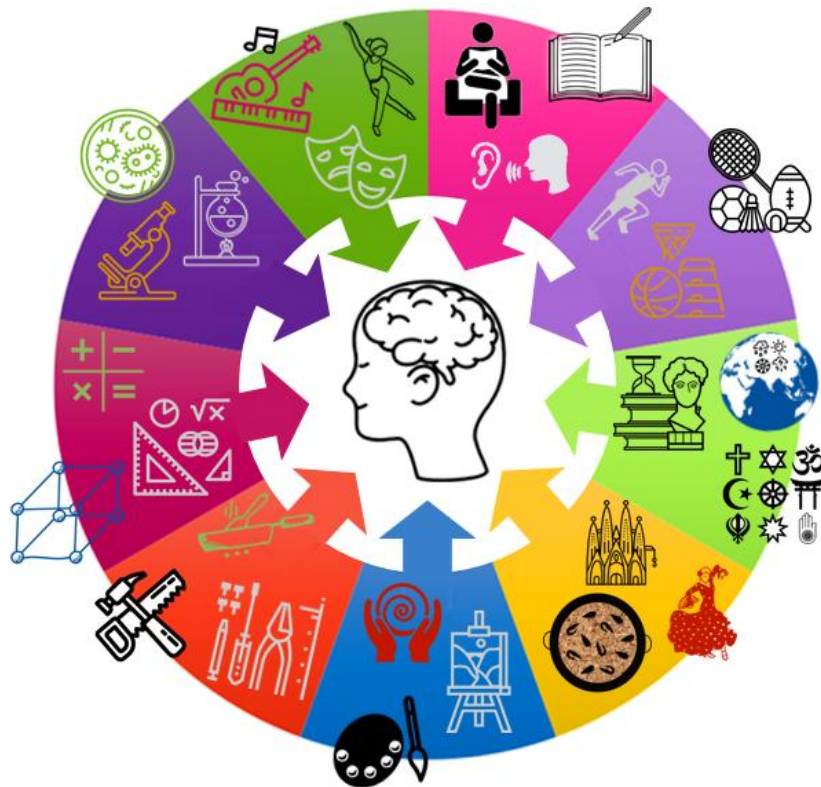


100% book - Year 7 Grammar

Aim to memorise 100% of the knowledge on these Knowledge Organisers

Term 2



Swindon Academy 2025-26

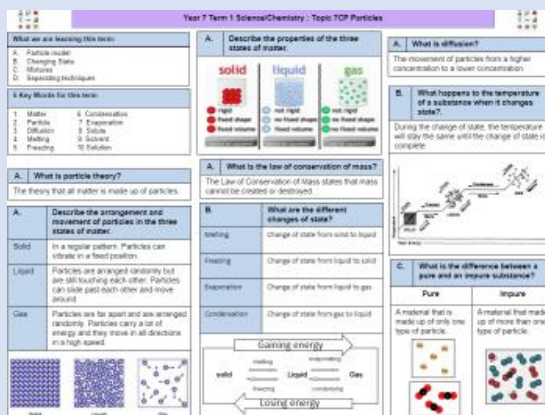
Name:	
Tutor Group:	
Tutor & Room:	

"If you are not willing to learn, no one can help you.

If you are determined to learn, no one can stop you."

Using your Knowledge Organiser and Quizzable Knowledge Organiser

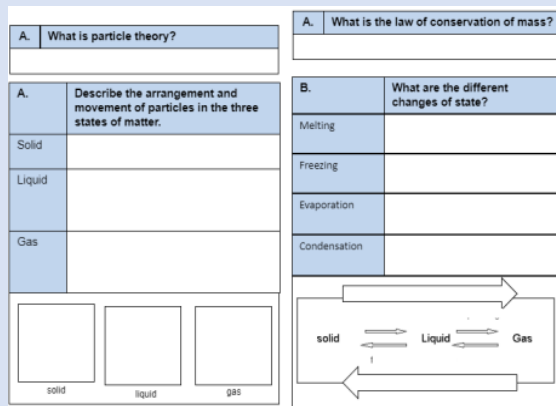
Knowledge Organisers



Knowledge Organisers contain the essential knowledge that you **MUST** know in order to be successful this year and in all subsequent years.

They will help you learn, revise and retain what you have learnt in lessons in order to move the knowledge from your short-term memory to long-term memory.

Quizzable Knowledge Organisers



These are designed to help you quiz yourself on the essential Knowledge.

Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

Top Tip

Don't write on your Quizzable Knowledge Organisers! Quiz yourself by writing the missing words in your prep book. That way you can quiz yourself again and again!

Expectations for Prep and for using your Knowledge Organisers

1. Complete all prep work set in your subject prep book.
2. Bring your prep book to every lesson and ensure that you have completed all work by the deadline.
3. Take pride in your prep book – keep it neat and tidy.
4. Present work in your prep book to the same standard you are expected to do in class.
5. Ensure that your use of SPAG is accurate.
6. Write in blue or black pen and sketch in pencil.
7. Ensure every piece of work has a title and date.
8. Use a ruler for straight lines.
9. If you are unsure about the prep, speak to your teacher.
10. Review your prep work in green pen using the mark scheme.

How do I complete Knowledge Organiser Prep?

Step 1

Check Epraise and identify what words /definitions/facts you have been asked to learn. Find the Knowledge Organiser you need to use.

The screenshot shows the epraise website interface. At the top, there's a navigation bar with 'Home', 'Me', 'Community', 'Rewards', and 'Downloads'. Below it is a 'Planner' section showing a calendar for May 2020. To the right, there's a list of knowledge organisers categorized by subject: Science, History, and English. Each category has a list of topics and their corresponding knowledge organisers.

Step 2

Write today's date and the title from your Knowledge Organiser in your Prep Book.

The screenshot shows a Knowledge Organiser for 'Particle Theory' and 'The Law of Conservation of Mass'. It includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams showing the states of matter (Solid, Liquid, Gas) and a flowchart for the changes of state (Melting, Freezing, Evaporation, Condensation). Handwritten notes and diagrams are present, including the date '29th May 2020' and the title 'Particle theory'.

Step 3

Write out the keywords/definitions/facts from your Knowledge Organiser in FULL.

The image shows handwritten notes from a Knowledge Organiser. The date '29th May 2020' is written at the top. Below it, the title 'Properties of the states of matter' is written. The notes describe the three states of matter: Solid (regular pattern, particles vibrate in fixed position), Liquid (particles are arranged randomly but are still touching each other, particles can slide past each other and move around), and Gas (particles are far apart and are arranged randomly, particles carry a lot of energy).

Step 4

Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times.

The image shows handwritten notes from a Knowledge Organiser. The words 'Solid', 'Liquid', and 'Gas' are written and then repeated three times each, as instructed in Step 4.

Step 5

Open your quizzable Knowledge Organiser. Write the missing words from your quizzable Knowledge organiser in your prep book.

The screenshot shows a quizzable Knowledge Organiser for 'Particle Theory' and 'The Law of Conservation of Mass'. It includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams showing the states of matter (Solid, Liquid, Gas) and a flowchart for the changes of state (Melting, Freezing, Evaporation, Condensation). Handwritten answers are present, including the date '29th May 2020' and the title 'Particle theory'.

Step 6

Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident.

The image shows handwritten notes from a Knowledge Organiser. The words 'Solid', 'Liquid', and 'Gas' are written and then repeated three times each, as instructed in Step 4.

Make sure you bring in your completed Prep notes to demonstrate that you have completed your prep.



What we are learning this term:		Plot Breakdown of Oliver Twist	Vocabulary: Subject Specific Terminology
- An introduction to life in Victorian London - An introduction to the life of Charles Dickens - An introduction to the workhouse and the Poor Law - The story and moral of Oliver Twist - Key characters and quotations - How to write a simple analytical paragraph		Oliver is born in the workhouse. When he is a bit older he is nominated to ask for more food because the boys are starving.	characterisation - the way a writer shows what a character is like
Vocabulary: Key Words		He is kicked out of the workhouse and sold to the Sowerberry family to be an undertaker's apprentice. He's bullied by Noah, they fight and he is locked up.	irony - figure of speech in which the intended meaning is the opposite of the literal meaning
morality – a code of right and wrong. People who try to be good can be called moral and people who do bad things can be called immoral .		Oliver runs away to London, meets Dodger and is introduced to Fagin's gang.	novel – a novel is a long book that tells the story of imaginary people and events
moral - a lesson that can be derived from a story or experience		Oliver is taken out with the gang and is horrified to see Dodger steal a gentleman's handkerchief. Oliver is wrongly arrested for the theft.	protagonist - he main character
vulnerable – in a situation in which you could be easily harmed. People living on the streets are vulnerable .		The gentleman, Mr. Brownlow, takes pity on Oliver and takes him in. The gang plot to get him back in case he reveals information about them.	antagonist - a character in a story who is the chief enemy of the protagonist.
brutal – very violent or cruel.		Oliver is abducted by the gang whilst running an errand for Mr. Brownlow.	topic sentence – the first sentence of your analytical paragraph.
barbaric – cruel and wild		Oliver is used by Sikes in a burglary. They fail and Sikes runs away. Oliver is left behind but the people who live there feel sorry for him and look after him. They are called Fred and Rose Maylie.	Characters in Oliver Twist
exploit - Taking advantage of someone to benefit from them.		When Bill and Fagin realise what has happened, they plot to catch Oliver again. Nancy overhears and visits Mr. Brownlow to warn him.	Oliver He is a 'pale, thin' orphan who is treated badly by almost everyone he meets. He tries his best to be a good person and experiences 'horror and alarm' whenever he sees crimes being committed.
corrupt – a word used to describe a person who uses their power in a dishonest or illegal way in order to make life better for themselves.		Fagin tells Bill about Nancy's betrayal and Bill murders her. Fagin is discovered and sent to prison and Bill dies trying to run away.	Mr. Bumble The corrupt man who runs the workhouse and gives Oliver his name.
villain – a bad person in a story who harms other people or breaks the law to get what they want.		Oliver discovers who his parents were and joins Mr. Brownlow and the Maylies to live happily ever after.	Noah Claypole A 'malicious' boy who bullies Oliver at the undertakers.
malicious – meant to hurt or upset someone.		Historical Context: Charles Dickens in the Victorian era.	Fagin An old man who runs the gang of pickpockets. He seems kind but his selfish nature as he gets young boys to do his dirty work for him.
victim – someone who has been harmed, often by other people.		'Oliver Twist' was written in 1837-39. This is in the Victorian era by Charles Dickens.	Jack Dawkins (The Artful Dodger) A young boy who introduces Oliver to Fagin's gang.
naïve – If someone is naïve if they don't have experience of how complicated life can be and therefore trust people too much.		In was published chapter by chapter in a periodical (magazine).	Bill Sikes A 'rough man' who has been a criminal for many years. He beats his dog viciously and brutally kills his girlfriend, Nancy.
society – the people who live in a certain area. This could be a country, town or small group.		Charles Dickens had to work in harsh conditions as a child when his father was sent to prison. This mirrors the childhood of Oliver and the other boys in the workhouse.	Nancy Bill's girlfriend who risks her life to help Oliver escape from the gang. She loves Bill even though he treats her abusively and she feels guilty about the life of crime she has led.
workhouse – a place where people who couldn't support themselves were sent to live and work.		Dickens wanted to criticise a new change to The Poor Law which happened in 1834 and created more workhouses and show how hard life was for poor people.	Mr. Brownlow A wealthy older gentleman who takes Oliver in and looks after him.
poverty - being extremely poor		Oliver Twist was written in the Victorian era. This means that Queen Victoria was the reigning monarch at the time. Dickens lived and worked through this time period. The novel is a social commentary on the perceptions of society at the time.	Writing Analytically
		The Big Ideas in Dicken's Oliver Twist	What three things must a topic sentence do? – be accurate, focus on one thing, answer the question
		Corruption - Dickens presents corruption from the outset and throughout. - Powerful people are corrupt e.g., Bumbles - Powerless people corrupt others e.g., Dodger, Fagin & Bill	What is a quotation? - a sentence or phrase copied exactly from what someone has said or written. To quote means to copy exactly what someone has said or written.
		Villains' vs victims - Dickens juxtaposes the purest, most vulnerable and innocent of children against the most violent, brutal and selfish criminal. However, he presents the characters of a scale of villainy. Is it just a matter of time before Oliver, if left unchecked, would deteriorate into a man like Bill?	What do you do once you have written a topic sentence and matching quote? - explore how the quote proves the point in as much detail as you can.
		Crime - Dickens presents his reader with the realities of the criminal underworld of Victorian London. He shows the reader what the future often holds for destitute orphan children that are abandoned by society. All children may end up like Dodger or Nancy, then like Fagin or even Bill.	
		Poverty - Dickens wants to illustrate what life was really like for poor people in the Victorian era He believed that just because people were poor, that didn't mean they deserved to be treated like criminals. This directly links to Dickens' criticism of The Poor Law of 1834.	

