun and prophecy.
8	Artemis	Goddess of the moon and hunting.
9	Demeter	Goddess of the harvest.
10	Hestia	Goddess of the hearth fire.
11	Ares	God of war.
12	Hephaestus	God of fire and smiths.



Key Events - Birth of the Gods

1	Cronus' prophecy.
2	Cronus eats his children.
3	Rhea disguises Zeus and gives Cronus a rock.
4	Zeus returns and gives Cronus a potion to vomit his siblings.
5	The Olympians rebel against the Titans.

Key Events - Titanomachy

1	The Olympians and Titans set up headquarters.
2	The Olympians get help from the Cyclops and Hecatonchires.
3	The Titans recruit Atlas.
4	The war rages for ten years.
5	The Titans are overcome and imprisoned in Tartarus.

Areas of Hades (the underworld)

1	The river Styx (Charon the ferryman).
2	The gates of Hades (guarded by Cerberus).
3	The Place of Judgement (Minos, Rhadamanthus and Aecus).
4	The Fields of Mourning (Asphodel).
5	The Fields of Elysium (heroes).
6	Tartarus (sinners).

Classics Heroes

Key Vocabulary - The Heroes



1	Perseus	Killed Medusa, saved Andromeda.
2	Herakles (Hercules)	Completed the 12 Labours.
3	Jason	Retrieved the Golden Fleece.
4	Theseus	Killed the Minotaur.
5	Achilles	Best of the Greek warriors in Troy.
6	Odysseus	Cleverest of heroes, blinded the Cyclops.

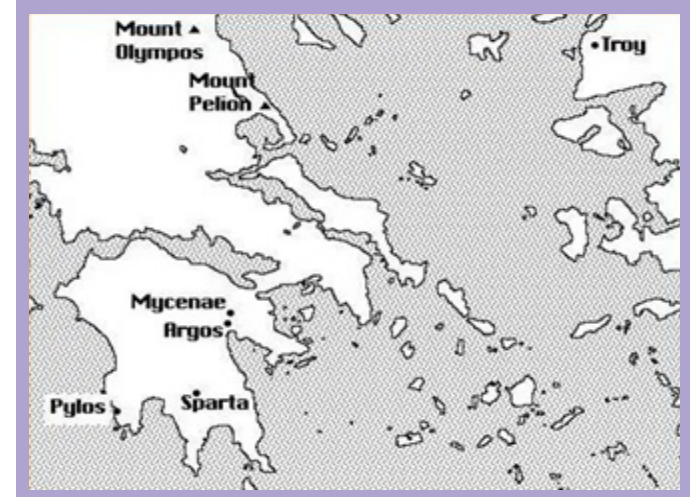
Key Vocabulary



1	Labour	An task impossible to ordinary mortals.
2	Immortal	A god.
3	Demigod	A mortal (human) with an immortal (god) parent.
4	Sacrifice	A gift of an animal to a god.
5	Kleos	Glory or renown.

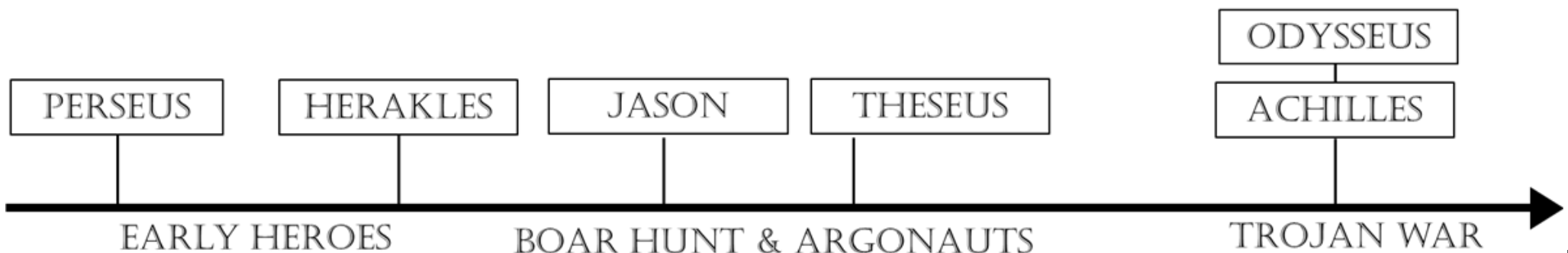
Descriptive Techniques

1	Sensory description	Describe what a character senses - 'the acrid stench of the Hydra's lair singed my nostrils'.
2	Vivid adjectives and verbs	Use expressive adjectives and verbs - 'the foul coils of the serpentine monster writhed and contorted as I struck off head after head.'
3	Dramatic adverbs	Describe how your character is moving and acting - 'The birds swarmed menacingly above...'
4	Metaphor, simile, personification (See English Knowledge Organiser)	Use language which creates a clear image in the reader's head - 'My raging club pulsated as I smashed the lion. Night fell upon me when I realised its skin could not be broken, I felt like a soul wandering the fields of mourning; all strength seeped from my limbs.'



Analytical Skills P.E.A Paragraphs

1	P - Point	Make a point related directly to the question.
2	E - Evidence	Back it up with specific evidence from the story or source.
3	A - Analysis	Explain what your evidence shows and how it corroborates (backs up) your argument.



Computer Science Welcome to Tythy

Your Login Details

1	Username	The year you joined Tythy, your first initial, then your last name. e.g. Jane Smith is: 22JSmith
2	Email Address	Your username, then @tythy.school - Jane's would be: 22JSmith@Tythy.School
3	Firefly/Teams Login	Use your Tythy email, and the password you set up for your school account.



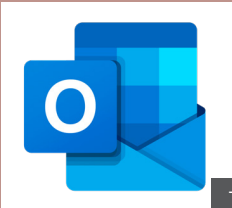
Your Behaviour

1	Screens off, face me	Turn off your screen, face your teacher, and be silent.
2	One voice	Your teacher is speaking, be silent.
3	Note taking	Whatever your teacher tells you to write down, do it. Your notes will be brought up and shown to your parents / guardians at parents evening.

Word

1	Headings	Use Heading 1/2 for all your titles. This will auto generate a contents page for your document.
2	CTRL-F	CTRL-F will bring up your navigation pane , letting you jump around your document efficiently.
3	OneDrive	Always store your documents in OneDrive . It keeps them safe, and lets you access them wherever you are .

The 3 Big Systems

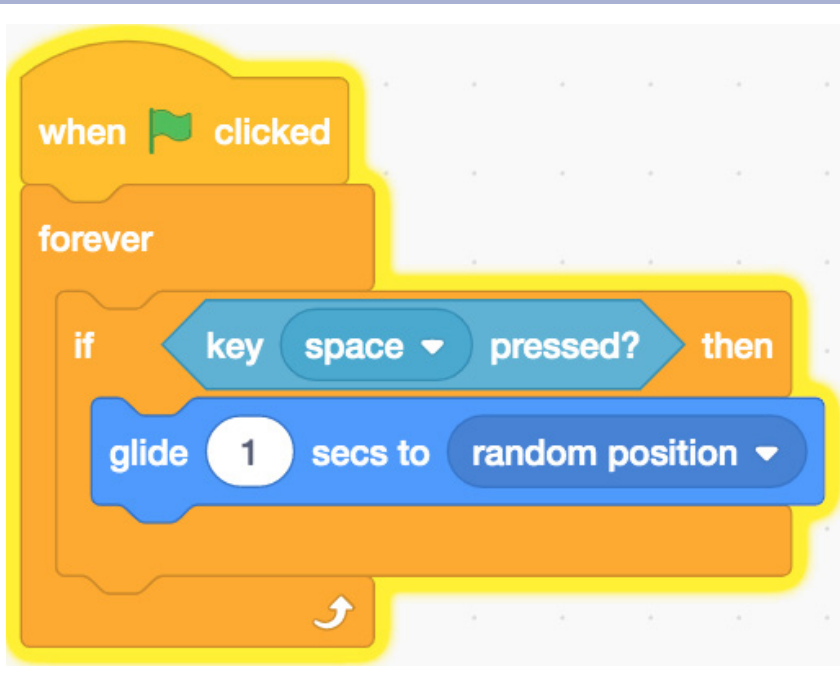
1	Firefly	The website you use for all of your homework. Check it every day, otherwise you will end up with missed homework detentions.	
2	Teams	Used for virtual lessons, and also some assignments for some classes.	
3	Email (Outlook)	Install the outlook app on your phone, this will let you see all your school emails wherever you are.	

Key Vocabulary

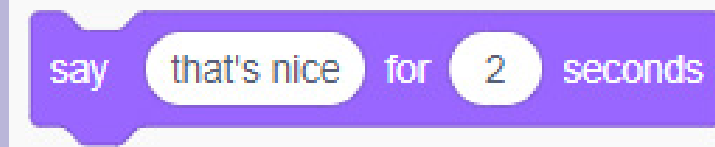
1	Selection	Used in Scratch for making a decision using an if-then statement.
2	Forever loop	Used in Scratch for repeating an action over and over again.
3	Pitch	How high or low a sound frequency is.

Forever loop

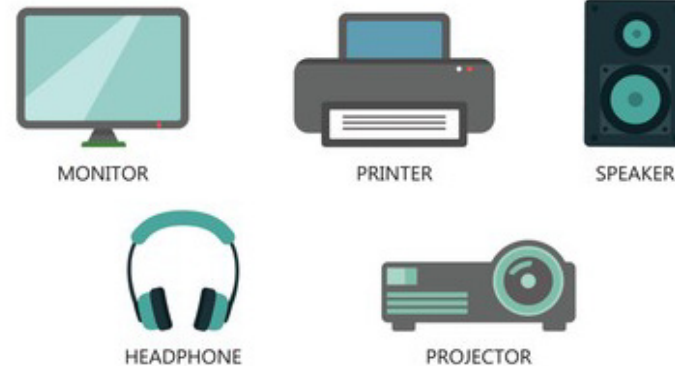
If statements make decisions, they are selection tools. It will repeat the if statement inside it forever. This is a forever loop.



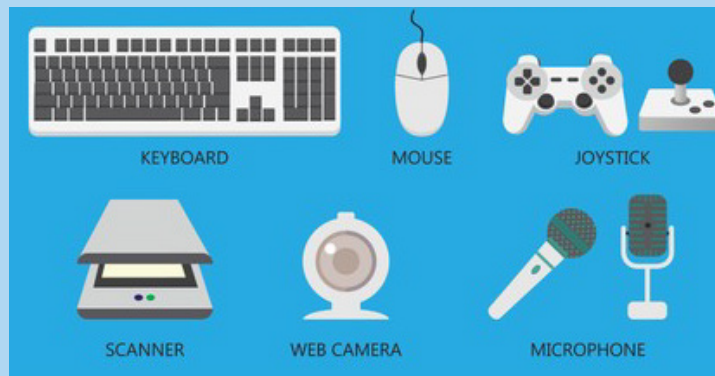
Scratch Command for outputting 'that's nice'



Output Devices

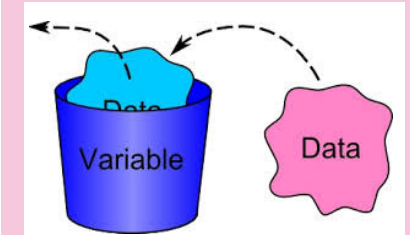


Input Devices



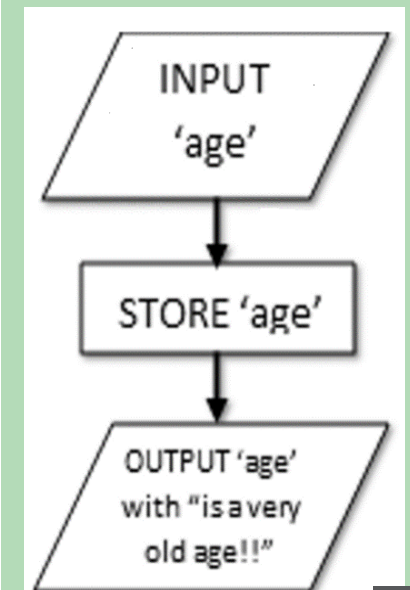
Variables

Variables hold data e.g. your name or your age.



Flowchart

Flowchart - used to plan your program.



DT Project: Phone holder & Desk organiser (GC)



Tools

1	Belt / Rotary sander	Machine used to remove waste material and smooth wood.
2	Bench hook	Used to assist holding wood in place when sawing.
3	Bevel edge chisel	Used to cut away and shape wood. Used to create housing joint.
4	Coping saw	Cutting curves. Larger blade teeth for wood and smaller teeth for metal/plastic.
5	Drill press clamp	Used when drilling to hold work securely for safe drilling.
6	File	Removes waste. Can be used to help shape and smooth edges.
7	Pillar drill	Machine used for drilling holes.
8	Steel rule	Used to measure when marking out in millimetres (mm).
9	Template	Used for marking out identical shapes multiple times
10	Tenon saw	Cutting wood joints and straight cuts in small section material (for wood only).
11	Try square	Used for marking out to ensure straight lines are 90° from the edge of the wood.
12	Twist drill bit	General purpose drill bit used on wood, metal or plastic.



