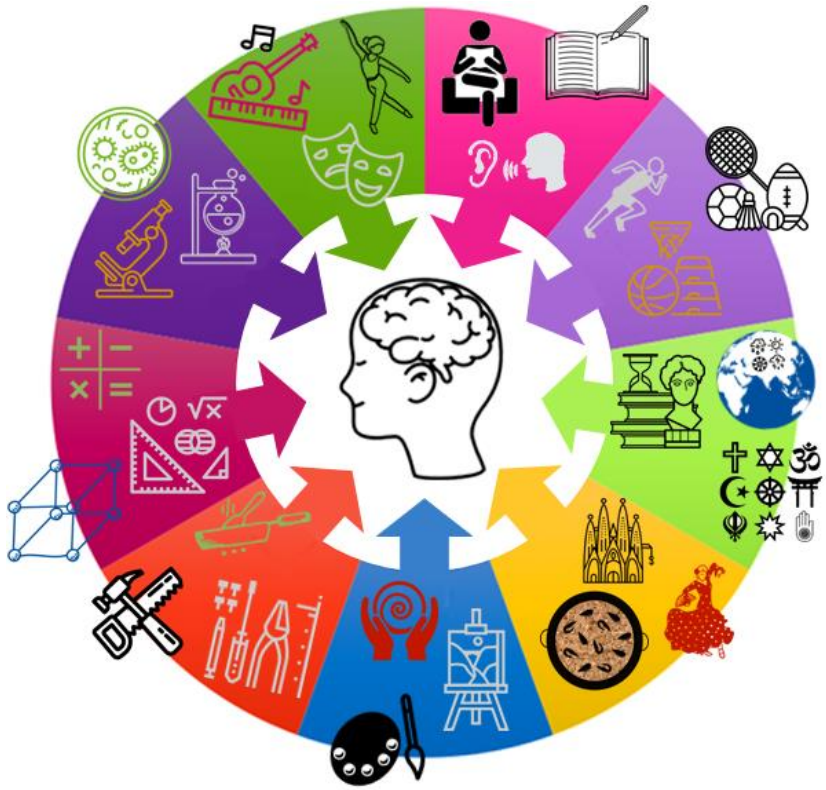
100% book - Year 9 Grammar

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



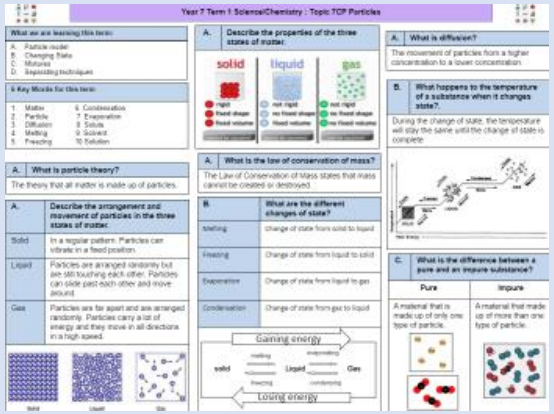
Term 4

Swindon Academy 2023-24	
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

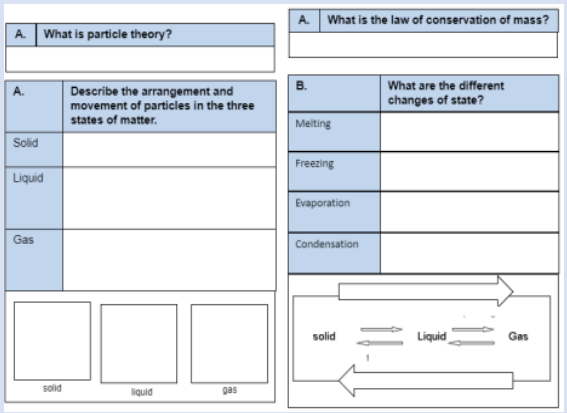
Knowledge Organisers



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!

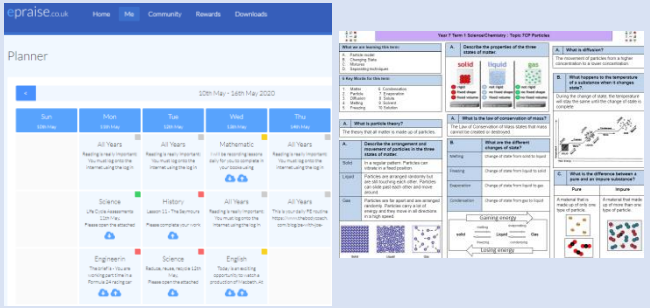
Expectations for Prep and for using your Knowledge Organisers

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?