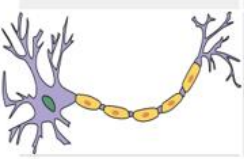


ENGLISH Knowledge organiser Year 7 'Oliver Twist': GS Knowledge Organiser

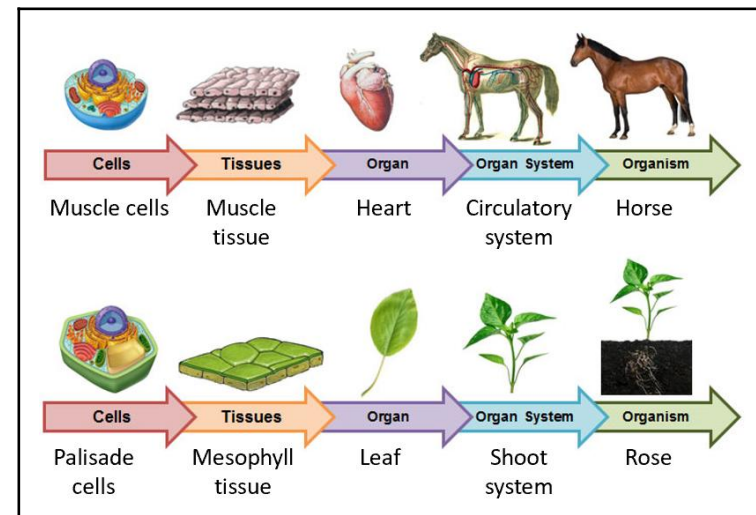


What we are learning this term:	Plot Breakdown of Oliver Twist	Vocabulary: Subject Specific Terminology
- An introduction to life in Victorian London - An introduction to the life of Charles Dickens - An introduction to the workhouse and the Poor Law - The story and moral of Oliver Twist - Key characters and quotations - How to write a simple analytical paragraph		characterisation -
		irony -
		novel –
		protagonist -
		antagonist -
Vocabulary: Key Words		topic sentence –
morality –		Characters in Oliver Twist
moral -		Oliver
vulnerable – i		
brutal –	Historical Context: Charles Dickens in the Victorian era.	Mr. Bumble
barbaric –		Noah Claypole
exploit –		
corrupt –		Fagin
		Jack Dawkins (The Artful Dodger)
villain –		Bill Sikes
malicious –	The Big Ideas in Dicken’s Oliver Twist	Nancy
victim –	Corruption -	Mr. Brownlow
naïve –	Villains' vs victims -	Writing Analytically
society –		
workhouse –	Crime -	
poverty –	Poverty -	

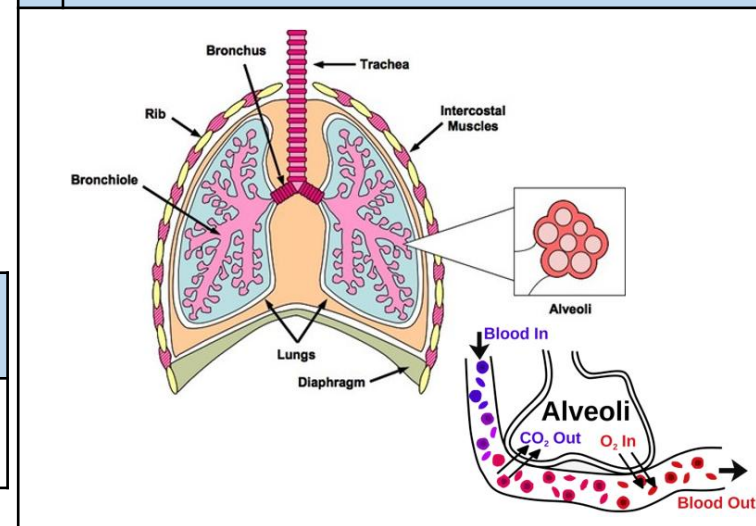


B. What are specialised cells?				
Specialised cells are found in multicellular organisms.				
Each specialised cell has a particular function within the organism				
	Type of cell	Function	Special features	
Animal cells		Red blood cells	To carry oxygen	• Large surface area, for oxygen to pass through • Contains haemoglobin, which joins with oxygen • Contains no nucleus
		Nerve cells	To carry nerve impulses to different parts of the body	• Long • Connections at each end • Can carry electrical signals
		Male reproductive cell (sperm cell)	To reach female cell, and join with it	• Long tail for swimming • Head for getting into the female cell
Plant cells		Root hair cell	To absorb water and minerals	• Large surface area
		Leaf cell	To absorb sunlight for photosynthesis	• Large surface area • Lots of chloroplasts

B What are the 2 main types of organism?	
Unicellular	Consisting of just one cell
Multicellular	Consisting of many cells



D What are the organs in the gas exchange system?



B. What is a tissue?
A group of cells working together to perform a particular function
C. What is an organ?
A group of tissues working together to perform a particular function
D. What is an organ system?
A group of organs working together to perform a particular function

B. How do substances move into and out of cells?
By diffusion.

**B. What is a malnutrition?**

If a person has an **unbalanced diet** they are said to be malnourished.

This can lead to people becoming overweight or underweight or having deficiency diseases.

B. What is obesity?

If a person eats **too much food** and does **not do enough exercise** they will gain weight.
If someone becomes **very overweight** they are said to be obese.

B. What is a deficiency disease?

A disease caused by the **lack** of a **specific nutrient**.

- A lack of vitamin C can lead to scurvy which affects the gums.
- A lack of vitamin D can lead to rickets which affects the bones.

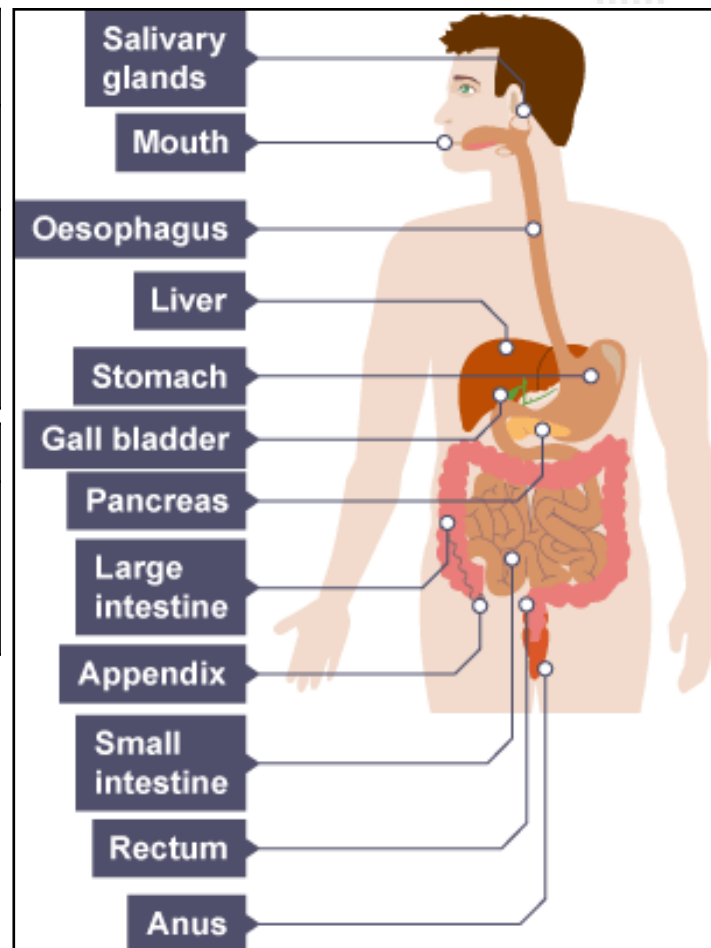
B. What is starvation?

If a person does not **eat enough food** they will **lose weight**.
In the extreme this can lead to starvation.

C. Describe the function of enzymes in the digestive system.

Enzymes help to break down larger food molecules into smaller ones, so that they can be absorbed through the walls of our small intestines, into our blood stream.

Enzyme	Made in...	What it breaks down and where
Amylase	Salivary glands, pancreas, small intestine	Starch into sugars , in the mouth and small intestine
Protease	Stomach, pancreas, small intestine	Protein into amino acids , in the stomach and small intestine
Lipase	Pancreas and small intestine	Lipids into fatty acids and glycerol , in the small intestine

**C. Describe the role of bacteria in the digestive system.**

1. Digesting certain carbohydrates that our own enzymes cannot.
2. Reduce the chances of harmful bacteria multiplying and making us ill.
3. They produce some vitamins that we need that we cannot (e.g: vitamins K and B).



What we are learning this term:
A. Movement B. Breathing and Fitness C. Effect of drugs D. Aerobic and Anaerobic respiration E. Reproduction and Heredity

6 Key Words for this term
1. Chromosomes 2. Exchange 3. Anaerobic 4. Respiration 5. Aerobically 6. Cilia

A.	What are the 4 functions of the Skeletal System?
	Movement, support, protection and making red blood cells

A	Support – what is the main function of the spine?
	The spine supports the upper body and allows us to stand upright.
Protection – what is the function of the following:	
Ribcage	Protects the heart and lungs
Cranium (skull)	Protects the brain

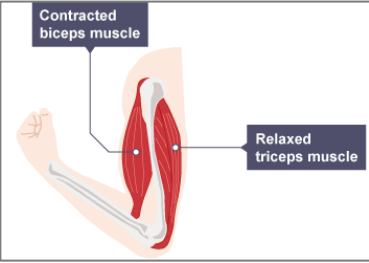
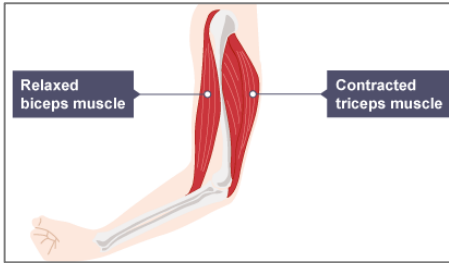
A	Making blood cells – what part of the bone makes blood cells?
	Bone marrow produces: 1. Red blood cells (which transport O ₂ and CO ₂) 2. White blood cells (some of which fight disease) 3. Platelets (which cause blood clotting e.g. when we cut ourselves)
Why are bones hollow?	
	Long bones in the body are hollow – in the middle of the bone is a marrow cavity . The cavity contains bone marrow , from which blood is produced.

A.	Movement and muscles
What are the following:	
Ligaments	Bones are attached to each other by ligaments .
Muscles	A collection of tissues which can contract and relax, causing other body parts (including bones) to move.
Tendons	Muscles are attached to bones by tendons . They are a strong, flexible tissue attaching a muscle to a bone.

A.	How does the muscular system help us move?
	This system allows us to move by contracting and relaxing our muscles

A.	How do your muscles move your bones?
	Muscles exert a force on bones to move them.

A.	What is Biomechanics?
	Biomechanics is the working together of the skeletal system and the muscular system to help us move.

A	What are antagonistic muscles?
	In order to move bones in two directions (e.g. bending then stretching your arm), muscles are paired antagonistically (one moves the bone in one direction, the other in the opposite direction).
How do they work?	1. To raise the forearm, the biceps contracts and the triceps relaxes. 2. To lower the forearm again, the triceps contracts and the biceps relaxes.  

A.	What is Osteoporosis
	Osteoporosis is a condition in which someone loses bone density, making their bones fragile so they are more likely to break bones.
What are rickets?	
	Rickets can be caused by a deficiency of calcium or vitamin D . Rickets causes bone pain, and soft bones which can deform.

A.	What happens if you overstretch a tendon?
	Over-stretching a tendon can cause it to snap. Tendons will heal themselves but become shorter in the process because the two severed ends overlap to heal, reducing flexibility
What is Tendonitis?	
	As the body tries to heal a tendon, it will swell and become painful. This is called tendonitis , and includes tennis elbow .



What we are learning this term:

- A. Particle model
- B. Changing State
- C. Mixtures
- D. Separating techniques

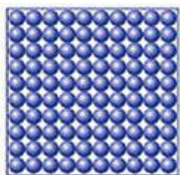
7 Key Words for this term

1. Distillation
2. Separation
3. Solution
4. Solute
5. Solvent
6. Chromatography
7. Properties

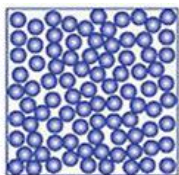
A. What is particle theory?

The theory that all matter is made up of particles.

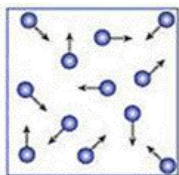
A.	Describe the arrangement and movement of particles in the three states of matter.
Solid	In a regular pattern. Particles can vibrate in a fixed position.
Liquid	Particles are arranged randomly but are still touching each other. Particles can slide past each other and move around.
Gas	Particles are far apart and are arranged randomly. Particles store a lot of energy, they move in all directions at a high speed.



Solid

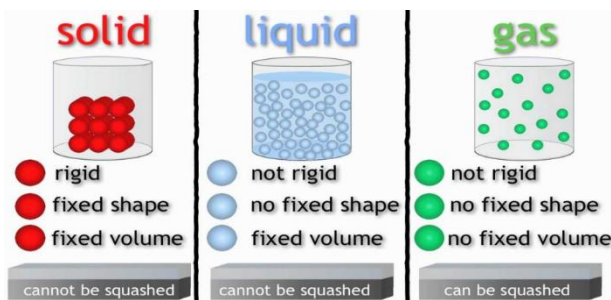


Liquid



Gas

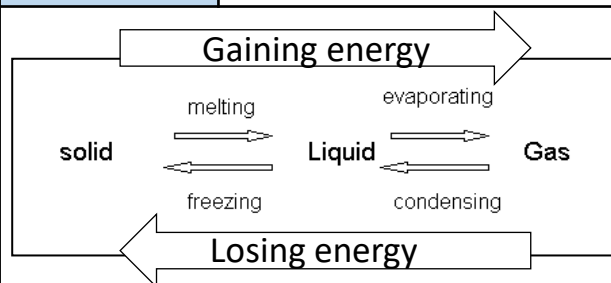
A. Describe the properties of the three states of matter.



A. What is the law of conservation of mass?

The Law of Conservation of Mass states that mass cannot be created or destroyed.