Try square



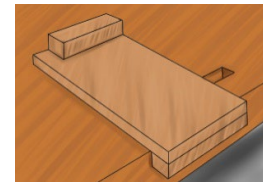
Steel rule



Bevel edge chisel



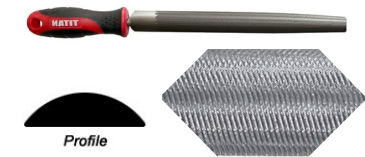
Tenon saw



Bench hook



Coping saw



File (half round)



Belt sander



Pillar drill



Drill press clamp



Twist bit



Vacuum Former



Injection moulding machine



Ensure you know how to use all tools and machinery safely. **Follow the machine rules.** Ask if you are unsure.



Wear apron & fasten up



Wear eye protection



Long hair?
Wear a hair net



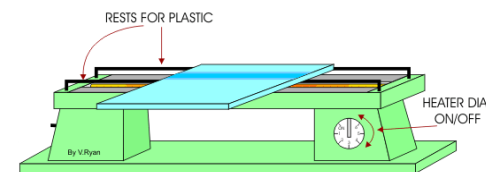
Know where the stop buttons are



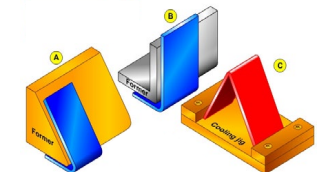
Remove jewellery



Ensure no one else is in your machine safe zone



Strip heater



Formers / Bending jigs

Key Vocabulary

13	Client	Also known as the user; the person or group of people who will buy and/or use the design solution.
14	Computer-aided design (CAD)	Using computer software to draw, model and simulate the performance of products.
15	Computer-aided manufacturing (CAM)	Using computer software to control machine tools to make products.
16	Crude oil	Non-renewable resource obtained from drilling underground/under the sea.
17	3D printing	A process that builds up a product layer by layer using a moving printer head that deposits material as it goes
18	Design brief	A summary of the design opportunity
19	Design context	A general situation where there are problems that need solutions.
20	Freehand sketching	A quick way to get initial ideas down on paper.
21	FSC	Forest Stewardship Council.
22	Grain	The growth rings visible in wood.
23	Hardwood	Wood from trees that shed their leaves each autumn.
24	Iterative design	A design strategy that follows a cyclic make-test-evaluate approach.
25	Isometric drawing	3D drawing method (using lines at a 30 angle)
26	Manufactured boards	Materials made by gluing particles or pieces of wood together.
27	Monomer	Chemical parts from which polymer can be made.
28	Seasoning	Drying wood to remove moisture before its used. Less likely to distort & warp.

29	Softwood	Wood from trees that keep their leaves or needles all year round.
30	Sustainability	The level to which resources can be used without them becoming unavailable in the future.
31	Thermoplastic	Polymers that can be reshaped when heated.
32	Thermosetting	Polymers that will not change shape when reheated.
33	Veneer	A thin layer of wood, often used to provide an attractive surface on a product.
34	Virtual model	A model of a design produced using CAD software.
35	Wasting	Removing material that is not needed to achieve a desired shape.

Softwood



(Coniferous)
Scots Pine /
Spruce / Larch

Hardwood



(Deciduous)
Ash / Oak / Elm /
Beech / Mahogany

Forest Stewardship Council.

Timber sourced from a sustainably managed forest means new trees are replanted to replenish supply. Logo appears on wood, wood products and paper/packaging.



Plywood



Chip board

Manufactured boards -
Materials made by gluing particles or pieces of wood together.



Medium density fibreboard

D&T Project: Toy Car & Keyfob (CT)

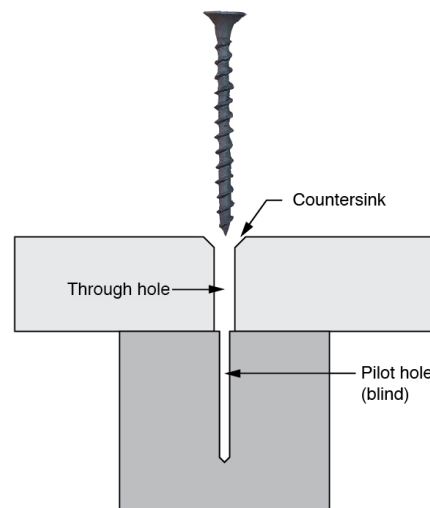


Key Vocabulary

1	Acrylic	Rigid and shiny but brittle plastic suited for workshop use.
2	Assembly	To put together parts to make a product.
3	Belt / Rotary sander	Machine used to remove waste material and smooth wood on end grain only .
4	Bench vice	Device used to hold job while using hand tools.
5	Burr	Sharp edge on metal left after sawing.
6	BZP	Bright zinc plated.
7	Clearance hole	Hole size larger than screw thread diameter.
8	Coping saw	Hand saw used to cut curves in wood, metal and plastic.
9	Dimensions	Size (in mm) of length width and height of a product.
10	Drilling	Process involving putting holes in a material.
11	Evaluation	Reflecting on how well something went and how it could be improved.

Screw Joint

To join 2 materials with screw – aligning clearance hole with pilot hole and using clearance hole as marking-out jig.

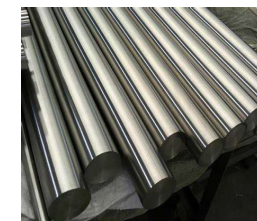


Softwood

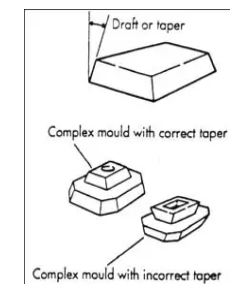
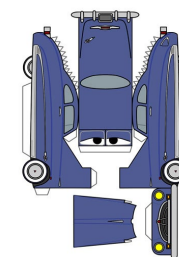


(Coniferous)
Scots Pine / Parana Pine

Metal



Mild steel – alloy of iron and carbon



Try square

Steel rule

Template

Pattern



Junior Hacksaw

Coping saw

Strip Heater

Sanding block



Ensure you know how to use all tools and machinery safely and follow protocols. Ask if you are unsure, inform teacher if not well.



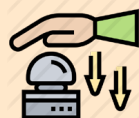
Wear apron & fasten up



Wear eye protection



Long hair?
Wear a hair net



Know where the stop buttons are



Remove jewellery



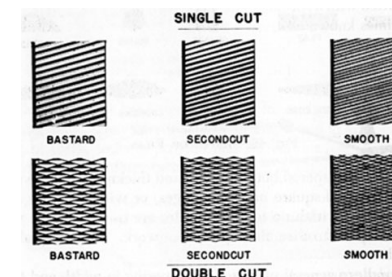
Ensure no one else is in your machine safe zone



Vacuum Former



Pillar drill



Files – bastard cut, 2nd and smooth

Key Vocabulary

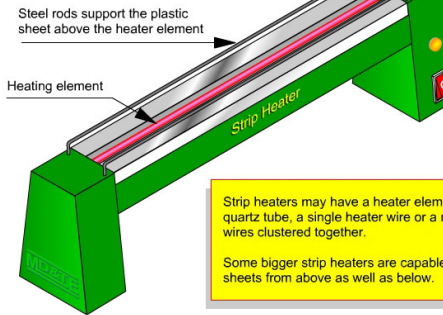
12	Exploded drawing	3D drawing used to show how parts fit together.
13	File	For plastic and metal only. Trims shape to line after cutting. Use bastard cut first, then 2nd, finish with smooth cut.
14	Good house-keeping	Working in a tidy manner.
15	Health and Safety	Making with minimised hazard
16	H&S Colour coding	4 colour codes recognised internationally to denote specific hazards.
17	Iterative design	A design strategy that follows a cyclic make – test – evaluate approach.
18	Injection moulding	Process that squirts molten plastic into a mould to make complex shapes.
19	Interference fit	Parts holding together using friction.
20	Job	The item being worked on.
21	Junior hack saw	Cutting small metal sections such as rod - straight cuts only.
22	Keyfob	Shape which attaches to the key ring.
23	Machine guards	Device to shield user from moving parts on a machine.
24	Machine Vice	Used when drilling to hold work securely for safe drilling.
25	Pillar drill	Machine used for drilling holes accurately in all materials.

Strip Heater / Line bender

Equipment that directs a narrow focus of heat on plastic to enable it to be bent.

Bending jig used to assist in the accurate bending of acrylic keyfob when heated.

A typical strip heater used in schools



Strip heaters may have a heater element contained in a quartz tube, a single heater wire or a number of heater wires clustered together.

Some bigger strip heaters are capable of heating plastic sheets from above as well as below.



What is plastic?

Crude oil – fossil – based oil as found at source.

Thermosetting – plastic that can only be formed once.

Synthetic – factory made / not natural.

Petrochemical – industry that converts oil into plastics and fuels.

Oil rig – structure used to extract oil from oil field.

Thermoplastic – plastic that can be heated and formed repeatedly.

Polymer – engineering term for plastics.

Environmental – issues relating to the natural functioning of the planet.

Why is plastic such a popular material in modern manufacturing?

- Self-finishing: does not require painting as is already coloured.
- One piece design: complex shape created without having to be joined together.
- Efficient: less time energy and resources needed.

Key Vocabulary

26	Pilot hole	Hole size matching core of screw but smaller than thread diameter.
27	Polish and buff	To apply and remove abrasive polish to create a shiny surface on metal and plastic.
28	Polypropylene	Tough plastic used for wheels in project.
29	Pozidriv	Cross-shaped screw driving system with extra cross pattern.
30	Production paper	Industrial grade abrasive paper.
31	Quality control	Checking that work is good enough during the making.
32	Rod	Solid metal round bar.
33	Sanding (sanding block)	Used to shape wood after cutting using P60 abrasive paper. P120 paper for medium finishing and smoothing, glass paper for extra smooth (block optional).
34	Screwdriver	Tool used to turn screws.
35	Self-tapping screw	Screw with hardened thread which can be used in metal, plastic and wood.
36	Steel rule	Used to measure when marking out in millimetres (mm).
37	Template	Marking out tool for irregular shapes. Can be paper, card, wood or metal depending on quantity of product required.
38	Try square	Used for marking out to ensure straight lines are 90° from the edge of the wood / checking wood is square.
39	Vacuum Former	Machine used to create shell shapes in thin plastics material – use with a wooden pattern.
40	Vinyl	Thin flexible plastic used for decals in project.
41	Wet & dry paper	Waterproof abrasive paper for plastics and metals.

42	Working drawing	Technical drawing showing product from 3 angles with accurate dimensions used to make a product.
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Strip Heater / Line bender

High density polystyrene - vacuum forming thermoplastic.

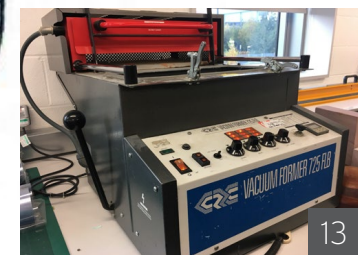
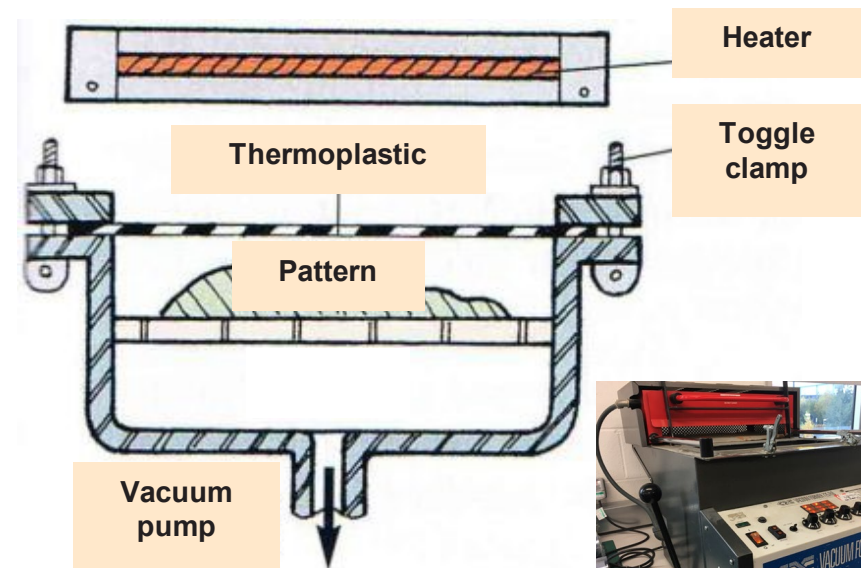
Pattern - solid 3D shape used to form plastic over.

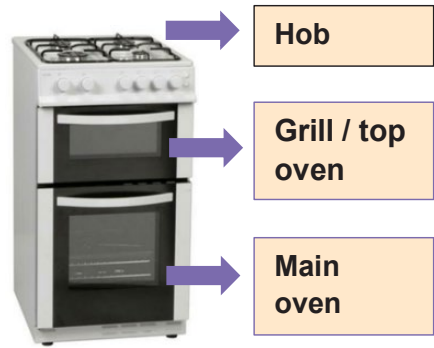
Cycle time – time taken from start to finish of vacuum forming process.