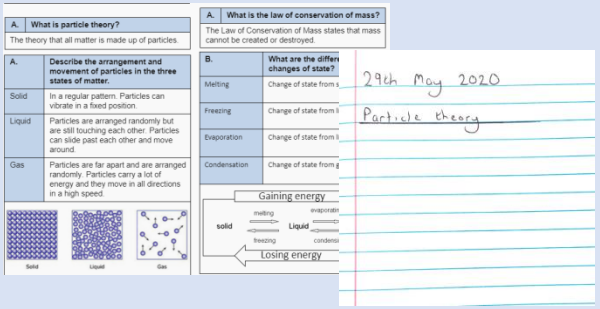
Step 1

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



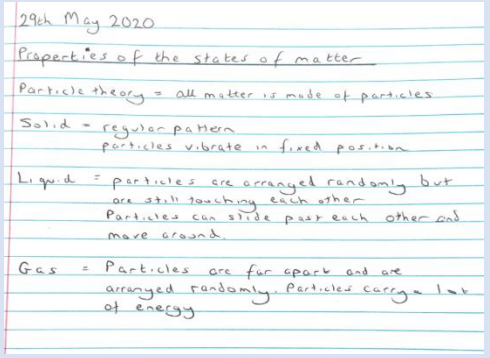
Step 2

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



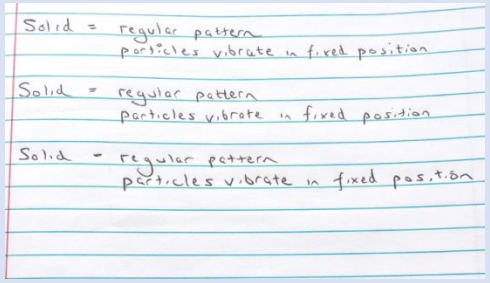
Step 3

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



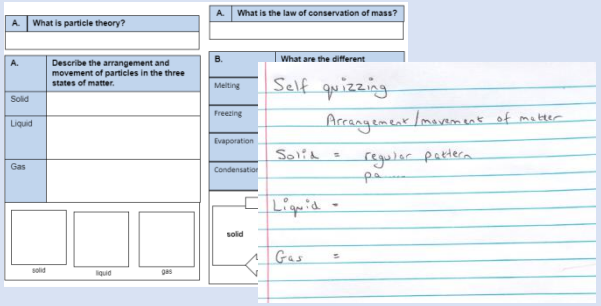
Step 4

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



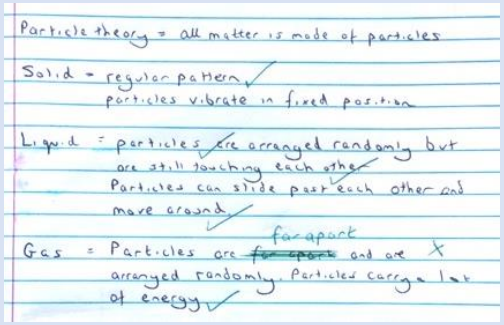
Step 5

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



Step 6

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



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

Comparative Poetry: G Knowledge Organiser

Poem Journey Type		
'Wherever I Hang' Grace Nichols	• Physical journey from Guyana to England • Spiritual reflection of the changes she has made in her viewpoints	1. 'I leave me people, me land, me home / For reasons I not too sure' 2. 'And de people pouring from de underground system / Like beans' 3. 'I don't know really where I belaang'
'The Night Mail' W. H. Auden	• The journey of letters across the country	1. 'This is the Night Mail crossing the border, / Bringing the cheque and the postal order' 2. 'All Scotland waits for her: / In the dark glens, beside the pale-green sea lochs / Men long for news' 3. 'For who can bear to feel himself forgotten?'
'Swing Low Sweet Chariot' Wallace Willis	• The journey of slaves to freedom • The journey of Christians to heaven	1. 'Swing low, sweet chariot, Coming for to carry me home' 2. 'Tell all my friends I'm coming too, Coming for to carry me home.' 3. 'But still my soul feels heavenly bound'
'The Canterbury Tales' Geoffrey Chaucer	• Pilgrimage to Canterbury • From the city to the countryside	1. 'pilgrims were they all / That toward Canterbury would ride' 2. 'When April with his showers sweet with fruit / The drought of March has pierced unto the root' 3. 'Of England they to Canterbury wend'
'Telling Tales' Patience Agbabi	• Pilgrimage to Canterbury • The journey of language evolving over time	1. 'On this Routemaster bus: get cerebral/Tabard Inn to Canterbury Cathedral' 2. from the grime to the clean-cut iambic,/rime royale, rant or rap, get your slam kick 3. 'Chaucer Tales, track by track, here's the remix'
'Paradise Lost' John Milton	• The journey of Satan to hell	1. 'Of Man's First Disobedience, and the Fruit / Of that Forbidden Tree' 2. 'Who first seduc'd them to that foul revolt?' 3. 'Him the Almighty Power / Hurld headlong flaming from th'Ethereal Skie'
'The Road Not Taken' Robert Frost	• Reflecting on the journey taken between two roads • The journey as a metaphor for a decision	1. 'I took the one less travelled by, / And that has made all the difference' 2. 'And both that morning equally lay' 3. 'I shall be telling this with a sigh / Somewhere ages and ages hence'
'My Father Thought It' Simon Armitage	• The journey of growing up	1. 'My father thought it bloody queer / the day I rolled home with a ring of silver in my ear' 2. 'the hole became a sore, became a wound, and wept' 3. 'At twenty-nine, it comes as no surprise to hear / my own voice breaking like a tear'
'Gap Year' Jackie Kay	• The journey of motherhood • The journey of a child growing up	1. 'I remember your Moses basket before you were born' 2. 'A flip and a skip ago, you were dreaming in your basket' 3. 'I have a son out in the big wide world'