B.	What are the different changes of state?
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid

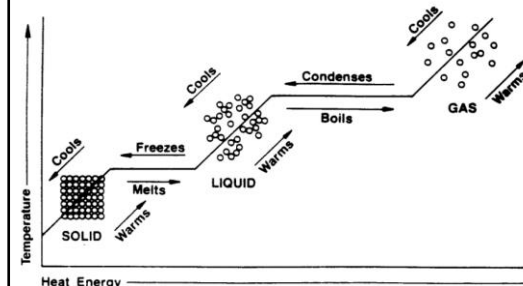


A. What is diffusion?

The movement of particles from an area of higher concentration to an area lower concentration.

B. What happens to the temperature of a substance when it changes state?

During the change of state, the temperature will stay the same until the change of state is complete



C. What is the difference between a pure and an impure substance?

Pure	Impure
A material that is made up of only one type of particle.	A material that made up of more than one type of particle.

**What we are learning this term:**

- A. Particle model
- B. Changing State
- C. Mixtures
- D. Separating techniques

7 Key Words for this term

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

A. What is particle theory?**A. Describe the arrangement and movement of particles in the three states of matter.**

Solid

Liquid

Gas



solid



liquid



gas

A. Describe the properties of the three states of matter.

Solid

Liquid

Gas

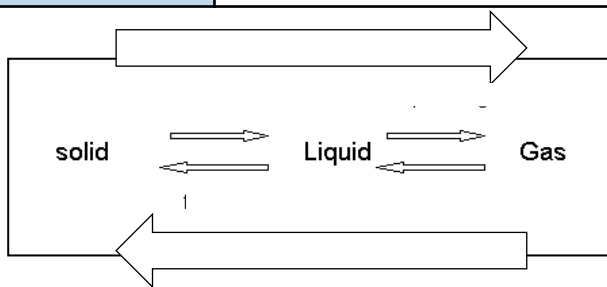
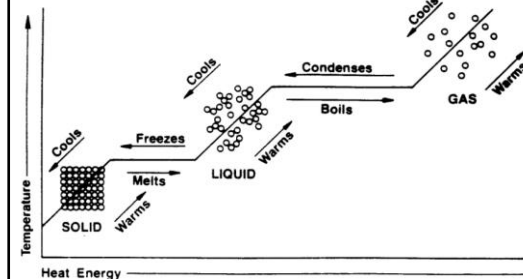
A. What is the law of conservation of mass?**B. What are the different changes of state?**

Melting

Freezing

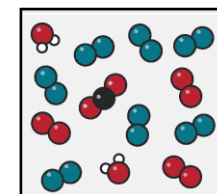
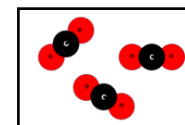
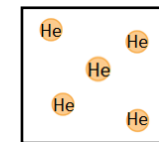
Evaporation

Condensation

**A. What is diffusion?****B. What happens to the temperature of a substance when it changes state?.****C. What is the difference between a pure and an impure substance?**

Pure

Impure

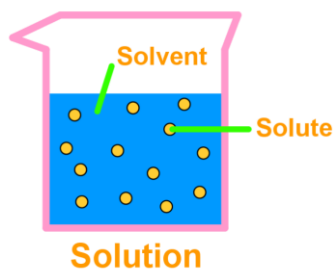




D.	What is a mixture?
A mixture contains different elements or compounds that are not chemically joined to each other.	

D.	What happens when a substance dissolves?
During dissolving, the solvent particles surround the solute particles and move them away from each other, so they are spread out in the solvent.	

D.	What are the different parts of a solution?
Solute	The substance that dissolves into the solvent.
Solvent	The liquid that the solute dissolves into.



D.	What is the difference between a soluble substance and an insoluble substance?
Soluble	A substance that dissolves into a solvent.
Insoluble	A substance does not dissolve into a solvent.

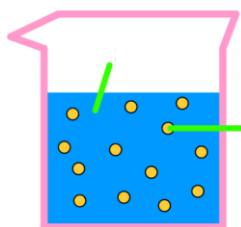
D.	How are different mixtures separated?		
Method	Used to separate:	Apparatus	
Evaporation	Soluble substances from a solution		
Filtration	An insoluble solid from a liquid		
Distillation	The parts of a liquid solution according to their boiling point.		
Chromatography	Mixtures of solutes according to their solubilities in a solvent.		



D.	What is a mixture?

D.	What happens when a substance dissolves?

D.	What are the different parts of a solution?
Solute	
Solvent	



Solution

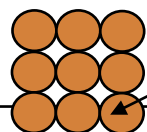
D.	What is the difference between a soluble substance and an insoluble substance?
Soluble	
Insoluble	

D.	How are different mixtures separated?		
Method	Used to separate:	Apparatus	
Evaporation			
Filtration			
Distillation			
Chromatography			

7.04: Chemical changes

Atom

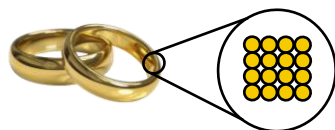
The smallest particle of matter, which all things are made of.



a single atom

Element

A pure substance that is made of only one type of atom. All atoms of an element are identical, e.g. Gold is an element made up of gold atoms only. The 118 known elements are listed on the periodic table of elements.



The atoms of some elements do not join together, but instead they stay as separate atoms, e.g. helium.

The atoms of other elements join together to make **molecules**, e.g. oxygen and hydrogen.

helium



oxygen

hydrogen



Properties of elements

Individual atoms do not have the properties of the element. The properties of an element are because of the arrangement and behaviour of the atoms as a group.

Metals	Non-metals
most are shiny	most are dull
most are hard	solid non-metals are soft and easy to cut, except carbon as diamond
most are strong	most are not strong
most are sonorous (makes a ringing sound when hit)	most are not sonorous
malleable (easy to reshape without breaking)	not malleable
most are ductile (can be drawn out into a long wire without breaking)	not ductile
most have very high melting and boiling points	most have very low melting and boiling points
some but not all are magnetic	not magnetic
conduct electricity	non-metals do not conduct electricity, except carbon as graphite
good at conducting heat	poor at conducting heat

Writing element symbols

The first letter is always written as a capital letter and if there is a second letter, it is always written as a lowercase letter.
Element symbols make writing elements easier and allow scientists all over the world to communicate and write about them.

Na

sodium

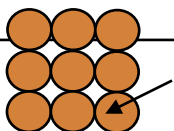
O

oxygen

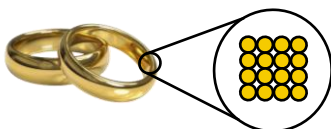


7.04: Chemical changes Blank

Atom

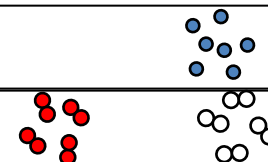


Element



The atoms of some elements do not join together, but instead they stay as separate atoms, e.g.

The atoms of other elements join together to make , e.g.



Properties of elements

Individual atoms do not have the properties of the element. The properties of an element are because of the arrangement and behaviour of the atoms as a group.

Metals	Non-metals

Writing element symbols

Na

sodium

O

oxygen



7.04: Chemical changes

Compound

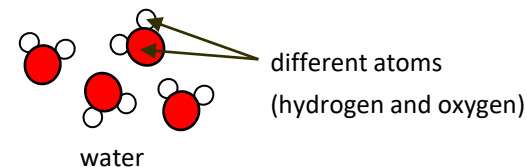
A substance made of two or more different elements chemically joined (bonded) together.

A chemical bond is a strong force that holds atoms together in a compound. Lots of energy is needed to break a chemical bond. A compound cannot be easily separated.

A compound may have very different properties to those of the elements from which it is made.

Water is a compound of hydrogen and oxygen.

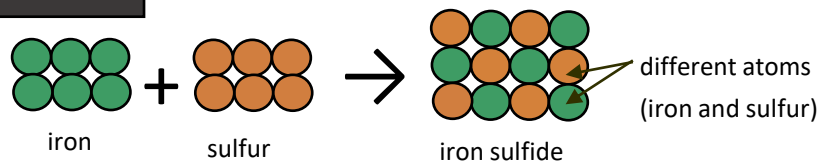
Each of its molecules contains two hydrogen atoms and one oxygen atom.



Chemical reactions

When chemicals react, the atoms are rearranged.

For example, iron reacts with sulfur to



make iron sulfide. Iron sulfide, the compound formed in this reaction, has different properties to the elements it is made from.

	iron	sulfur	iron sulfide
Type of substance	element	element	compound
Colour	silvery grey	yellow	black
Is it attracted to a magnet?	yes	no	no

Conservation of mass

Atoms are not destroyed nor created during chemical reactions, so in any reaction:

Total mass of reactants = total mass of products

Naming metal and non-metal compounds

The metal element (furthest left on the periodic table) comes first in the name of the compound. The ending for the non-metal is shortened and changed to '-ide'. E.g. iron + sulfur → iron sulfide

Naming three element compounds containing oxygen

The metal element (furthest left on the periodic table) comes first in the name of the compound. If there are three elements in the compound, and one of them is oxygen, the ending of the non-metal is shortened and changed to '-ate'. E.g. lithium + nitrogen + oxygen → lithium nitrate

Chemical formulae

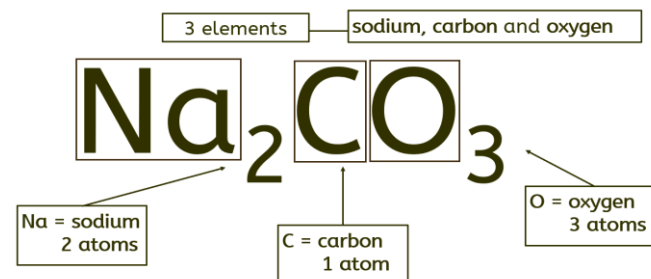
A chemical formula uses chemical symbols and numbers to show how many of each atom is present in a compound.

The small numbers (subscript) go at the bottom.

For example:

CO₂ is correct;

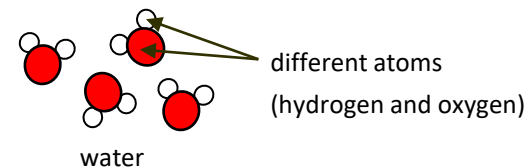
CO₂ and CO² are wrong.



The formula for sodium carbonate is Na₂CO₃. It tells you that sodium carbonate contains two sodium atoms (Na x 2), one carbon atom (C) and three oxygen atoms (O x 3).

7.04: Chemical changes Blank

Compound

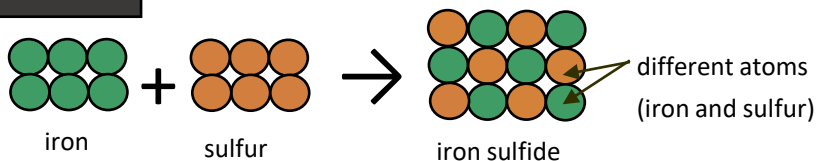


Chemical reactions

When chemicals react, the atoms are rearranged.

For example, iron reacts with sulfur to

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	iron	sulfur	iron sulfide
Type of substance			
Colour			
Is it attracted to a magnet?			

Conservation of mass

Chemical formulae



The formula for sodium carbonate is:

Naming metal and non-metal compounds

Naming three element compounds containing oxygen



7.04: Chemical changes

Chemical equations

We summarise chemical reactions using equations:

reactants → products

- **Reactants** are shown on the **left** of the arrow;
- **Products** are shown on the **right** of the arrow.

Do not write an '≡' sign instead of an arrow.

If there is more than one reactant or product, they are separated by a '+' sign. For example:

copper + oxygen → copper oxide

Reactants: copper and oxygen
Products: copper oxide

A **word equation** shows the names of each substance involved in a reaction and **must not include any chemical symbols or formulae**.

Oxidation reactions

In oxidation reactions, a substance gains oxygen. Metals and non-metals can take part in oxidation reactions (be oxidised).

Magnesium reacts with oxygen to form magnesium oxide:
magnesium + oxygen → magnesium oxide
 $2\text{Mg(s)} + \text{O}_2\text{(g)} \rightarrow 2\text{MgO(s)}$

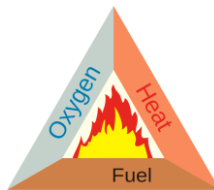
Carbon reacts with oxygen to form carbon dioxide:
carbon + oxygen → carbon dioxide
 $\text{C(s)} + \text{O}_2\text{(g)} \rightarrow \text{CO}_2\text{(g)}$

Another example is a combustion reaction, where we burn fuels in oxygen:

Fuel + oxygen → carbon dioxide + water

methane + oxygen → water + carbon dioxide

- Combustion is another name for burning fuels.
- It is an exothermic reaction.
- The fire triangle shows three components which, when combined, provide the right conditions for combustion to happen.



Thermal decomposition reactions

This is the breaking down of a substance, using heat, to form two or more products. It is an endothermic reaction.

Many metal carbonates take part in thermal decomposition reactions. For example, copper carbonate:

copper carbonate is green; copper oxide is black.
copper carbonate → copper oxide + carbon dioxide
 $\text{CuCO}_3\text{(s)} \rightarrow \text{CuO(s)} + \text{CO}_2\text{(g)}$

Exothermic and Endothermic reactions

- **Exothermic** reaction - **transfers** energy to the thermal store of the surroundings. This causes a **rise** in temperature (**positive** temperature change).
- Hand warmers transfer energy to the thermal store of the surroundings by an exothermic oxidation reaction.
- **Endothermic** reaction – **transfers** energy in from the thermal store of the surroundings. This causes a **drop** in temperature (**negative** temperature change).
- Sports injury packs transfer energy from the thermal store of the surroundings by an endothermic reaction.