Draft angle – angle on the pattern to allow it to be released after plastic has been moulded.

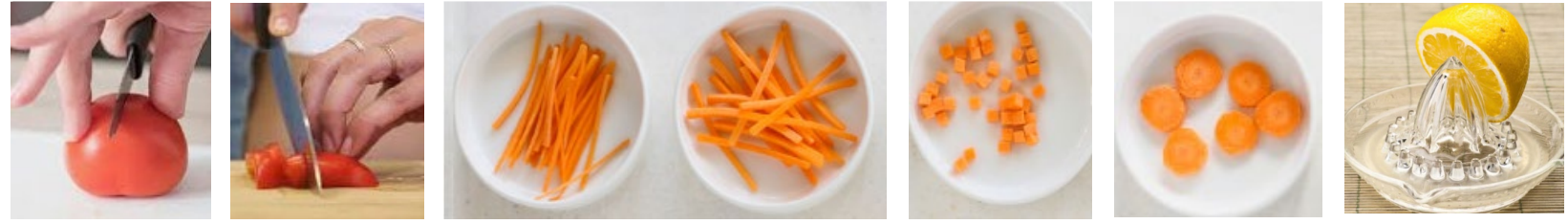
Atmospheric pressure – pressure in the room utilised to form plastic – 1 bar or 12.5 lbs per square inch.

Vacuum Former

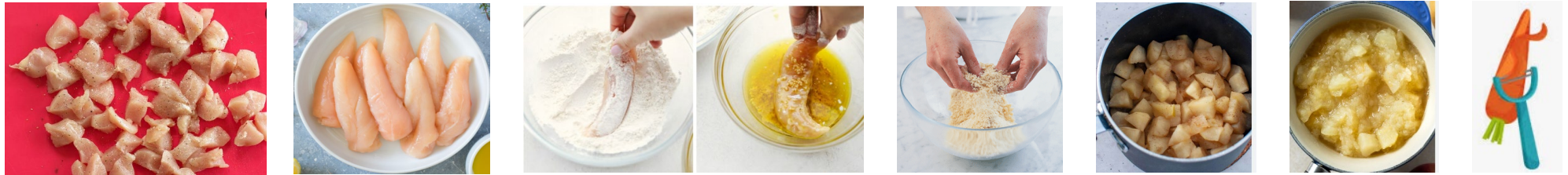




Chopping and Cooking Techniques



Bridge hold Claw hold / grip Fine julienne (Match sticks) Julienne Dice Slices Lemon juicer



Medium diced chicken Chicken goujon shape Enrobing / coating Rubbing in method Stewing apples – consistency Peeler

High risk foods - defined as a food that contains protein and moisture. Higher risk of food poisoning if not handled, cooked or stored correctly - **Meat, fish, eggs, cooked rice, gravies, meaty soups, unpasteurised foods.**

- PREVENT CROSS CONTAMINATION**
USE CORRECT COLOUR CODED CHOPPING BOARDS & KNIVES
- RAW MEAT
 - RAW FISH
 - COOKED MEATS
 - SALADS & FRUITS
 - VEGETABLES
 - ALLERGENS
 - DAIRY PRODUCTS

Basic Safety and Hygiene Rules

- Wash hands before handling food
- Store food in the correct place (Fridge 1-4C)
- Use the correct colour chopping boards to avoid contamination
- Cover cuts with a blue plaster
- Tie back hair and wear a clean apron.
- No nail varnish or false nails

Key Vocabulary – Cooking methods

<u>Water based methods</u>	<u>Dry methods</u>	<u>Fat based methods</u>
Boiling	Baking	Braising
Steaming	Grilling	Stir-frying / Fambe
Poaching		Deep fat frying
Simmering		Roasting

Food : Introduction to cooking



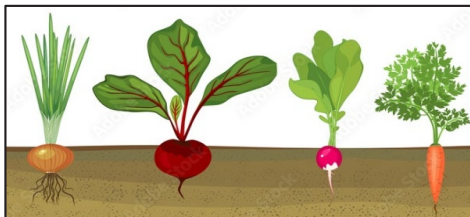
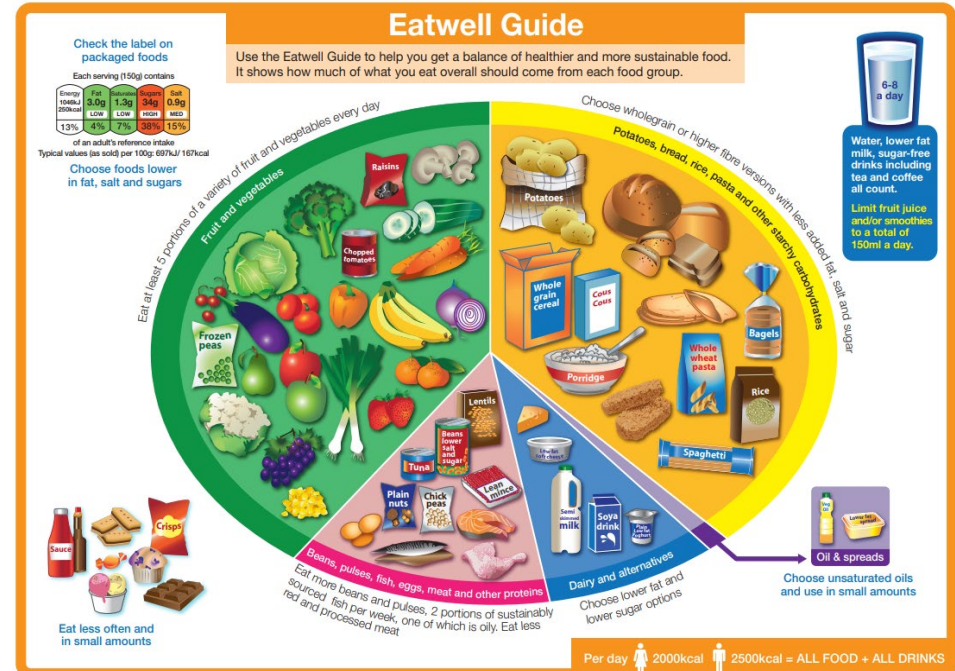
Seasonal foods

are **fruit** and **vegetables** that are ripe and ready in a particular season E.g., Winter, Spring, Summer, and Autumn.

They will no longer grow when the weather changes.

Advantages

- Rich in flavour
- High in nutrients
- Cheaper in season
- Supports local farmers



Root vegetables grow in the ground



Stone fruits have a hard stone in the middle of them



Flower vegetables come from the 'head' of the plant

Dietary guidelines


Health experts and the Government have worked together and produced a set of **Dietary Guideline and Eatwell Guide** to help people make informed choices when they are deciding what to eat. These are shown below. You will see that there are also guidelines about lifestyle choices as well as what you eat.

- | | | | |
|---|--|---|--|
| 1 | Base your meals on starchy foods e.g. Potatoes, rice, pasta | 5 | Eat less salt – no more than 6g a day (1 level teaspoon) for adults |
| 2 | Lots of fruit and vegetables (5 a day) | 6 | Get active and be a healthy weight |
| 3 | Don't get thirsty – drink plenty of water | 7 | Eat more fish – including a portion of oily fish each week E.g. tuna |
| 4 | Cut down on saturated fat and sugar | 8 | Don't skip breakfast. |

Food : Introduction to cooking



Key Vocabulary

1	Adapting recipes	Altering a recipe to suit a dietary, personal or medical need.
2	Bacteria	Micro-organisms that can lead to food poisoning.
4	Carbohydrate	A macro nutrient required in large amounts for energy
5	Cross-contamination	High risk foods touching others during preparation causing a food poisoning risk
6	Danger zone	Range of temperatures between 5°C to 63°C at which bacteria begin to multiply rapidly
7	Food Science - Dextrinisation	Breaking up of the starch molecules into smaller groups of glucose molecules when exposed to dry heat, e.g. toast. 
9	Food safety	Handing, preparing, cooking and defrosting/re-heating food safety to prevent food poisoning.
10	Sensory analysis	Evaluating the smell, appearance, texture, and mouth feel and how they influence what we select to eat.

Food storage

Different foods need to be stored in different places to slow down the growth of bacteria.

Fruit should be stored in a fruit bowl to ripen



Ambient foods (bread, cereals, pasta etc) should be stored in a cool, dry place such as a cupboard or bread bin.

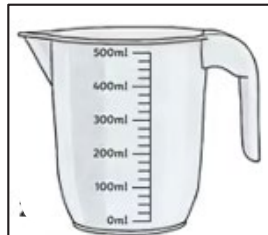


A **fridge (dairy, meat, fish, salad)** should be between a temperature 1 - 5°C

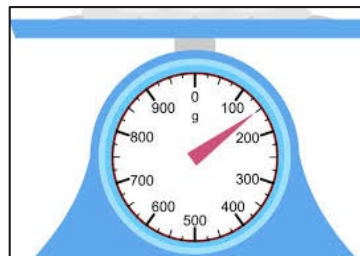
Raw meat and fish should be wrapped up and put at the bottom of the fridge. This will prevent the food dripping onto other foods.

(Cross contamination)
Leftovers/cooked foods should be above raw foods in the fridge.

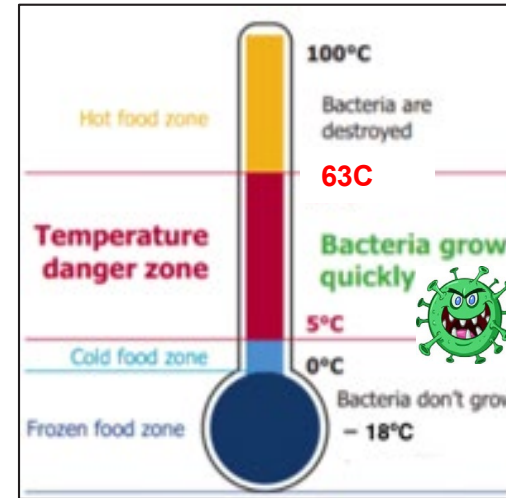
A **freezer** should be kept at -18°C or below.



Liquids are measured in mls.
E.g. 200mls



Dry foods and solid fats are measured in grams E.g. 100g



Key point	Temperature
Fridge	1-5C
Freezer	-18C
Serving hot food should be above	63C
Internal temp of meat/fish for 2 minutes	75C

Year 7 Drama Unit 1 : Introduction to Drama

What is Drama? Drama is a type of literature **telling a story** intended to be performed to an audience on a stage. Generally, while drama is the printed text of a play, the word **theatre** often refers to the actual production of the text on stage. **Theatre** involves action taking place on the stage, the lighting, the set, the costumes, the accompanying music and/or sound effects and the atmosphere created. Drama comes from Greek word a meaning “action” which is derived from “to do” or “to act.”

Key Terms

Tableau or Freeze frame



A frozen picture that communicates meaning.

Use of space, body language and facial expression give the audience understanding of character’s emotions and relationships

Thoughts Aloud



Saying what a character is thinking at a given moment. This can be prepared beforehand and can be part of a performance.

Sometimes the character might feel something different to the words they're speaking

Choral Speaking



Speaking as a group using every member of the group

The chorus helps to explain the play to the audience

Types of Choral Speaking

- 1 Solo Line or lines you say on your own
- 2 Unison Lines you say as a group
- 3 Canon Words or phrases you say one after another
- 4 Antiphon Group is divided into two or more groups and each responsible for a different section of the speech
- 5 Repetition Repeating a word or phrase.
- 6 Cumulative Individual voices or groups of voices are added in and/or subtracted.
- 7 Projection Voice projection is the strength of speaking whereby the voice is used powerfully and clearly.



Year 7 Drama : Greek Theatre



Greek Theatre The theatre of Ancient Greece flourished between 550 BC and 220 BC. A festival honouring the god Dionysus was held in Athens, out of which three dramatic genres emerged: **tragedy, comedy** and **satyr**.

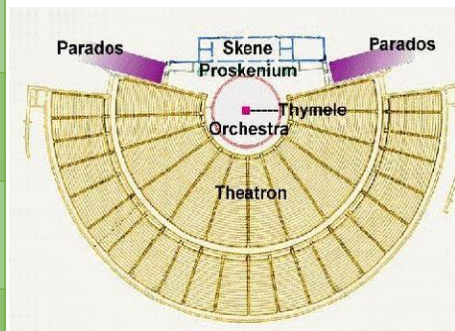
Key Vocabulary

1	Tragedy	A play in which the hero dies at the end due to a combination of the circumstances and personal flaws.
2	Comedy	A play that involves song, dance, rude jokes and makes fun of the politicians and people in power.
3	Satyr	A form of Greek tragedy but with a happy atmosphere and a rural setting. A combination of Tragedy and Comedy.
4	Amphitheatre	The name of a Greek theatre. Which was large and outdoors.
5	The Chorus	A group of actors who describe and comment upon the main action of a play with song and dance.
6	Thespian	A name sometimes given to actors.
7	Orchestra	The part of the Amphitheatre where the Chorus would perform, speak, sing and dance
8	Skene	The part of the Amphitheatre where the actors/characters performed the play.
9	Theatron	The part of the Amphitheatre where the audience would sit to watch the play.