Vocabulary: Key words

immigrant-: a person who moves to live in another country permanently. When **immigrants** travel to a new place, they **migrate.**
dialect: a form of language that is used in a specific area.
astrology: the study of the stars and how their movement affects earth. **Astrologers** study the stars.
remix: to change or improve something that already exists.
slang: very informal language used by particular groups of people. It is usually spoken rather than written.
domineering: trying to control others.
emulate: imitate
endeavour: to try hard or to achieve something
mendacious: lying

Terminology: Key words

comparative statement: These statements clearly explain what the poems have in common and how they are different
dramatic irony: When the audience is aware of something that a character is not.
discourse markers: A word or phrase that helps to organise communication
personification: a type of metaphor used by writers to make something seem like it is alive with a human personality.
epic: a long, narrative poem
Venn diagram: a diagram representing common elements represented by intersecting circles.

Historical Context:

Nichols is an immigrant who wrote about the Afro-Caribbean experience. She uses dialect in her poems and is influenced by the rhythmic nature of Caribbean language.
Willis was a slave in America. Many people hoped for death rather than live as a slave. For them, the promise of being taken to heaven after death would have given them hope.
Many people in the Medieval era believed astrology influenced many things like the weather, nature, personalities and hormones. Astrology was a respected science that was used alongside other medical theories.
A gap year is a year between leaving school and starting university or starting employment. Most people spend the year travelling or working.

Comparative Writing:

- Identify similarities and differences between poems.
- To see how different poets, with different backgrounds and interests, write about the same topic.
- To see how different writers use the same literary techniques.
- To see how views on topics have changed over time.
- To understand the individual poems better.

Comparative Poetry: G Knowledge Organiser

Poem Journey Type		
'Wherever I Hang' Grace _____	• _____ journey from Guyana to England • _____ reflection of the changes she has made in her _____	1. 'I leave me _____, me _____, me _____ / _____' 2. 'And _____/ Like _____' 3. 'I don't _____'
'The Night Mail' W. H. _____	• The journey of _____ across the country	1. 'This is the _____, / Bringing the _____ and the _____ _____' 2. 'All _____ _____ for her: / In the_____,beside _____/ Men _____ _____' 3. 'For who _____?'
'Swing Low Sweet Chariot' Wallace _____	• The journey of _____ to _____ • The journey of _____ to _____	1. 'Swing low, _____, Coming _____' 2. 'Tell _____, Coming for _____' 3. 'But still my soul _____'
'The Canterbury Tales' Geoffrey _____	• Pilgrimage to _____ • From the _____ to the _____	1. '_____ were they all / That _____' 2. 'When April _____ / The _____' 3. 'Of _____ wend'
'Telling Tales' Patience _____	• _____ to _____ • The journey of _____ evolving over _____	1. 'On _____:_____/ Tabard Inn _____' 2. from the grime _____,/rime _____' 3. 'Chaucer Tales, _____'
'Paradise Lost' John _____	• The journey of _____ to _____	1. 'Of Man's First _____, and the _____ / Of that _____ _____' 2. 'Who first _____?' 3. 'Him the _____ Power / Hurld _____'
'The Road Not Taken' Robert _____	• Reflecting on the journey taken between _____ _____ • The journey as a _____ for a _____	1. 'I took the one _____ _____ by, / And that has _____ all the _____' 2. 'And _____ that morning _____ _____' 3. 'I shall be _____ this with a _____ / Somewhere _____'
'My Father Thought It' Simon _____	• The journey of _____ _____	1. 'My father _____/ the day I _____' 2. 'the _____became a _____, became a _____, and _____' 3. 'At _____, it comes as no _____ to _____ / my own voice _____'
'Gap Year' Jackie _____	• The journey of _____ • The journey of a _____ _____ _____	1. 'I remember _____' 2. 'A _____ and a _____ ago, you _____' 3. 'I have a _____'