Temperature data collected from exothermic and endothermic reactions can be improved by:

- Using a **polystyrene** cup as an insulator, as it reduces energy transfers to or from the surroundings.
- Using a **lid** to reduce energy transferred from the surface.
- Using a **digital thermometer**, which is easier to read than a regular thermometer and, if it measures in decimal places, also has better resolution.

State symbols in chemical formulae provide information about the physical state of the reactants and products.

(s) – solid, (l) – liquid, (g) – gas, and (aq) – aqueous solution (i.e. dissolved in water).

The state symbol comes after the chemical formula and is written in lower case and in brackets. E.g. $\text{CuCO}_3\text{(s)} \rightarrow \text{CuO(s)} + \text{CO}_2\text{(g)}$



7.04: Chemical changes Blank

Chemical equations

We summarise chemical reactions using equations:

- **Reactants**
- **Products**

Do not write an '=' sign instead of an arrow.

If there is more than one reactant or product, they are separated by a '+' sign. For example:

Reactants:

Products:

Oxidation reactions

Magnesium reacts with oxygen to form magnesium oxide:
magnesium + oxygen →
 $2\text{Mg(s)} + \text{O}_2\text{(g)} \rightarrow$

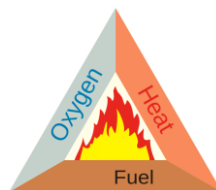
Carbon reacts with oxygen to form carbon dioxide:
carbon + oxygen →
 $\text{C(s)} + \text{O}_2\text{(g)} \rightarrow$

Another example is a combustion reaction, where we burn fuels in oxygen:

Fuel + oxygen →

methane + oxygen →

- Combustion is



Thermal decomposition reactions

copper carbonate is green; copper oxide is black.
copper carbonate →
 $\text{CuCO}_3\text{(s)} \rightarrow$

Exothermic and Endothermic reactions

- **Exothermic** reaction –
- **Endothermic** reaction –
- Temperature data collected from exothermic and endothermic reactions can be improved by:

State symbols



**What we are learning this term:**

- A. Compare Light and Sound waves
- B. Wave behaviour
- C. Sound waves
- D. Hearing ranges
- E. Uses of sound

3 Key Words for this term

- 1. Ultrasound
- 2. Frequency
- 3. Transverse

A. How do sound waves compare with Electromagnetic waves (e.g. Light)

Sound	EM waves, like light
Requires a medium (particles) to travel	Does not require a medium (particles)
Longitudinal waves	Transverse Waves
Travels faster in more dense media. In air 330m/s	Travels slower in more dense material. In vacuum 3×10^8 m/s

A. Types of Waves

Waves **transfer energy** without transferring matter.

A. What are the two types of waves?**Transverse**

- **Oscillations are perpendicular** to the direction of **energy transfer**.

Longitudinal

- **Oscillations are parallel** to the direction of **energy transfer**.

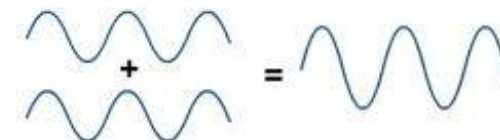
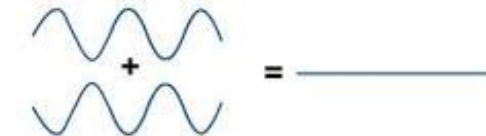
B. What different behaviours do waves show?

Waves can travel through all sorts of media, and different things can happen at the **boundary** between different media:

Transmission	Passing through , we say a wave is 'transmitted' through a medium
Reflection	When a wave bounces back from a boundary between media at the same angle as which it hit the boundary.
Refraction	When a wave changes direction at the boundary between media due to a change in speed.
Absorption	When the energy a wave transfers goes into heating a material.
Diffraction	The spreading out of a wave after it passes through a gap.

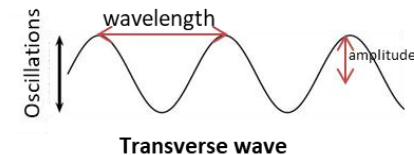
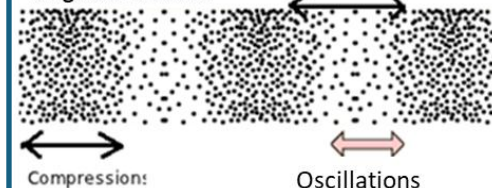
B. What is Superposition

Superposition occurs when two or more of the same kind of waves are travelling together. The waves can add up or cancel each other out depending on how they line up.

Constructive Interference**Destructive Interference****C. Changes in sounds**

What is pitch?	The highness/lowness of a sound. Higher sounds have a higher frequency
What is frequency?	The number of oscillations in a wave per second. This is also the number of waves passing a point per second. It is measured in Hertz (Hz)
What is volume?	The intensity of a sound. Louder sounds have a larger amplitude. It is measured in decibels (dB)

Direction of energy transfer by both ways

Longitudinal wave

**What we are learning this term:**

- A. Compare Light and Sound waves
- B. Wave behaviour
- C. Sound waves
- D. Hearing ranges
- E. Uses of sound

3 Key Words for this term

- 1.
- 2.
- 3.

A. How do Sound waves compare to Electromagnetic waves (e.g. Light)?

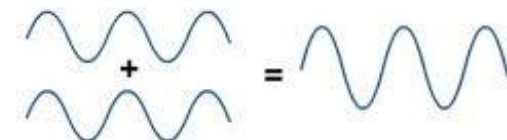
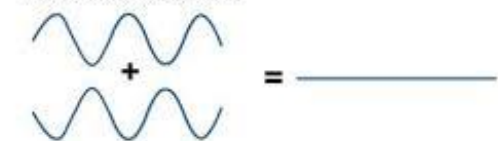
Sound	EM waves, like light

A. Types of Waves

Waves transfer energy without transferring matter.

A. What are the two types of waves?**B. What different behaviours do Waves show?**

Waves can travel through all sorts of media, and different things can happen at the **boundary** between different media:

Transmission**Reflection****Refraction****Absorption****Diffraction****B. What is Superposition?****Constructive Interference****Destructive Interference****C. Changes in sounds****What is pitch?****What is frequency?****What is volume?**

Direction of energy transfer by both ways

Longitudinal wave

Rarefaction

Compression:

Oscillations

wavelength

Oscillations

amplitude

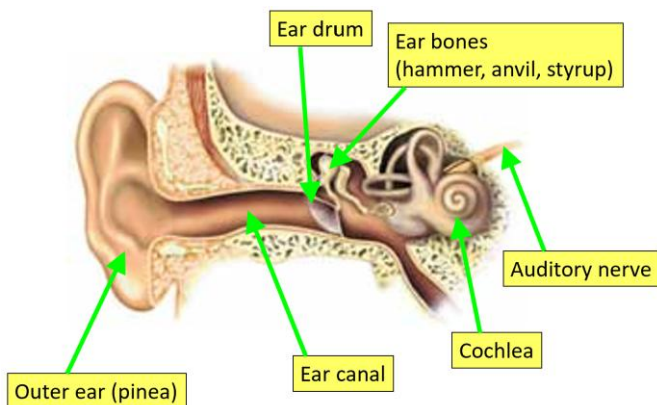
Transverse wave



C.	How is sound produced?
	Sound is produced by vibrations
	How does sound travel?
	Vibrations transfer energy through particles.
	Which media does sound travel fastest in and why?
	Solids – the particles are closer together

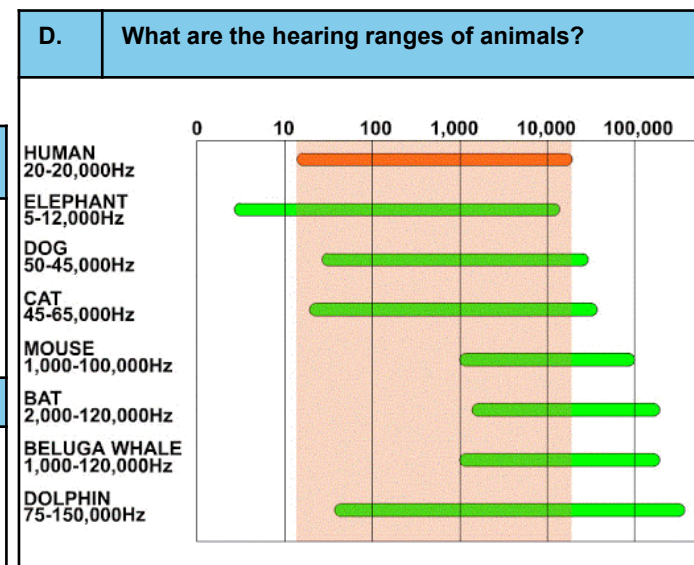
D.	Hearing ranges
What is the hearing range of humans?	Humans have a hearing range between 20 – 20 000 Hz
What is ultrasound?	Sounds with a frequency above 20 000 Hz
What is ultrasound used for?	Uses of ultrasound: • Prenatal scans of unborn babies • Ultrasonic cleaning of fragile objects (eg jewellery) • Breaking up kidney stones to prevent harm.

C.	Part of the Ear	What is the Function?
	1. Outer ear (pinna)	Collects the sound like a funnel.
	2. Ear canal	Transmits sounds from the pinna to the ear drum
	3. Ear drum	Sound waves causes this to vibrate
	4. Ear bones (hammer, anvil, stirrup)	After the ear drum vibrates, it passes the vibrations on to these. They transfer the vibrations to the cochlea
	5. Cochlea	Receives vibrations and converts these to nerve impulses
	6. Auditory nerve	Carries nerve impulses (messages) to the brain



E.	What is an echo?
	A reflected sound

E.	How do loudspeakers work?
	• Loudspeakers are vibrating cones. • The pattern and frequency of the vibrations (oscillations) determines the sound.
	How do Microphones work?
	Microphones have a vibrating <u>diaphragm</u> inside, which converts the sound wave into an electrical signal in a circuit.



D.	Seeing sounds – How can you see sounds?
	You can use an instrument called an oscilloscope to see a sound wave
Amplitude (volume) is shown by the height. The higher the waves, the louder the sound.	Amplitude Frequency
The frequency (pitch) is shown by how close the waves are to each other. The closer they are, the higher the pitch.	



What we are learning this term:

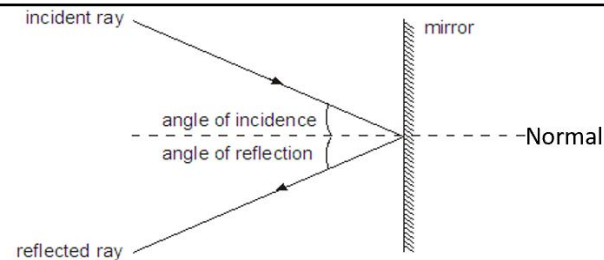
- Light and materials
- Ray model
- Colour
- Weight and mass
- Astronomical structures and distances
- Days, years and seasons

6 Key Words for this term

- Vacuum
- Refraction
- Absorption
- Transmission
- Wavelength
- Reflection

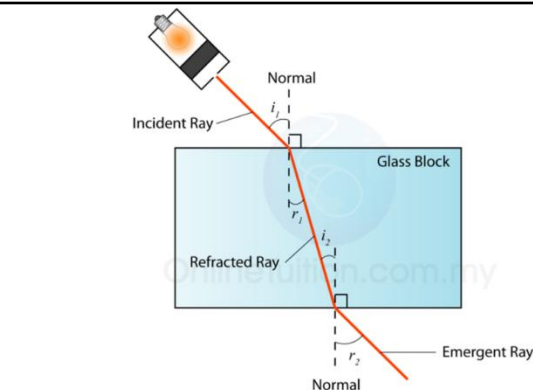
B. What is reflection?

When a ray of light (**incident ray**) reflects off a material and the reflected ray of light then goes into your eye, for you to see it.



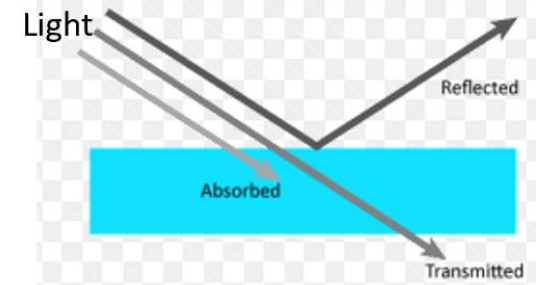
B. What is refraction?

When light **changes direction** as it enters or leaves a different medium (material).



A. What are the three different ways light interacts with material?

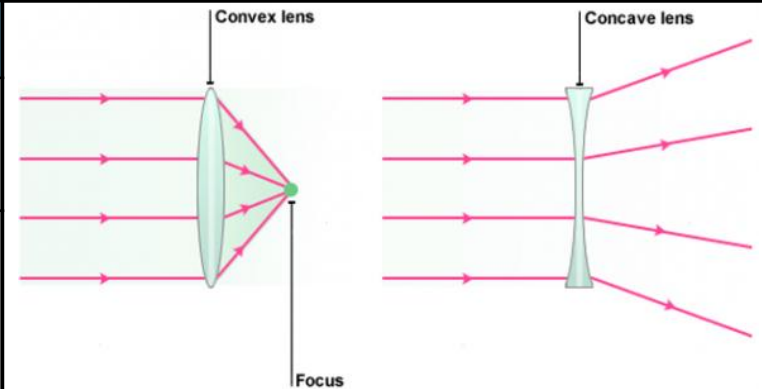
Light is transmitted	it passes straight through
Light is absorbed	it does not pass through
Light is reflected	light bounces off the surface of the material



B. What are the two types of lenses?

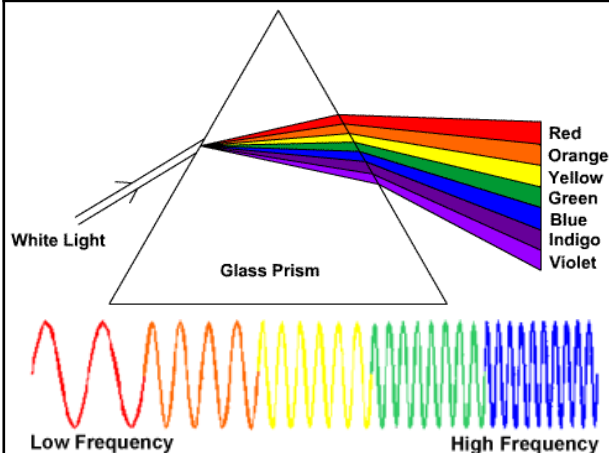
Convex lens – light rays are refracted then **converge** (meet up).