Greek Tragedy Structure:

1	Prologue	Characters speak, directly to the audience.
2	Parados	Chorus, in unison, tells us what has happened before the beginning of the action of the play.
3	Episode 1	Characters, in masks, of course, act out the beginning of the action of the play
4	Choral Ode 1	Chorus speaks about something connected with the theme of the story, but not necessarily about the story itself

An Amphitheatre



Top 3 Greek Playwrights

Aeschylus	Most famous plays: The Oresteia Trilogy
Sophocles	Most famous plays: Oedipus and Antigone
Euripides	Most famous plays: The Trojan Women and Medea

Key Vocabulary



1	Sex	Refers to the different biological and physiological characteristics between individuals.
2	Gender	Gender refers to the characteristics of women and men that are socially constructed.
3	Sexuality	A person's identity in relation to the gender or genders to which they are typically attracted.
4	Inequality	When people are treated differently in society resulting in a difference in power.
5	Stereotypes	A widely held but fixed and oversimplified image or idea of a particular person/thing.
6	Discrimination	When people are treated negatively especially on the grounds of race, age or sex.
7	Oppression	Cruel or unjust treatment.
8	Empower	To give power or authority to.
9	An Advocate (noun)	Someone who argues for and supports a cause or idea.
10	To Advocate (verb)	Publicly support.
11	Agency	If someone/something has agency they have power and influence over something.

Aspects of Grammar and Punctuation

1	Modal Verbs	A type of verb that expresses necessity or possibility. e.g. include must, shall, will, should, would, can, could, may, and might.
2	Pronoun	A word that refers to the participants in the conversation (e.g. I, you) or to someone or something mentioned elsewhere (e.g. she, it, and this). Inclusive Pronoun - "we" "us" Personal pronoun - "I" "me"
3	Imperative Verb	An imperative verb is one that tells someone to do something e.g. "Write that down" Write is an imperative verb here.
4	Time Adverbial	Adverbs of time tell us when an action happened - "yesterday", "in 2021".
5	Parenthesis	A word or phrase inserted as an explanation or additional information using brackets, dashes or commas. The rest of the sentence makes sense without it.

Language methods often used to persuade and argue

1	Anecdote	A short amusing or interesting story about a real incident or person.
2	Facts	Something that is true / can be proven.
3	Opinion	Something someone thinks.
4	Repetition	Words or phrases that are used more than once.
5	Rhetorical Question	A question used to make a point and have an effect, no answer is expected.
6	Emotive Language	Language used to create emotion in the audience e.g. 'he was depressed, bedraggled and lonely.'
7	Statistics	Facts using numbers / percentages
8	Triplet / List of Three	Three words or phrases used one after the other e.g. he was lonely, nervous and uncertain.
9	Hyperbole	Obvious exaggeration. e.g. 'I've been waiting forever'
10	Colloquial Language	Language that is informal and similar to how you would speak in a conversation.
11	Direct Address	Using someone's name or a pronoun such as 'you / your' to speak directly to a particular person or group. "This is your responsibility"
12	Inclusive pronoun	Pronouns used to create a sense of shared experience and link the writer to the audience e.g. "we" and "us".

Aspects of Structure

1	Counter -argument	What someone who disagrees with you might say in response to your ideas / argument.
2	Topic sentence	A sentence that identifies the main idea of the paragraph e.g. The facts about women and employment are clear.
3	Discourse markers	A word or phrase used to organise what we are saying in sections: "however", "firstly", "finally".
4	Cyclical structure	When the introduction and conclusion of a piece of writing link in a way that provides balance and emphasises the meaning or purpose of the text.

Key Vocabulary



1	Omnipotent	Having unlimited power.
2	Agency	If someone/something has agency they have power and influence over something.
3	Naivety	Showing a lack of wisdom or understanding.
4	Literal	The actual, most obvious meaning.
5	Metaphorical	A hidden deeper meaning which is often more to do with emotions.
6	Embedded quotations	These are quotations that sound like they are part of your sentence: <i>Hughes suggests the wind is powerful by the way that the winds are 'stamped the fields'.</i>

Poetry Structures

1	Atmosphere	The feeling created in a text e.g. 'unsettling', 'hopeful', 'mysterious'. Sometimes called 'mood'.
2	Juxtaposition	Contrasting two or more things side by side.
3	Stanza	Several lines of verse in a poem.

POEMS	'Inheritance' by John Agard	'Wind' by Ted Hughes: 1957	'Death of a Naturalist' by Seamus Heaney: 1966	'Caged Bird' by Maya Angelou: 1983
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Key Terminology

1	Speaker	The narrator of a poem - the voice speaking.
2	Subject	Who the poem is about or addressed to.

Figurative Language (language that creates imagery):

3	Simile	Comparing something in order to describe it using 'like' or 'as'.
4	Metaphor	A descriptive method which makes use of describing one thing as if it is something else.
5	Personification	Giving inanimate objects human characteristics or actions. Example: 'Winds stampeding the field under the window.'
6	Imagery	Creating images in the readers' mind using words.
7	Pathetic Fallacy	When the weather reflects the mood or atmosphere.
8	Symbolism	When a writer uses something to symbolise (represent) something else - Symbols used for ideas or qualities. E.g. The colour 'red' could symbolise anger, danger, violence or passion. A place could symbolise safety.
9	Conceit	An extended metaphor.

Sound Effects:

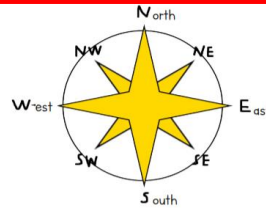
10	Alliteration	The repetition of the same letter at the beginning of consecutive words.
11	Assonance	The repetition of vowel sounds at the beginning of or within consecutive words.
12	Plosives	Letter sounds which sound explosive and harsh (P, T, K, B, D, G)
13	Onomatopoeia	Words which sound like the noise they describe.

GEOGRAPHY TOPIC 1: MAPPING OUR WORLD

KEY VOCABULARY

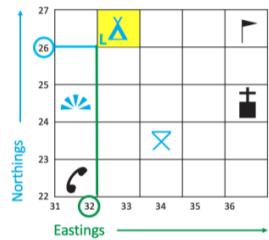
1	Human Geography	The impact of people on the earth e.g. towns, cities, tourism and population.
2	Physical Geography	The natural world e.g. rivers, coasts, volcanoes, earthquakes and weather.
3	Environmental Geography	Human interaction with nature e.g. pollution and climate change.

COMPASS POINTS



FOUR FIGURE GRID REFERENCES

Along the edges of each map there are numbers. These numbers help you work out where a location is on a map. Northings are numbers that go from bottom to top, Eastings go from left to right.



The first two numbers give the eastings.

32 26

The second two numbers give the northings.

Remember... eastings then northings!

Along the corridor and up the stairs!

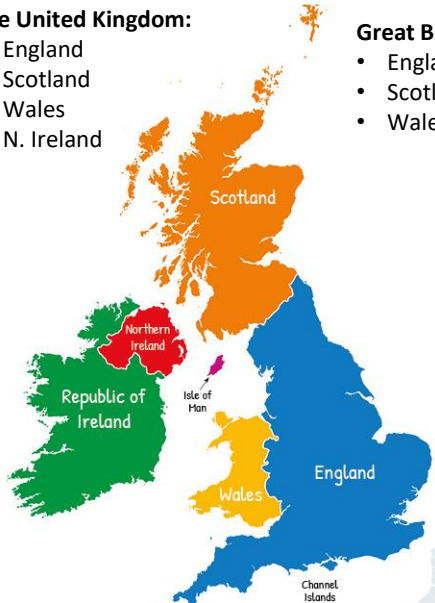
THE BRITISH ISLES

The United Kingdom:

- England
- Scotland
- Wales
- N. Ireland

Great Britain:

- England
- Scotland
- Wales



SIX FIGURE GRID REFERENCES

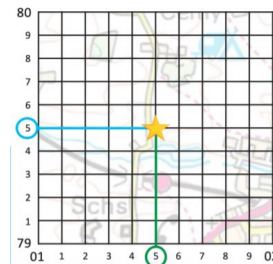
We can use six-figure grid references to find an exact location within a grid square, they are much more accurate. The grid square is divided into tenths.

Example:

015 795

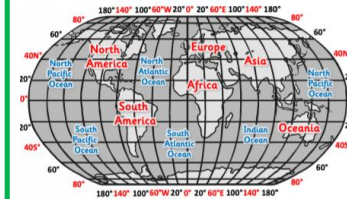
The first three numbers give the easting which includes the number of tenths.

The last three numbers give the northing which includes the number of tenths.



LATITUDE & LONGITUDE

Unlike grid lines where we go along the corridor and the stairs, here we go **UP** and **ACROSS**



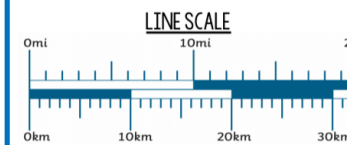
LATITUDE

Flat lines. Flat-itude!

LONGITUDE

Long lines – up and down

SCALE & DISTANCE



WORD SCALE

One centimeter on the map represents 3 kilometers on the ground. (1cm = 3 km)

A scale line shows measurements in km and the measurements on a ruler are in cm.

If we measure the distance on a map between two places with our ruler. The measurement is 4cm. We then have to multiply that measurement by 3 to calculate that the real distance between the two places is 12km.

MAP SYMBOLS

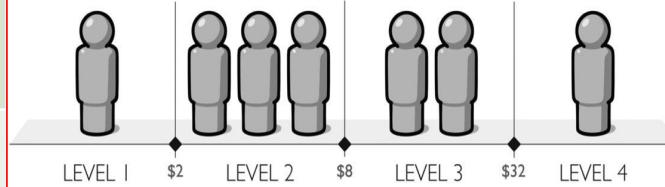


YEAR 7 GEOGRAPHY TOPIC 2: A MODERN WORLD

KEY VOCABULARY

Infant Mortality Rate	The number of children who die before the age of 1, per 1000 of the population per year
Life Expectancy	How long a person is expected to live from birth
Literacy Rate	The percentage of people that can read and write who are over the age of 15
Birth Rate	The number of live birth per 1000 of the population per year
Calorie Intake	The average number of calories consumed each day
Extreme Poverty	A lack of basic needs e.g. food, water and adequate shelter
Population	The number of people living in a place
Natural Disaster	Extreme natural events that can cause loss of life, extreme damage to property and disrupt human activities
Climate Change	The large-scale, long-term shift in the planet's weather patterns or average temperatures.
Misconception	A false or mistaken view, opinion, or attitude
Stereotype	A stereotype is an idea or belief that many people have about a thing or group.

THE FOUR LEVELS OF DEVELOPMENT

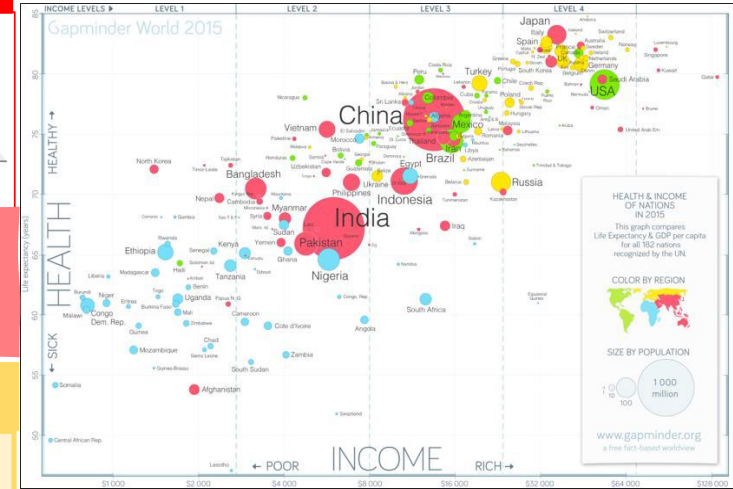


Each figure in the chart represents 1 billion people, and the seven figures show how the current world population is spread out across four income levels, expressed in terms of dollar income per day.

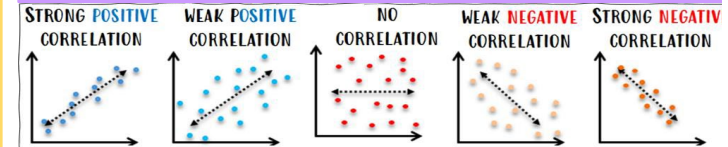
CAUSES OF UNEVEN DEVELOPMENT

- | | |
|--|--|
| NATURAL:  | HUMAN:  |
| <ul style="list-style-type: none"> • Hazards • Climate • Location • Pests and diseases | <ul style="list-style-type: none"> • Colonialism • Access to education • War and conflict • Corruption |

WORLD HEALTH VS WORLD INCOME (BIG QUESTION)



SCATTER GRAPHS



KEY THEMES FROM FACTFOULS

THE GAP INSTINCT

The belief that the world is split into 2 groups – ‘rich or poor’. We know this to be wrong as 75% of people live in middle income countries- so are not rich or poor.