Vocabulary: Key words

immigrant-: a _____

dialect: _____

astrology: _____

remix: _____

slang: _____

domineering: _____

emulate: _____

endeavour: _____

mendacious: _____

Terminology: Key words

comparative statement: _____

dramatic irony: _____

discourse markers: _____

personification: _____

epic: _____

Venn diagram: _____

Historical Context:

Nichols is _____

Willis was a _____

Many people in the _____

A gap year is _____

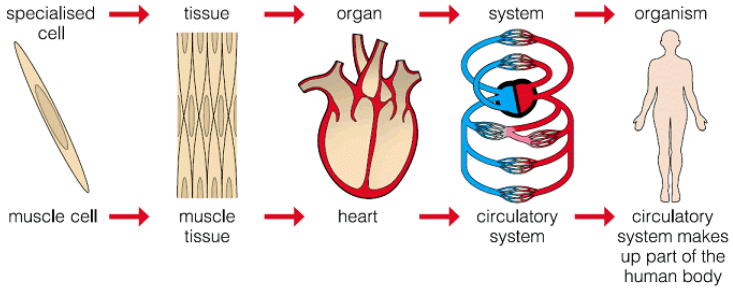
Comparative Writing:

- Identify _____.
- To see how
- To see how different
- To see how _____
- To _____

Year 9 Grammar Term 4 B2 – Organisation

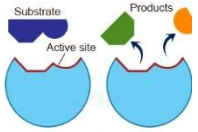
Levels of Organisation

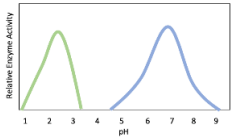
Cells = basic building blocks of all living organisms.
A tissue = group of cells with a similar structure and function.
Organs = aggregations of tissues performing specific functions.
Organs systems = organs organised to form organisms.



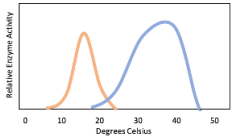
Enzymes

- Biological catalysts
- Digestive enzymes speed up the break down of insoluble food molecules
- Specific shape active site that matches substrate





Enzymes work best at certain temperatures or pH depending on their role.



Bile

The liver makes an **alkaline** solution called bile. Stored by the gall bladder.
Has two jobs:

- Emulsifies fats
- Neutralises stomach acid.

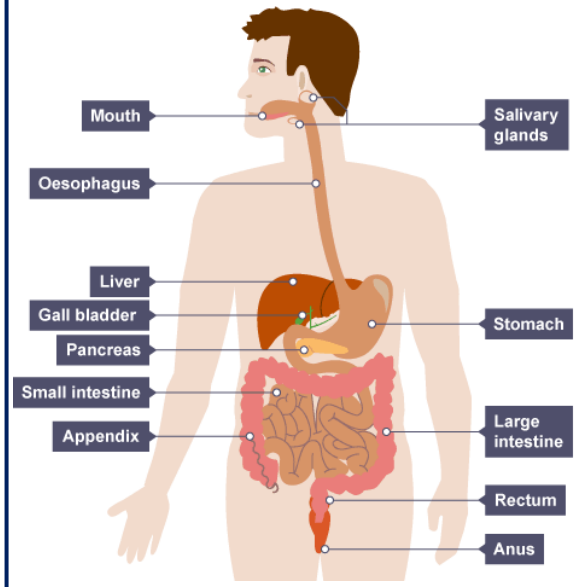
Digestive Enzymes

Starch —(amylase)→ Glucose

Protein —(protease)→ Amino Acids

Fats —(lipase)→ Fatty acids + Glycerol

Digestive System



Organ	Function
Mouth	Teeth and tongue to chew food.
Salivary Glands	Releases saliva containing enzymes.
Oesophagus	Muscle tube to squeeze food along.
Stomach	Contains enzymes and hydrochloric acid. Is made of muscle to churn food. Hydrochloric acid kills bacteria in food
Small Intestine	Where digestion is completed and soluble food particles (glucose, amino acids, fatty acids, glycerol). are absorbed
Large Intestine	Absorbs water.
Liver	Produces bile.
Gall Bladder	Stores bile.
Pancreas	Releases enzymes.

Where are the enzymes?

Enzyme	Salivary glands	Stomach	Pancreas	Small intestine
Amylase	X		X	X
Protease		X	X	X
Lipase			X	X

RP3 – Food Tests

Summaries of the four food tests.

Protein Add Biuret's reagent Positive test; Blue solution turns **Purple**	**Starch** Add Iodine Positive test; solution turns from orange to **Black**
Fats Add Ethanol and water Positive test – solution turns **Cloudy**	**Glucose** Add Benedict's and heat Positive test blue solution turns **Brick red** Water Bath

Year 9 Grammar Term 4 B2 – Organisation

1. What is an organ system?
2. What are group of cells with a similar structure and function?
3. Give an example of an organ.
4. Put these into order, starting with the smallest:
   tissue cell organ system organ

1. What is an enzyme?
2. What is the name of the part of the enzyme that the substrate fits into?
3. Give two factors that affect how enzymes work

1. Where is bile made?
2. Where is bile stored?
3. What are the two jobs of bile?

1. Which enzyme breaks down starch?
2. What are the products of fat digestion?
3. What are proteins made of?

1. Where are the salivary glands found?
2. What is the job of the oesophagus?
3. What is the job of the pancreas (in digestion)?
4. What is the job of the small intestine?
5. What is the function of the hydrochloric acid in the stomach?