Concave lens – light rays are refracted then **diverge** (move apart).

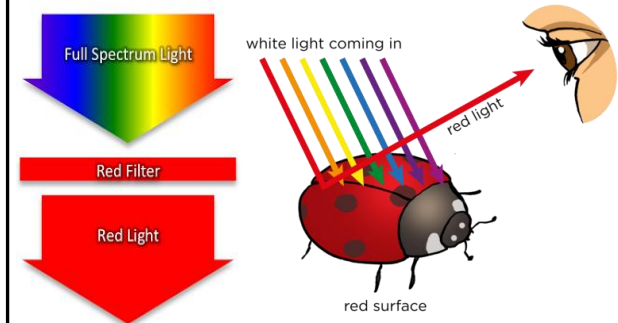


C. What is light dispersion?

The **separation of white light** into colours according to frequency.



- Black – all colors absorbed, nothing reflected
- White – all colors reflected, nothing absorbed





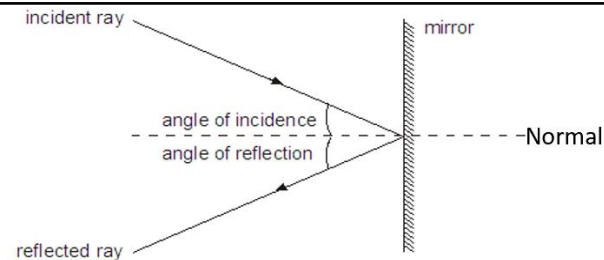
What we are learning this term:

- A. Light and materials
- B. Ray model
- C. Colour
- D. Weight and mass
- E. Astronomical structures and distances
- F. Days, years and seasons

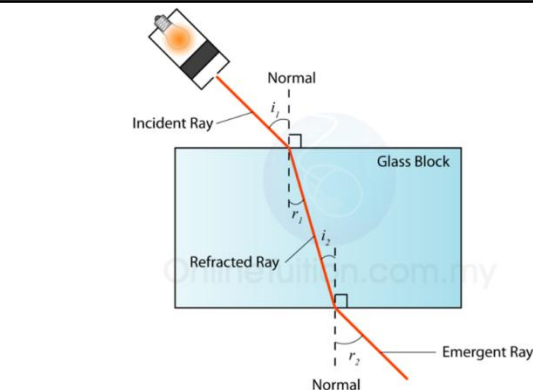
6 Key Words for this term

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

B. What is reflection?

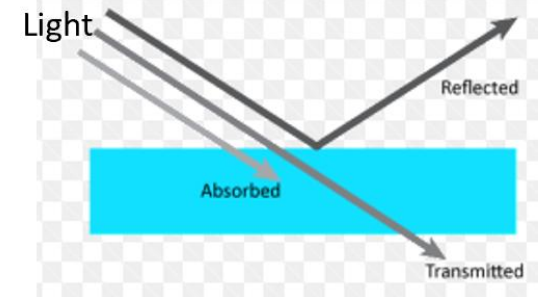


B. What is refraction?

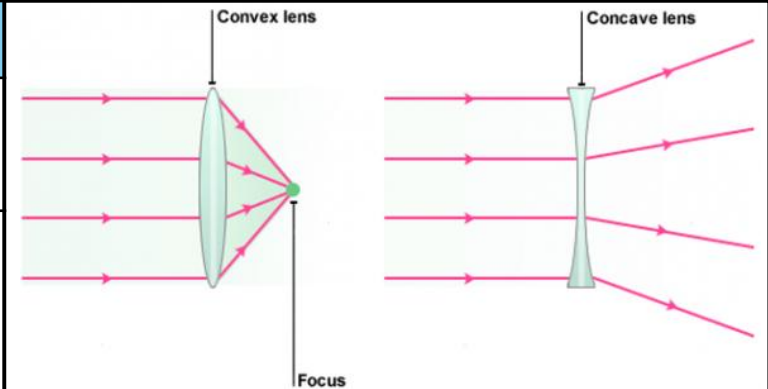


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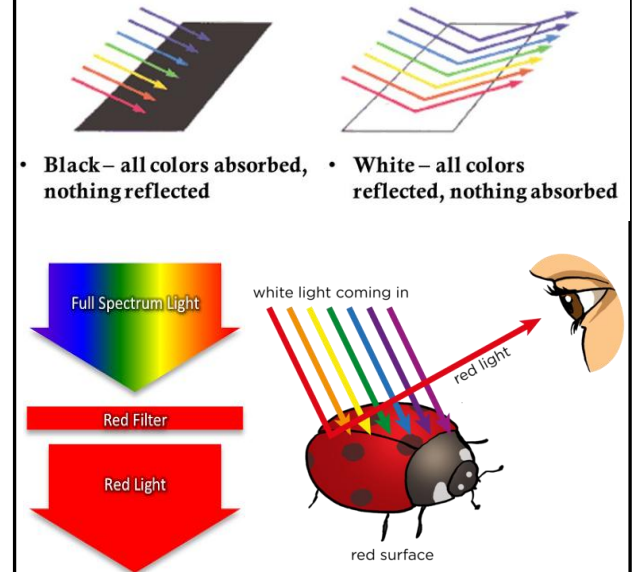
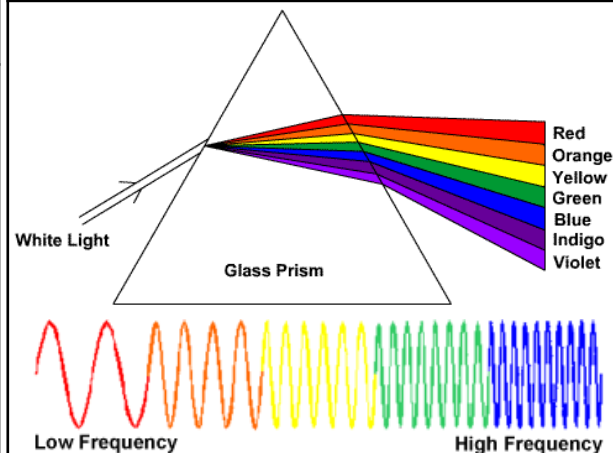
Light is _____	it passes straight through
Light is _____	it does not pass through
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B. What are the two types of lenses?



C. What is light dispersion?



7.03: Development

Background

	Across the world, the standard of living and quality of life can be very different.
A	Countries therefore have different classifications based on the quality of life within them.
B	How developed a country is can be measured in different ways.
C	Development levels can vary within and between countries. There are many reasons why some countries are more developed than others.
D,E	Countries can become more developed in many ways, including through economic growth from tourism, top-down development projects and bottom-up development projects.

A) Country classification

1 developed	(n) countries with high standards of living, advanced infrastructure and strong economies.
2 emerging	(n) countries transitioning between developing and developed, showing rapid improvements in infrastructure.
3 developing	(n) countries with lower standards of living, less advanced infrastructure and economies that are growing but not yet strong.

B) Measuring development

1 GNI per capita	(n) the average income of a country's citizens.
2 infant mortality rate	(n) the number of babies that do not survive to one year old per 1,000 births.
3 life expectancy	(n) the average number of years a person is expected to live.
4 literacy rate	(n) the percentage of people in a specific age group, typically aged 15 and above, who can read and write.
5 average years of schooling	(n) the average number of years of education that individuals aged 25 and older have completed.
6 Human Development Index (HDI)	(n) a composite measure of development that is used to categorise the development of countries using GNI per capita, life expectancy and average years of schooling.

C) Factors that hinder development

Human	Physical
uneven distribution of income	challenging relief
corruption	extreme climate
conflict	lack of natural resources
low-value goods and services for trade	landlocked
high levels of debt	tectonic hazards
poor education systems	extreme weather
poor healthcare systems	lack of water resources



D and E) Development Projects

D) Top-down project: The Grand Inga Dam DRC

Advantages	Disadvantages
It provides a reliable source of renewable energy for the DRC.	It would flood 22,000 hectares of land in the Bundi Valley.
It provides electricity for Kinshasa at a lost cost.	Natural habitats will be destroyed by the reservoir.
It produces electricity that the DRC can sell the other countries.	35,000 people would be displaced from their homes by the dam reservoir.
It produces electricity to power more coltan and copper mines.	Electricity will be sold to other countries, and many people in rural DRC will still be without electricity.

E) Bottom-up project: WECAN DRC

Advantages	Disadvantages
It protects the habitats of 100,000 species of animals and plants.	It is small scale, so it has limited reach.
It empowers indigenous women.	It does not stop illegal logging.
Women earn money from selling fruit and herbs from the trees planted.	The project currently supports only 700 women.
It reduces the impact of climate change through reforestation.	It takes a long time for the full benefits to be achieved.



7.03: Development

Background

- Across the world, the standard of living and quality of life can be very different.
- A Countries therefore have different classifications based on the quality of life within them.
- B How developed a country is can be measured in different ways.
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A) Country classification

- 1 developed
- 2 emerging
- 3 developing

B) Measuring development

- 1 GNI per capita
- 2 infant mortality rate
- 3 life expectancy
- 4 literacy rate
- 5 average years of schooling
- 6 Human Development Index (HDI)

C) Factors that hinder development

Human	Physical



D and E) Development Projects

D) Top-down project: The Grand Inga Dam DRC

Advantages	Disadvantages

E) Bottom-up project: WECAN DRC

Advantages	Disadvantages



Year 7 History : The Norman Conquest

What we are learning this term:

The crisis of succession for Edward the Confessor following his death and the competition for the Throne. A focus on the Battle of Stamford Bridge and Hastings

A.	Can you define these key words?
Migration	The movement of people from one place to another
Invade	To enter a place an area by force and take control
Succession	The order of taking over and official title or position
Inherit	To receive something from a person who has died
Claimant	A person who believes they have a right to something
Oath	A promise witnessed by God
Illegitimate	A child born to parents who are not married
Conquer	To take control of people or a place by force
Cavalry	A group of soldiers who fight on horses
Archer	A soldier who's main weapon is a bow and arrow
Infantry	A soldier who fights on foot
Coronation	A ceremony in which a new monarch is crowned
Motte and Bailey Castle	A simple castle with a man made hill surrounded by a clear defensive area.
Harrying	To repeatedly attack something
Feudal System	System where someone who holds land gives land in exchange for support
Primogeniture	Being the first born
Source	Something that people made or wrote during the time of study
Interpretation	An opinion about what the past was like

B. Themes and threads

1. Power	2. Identity	3. Connectivity
- The control a person or group has on a country. - For example, the monarchs held complete control and needed a clear line of succession to avoid a foreign claim to the throne. - This includes threads such as succession, warfare, protest, and class system.	- The qualities and characteristics that make a person who they are and what they value as important. - For example, the Normans promoted Christianity in Europe - This includes threads such as women, and beliefs.	- The act of being joined or being linked to somewhere, something, or someone. - For example, England was made of up of many diverse groups who migrated before 1066. - This includes threads such as migration and medicine.