THE NEGATIVITY INSTINCT

The belief that the world is worse than it is. Dr Rosling thinks this comes from how our brains work and our cravings for gossip and drama.

Year 7 History Unit 1: What is History?

Key Vocabulary

1	AD	Anno Domini. This is Latin for 'In the Year of Our Lord'.
2	BC	Before Christ.
3	CE	Common Era. This can be used instead of AD.
4	BCE	Before Common Era. This can be used instead of BC.
5	Anachronism	Something that is out of place in time. E.g. a TV in Henry VIII's palace.
6	Chronology	The arrangement of events or dates in the order in which they happened.
7	Circa (c.)	Approximately or roughly. Usually used before a date. E.g. circa 1200 or c. 1200.
8	Historian	Someone who studies History.
9	Decade	A period of 10 years.
10	Century	A period of 100 years.
11	Millennium	A period of 1000 years.

Periods of British History

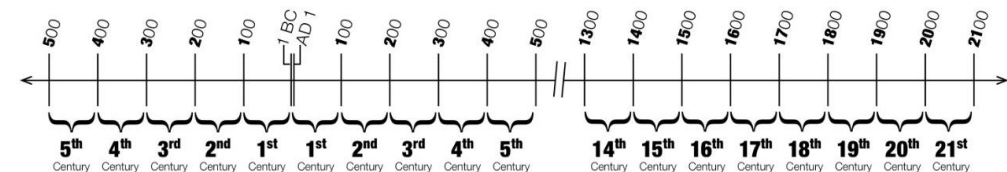
43 - 410 AD	Roman Britain
476 - 1000 AD	The Dark Ages
1066 - 1135	Norman England
1135 - 1485	Middle Ages / Medieval Era
1485 - 1714	Tudors and Stuarts
1714 - 1837	Georgians
1837 - 1901	Victorians
1900 onwards	Modern

Naming Centuries

When naming centuries in the Common Era add 1 to the first 2 numbers of the year, as the 1st Century refers to the years 1-99.

E.g. 2020 = 21st Century
1588 = 16th Century

Understanding Centuries



Year 7 History Unit 2: What can Sutton Hoo reveal about the Anglo-Saxons?

Key Vocabulary

1	Anglo-Saxons	Migrants from northern Europe who settled in England in the 5 th and 6 th centuries, initially made up of small groups and divided into a number of kingdoms; joined together as one kingdom- England- in the 10 th century
2	Sutton Hoo	An Anglo-Saxon burial site in Suffolk dating from the 6 th and 7 th centuries, discovered in 1939
3	Artefact	An object made by a person; often of historical interest
4	Archaeology	The study of history through the excavation of sites and the analysis of artefacts and other physical remains
5	Excavation	Removing earth that is covering artefacts buried in the ground in order to study them
6	Pagan	Religious beliefs other than those of the main world religions; often involves worshipping many gods
7	Byzantine Empire	The Eastern Roman Empire after the fall of the Western Roman Empire; its capital was Constantinople (modern-day Istanbul in Turkey)
8	Vikings	Collective name for Scandinavian raiders

Map of Anglo-Saxon England, c. 800 AD



What was discovered at Sutton Hoo?



The shape of the ship



A helmet (original and replica)



A gold belt buckle



A shoulder clasp made of gold and garnets



An iron sword with gold handle

Year 7 History Unit 3: Why did William win the Battle of Hastings in 1066?

Key Vocabulary

1	Conquer	To take over another country by force
2	Saxons	At the time, this means the English
3	Normans	People from Normandy in Northern France
4	Vikings	People from Scandinavia (Denmark, Norway or Sweden)
5	Earl	Someone who supported the king by ruling a local area of England
6	Witan	A group of powerful Earls and Churchmen
7	Feigned Retreat	A trick played by the Normans when they pretended to run away
8	Fyrd	An untrained Saxon soldier; likely a peasant
9	Housecarl	Well trained, full time Saxon soldier
10	Heir	The person who would inherit the throne and right to be king when the previous king dies

Reasons for William's Victory



Norman Strengths

- William's leadership inspired his men
- Norman army was well-prepared, trained and rested
- Use of the feigned retreat tactic
- Brought supplies and pre-packed castle

Saxon Weaknesses

- England had been invaded twice in two months
- Saxon army were tired from the march south
- Many of the best soldiers had been killed fighting the Vikings
- Most soldiers were untrained and poorly equipped



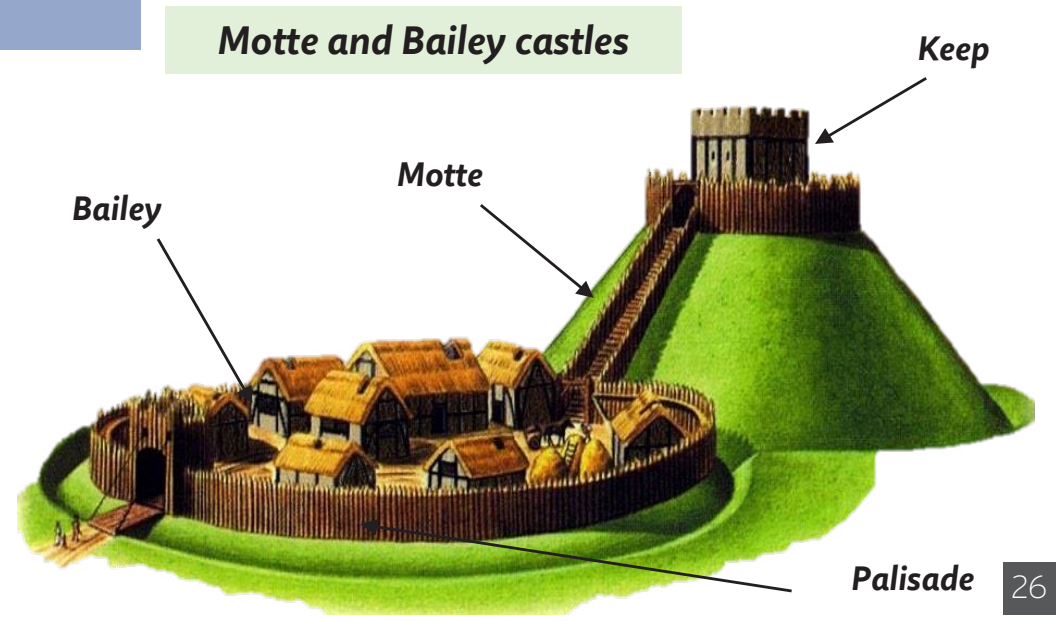
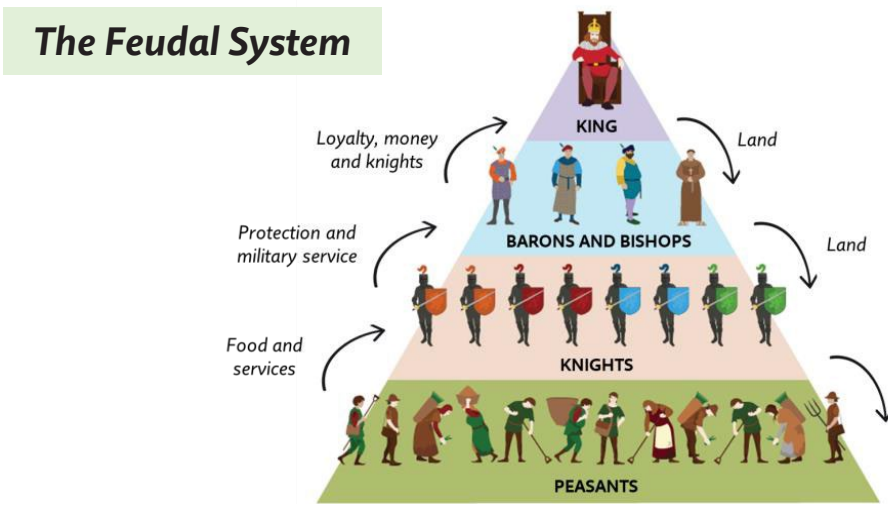
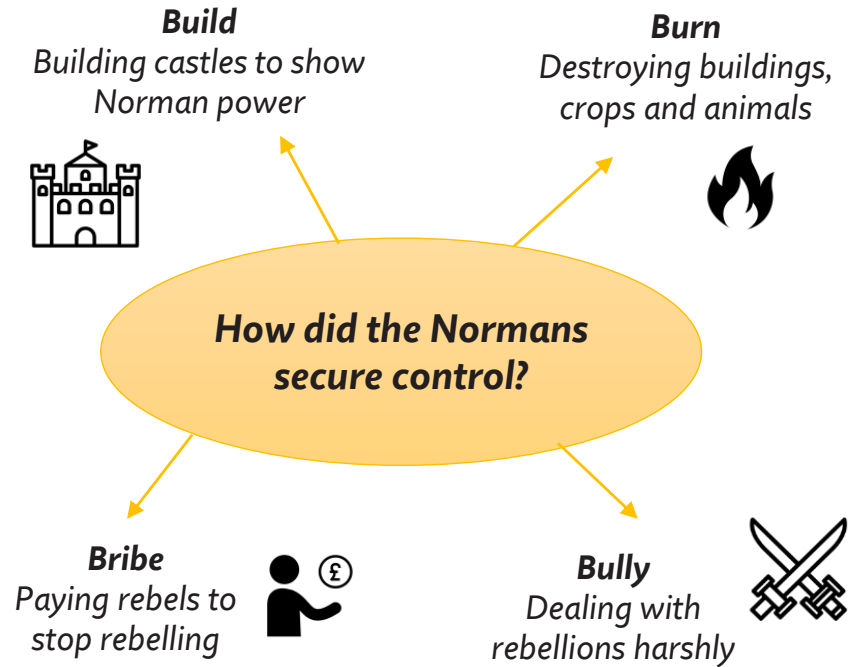
Key People

Edward the Confessor	The King of England who died in January in 1066
Harold Godwinson	The Earl of Wessex and Edward the Confessor's brother in-law
Edgar the Atheling	The young, great nephew of Edward the Confessor- Edward's closet blood relative
Harald Hardrada	The Viking King of Norway, who invaded England but was defeated and killed
Duke, William of Normandy	The Duke of Normandy in Northern France, who invaded England in 1066 and won the Battle of Hastings, then being known as King William I and William the Conqueror
The Pope	The person in charge of the Christian Church throughout the world; God's representative on Earth

Year 7 History Unit 4: How did the Normans secure their control of England?

Key Vocabulary

1	Baron	A Norman landowner who organises the knights
2	Coronation	The ceremony in which a king is crowned and made a king
3	Domesday Book	A survey of England in 1086
4	Famine	Widespread hunger and lack of food
5	Feudal System	William's system of organising people by giving land in return for work, soldiers and loyalty
6	Motte and Bailey	A type of castle built by the Normans
7	Rebellion	When people fight against those in charge
8	Saxon	In 1066 this word referred to the English



Mathematics *"Talk like a Mathematician"*

Topic 1 - Place Value

1	Compare	Look at similarities and differences.
2	Greater than >	Bigger than a number.
3	Less than <	Less than a number.
4	Greater than or equal to \geq	Bigger than a number but could be equal as well.
5	Less than or equal to \leq	Smaller than a number but could be equal as well.

Topic 3 - Properties of Number

1	Negative Numbers	Numbers less than zero.
2	Integer	A whole number.
3	Factor	Whole numbers we can multiply together to get another number.
4	Multiple	The result of multiplying a number by an integer.
5	Prime Number	A number with only 2 factors: 1 and itself.
6	Prime Factor	A factor of another number which is prime.
7	Square Number	A number we get because of multiplying another number by itself.
8	Square Root	The number that must be multiplied by itself to get the given number.
9	Cube Number	The result we get from multiplying a number by itself twice.

Topic 2 - Calculations

1	Calculate	Work out the answer to.
2	Sum	To add numbers together, the result when numbers have been added together.
3	Product	The result when two numbers have been multiplied together.
4	Total	Result when lots of numbers have been added together.
5	Remainder	The amount left over after a division, when one number does not divide exactly by another.
6	Integer	Whole number.
7	Difference	The result when two numbers have been subtracted, the amount you have to add to a smaller number to get to the other.

Topic 4 - Fractions

1	Equivalent	Having the same value.
2	Numerator	The top number in a fraction.
3	Denominator	The bottom number in a fraction.
4	Vinculum	The line in a fraction that separates the numerator and denominator.
5	Unit Fractions	A fraction whose numerator is 1.
6	Improper Fraction	A fraction where the numerator is larger than the denominator.
7	Mixed Number	A whole number and a fraction written together.