1. Where is lipase released from?
2. Which enzyme is released in the stomach?
3. Which enzyme is found in the mouth?

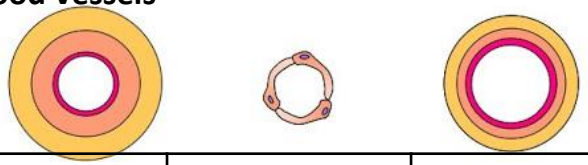
1. Which two chemicals are added to test for fats?
2. What is the colour change when Biuret is added to a food containing protein?
3. Which test needs to be placed in a water bath?

Year 9 Grammar Term 4 B2 – Organisation

The effect of pH on the rate of reaction of amylase

1. Add $2cm^2$ amylase solution, $2cm^2$ of starch solution and $2cm^2$ of pH2 buffer to a water bath (37°) in separate test tubes. Wait 10 minutes.
2. While waiting, add 2 drops of iodine solution to each well on the spotting tile.
3. Once the solutions in the water bath have reached 37° pour the amylase and PH2 buffer into the starch solution.
4. Immediately take a sample with a pipette and add to the first well of the spotting tile.
5. Repeat step 4 every 30 seconds until there is no colour change when testing with iodine solution.
6. Repeat steps 1-5 with pH4, pH6, pH8 and pH10 buffers.

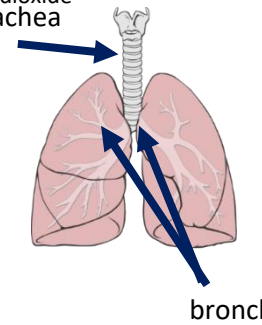
Blood Vessels



Arteries	Capillaries	Veins
• Blood carried away from heart • Thick muscular and elastic walls = withstands high pressure • Small lumen = maintains high pressure	• Walls only one cells thick = shorter diffusion pathway • Lumen just bigger than red blood cell • Blood flows very slowly • Diffusion takes place here	• Blood carried back to heart • Thin walls as blood is low pressure • Large lumen – lower resistance for blood passing through • Valves prevent back flow

Respiratory System

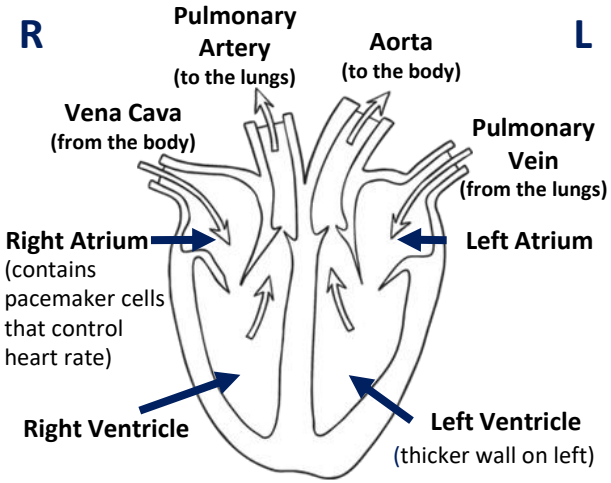
The lungs have two jobs – to get oxygen into the blood and remove carbon dioxide



Structures that cannot been seen on this diagram are the **alveoli and capillary network** – see 'unit 1 - diffusion'.

The Human Heart

Double pump because - left side pumps to whole body, right side pumps to the lungs.



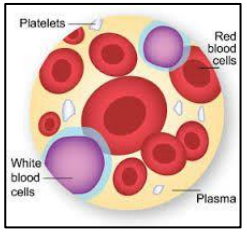
Blood – 4 components

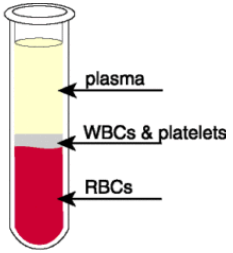
Red blood cells – contain haemoglobin to carry oxygen. More detail…

White blood cells – fight pathogens (see unit 3 – infection and response).

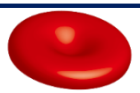
Platelets – cell fragments that clot blood.