5th January 1066

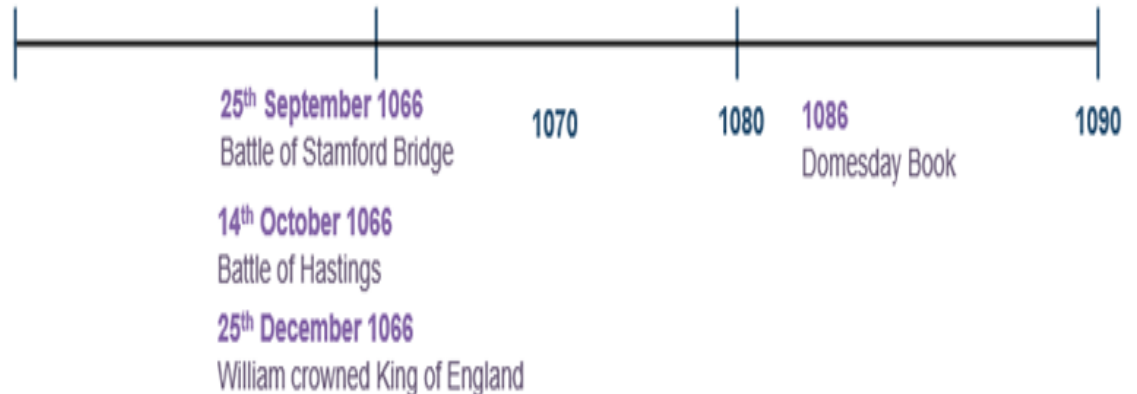
Death of Edward the Confessor

6th January 1066

Harold Godwinson crowned King of England

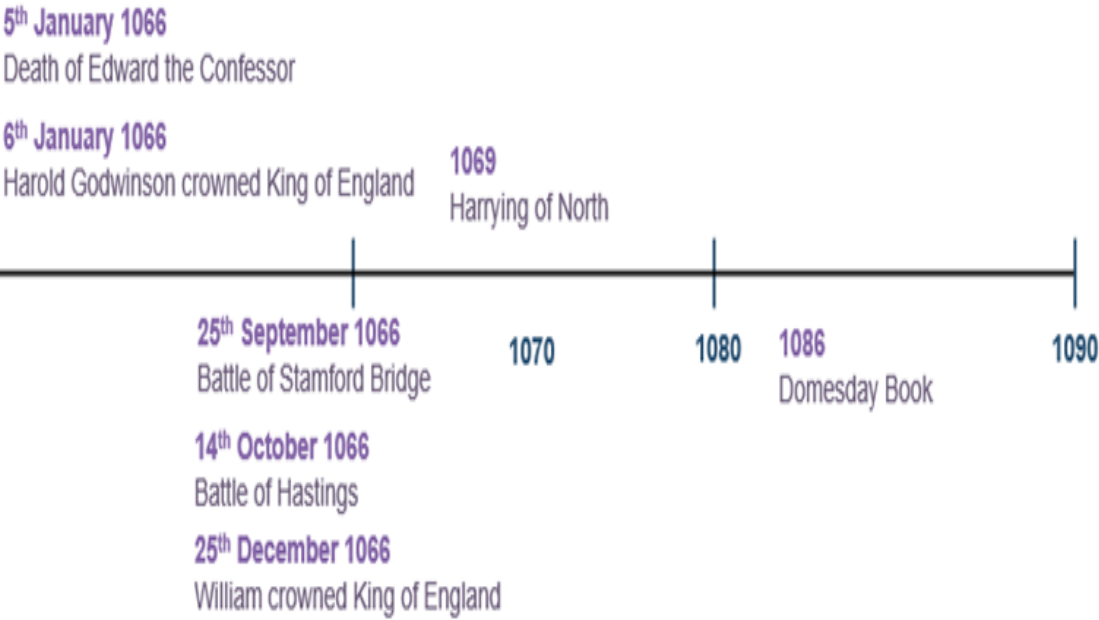
1069

Harrying of North



Year 7 History : The Norman Conquest	
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Cavalry	
Archer	
Infantry	
Coronation	
Motte and Bailey Castle	
Harrying	
Feudal System	
Primogeniture	
Source	
Interpretation	

B. Themes and threads		
1. Power	2. Identity	3. Connectivity



7.03: Judaism



Key Vocabulary

1	Abraham	The founder of Judaism and husband of Sara.
2	Covenant	An agreement between two sides (between humans and God).
3	Sara	Female leader, mother of nations and wife of Abraham.
4	Isaac	The son of Abraham and Sara.
5	Moses	Leader who freed the Israelites from slavery and was given the 10 commandments.
6	Miriam	Prophetess who helped her brother Moses lead the Israelites out of slavery.
7	Exodus	A book in the Bible which tells the story of the Israelites being freed from slavery.
8	Ten Commandments	Ten rules given to Moses by God about how humans should behave.
9	Esther	A Jewish queen who saved her people from a plot to destroy them.
10	Monotheism	The belief that there is only one God.
11	Shema	An important prayer, declaring the oneness of God.
12	Messiah	A future Jewish king who is expected to bring peace.
13	Genesis	A book in the Bible which describes the creation of the world.
14	Mitzvot	613 rules in the Torah which guide Jews in their behaviour.
15	Tikkun Olam	“Repairing the world”, encouraging actions that improve society and bring justice.
16	Synagogue	A Jewish place of worship, study and community.
17	Bar/Bat Mitzvah	Coming of age ceremony (Bar Mitzvah for boys and Bat Mitzvah for girls).
18	Pesach/Passover	A Jewish holiday which commemorates the Exodus story.
19	Shabbat	A day of rest and worship observed from Friday evening to Saturday evening.
20	Orthodox	A branch of Judaism that follows traditional beliefs, laws and practices.
21	Reform	A branch of Judaism that adapts traditional beliefs, laws and practices to fit modern life.
22	Prophecy	A message given to humans from God, usually to a prophet.

Holy Books introduced

The Tanakh	Hebrew Bible, which includes three parts: the Torah, Nevi'im and Ketuvim.
The Torah	Holiest scripture for Judaism. The word means “law” in Hebrew. Written by Moses. Also important in Christianity and Islam.
Nevi'im	Contains books of the Prophets, which tell the history of Israel God’s messages through the prophets.
Ketuvim	Contains various writings, including poetry, wisdom literature and historical accounts.
Talmud	Contains discussions and interpretations of the Torah, which guides Jewish law and practice.

Tools for Studying Religion

Theology is the study of God and ideas about God. Theologians look at how ideas about God influence beliefs in religions and the actions people will do.



Social Scientists use evidence to see how people are influenced by society. Social Scientists look at patterns in what people believe about God and how this may change due to time and place.



7.03: Judaism



Key Vocabulary

1	Abraham	
2	Covenant	
3	Sara	
4	Isaac	
5	Moses	
6	Miriam	
7	Exodus	
8	Ten Commandments	
9	Esther	
10	Monotheism	
11	Shema	
12	Messiah	
13	Genesis	
14	Mitzvot	
15	Tikkun Olam	
16	Synagogue	
17	Bar/Bat Mitzvah	
18	Pesach/Passover	
19	Shabbat	
20	Orthodox	
21	Reform	
22	Prophecy	

Holy Books introduced

The Tanakh	
The Torah	
Nevi'im	
Ketuvim	
Talmud	

Tools for Studying Religion





What we are learning this term:		C. ¿Qué color es? What colour is it?		Key Verbs						
A. School subjects and adjectives B. Opinions of school subjects C. Describing the school day D. Key words across topics E. Telling the time F. Daily Routine G. Translation practice		<u>Los colores</u> amarillo/a atigrado/a azul blanco/a dorado/a gris marrón negro/a rojo/a verde dorados/as marrones negros/as	<u>Colours</u> yellow tabby blue white gold grey brown black red green gold brown black	<u>Ser</u> To be	<u>estudiar</u> To study	<u>Pensar</u> To think	<u>Escribir</u> To write	<u>Vivir</u> To live		
6 Key Words for this term				Soy I am	Estudio I study	Pienso I think	Escribo I write	Vivo I live		
				Eres You are	Estudias You study	Piensas You think	Escribes You write	Vives You live		
				Es s/he is	Estudia He/she studies	Piensa s/he thinks	Escribe s/he writes	Vive s/he lives		
				Somos We are	Estudiamos We study	Pensamos We think	Escribimos We write	Vivimos We live		
				son They are	Estudian They study	Piensan They think	Escriben They write	viven They live		
A. Key Opinions		D. Las Instalaciones - Facilities		E. Describe tus asignaturas		F. La hora – Telling the Time				
Me gusta Me encanta Odio porque divertido/a aburrido/a útil inútil cómodo/a interesante entretenido/a emocionante guay genial soso asqueroso/a malo bueno	I like I love I hate because... fun boring useful pointless comfortable interesting entertaining exciting cool amazing dull disgusting bad good	el aula la biblioteca el patio los laboratorios el salón de actos el despacho de la directora un campo de fútbol un comedor un gimnasio una piscina unas clases hay no hay tiene no tiene en mi instituto alumnos mixto el salón de los profesores	the classroom the library the patio the laboratories the hall the Head's office the football pitch the dining room the gym the pool some classes there is / there are there isn't it has it doesn't have in my school students mixed the staffroom	el inglés las matemáticas la música la religión la tecnología Odio ... Detesto ... Mi asignatura favorita Pienso que ... (los profesores) son aburrido/a/ bueno/a/buenos/as divertido/a/ difícil/es fácil/es interesante/s relajante/s simpático/a/os/as –	English Maths Music R.E. design technology I hate ... I detest ... favourite subject I think that ... (the teachers) are aburrido/a/ good fun difficult easy interesting relaxing nice	Es la Son las y media y cuarto menos cuarto uno dos tres cuatro cinco seis siete ocho nueve diez once doce trece catorce quince dieciséis diecisiete dieciocho diecinueve veinte veintiuno veintidos veintitres veinticuatro ¿Qué hora es? la hora El reloj	It is... It is...(plural) half past quarter past quarter to one two three four five six seven eight nine ten eleven twelve thirteen fourteen fifteen sixteen seventeen eighteen nineteen twenty twenty one twenty two twenty three twenty four What time is it? the hour / time The clock			
B. Key verbs across topics		E. Describe tus asignaturas?		lunes martes miércoles jueves viernes sábado domingo		Monday Tuesday Wednesday Thursday Friday Saturday Sunday				
tener ser ir hacer jugar ver escuchar comprar vivir hablar deber querer visitar escribir	to have to be to go to do/to make to play to see to listen to buy to live to speak to have to to want / to love to visit to write	<u>Las asignaturas</u> las ciencias la educación física el español el francés la geografía la historia la informática	<u>School subjects</u> Science P.E. Spanish French Geography History ICT	empezar terminar La hora de comer		To start To finish The lunch hour				



G. Translation Practice	
I study Spanish	E e
I don't study French	N e f
What do you study?	¿Q e?
Music is interesting	M e i
I like my teacher	M g m p
I hate my teacher	O m p
I think that science is difficult	P q l c s d
Do you like maths?	¿T g l m?
RE is useful	L r e u
PE is boring	L e f e a
The Maths are difficult	L m s d
English is easy	E l e f
Spanish is fun	E e e d
History is boring but easy	L h e a p f
My subject favourite is Spanish	M a f e e
Because the teachers are interesting	P l p s l
I like science because they are interesting and nice	M g l c p s l y s
But I prefer maths because they are fun and relaxing	P p l m p s d y r

H . Key Questions: Answer the following in your own words. Use these model answers	
¿Qué estudias en el colegio?	Estudio muchas asignaturas. Estudio el español, el inglés, las matemáticas, las ciencias y mucho más. ¿Y tú? ¿Qué estudias?
¿A qué hora estudias el español?	Normalmente estudio el español los lunes y miércoles. Las clases de español empiezan a las nueve y media y duran una hora. Me gustaría estudiar español todos los días porque es un idioma muy útil y muy importante.
¿Qué asignaturas te gustan y no te gustan? What subjects do you like/dislike	Me encantan las ciencias porque son fenomenales pero no me gustan las matemáticas porque son difíciles y aburridas. Pienso que prefiero la cocina porque me encanta comer.
¿Cómo es tu colegio? Describe your school	Mi colegio es bastante grande y muy moderno. Las clases empiezan a las ocho y veinte y terminan a las cuatro menos veinticinco. Tenemos una cantina, una sala de informática, un patio. Pienso que me gusta mi colegio porque es moderno y divertido

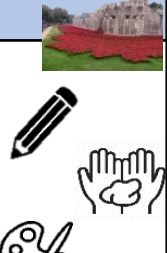
I. Key Questions: Translate these model answers using the KO	
¿Qué estudias en el colegio? What do you study at school?	I study a lot of interesting subjects. I study English, Maths, Science and RE. I also study PE, Music and Geography. What about you? What subjects do you study?
¿A qué hora estudias el español? At what time do you study Spanish?	I study Spanish Thursdays and Friday at 10.30 in the morning. The classes last an hour. I would like to study Spanish all day because it's a fantastic subject and very interesting.
¿Qué asignaturas te gustan y no te gustan? What subjects do you like/dislike	I love maths because it's fun but I don't like art because it's boring. I love Spanish because the teacher is fun but I hate PE because it's not exciting and I think that it's not relaxing.
¿Cómo es tu colegio? Describe your school	My school is quite modern and very big. The classes start at 8.30 and finish at 4. We have a canteen, lots of maths rooms, science rooms and computer suites

J. Key Grammar	
Words for THE and A	The = el or la or los or las – depending on if it's masculine/feminine/plural A = un or una – if it's masculine or feminine
Using the verbs "to be" and "to have" correctly	Tengo = I have (you just need one word in Spanish not 2 like in English) but remember each person needs a different word <i>eg he has = tiene, we have = tenemos</i>
Adjective placement Adjective agreement	Remember adjectives go after the noun Remember adjectives have to agree with the noun in number and gender Eg ojos azules –eyes blues, pelo negro - black hair
Use porque to describe your opinions Use singular and plurals correctly	Me gusta el inglés porque es fácil BUT Me gusta N las matematicas porque SON facil ES