Music Singing



Key Vocabulary



1	Warm Up	Voice exercises to prevent straining your voice, causing injury and to improve the quality of your vocal sound.
2	Anthem	A rousing or uplifting song. They are easy to sing so that everyone can join in.
3	Hook	The catchy part of a tune that makes a song memorable and grabs your attention.
4	Syllabic	Singing where every syllable has it's own note.
5	Melisma	Singing technique where one sound is sung over many notes. E.g. ooooooh.
6	Ballad	A slow song that tells a story, often about love and romance.
7	Musical	Stage shows that tell a story through singing, acting and dancing.
8	Narrative	The story that is being told.
9	Expression	Using volume and the tone of your voice to make your thoughts and feelings clear.
10	Acappella	Sung music without accompanying instruments.
11	Harmony	A secondary tune which fits with the main tune to enhance and add texture. Particularly effective in vocals.

The Vocal Tradition

- 1 Singing is the oldest way of making music in history.
- 2 It forms an important part of every country's culture and traditions.
- 3 Good singers have always been revered.

Different ways of using your voice

1	Singing	4	Beat boxing	7	Screaming
2	Chanting	5	Shouting	8	Growling
3	Rapping	6	Sound effects	9	Humming

Warm - ups

- 1 When you sing/speak, your voice uses the muscles in your throat to make sound.
- 2 As we are using muscles, we need to warm them up like you would before doing sport.
- 3 Excessive strain on your vocal muscles will lead to them getting hurt.



Music Rhythm & Pulse

Key Vocabulary - Music Notes



1	Rhythm	Different lengths of sound groups together that fit within the pulse.
2	Pulse	A steady, constant beat (Like a pulse in our heart).
3	Chord	A chord is 2 or more notes played at the same time.
4	Crotchet	A musical note worth one beat.

Key Vocabulary - Music Notes



5	Quaver	A musical note worth half a beat.
6	Semiquaver	A musical note worth quarter of a beat.
7	Minim	A musical note worth two beats.
8	Semibreve	A musical note worth four beats.



1 Quaver
1/2 beat



1 Semiquaver
1/4 beat



Crotchet rest 1
beat



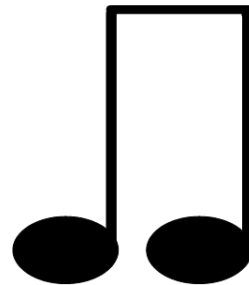
Quaver rest
1/2 beat



STOKE

Crotchet

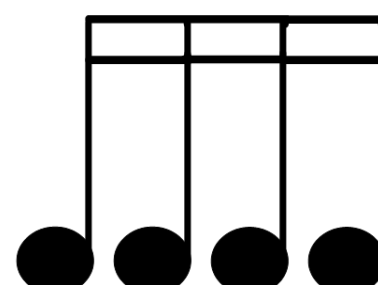
1 beat



CITY

Quavers

1/2 beat
(each)



MAN UNITED

Semiquavers

1/4 beat
(each)



BEER

Minim

2 beats



Semibreve

4 beats



Personal Development- Year 7



Autumn Term 2024 – Healthy Body, Healthy Mind

Rights and Responsibilities as I start my journey at Tytherington School

What are rights?

A right is something that you are **entitled** to.

Example = To express my opinions and be listened to.

What are responsibilities?

A responsibility is a **duty** or something that you **should do**.

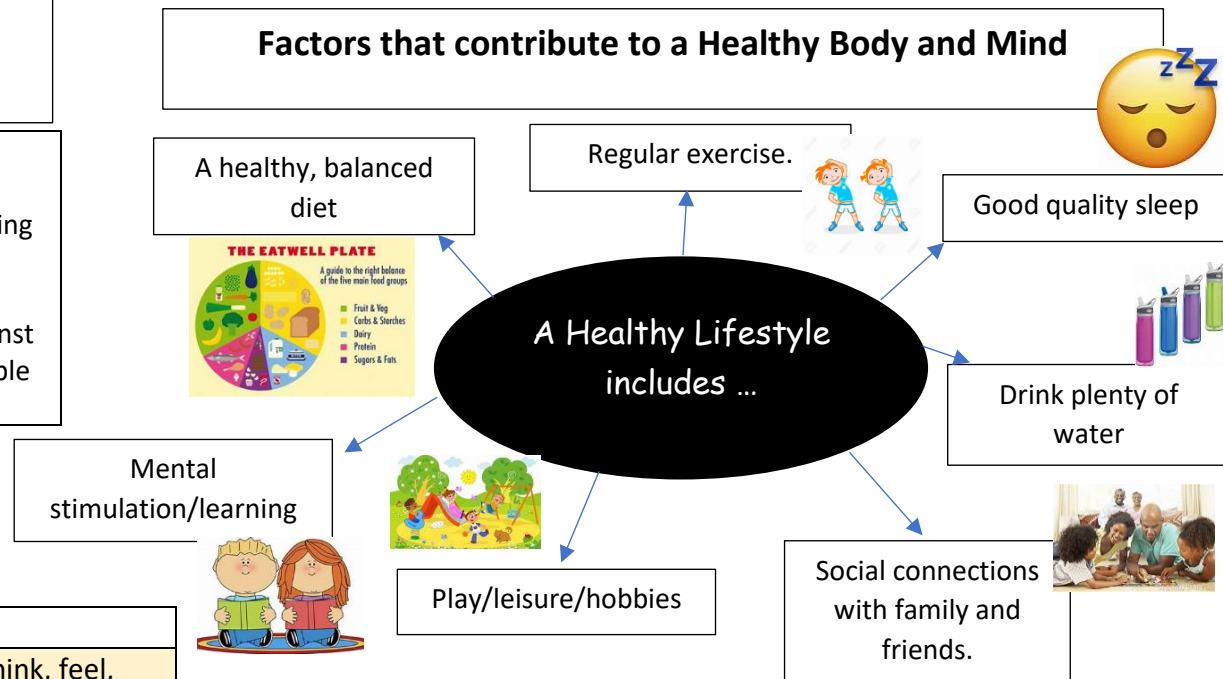
Example = Do not discriminate against others – to accept and respect people for who they are.

Key terms



Key term	Definition
Mental health	We all have mental health. It influences how we think, feel, behave and interact with others. It is just as important as physical health.
Nutrients	The substances found in foods and drinks that are essential to life and health. For example, carbohydrates, fats, vitamins, minerals, protein and water.
Puberty	The process whereby a child's body develops into an adult body that is capable of sexual reproduction.
Hormones	Chemical messages released into the bloodstream – play in a key role in the changes that happen during puberty.
Personal hygiene	The act of keeping your body clean. For example, through regular showering, hand-washing, use of deodorant, cleaning your teeth, washing and brushing hair, and wearing clean clothes. Helps to protect ourselves and others from illnesses.

Factors that contribute to a Healthy Body and Mind



The Mental Health Continuum



Throughout our life we are likely to move up and down the mental health continuum. Making positive lifestyle choices can help to improve mental health.

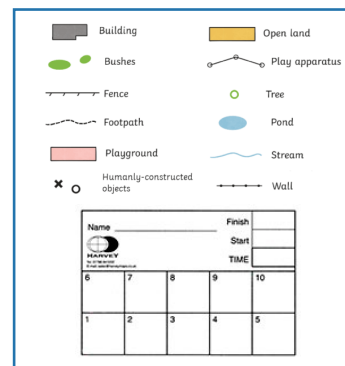
Physical Education Orienteering

Key Vocabulary



1	Orienting the Map	Positioning the map so you know where you are on the map and can look in a certain direction for landmarks.
2	Control points	Plaques to be found containing crucial information to be accurately recorded.
3	Star course	Method of completing an orienteering course in a relay style, visiting one control at a time and returning to starting position after each one.
4	Track course	Method of completing an orienteering course visiting consecutive controls until all controls on the course have been visited before heading to finishing position.
5	Symbols	Pictures which visually represent features on the map.
6	Route planning	Planning a way to get from your starting position to the designated controls and to your finishing position.
7	Map to ground	Orientate the map so it corresponds directly with the ground.
8	Control cards	A card which is marked with the information from each control point to show that the course has been completed correctly.
9	Boundaries	Lines on the map which indicate the limits of an area.
10	Location	Understanding the position of something in relation to your surroundings.

Orienteering is a sport in which participants use a map to navigate their way to a series of different points in order to complete a course. It can be completed as an individual or team activity and can be both competitive and non-competitive.



Key Knowledge

1 Key information for success

- Use landmarks such as school buildings to help you orientate your map.
- Consider the topography of the course before route planning to avoid areas which may slow you down e.g. muddy.
- Pace yourself so you can be fast around the whole course without tiring.
- Use the symbols to help you identify the exact location of a control.
- Work closely as a team in order to solve the problems more quickly.

2 Rules

- Star course – you must return to your starting position and check your answer before continuing.
- Teams – you must not stray from your partner/team mates during completion of a team challenge.
- You must visit every control in the fastest possible time but ensure all answers are correct to win!
- All answers must be recorded on the control card.

Cross Curricular Vocabulary

These are words which you are/will become familiar with when studying different sports:

1	Resilience	The ability to recover quickly from difficulties.
2	Feedback	Information received to help you improve in future.
3	Diligence	Careful and persistent work.
4	Communication	Sharing information with others
5	Teamwork	Working cooperatively with others.
6	Tactics	A plan to gain advantage or success.
7	Cardiovascular fitness	The ability to exercise without tiring too quickly.

Physical Education Invasion Games

Key Vocabulary



1	Passing	An intentional transfer of the ball from one player to another. Can be over different distances.
2	Receiving	Obtaining the ball from another player or from an interception and controlling it.
3	Dribbling	(not used in netball or rugby) The method a player uses to progress up the court/pitch as well as a way to maintain possession of the ball.
4	Tackling	(not used in netball) An attempt to take the ball off an opposing player. In rugby this involves stopping the player with the ball by bringing them to the ground.
5	Marking	Organised system which the defending players use to prevent the opposing team advancing with the ball.
6	Track back	This is when an opposing player will follow an opponent back and tries to tackle them or intercept the ball.
7	Close down	As soon as an opposing player has the ball, a player moves towards them in an attempt to stall or win the ball via a tackle or interception.
8	Possession	This is the amount of time a team has the ball. The more possession a team has, the more likely they are to control the game.
9	Interception	An opposing player gets to the ball when it's being passed and prevents the completion of the pass.
10	Positions	Each invasion sport is made up of defensive and attacking players and creates a tactical formation.

(Hockey, Football, Rugby, Basketball, Handball, Netball, Lacrosse, Ultimate Frisbee).
An invasion game is where the objective is to attack the opposition's territory and score a goal or points. Fundamental skills and tactics across invasion games are often the same.



Cross Curricular Vocabulary

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1	Resilience	The ability to recover quickly from difficulties.
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Key Knowledge

- Key information for success**

 - Invasion games are played on a pitch or court and teams need to establish attacking and defending positions in order to ensure they effectively cover the space. Certain players will suit certain positions and should play to their strengths. In order to win the game you need to be able to score a goal or points and so being able to move the ball in to the attacking part of the pitch/court is important. Maintaining possession of the ball is a good way to control the game and means you will be more likely to score. You can maintain possession by dribbling or making accurate passes to team mates.
 - When the opposition has the ball it is important that you close down the player to limit their options to pass and to put pressure on them. If you lose the ball you should track back to try and win the ball back through tackling or an interception.
 - Invasion games all require you to mark players and this can be done using player-to-player marking or using a system of zonal defence which involves players defending a danger area e.g. the semi circle in netball and hockey, the key in basketball or the 18 yard box in football.



Key Vocabulary



1	Holy Trinity	God can be seen in three ways; The Father, God, The Son, Jesus and The Holy Spirit.
2	Bible	The Holy Book.
3	Cross	Symbol that represents Jesus died on a cross.
4	Crucifix	A cross with a figure of Jesus on it.
5	Commandment	A rule set by God.
6	Denomination	A branch of Christianity.

Worldviews

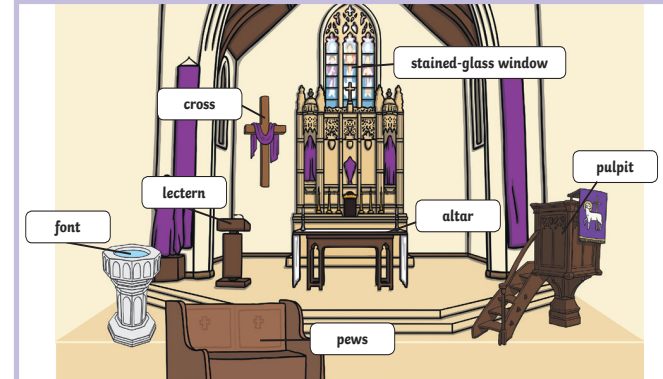
1	Belief & Teachings	What Christians believe about God, life, death, and the place of human beings in the universe.
2	Stories	Narratives that explain teachings and inspire believers.
3	Rules	Guideline and laws that influence behaviour.
4	Rituals	Practices like worship, prayer, celebrations, and memorials of events or to remember dead people.
5	Feelings	People react emotionally when they have experienced something deep.
6	Social	Groups of people sharing common beliefs, views, values, and experiences.
7	Material	Objects of faith, including buildings, reminders of dead people, food, and clothes.
8	Seven Dimensions of Religion	Created by Ninian Smart at the start of the 20th Century.
9	Spirituality	People believe that there is more than the physical world we see.
10	Ethics	People see importance in shared values of love, justice, truth, and peace.
11	The Golden Rule	Treat each other as they would like to be treated.
12	Stewardship	Looking after the natural world around us daily

Christian Beliefs

1	Creed	Statement of faith about the Trinity said every Sunday by Christians.
2	The Life of Jesus	<p>a) Christians believe that Jesus is the son of God. He was born to ordinary parents, Mary and Joseph, in Bethlehem.</p> <p>b) Christians celebrate the birth of Jesus on 25th December - Christmas Day.</p> <p>c) Jesus taught people about God and cured the sick.</p> <p>d) Jesus had 12 male followers called disciples.</p> <p>e) He had a final meal with his disciples (known as 'The Last Supper') before being crucified.</p> <p>f) He is said to have died for the sins of man and his resurrection occurred three day later on Easter Sunday.</p>
3	Genres	[stories] found in the Bible are poetry, history, wars, songs, loves stories, warnings and laws.
4	Parable	A simple story used to illustrate a moral or spiritual lesson, as told by Jesus in the Gospels.
5	Miracle	An extraordinary event that goes against nature, cannot be explained by science and that Christians believe are caused by God.