Plasma – liquid part that transports cells, cell fragments and dissolved substances (salts, urea, CO_2, hormones…)



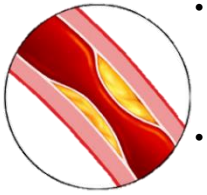


Red Blood Cells (RBCs)



- Contain chemical 'haemoglobin'.
- This reacts/ binds with oxygen to be carried around the body.
- RBCs are ~8µm (relative small animal cell) allows them to fit through capillaries
- Bi-concave disc shape for large SA:V

Coronary Heart Disease (CHD)



- Coronary arteries supply heart muscle with blood (containing glucose and oxygen for respiration)
- Can become narrowed/blocked by fatty deposits if cholesterol high, reducing blood flow.
- Reduced muscle contraction in heart

Year 9 Grammar Term 4 B2 – Organisation

The effect of pH on the rate of reaction of amylase

1. What temperature should the water bath be set at for the affect of pH on amylase practical?
2. What is the name of the chemical used to test for the presence of starch?
3. What is the independent variable in the investigation?

1. Which blood vessels contain valves?
2. Which vessels carry blood under very high pressure?
3. In which blood vessels does diffusion take place?
4. Which blood vessels have thick muscular walls?
5. Which vessels have a wide lumen?

1. What is the name of the tube that connects the throat to the lungs?
2. What is the name of the tubes that enter each lung?
3. What are the two jobs of the lungs?

1. Which blood vessel returns blood to the heart from the lungs?
2. Which blood vessel carries blood away from the heart towards the body?
3. Which ventricle wall is thicker?
4. Where are pacemaker cells found?
5. Why is the heart knowns as a double pump?

1. Name the two types of cells in blood.
2. What are platelets?
3. What do platelets do?
4. Name 3 substances plasma might have dissolved in it?

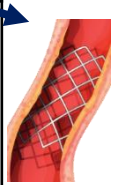
1. What chemical is found inside red blood cells?
2. What is the 3D shape of RBCs called? What is the advantage of this shape?

1. What do coronary arteries do?
2. What can block coronary arteries?
3. What will happen to the heart if they become blocked?

Year 9 Grammar Term 4 B2 – Organisation

Heart Disease Treatment – Statins vs Stents

Statins	Stents
• Medication to be taken everyday • Lowers blood cholesterol • Does not work immediately	• Mesh tube to be inserted into artery to hold it open • Surgery required • Works immediately



Faulty Valves

- Valves in veins and the heart prevent backflow of blood
- Faulty valves = don't open or close fully
- Can be replaced with man-made valves or transplants from donors

Cancer

Uncontrolled cell growth

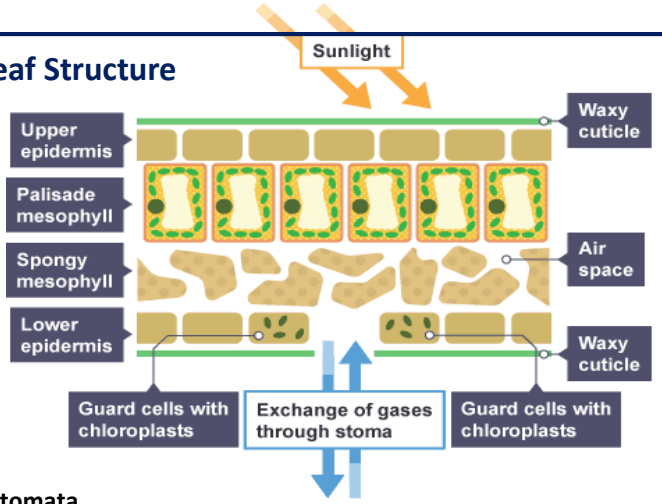
Benign tumours = abnormal cells, contained in one area, in a membrane, do not invade other parts of body.

Malignant tumours = cancer cells, not in a capsule, invade neighbouring tissue, and spread into blood and form secondary tumours.

Risk Factors

Lifestyle factors can have be risk factors for certain diseases. E.g. obesity is a risk factor for type 2 diabetes, or drinking and smoking while pregnant affects the development of the foetus.

Leaf Structure

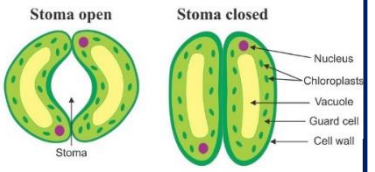


Stomata

Tiny pores on the underside of the leaf.

Allow oxygen and CO_2 to diffuse in and out

Guard cells surround the stomata and can open and close the pore

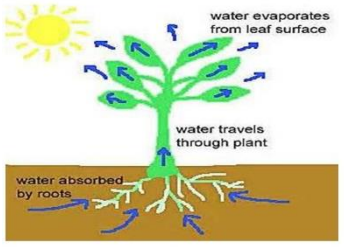


Interaction of Diseases

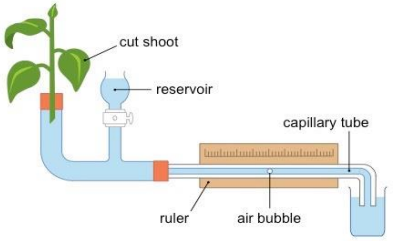
- Defects in the immune system - individual is more likely to suffer from infectious diseases.
- Viruses can trigger cancers, e.g. HPV can trigger cervical cancer.
- Immune reactions caused by pathogens can trigger allergies such as asthma or rashes
- Severe physical ill health can lead to depression and other mental illness.