What we are learning this term:		C. ¿Qué color es? What colour is it?		Key Verbs									
A. School subjects and adjectives B. Opinions of school subjects C. Describing the school day D. Key words across topics E. Telling the time F. Daily Routine G. Translation practice		Los colores _____ azul blanco/a _____ gris _____ negro/a _____ verde _____ marrones _____		Colours yellow tabby _____ gold _____ brown _____ red _____ gold _____ black		Ser To be	estudiar To study	Pensar To think	Escribir To write	Vivir To live			
6 Key Words for this term						Soy _____	Estudio _____	Pienso I _____	Escribo _____	Vivo I live			
1. estudiar 2. asignaturas 3. Pienso que...		4. el horario 5. las instalaciones 6. profesor(a)				Eres You are	Estudias _____	Piensas _____	Escribes You write	Vives You live			
						Es s/he is	Estudia _____	Piensa _____	Escribe s/he writes	Vive _____			
						Somos We are	Estudiamos _____	Pensamos We think	Escribimos We write	Vivimos We live			
						son They are	Estudian _____	Piensan They think	Escriben _____	viven _____			
A. Key Opinions		D. Las Instalaciones - Facilities		E. Describe tus asignaturas			F. La hora – Telling the Time						
Me gusta Me encanta _____ divertido/a _____ útil _____ i _____ emocionante guay genial _____ asqueroso/a malo bueno		_____ I hate because... _____ boring _____ pointless comfortable interesting entertaining _____ dull _____ _____		los laboratorios el salón de actos el despacho de la directora _____ _____ _____ hay no hay tiene no tiene _____ _____ _____ _____		the classroom the library the patio _____ _____ _____ the football pitch the dining room the gym the pool some classes _____ _____ _____ in my school students mixed the staffroom _____ _____ _____		_____ _____ _____ _____ _____ Odio ... Detesto ... Mi asignatura favorita Pienso que ... (los profesores) son aburrido/a/ _____ _____ _____ interesante/s relajante/s _____ _____ _____ jueves viernes sábado domingo _____ _____ _____		English Maths Music R.E. design technology _____ _____ _____ good fun difficult easy interesting _____ nice _____ Monday Tuesday Wednesday _____ _____ _____ To start To finish The lunch hour		Es la Son las _____ half past quarter past quarter to _____ uno dos tres cuatro cinco seis _____ seven eight nine ten _____ fourteen fifteen sixteen seventeen _____ dieciocho diecinueve veinte veintiuno veintidos veintitres Veinticuatro _____ twenty four What time is it? the hour / time The clock	
B. Key verbs across topics				E. Describe tus asignaturas?									
_____ ir hacer jugar _____ _____ vivir hablar deber querer _____ _____		to have to be _____ _____ to see to listen to buy _____ _____ to visit to write		Las asignaturas _____ _____ _____ la geografía la historia la informática		School subjects Science P.E. Spanish French _____ _____ _____							

ART Year 7 Term 1:Topic = Remembrance Poppies

What we are learning this term:	
A. About Paul Cummins installation 'Blood Swept Lands and Seas of Red'	
B. How to use the Grid method for accurate drawing	
C. Using clay to create a ceramic poppy – slab method for accurate drawing	
D. Using poster paint to decorate your sculpture	

6 Key Words for this term

1. Remembrance
2. Sculpture
3. Installation
4. Decoration
5. Line
6. Ceramic

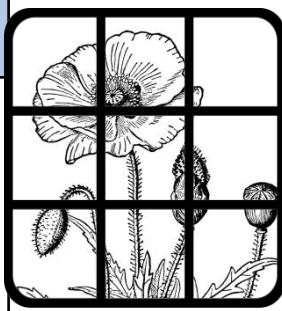


A.	About Paul Cummins and his installation 'Blood Swept Lands and Seas of Red'
What?	He installed 888000 clay poppies at the Tower of London in 2014 covering 16 acres
Why?	Each one represented a service/man woman who died during WW1 (1914-18)
How?	Each one was made by hand using clay, fired in the kiln and painted before going on display



B. How to use the Grid Method for accurate drawing

- 1) Use a ruler to draw an equally spaced grid onto your image
- 2) Draw an identical grid **LIGHTLY** onto paper
- 3) Draw in the main **outlines** of your image, focusing on one square at a time Use a ruler to help you **measure** the positioning of lines if needed
- 4) Add main details before erasing the grid on the paper
- 5) Add fine **details** and build in **tone**



C. Using clay to create a ceramic poppy using the slab method

Clay is a **material** used by artists. It is made from minerals. It is found underground. There are many different types of clay.

Steps for making your poppy:

1. Roll out the clay using a rolling pin, wooden board and slats
2. Use a template or a cutter to cut the poppy shapes
3. Join piece using **score and slip**
4. Decorate the clay using **additive** and **subtractive** techniques
5. Fire the **sculpture** in the **kiln**
6. **Decorate** the ceramic sculpture using poster paint

What each tool is used for:

Rolling pin	Rolling the clay out into a slab
Wooden board	Stops the clay sticking and minimises dust
slats	Stops the clay being rolled too thin

States of working with clay

Plastic	Very flexible, high moisture content, easy to shape
Leather-hard	Partially dried out, can still be carved but no longer shaped
Bone dry	No moisture. Can't be altered
Bisque fired ceramic	After first firing (lower temperature), waterproof After second firing (higher temperature). Delicate



G. Key words and definitions

Remembrance		the action of remembering the dead.	
Sculpture		A 3dimensional artwork	
Installation		Placing a particular artwork in a specific place	
Decorate		To make something more appealing or visually attractive	
Line		A continuous mark with width, length and direction	
Ceramic		made of clay and permanently hardened by heat.	
Detail		The small parts of something	
Accuracy		How similar a drawing is to the source	
Source		What you are drawing or working from	
Construct		To build	
Score and slip		Method for joining clay	
Kiln		The oven used to fire the clay	
composition		How the elements of an artwork are arranged	
outline		the outer edge or line	

What we are learning this term:	
A. About Paul Cummins installation 'Blood Swept Lands and Seas of Red'	
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6 Key Words for this term
1. Remembrance
2. Sculpture
3. Installation
4. Decoration
5. Line
6. Ceramic



A.	About Paul Cummins and his installation 'Blood Swept Lands and Seas of Red'
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How?	Each one was made by hand using clay, fired in the kiln and painted before going on display



B.	What are the stages of drawing using the grid method?
----	---



C.	Using clay to create a ceramic poppy using the slab method
----	--

Clay is a **material** used by artists. It is made from minerals. It is found underground. There are many different types of clay.

Explain the steps for making your poppy including materials and techniques

- 1
- 2
- 3
- 4
- 5
- 6

Explain what each tool is used for:

Rolling pin	
Wooden board	
slats	

What are each of the States of working with clay

Plastic	
Leather-hard	
Bone dry	
Bisque fired ceramic	



G.	Add definitions for the key words	
Remembrance		
Sculpture		
Installation		
Decorate		
Line		
Ceramic		
Detail		
Accuracy		
Source		
Construct		
Score and slip		
Kiln		
composition		
outline		

YEAR 7 GRAPHIC COMMUNICATION

What are we learning this term?

A Personification	B Typography	C Computer skills	D Key words	E Evaluation
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A | Personification

What is personification?

Personification makes sentences more exciting by:

- describing objects as if they are *people*
- describing objects as if they have *feelings*



How does Paul Thurlby use personification?

Paul Thurlby personifies his letters by giving the turning the letters that he works with into characteristics so that you can clearly see an emotion.

B | Draw the letter A in the following font styles. Write the description of the font style too.

Serif: Serif is a traditional style font. It usually has flicks on the end of each letter.	A
Sans Serif: Sans serif fonts are modern in style; Sans serif fonts good for large pieces of text.	A
Script: Script font often resembles everyday handwriting.	A
Decorative: decorative fonts are unique in style and have an artistic flair. They are often hard to read.	A

C | Computer skills

What is the shortcut for copy?

Ctrl + C

What is the shortcut for paste?

Ctrl + V

What does this symbol stand for?



Photoshop

What does this symbol mean?



Cropping

D | Key words

Graphics	Visual images or designs on a surface which communicate a message such as a brand advertisement or logo.
Typography	The arrangement of type to make written language legible.
Font	The term 'font' refers to a specific style of typeface such as its size and weight, it can come in regular, bold or <i>italic</i> .
Photoshop	A software for editing photos and graphics. It is used for image editing, making illustrations or web design.

E | Evaluation

Evaluation: To judge or give an opinion

Designers will evaluate their products to see what works well and what doesn't. This way they can make any improvements on their current designs to ensure a high-quality product.

When writing an evaluation it is important to include the following three things:

1. Positives – what works well
2. Negatives – what doesn't work well
3. Possible improvements – how could you make it better?

For example:

My word sticker looks great, the colours are bright which appeals to the audience. However, some of the letters are hard to read. One improvement I could make is to simplify the personification on some of the letters to make the final word clearer and easier to read.

YEAR 7 GRAPHIC COMMUNICATION

What are we learning this term?

A Personification

B
Typography

C
Computer skills

D
Key words

E
Evaluation

A | Personification

What is personification?



How does Paul Thurlby use personification?

B | Draw the letter A in the following font styles. Write the description of the font style too.

Serif:

Sans Serif:

Script:

Decorative:

C | Computer skills

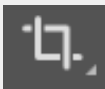
What is the shortcut for copy?

What is the shortcut for paste?

What does this symbol stand for?



What does this symbol mean?



D | Key words

Graphics

Typography

Font

Photoshop

E | Evaluation

Evaluation: To judge or give an opinion

When writing an evaluation it is important to include the following three things:

1. Positives – what works well
2. Negatives – what doesn't work well
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Year 7 PRODUCT DESIGN Rotation Knowledge Organiser



What we are learning this term:				
A. Workshop Tools	B. Materials	C. Modelling	D. Key Words	E. Evaluating Work

A.	Workshop Tools						
Steel Rule	Wooden Vice	Clamp	Bench Hook	Tenon Saw	Pillar Drill	Bandfacer	
							

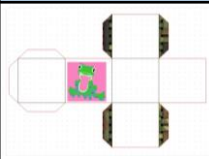
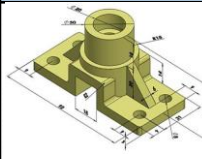
B.	Materials
Timbers come from trees	
	Scots pine – which you used for your maze frame – is a softwood Softwoods come in planks and boards

Manufactured Boards come from wood pulp	
	Plywood – which you used as your base, insert and maze walls – is a manufactured board Manufactured Boards come in sheets

Polymers come from crude oil	
	Acrylic – which you used as your lid for your maze – is a polymer Polymers come in sheets, graduals and filament

C.	Modelling
Creating a 3D representation of your product before you manufacture it.	

You can use a variety of different materials and computer programs to create a mock up model or prototype such as;

		
Cardboard	Foamboard	Scrap Wood
		
3D Printing	2D Design	Solidworks

Modelling is used to test a product before manufacture, to see what works and what doesn't.

Advantages	Disadvantages
Allows a designer to physically handle or view from all sides	Can be time-consuming and complicated
Changes can be made quickly and easily	Testing can be unreliable as they don't use the same materials as the end product

D.	Key Words
Specification 	A specific list of things that your product should be or do.
Modelling 	A way of making a 3D representations of your proposed design. To see what went well and how it can be improved.
Sustainable 	Limited negative impact on the environment.
Manufacture 	Making a product using tools and machinery.

E.	Evaluation of Products
----	------------------------

Evaluate 	To judge and give an opinion.
--	-------------------------------

Designers will evaluate their products to see what works well and what doesn't. This way they can make any improvements on their current designs to ensure a high-quality product.

When writing an evaluation it is important to include the following three things:

1. Positives – what works well
2. Negatives – what doesn't work well
3. Possible improvements – how could you make it better?

For example:

My maze looks really fun and challenging to play. However, when tested the model version of my game, it was too difficult to complete. One improvement I could make is by taking away some of the traps or moving some of the walls around, so that it is more fun to play.



Year 7 PRODUCT DESIGN Rotation Knowledge Organiser



What we are learning this term:

A. Workshop Tools B. Materials C. Modelling D. Data Analysis & Evaluation

A. Workshop Tools



B. Materials

Timbers come from _____



Scots pine – which you used for your maze frame – is a **softwood**

Softwoods come in _____ and _____

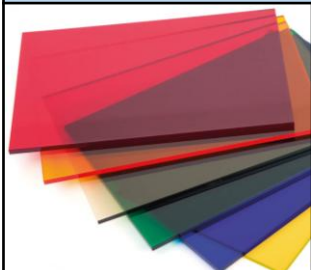
Manufactured Boards come from _____



Plywood – which you used as your base, insert and maze walls – is a **manufactured board**

Manufactured Boards come in _____

Polymers come from _____



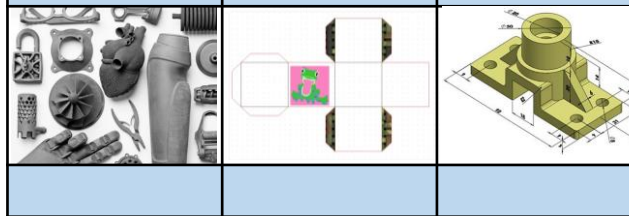
Acrylic – which you used as your lid for your maze – is a **polymer**

Polymers come in _____, _____ and _____

C. Modelling

Creating a _____ before you manufacture it.

You can use a variety of different materials and computer programs to create a mock up model or _____ such as;



Modelling is used to _____ before manufacture, to see what works and what doesn't.

Advantages

--

--

Disadvantages

--

--

D. Key Words

Specification



--

Modelling



--

Sustainable



--

Manufacture



--

E. Evaluation of Products

Evaluate



--

Think back to your completed handheld maze hand game. Evaluate one positive aspect of it, one negative aspect of it and an improvement you would like to have made if you had time.

--

Possible sentence starters:

- One thing that was successful.....
- One thing that I had issues with was.....
- If I had more time, I could improve this by.....