Church

The east end of the church is called the sanctuary and contains:



1	Altar	A table where the bread and wine are blessed during the Eucharist.
2	Lectern	A stand where the Bible is read from.
3	Pulpit	Where the priest delivers sermons.
4	Crucifix	A cross with Jesus on.
5	Statues of religious figures	Christ, Mary, or saints.
6	Stained glass windows	Often depicting biblical stories or religious teachings.
7	Candles	Often lit by Catholics when they are praying.
8	Organ	Makes music and is played during hymn singing.



Key Vocabulary



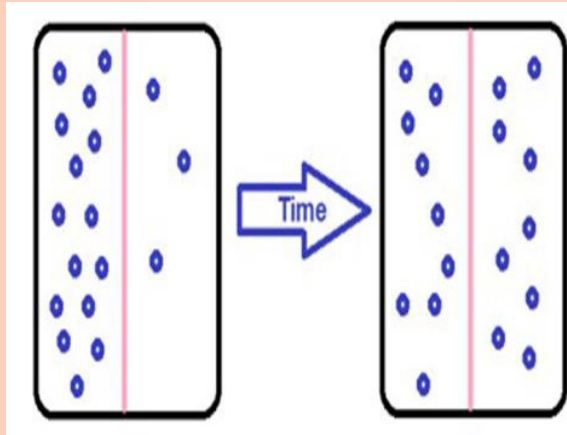
1	Cell	The basic unit of all life.
2	Cell Division	When a cell splits to form two new cells for growth and repair.
3	Cell Membrane	Controls what goes into and out of a cell.
4	Cell Wall	Provides support for plant cells.
5	Chloroplast	The part of a plant cell that absorbs light for photosynthesis.
6	Cytoplasm	The site of chemical reactions in a cell.
7	Diffusion	The movement of particles from an area of high concentration to an area of low concentration.
8	Microscope	A piece of equipment used to view small objects that cannot be seen by the naked eye.
9	Mitochondria	Site of respiration.
10	Multicellular	Made of more than one cell.
11	Nucleus	Controls the cell and stores DNA (genetic material).
12	Organ	A group of tissues that work together.
13	Organism	A living thing.
14	Organ System	A group of organs that work together to perform a function.
15	Tissue	A group of cells.
16	Vacuole	Stores sap(sugary liquid) in a plant cell.
17	Unicellular	Made of one cell only.

How to use a Microscope

- 1 Move the stage (the flat ledge the slide sits on) down to its lowest position.
- 2 Place the glass slide onto the stage. Be careful pushing it under the clips that the cover slide doesn't move or crack.
- 3 Select the lowest power objective lens.
- 4 Turn the coarse focus knob slowly until you are able to see the cells.
- 5 Turn the fine focus knob slowly until the cells are in focus and you can see them clearly.
- 6 Repeat steps 1-5 using the higher power magnification to see the cells in more detail.

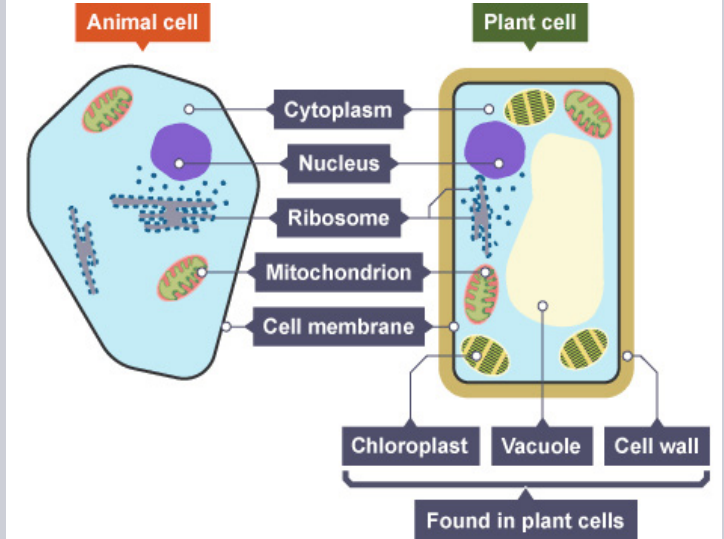
Diffusion

Diffusion is the movements of particles from an area of high concentration to an area of low concentration.

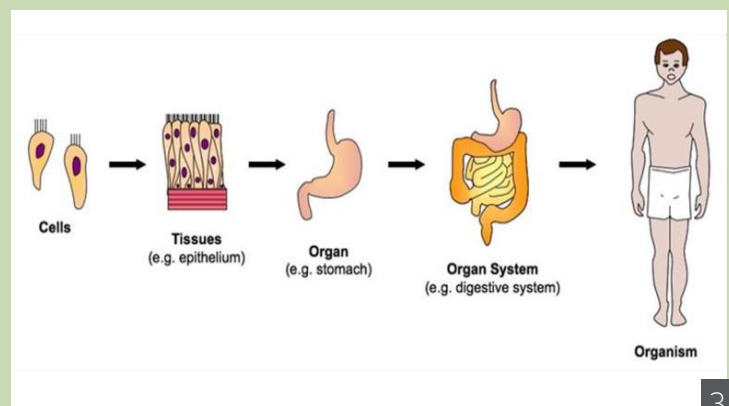


Comparing plant cells and animal cells

Plant cells have 3 parts that are not found in animal cells: the chloroplasts, the vacuole and the cell wall.



Levels of Organisation



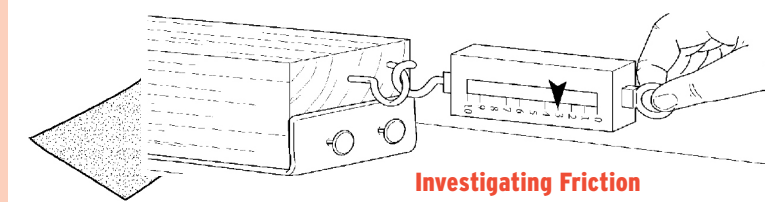
Key Vocabulary



1	Air resistance	A force resulting from air particles pushing against objects when they move through air.
2	Contact forces	A force that only occurs when objects touch.
3	Drag	The force that acts against objects moving through a fluid (liquid or gas).
4	Elastic	An object that will return to its original shape after being stretched or deformed.
5	Force	A push, pull or twist that can change an objects shape, speed or direction.
6	Friction	A force that acts in the opposite direction to movement.
7	Gravity	A force of attraction between all objects.
8	Mass	The amount of 'matter' that makes up an object.
9	Newton	The units for force.
10	Newton-meter	A piece of equipment used to measure the size of a force.
11	Non-contact force	A force that can act on an object from a distance.
12	Plastic	An object that will not return to its original shape after being stretched or deformed.
13	Upthrust	A force resulting from the water particles pushing objects up when they are in water.
14	Water	A force resulting from water pushing against objects moving through water.
15	Weight	The force an object exerts due to gravity.

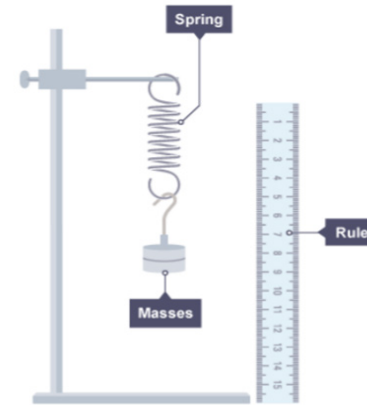
Practical Skills

How does the type of surface affect friction?



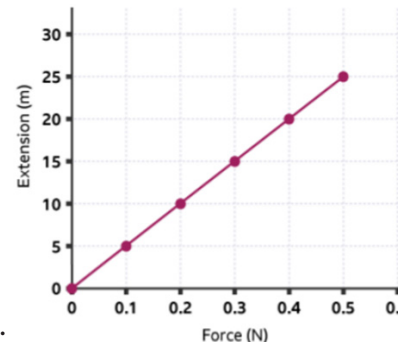
Hooke's law and elastic limit

How does mass added affect the extension of a spring?



Force Extension Graphs

- As more force is added, the extension increases.
- The extension is directly proportional to the force added.
- If too much force is added, the spring can reach its elastic limit.
- The spring will no longer go back to its original shape.



Force diagrams

A force diagram shows the direction which forces are acting on an object.

The size of the arrow shows the size of the force.



Key Idea: Contact & Non-Contact forces

Examples of contact forces: friction, air resistance, water resistance, upthrust.

Examples of non-contact forces: magnetism, the effect of gravity, electrostatic.

Maths Skills - Important equations

Weight (N) = mass (Kg) x gravitational field strength (N/Kg)

Density = mass / volume

Science Matter 1: The Particle Model

Key Vocabulary



1	Boiling	Changing state from a liquid to a gas.
2	Boiling point	The temperature at which an object changes state from a liquid to a gas.
3	Condensing	Changing state from a gas to a liquid.
4	Density	The amount of matter per unit of volume.
5	Diffusion	The movement of particles from an area of a high concentration to an area of low concentration.
6	Evaporating	Changing state from a liquid to a gas.
7	Freezing	Changing state from a liquid to a solid.
8	Gas	Particles are randomly arranged and spread out.
9	Liquid	Particles are irregularly arranged, but still touching.
10	Melting	Changing state from a solid to a liquid.
11	Sublimation	Changing state from a solid to a gas.
12	Solid	Particles are arranged regularly and vibrate in a fixed position.

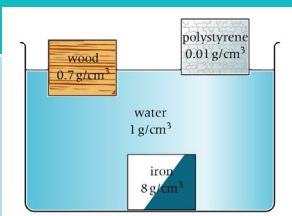
Particle Theory

1	Solids	<ul style="list-style-type: none"> • Particles are in a regular arrangement. • Particles are in a fixed position but can vibrate. • Particles are touching. 	
2	Liquids	<ul style="list-style-type: none"> • Particles are in an irregular arrangement. • Particles can move over each other. • Particles are touching. 	
3	Gases	<ul style="list-style-type: none"> • Particles are in a random arrangement. • Particles are not touching. • Gases can be compressed because the particles can be moved closer together. 	

Density

An object will float if it is less dense than water.

An object will sink if it is more dense than water.



Diffusion

The movement of particles from an area of high concentration to an area of low concentration.

Diffusion will happen more quickly if...

- The temperature increases.
- There is a larger concentration gradient.
- There is a larger surface area (space) for diffusion to take place.

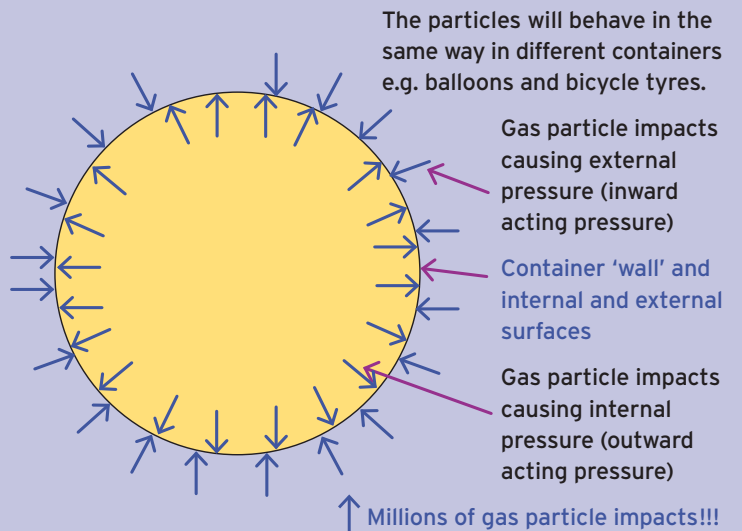
Pressure

The force produced when particles move against a surface.