Transpiration

Movement of water through plant from roots to leaves, driven by evaporation through the stomata



Measuring transpiration



Record the distance the bubble of air moves along the scale during set amount of time to calculate volume of water uptake per minute.

Transpiration	Translocation
Movement of water from roots to leaves	Movement of dissolved sugars from leaves all round the plant
Xylem - hollow tubes strengthened by lignin.	Phloem – tubes of elongated cells.
One way system – roots to leaves.	Two way system – sugars taken to wherever they are needed.

Increasing the rate of transpiration

- Higher temperature
- Lower humidity
- Higher light intensity
- Higher air movement

Year 9 Grammar Term 4 B2 – Organisation

1. How do stents treat CHD?
2. How do statins treat CHD?
3. Give an advantage of using stents rather than statins to treat CHD

1. What is the job of a valve?
2. How can faulty valves be treated?

1. What is a benign tumour?
2. Why do benign tumours not spread?
3. How can malignant tumours spread?
4. Name a disease linked with obesity

1. What are the cells called that surround the stomata?
2. What is the job of the stomata?
3. What the top layer of a leaf called?
4. Which tissue in a leaf has air spaces?
5. Which layer in the leaf contains cells with lots of chloroplasts?

1. Give and example of when cancer can be triggered by a virus.
2. Give an example of an immune reaction that can be triggered by a pathogen

1. What is transpiration?
2. What is translocation?
3. Which tissue carries out translocation?
4. Name 2 conditions that affect the rate of transpiration.
5. Describe how to investigate the rate of transpiration.

Year 9 Grammar Term 4 C2 – Bonding, structure, and the properties of matter

Formation of Ions

- **Ions** = a charged particle made when atoms lose or gain electrons
- **Positive ion** = atom has lost electrons
- **Negative ion** = atom has gained electrons.

Metals form **positive ions**
Non-metals form negative ions

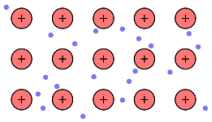
Group	Ions	Example
1	+1	$Li \rightarrow Li^+ + e^-$
2	+2	$Ca \rightarrow Ca^{2+} + 2e^-$
6	-2	$O + 2e^- \rightarrow O^{2-}$
7	-1	$Br + e^- \rightarrow Br^-$

Lost electrons

Gained electrons

Metallic Bonding

- Happens in **metals only.**
- Positive metal ions surrounded by **sea of delocalised electrons (can move).**
- Ions tightly packed in rows.

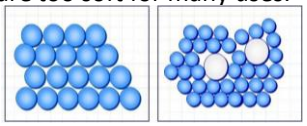


- Strong **electrostatic forces of attraction** between positive ions and negative electrons.

Alloys

- **Alloys** = mixture of two or more metal atoms
- Pure metals are too soft for many uses.

Pure Metal

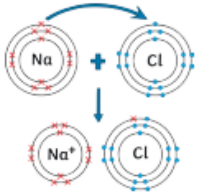


Alloy

- Atoms same size
- Layers slide
- Softer
- Different sized atoms
- Layers cannot slide
- Stronger

Ionic Bonding

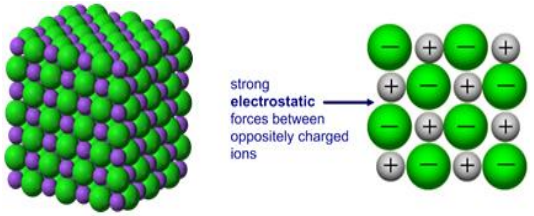
- Between a metal and non-metal.
- Metals give electrons to non-metals so both have a full outer shell.
- **Electrostatic force of attraction** between positive and negative ions.



E.g. Sodium loses one electron to become Na^+. Chlorine gains one electron to become Cl^-. The two ions attract to form sodium chloride.

Ionic compounds

- Form **giant lattices, as the attraction between ions acts in all directions**



Properties of Ionic Compounds

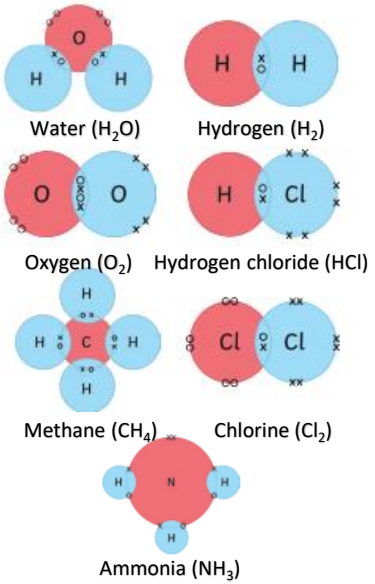
- **High melting point** – lots of energy needed to overcome electrostatic forces.
- **High boiling point**
- **Cannot conduct electricity as solid** – ions cannot move
- **Conducts electricity when molten or dissolved** – ions are free to move.