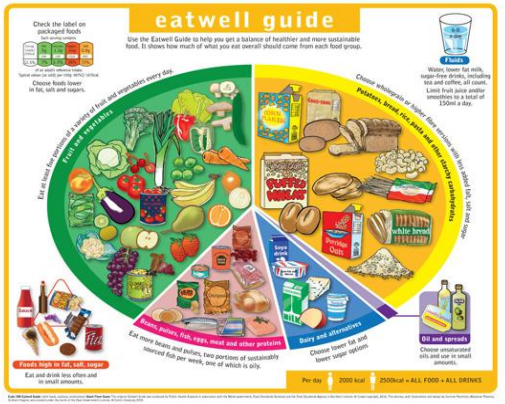
What we are learning this term:

- A. Health, safety and hygiene in the kitchen
- B. The Eatwell guide and nutrients
- C. Design Ideas
- D. Weighing
- E. Practical skills
- F. Evaluation Work

6 Key Words for this term

- 1 Hygiene
- 2 Health
- 3 Food Poisoning
- 4 Cuisine
- 5 Sensory Analysis
- 6 Preparation

A.	What are the three main nutrients required in the diet?
Carbohydrates	Foods that are eaten to give the body energy
Protein	Food that are eaten to build and repair muscles and cells
Fats	Food that are eaten to protect your vital organs and insulate your body



Year 7 Term 1 : Topic = Healthy Eating and High Skills

B. What are the 5 different sections of the Eatwell plate?

- 1 Fruit and Vegetables
- 2 Carbohydrates
- 3 Protein
- 4 Dairy
- 5 Fats and Oils



A. What nutritional foods are in the top picture? Can you list 5 of the food that you can see?

In this photo you can see a number of **protein** foods. Protein helps our muscles and cells to grow and repair. Some examples in this photo include:

- 1. Chicken
- 2. Eggs
- 3. Nuts
- 4. Cheese
- 5. Salmon

B. What nutritional foods are in the bottom picture? Can you list 5 of the food that you can see?

In this photo you can see a number of **carbohydrate** foods. Carbohydrates give out body energy. Some examples in this photo include:

- 1. Bread
- 2. Pasta
- 3. Rice
- 4. Potatoes
- 5. Bananas

C. Can you list 5 health, safety and hygiene rules and explain the importance of them?

Rule	Why it is important
1 Wash your hands in hot soapy water	1 to kills germs and bacteria
2 tie back your hair	2 to stop hair getting into the food
3 wear an apron	3 to protect yourself and your food from contamination
4 use oven gloves when handling hot food	4 to avoid burning yourself
5 wash your hands after handling meat	5 to avoid giving yourself or others food poisoning

E.	Keywords
Hygiene	A method of keeping yourself and equipment clean
Research	Information that you find out to help you with a project
Cuisine	Food from a different country
Target Market	The age or type of person you are creating a product for.
Carbohydrates	Foods that give you energy
Protein	Food that grow and repair your muscles
Fibre	Foods that keep your digestive system healthy and avoid constipation.
Calcium	Foods that make your teeth and bones strong
Design Idea	A sketch or plan of how you are hoping a project to turn out.
Organisation	Having everything ready for a lesson and following instructions
Time keeping	Using the time to remain organised.
Sensory analysis	Use your senses to taste and describe a product
Mood Board	A collage of photos and key words based on a project

What we are learning this term:
A. Health, safety and hygiene in the kitchen
B. The Eatwell guide and nutrients
C. Design Ideas
D. Weighing
E. Practical skills
F. Evaluation Work

Year 7 Term 1 : Topic = Healthy Eating and High Skills

B.	What are the 5 different sections of the Eatwell plate?
1	
2	
3	
4	
5	

E.	Keywords
Hygiene	
Research	
Cuisine	
Target Market	
Carbohydrates	
Protein	
Fibre	
Calcium	
Design Idea	
Organisation	
Time keeping	
Sensory analysis	
Mood Board	

6 Key Words for this term	
1 Hygiene	4 Cuisine
2 Health	5 Sensory Analysis
3 Food Poisoning	6 Preparation

A.	What are the three main nutrients required in the diet?



A.	What nutritional foods are in the top picture? Can you list 5 of the food that you can see?
B.	What nutritional foods are in the bottom picture? Can you list 5 of the food that you can see?

C.	Can you list 5 health, safety and hygiene rules and explain the importance of them?
Rule	Why it is important
• 1	• 1
• 2	• 2
• 3	• 3
• 4	• 4
• 5	• 5



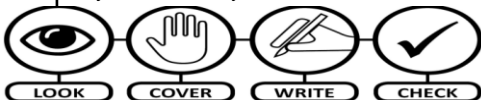


Year 7: Find Your Voice (Elements and Singing)

Term 2

A What we are learning about this term...

- 1 Elements of Music
- 2 Singing Technique
- 3 Using Graphic scores as notation
- 4 Singing with confidence
- 5 Major/ Minor tonality



C - Useful links: practice at home!

These QR codes will take you to YouTube to be able to sing along!

Disney Song
Sing Along! ----->



Check out this
vocal warm
up!

E - Major and Minor Tonality

Major and Minor mean **happy** or **sad sounding music** – or mood!
Check out the links below by scanning the QR codes to learn more and complete a major or minor quiz!



Game 1



Major/ Minor
Movie Quiz!

B Keywords

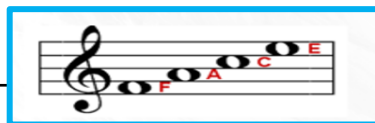
Thin Texture	Not many sounds/layers
Thick Texture	Many sounds/ layers
Round	singing/playing the same thing, starting at different times
Graphic Score	Where pictures and symbols are used instead of notes on the stave
Warm up	An important exercise for singers to prepare their voice for singing
Pulse	The steady beat in music
Rhythm	Combination of long and short notes to create interesting patterns
Octave	Distance of 8 notes (e.g. C to C)

D Treble Clef Notes and Octave

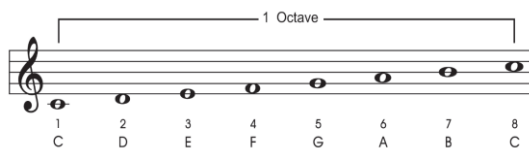
Every Good Boy Deserves Football



Every Good Boy Deserves Football



...in the space!



F Basic Rhythm Values in 4/4 time

	Beat 1	Beat 2	Beat 3	Beat 4
Technical name SEMI BREVE (4 beats)				
Remember it... Hold for 4 beats				
Technical name Minim (2 beats)				
Remember it... L - ong				
Technical name Crotchet (1 beat)				
Remember it... tea				
Technical name Quavers (1/2 beat)				
Remember it... Cof - fee				

M

A

D

T

S

H

I

R

T

Melody

Articulation

Dynamics

Texture

Structure

Harmony/Tonality

Instruments

Rhythm

Tempo

The tune

How notes are played

Loud/quiet and any other volume changes

Layers of sound / how they fit together

The sections and organising

Chords used / the mood

Types of instruments heard

Pattern of notes

The speed

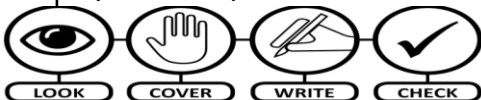


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These QR codes will take you to YouTube to be able to sing along!

Disney Song Sing Along! ----->



Check out this vocal warm up!

E - Major and Minor Tonality

What does Major and Minor Mean?

Major is _____

Minor is _____



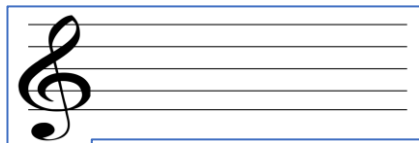
Game 1



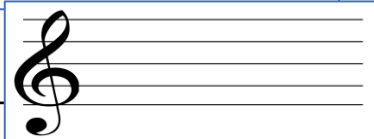
Major/ Minor Movie Quiz!

B Keywords

D Treble Clef Notes and Octave

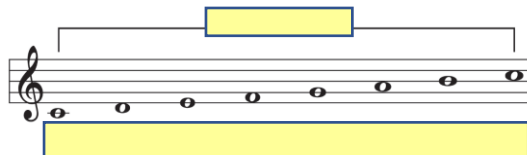


... Draw EGBDF on the lines!



... Draw FACE in the space!

Complete The gaps!



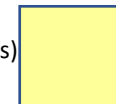
F

Practice your note drawing skills!

1. Draw the note TEA (crotchet)



2. Coffee (pair of quavers)



3. Now draw this rhythm in note values (TEA TEA COFFEE COFFEE)



4. COFFEE COFFEE COCACOLA TEA



F Describing Music - MAD T SHIRT

M

A

D

T

S

H

I

R

T

M _____

A _____

D _____

T _____

S _____

H _____/T _____

I _____

R _____

T _____



Year 7 Knowledge organiser Topic: Lights, Camera, Action!

What we are learning this term:

- You will develop your knowledge and understanding of key performance skills of drama.
- How to perform on different stage layouts
- Devise your own performance from a popular TV show creating new characters.

A- Key Words for this term

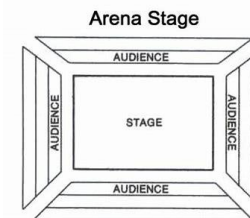
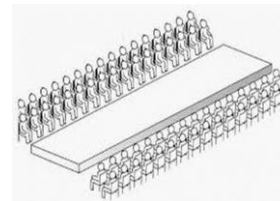
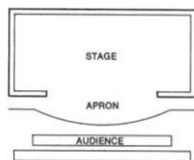
- Improvisation- create a scene without prior planning or a script.
- Characterisation – presentation of a fictional character using gesture, posture and stance.
- Body Language- The conscious and unconscious movements and postures by which attitudes and feelings are communicated
- Facial Expressions- How someone expresses their emotions using their face.
- Accent- The way you pronounce certain words, often showing where you are from.
- Tone- The emotion that you put into your voice.
- Blocking- Stopping the audience from being able to see / experience what is happening on stage
- Devising- Creation of an original performance in response to a stimulus.

C- Why is blocking important in drama?

It teaches the actors to be aware of where/what way they are standing on stage and make sure they are always in the audience's sightlines.

B Write the definition for these four stage layouts, where the entrances and exits happen and what (if any) set/scenery can be used.

- End On- Audience face one side of the stage. Numerous entrances and exits. Large scenery and set can be used.
- Thrust- Audience in front and around 3 sides. Entrances and exits happen on the main stage and through the audience. Set/Scenery on the main stage only.
- Traverse- The audience are around 2 sides. There are 2 entrances and exits. Set can be used but cannot be too high to obstruct sightlines of the audience.
- In The Round/Arena- The audience are on every side of the stage. There are entrances and exits around the audience. No large sets can be used.



C- Thinking questions.

- How am I showing my character?
- What is my body language?
- How is it different to my normal?
- What is my character feeling?
- Do my facial expressions match this?
- What is my posture like?
- How do I walk?
- What implications are there for blocking?
- What are the positives for each stage?
- What are the negatives for each stage?
- Which stage layout do you like the best? Why?



Year 7 Knowledge organiser Topic: Lights, Camera, Action!



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- You will develop your knowledge and understanding of key performance skills of drama.
- How to perform on different stage layouts
- Devise your own performance from a popular TV show creating new characters.

Key Words for this term

- Improvisation-
- C – presentation of a fictional character using gesture, posture and stance.
- B L - The conscious and unconscious movements and postures by which attitudes and feelings are communicated
- Facial Expressions-
- A - The way you pronounce certain words, often showing where you are from.
- T - The emotion that you put into your voice.
- Blocking-
- D - Creation of an original performance in response to a stimulus.

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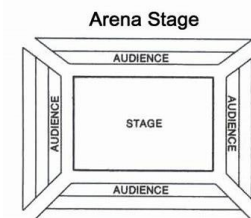
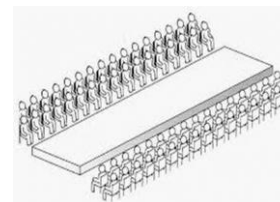
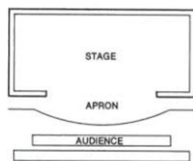
Write the definition for these four stage layouts, where the entrances and exits happen and what (if any) set/scenery can be used.

1 End On-

2 Thrust-

3 Traverse-

4 In The Round/Arena-



Thinking questions.

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SWINDON ACADEMY READING CANON

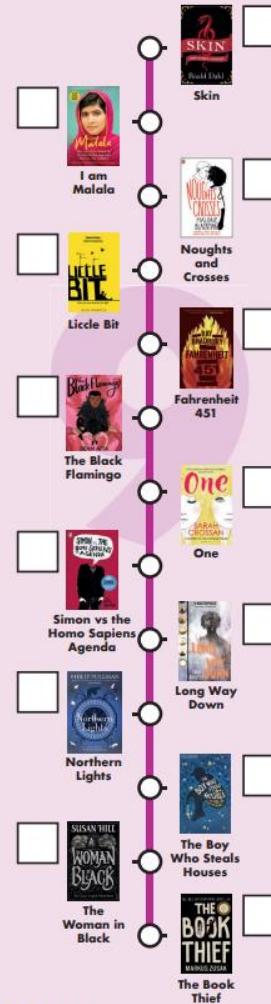
Year 7



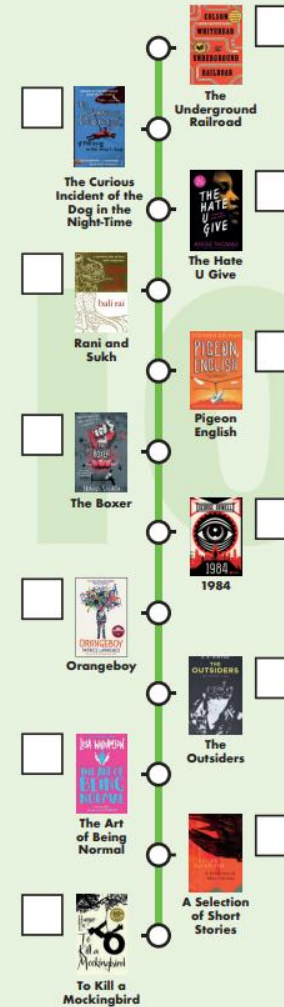
Year 8



Year 9



Year 10



#ReadingisPower