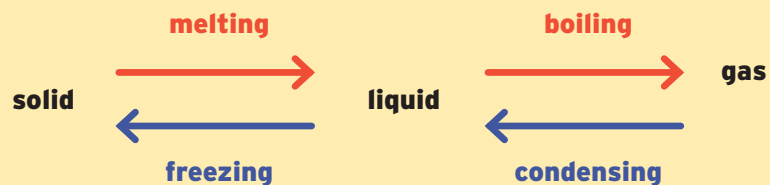
In a container the gas particles will:

- move rapidly.
- Move throughout the whole container.
- move randomly.
- When the particles hit the side of the container, they generate pressure.

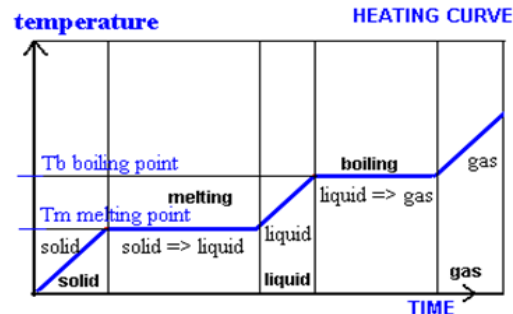
A simple particle impact model for a gas in a container:



Changes of State



- Forces of attraction between molecules are becoming weaker →
- Forces of attraction between molecules are becoming stronger ←



Science Matter 2: Elements, Compounds & Mixtures

Key Vocabulary



1	Atom	The smallest part of a substance.
2	Compound	Two or more different elements chemically joined together.
3	Conductor	Will allow electricity or heat to pass through.
4	Ductile	Can be made into wires.
5	Element	A substance made of one type of atom only.
6	Formula	Symbols that tell us how many elements and atoms of each element are in a compound.
7	Insulator	Will not allow electricity or heat to travel.
8	Magnetic	Attracted to a magnet.
9	Malleable	Can be bent or hammered into shape.
10	Mixture	Two or more different elements or compounds that are not chemically joined together.
11	Molecule	Two or more atoms joined together.
12	Periodic Table	A list of all known elements.
13	Product	A substance formed in a chemical reaction.
14	Reactant	A substance that takes part in a chemical reaction.
15	Sonorous	Makes a ringing sound when hit.

Periodic Table of the Elements

All elements are found on the Periodic Table. You can see all the elements have different letters (formulae).

Periodic Table of the Elements

The periodic table shows elements arranged in groups (vertical columns) and periods (horizontal rows). Groups are labeled I A to VIII A, and periods are labeled I to VII. The table includes elements from Hydrogen (H) to Oganesson (Og), with Lanthanide and Actinide series shown below the main table.

Metals and Non-metals

1	Metals are mostly:	<ul style="list-style-type: none"> • Shiny in appearance. • Malleable [flexible - easy to bend]. • High density. • Sonorous [make a sound]. • Some, but not all are magnetic. • Good conductors of electricity. • Good conductors of heat.
2	Non - metals are mostly:	<ul style="list-style-type: none"> • Dull in appearance. • Brittle (Break / Don't Bend). • Low Density. • Dull sounding when hit. • Non-magnetic. • Poor conductors of electricity. • Poor conductors of heat.

Key Idea

1	Atom	
2	Molecule of a Compound	
3	Molecule of a Compound	
4	Molecule of a Element	
5	Compound	
6	Mixture	

Word equations



Magnesium burns brightly in oxygen to form magnesium oxide.



Spanish Super 7s

The little words you use a lot



THE SUPER 7

TIME PHRASES

Specify **when** something is **happening** - in the **present, past** or **future** or whether we would like something to happen in an ideal world (**conditional**).

VERBS

Describe an **action**, state or occurrence - i.e. a doing, being or happening word.

OPINIONS

Explain **what we think** about the action or state of being - **positive** or **negative**.

JUSTIFIERS

Allow us to answer the question 'why?' to **give a reason** for our opinions... usually using 'because'.

QUALIFIERS

Words that make our describing words even **more interesting**.

ADJECTIVES

Words that **describe** nouns (people, places or things).

CONNECTIVES

Words which **join together** two different, but related, parts of a sentence. They allow us to **extend** and develop our sentences.

1. Time Phrases

1	normalmente	normally
2	siempre	always
3	a veces	sometimes
4	a menudo	often
5	todos los días	every day

4. Justifiers

1	porque (es/son)	because (it is/they are)
2	ya que	because

5. Qualifiers

1	muy	very
2	bastante	fairly
3	un poco	a bit
4	demasiado	too (much / many)
5	más...que	more...than
6	menos...que	less...than

2. Verbs

1	tener	to have
2	tengo	I have
3	tiene	s/he is
4	ser	to be
5	soy	I am
6	es	s/he is
7	hay	there is/are
8	estar	to be (location)
9	está	it is (located)

6. Adjectives

1	interesante	interesting
2	aburrido	boring
3	divertido	fun
4	bueno / malo	good / bad
5	guay	cool

3. Opinions

1	me gusta(n)	I like
2	no me gusta(n)	I don't like
3	me encanta(n)	I love
4	odio	I hate
5	en mi opinión	in my opinion
6	me gustaría	I would like to

7. Connectives

1	y	and
2	e	and (before h, i, hi)
3	pero	but
4	también	also
5	con	with
6	sin embargo	however

Spanish Infinitives

Can I understand what an infinitive is and use it in different tenses?

Infinitives

1	escuchar	to listen
2	jugar	to play
3	visitar	to visit
4	hablar	to speak
5	comer	to eat
6	beber	to drink
7	correr	to run
8	escribir	to write
9	vivir	to live
10	ir	to go
11	subir	to upload

Near future tense

To say what you are going to do

1	voy	I am going	+ a + infinitive e.g. Voy a jugar al fútbol Va a beber Coca Cola
2	va	he/she is going	
3	vamos	we are going	
4	van	they are going	

Saying what you can do

1	Se puede + infinitive	You can ...
2	Se puede ir al museo	You can go to the museum
3	Se puede comer en un restaurante	You can eat in a restaurant

The Weather

1	Hace calor	It is hot
2	Hace frio	It is cold
3	Hace sol	It is sunny
4	Hace buen tiempo	It is good weather
5	Hace mal tiempo	It is bad weather
6	Si hace sol, voy a ir al parque	If it's sunny, I'm going to go to the park

Connectives

1	Y	and
2	Pero	but
3	También	also
4	Porque	because

Opinions with infinitive

1	Me gusta	I like
2	No me gusta	I don't like
3	Me encanta	I love
4	Odio	I hate

e.g. Me gusta ver la tele
No me gusta correr

The conditional - used to say what you 'would' do

Take the infinitive and add the following endings:

1	Visitar<u>ía</u>	I would visit
2	Visitar<u>ía</u>	He / she would visit
3	Visitar<u>íamos</u>	We would visit
4	Visitar<u>ían</u>	They would visit

Photo descriptions

1	En la foto hay	in the photo there is
2	En el centro hay	in the centre there is
3	Una chica	a girl
4	Un chico	a boy
5	A la izquierda	on the left
6	A la derecha	on the right

Key Vocabulary



1	Hola!	Hi!
2	Me llamo...	I call myself...
3	Se llama...	S/he calls her / himself...
4	Muy bien	Very good
5	Fenomenal	Great
6	Fatal	It's going badly
7	Tengo once / doce años	I have 11/12 years
8	Tiene once / doce años	S/he has 11/12 years
9	Vivo en Macclesfield	I live in Macclesfield
10	Vive en Bollington	S/he lives in Bollington

Core intent:

To be confident and competent in:

- To use the verb tener
- Pronunciation skills
- Introducing myself

Key Questions

1	¿Cómo te llamas?	What do you call yourself?
2	¿Cómo estás?	How are you?
3	¿Cuántos años tienes?	What age have you?
4	¿Dónde vives?	Where do you live?
5	¿Cuándo es tu cumpleaños?	When is your birthday?

Numbers 1-20

1	uno	one
2	dos	two
3	tres	three
4	cuatro	four
5	cinco	five
6	seis	six
7	siete	seven
8	ocho	eight
9	nueve	nine
10	diez	ten
11	once	eleven
12	doce	twelve
13	trece	thirteen
14	catorce	fourteen
15	quince	fifteen
16	dieciséis	sixteen
17	diecisiete	seventeen
18	dieciocho	eighteen
19	diecinueve	nineteen
20	veinte	twenty

Numbers above 20

21	veintiuno	twenty one
22	veintidós	twenty two
23	veintitrés	twenty three
24	veinticuatro	twenty four
25	veinticinco	twenty five
26	veintiséis	twenty six
27	veintisiete	twenty seven
28	veintiocho	twenty eight
29	veintinueve	twenty nine
30	treinta	thirty
40	cuarenta	forty
50	cincuenta	fifty
60	sesenta	sixty
70	setenta	seventy
80	ochenta	eighty
90	noventa	ninety
100	cien	one hundred
0	cero	zero
1/2	y medio	half
+/-	más / menos	more/less

Common phrases

1	Hola ! Me llamo Pia. Tengo once años. Vivo en Macclesfield	Hello ! I call myself Pia. I'm 11. I live in Macclesfield
2	Hola ! Me llamo Pia pero (ella) se llama Helena.	Hi! I call myself Pia but she calls herself Helena.
3	Tenemos once años y vivimos en Macclesfield.	We have (are) 11 years (old) and we live in Macclesfield.

Present Tense

Subject	Present - Tener (to have)
yo = I	tengo
Él/Ella = he/she	tiene
Nosotros = we	tenemos
Ellos/Ellas = they	tienen

Key Vocabulary



1	la familia	the family
2	un padre	a father
3	una madre	a mother
4	un hermano	a brother
5	una hermana	a sister
6	un hermanastro	a half-brother
7	una hermanastra	a half-sister
8	soy hijo único	I'm an only son
9	soy hija única	I'm an only daughter
10	un abuelo	a grandfather
11	una abuela	a grandmother
12	hay	there is / there are

Core intent:

To be confident and competent in talking about my family.

Present Tense

Subject	Present - gustar (to like)	Subject	Present - in negative ser (to be)
Me gusta(n)	I like	No soy	I am not
Le gusta(n)	S/he likes	No es	S/he is not
Nos gusta(n)	We like	No somos	We're not
Les gusta(n)	They like	No son	They are not
Add an 'n' if the object is plural	Literally means - 'It pleases to me'	Negatives: To make a verb negative in Spanish, you just have to put a 'no' in front of it.	

Key Questions

1	¿Cuántas personas hay en tu familia?	There are how many people in your family?
2	¿Te gusta tu hermana/tu hermano?	Do you like your sister/brother?
3	¿Qué tipo de persona eres?	What type of person are you?

Adjectives

1	divertido(a)	funny
2	hablador(a)	chatty
3	tímido(a)	shy
4	simpático(a)	nice
5	antipático(a)	mean/nasty
6	deportivo(a)	sporty
7	aburrido(a)	boring
8	perezoso(a)	lazy
9	estúpido(a)	stupid
10	inteligente	clever

Note: you usually have to change the ending to 'a' if you're talking about a female.

Common phrases

1	Hay cinco personas en mi familia	There are 5 people in my family.
2	Tengo dos hermanos y tres hermanas	I have 2 brothers and 3 sisters.
3	Me gusta mucho mi hermano /mi hermana	I like my brother / sister a lot.
4	Soy divertido(a) y deportivo(a)	I'm funny and sporty.
5	Soy muy tímido(a) pero no soy estúpido(a)	I'm very shy but I'm <u>not</u> stupid.
6	No me gusta nada mi hermana porque creo que es siempre antipática	I <u>don't</u> like my sister at all because I think that she's always mean.

Key Vocabulary



1	los ojos	eyes
2	el pelo	hair
3	una barba	a beard
4	un bigote	a moustache
5	las gafas	glasses
6	soy mediana	I'm average height
7	llevar	to wear

Key Question

1	¿Cómo eres?	How are you? (What do you look like?)
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Common phrases

1	Tengo los ojos azules y también el pelo muy corto y negro.	I have blue eyes and also very short and black hair.
2	Tengo una barba bastante larga pero no llevo gafas.	I have quite a long beard but I don't wear glasses.
3	Tengo el pelo demasiado largo y realmente ondulado. Además creo que soy alto(a), sin embargo soy mediana.	I have too long and really wavy hair. Also, I think that I am tall, however I'm average size.

Core intent:

To be confident and competent in describing what I look like and using the verbs **ser** and **tener**.

Present Tense

Subject	Present tener (to have)	Present ser (to be)
Yo = I	tengo	soy
Él/Ella = he/she	tiene	es
Nosotros = we	tenemos	somos
Ellos/Ellas = they	tienen	son

Adjectives

1	azules	blue
2	marrones	brown (for eyes)
3	grises	grey
4	verdes	green
5	castaño	brown (for hair)
6	rubio	blond
7	pelirrojo	red (for hair)
8	negro	black
9	blanco	white
10	corto/largo	short/long
11	alto/a	tall
12	bajo/a	short (height)
13	pequeño/a	small
14	gordo/a	fat
15	delgado/a	thin
16	feo/a	ugly
17	precioso/a	beautiful
18	bonito/a	pretty
19	calvo/a	bald



Year 7 Knowledge Organisers

Autumn Term 2024-2025