Covalent Bonding

- **Covalent bonding** = sharing a pair or pairs of electrons for a full outer shell.
- Between **non-metals only.**

Dot and cross diagrams

- Show the bonding in simple molecules.
- Uses the outer shell of the atoms
- Crosses and dots used to show electrons
- You should be able to draw the following:



Simple Covalent Molecules

- Form when all atoms have full outer shells so bonding stops
- Examples are the molecules shown above.
- Have **low melting and boiling points**
- Due to **weak intermolecular forces**
- Do not conduct electricity

Year 9 Grammar Term 4 C2 – Bonding, structure, and the properties of matter

1. What is an ion?

2. What happens to form a positive ion?

3. What happens to form a negative ion?

4. What type of ions are formed by:
    1. metals
    2. non-metals

1. What are metal ions surrounded by?

2. Name the type of attraction between the electrons and ions.

3. Why do metals conduct electricity?

4. What is an alloy?

5. Why are pure metals too soft for some uses?

6. Why are alloys stronger than pure metals?

1. Ionic bonding happens between..

2. What do metals give to non-metals?

3. What type of attraction is between the positive and negative ions?

4. What structure do ionic compounds form?

5. What are the melting points of ionic compounds like?

6. Why can solid ionic compounds **not** conduct electricity?

7. When can ionic compounds conduct electricity?

1. What is covalent bonding?

2. What type of atoms does covalent bonding happen between?

3. Draw dot and cross diagrams for the following:

Water (H_2O)

Methane (CH_4)

Oxygen (O_2)

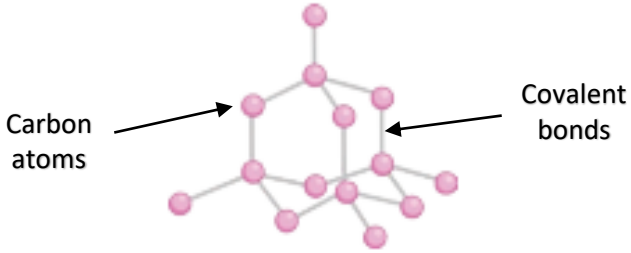
5. Do simple covalent molecules have a high/low melting point?

6. Why is this?

Year 9 Grammar Term 4 C2 – Bonding, structure, and the properties of matter

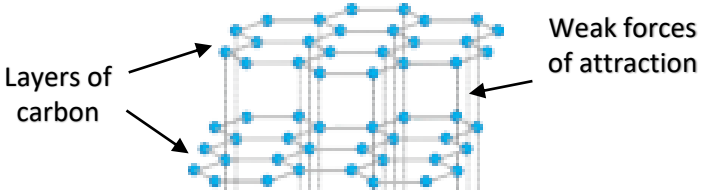
Giant Covalent Structure – Diamond

- Each carbon atom **covalently** bonded to **four** others.
- Forms a giant structure
- This makes diamond **strong** → a lot of **energy** needed to break lots of strong covalent bonds.
- **Does not conduct electricity** – has no free electrons.



Giant Covalent Structure – Graphite

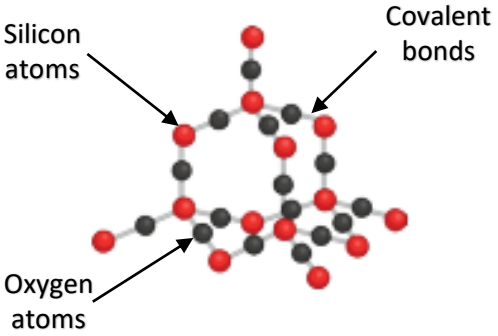
- Layers of **carbon** arranged in **hexagons.**
- Each carbon bonded to **three** other carbons.
- Leaves **one delocalised electron** → moves to carry electrical charge **throughout structure.**



- Layers held together by **weak forces**
- Layers can **slide** over each other easily
- Makes graphite **soft/slippery** → good lubricant.
- Has **high melting point** as has many strong covalent bonds.

Silicon Dioxide

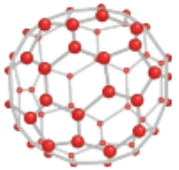
- Similar structure to diamond
- Giant covalent structure.
- Lots of **strong covalent bonds**.
- These require lots of **energy** to break.
- High melting and boiling points.



Fullerenes and Nanotubes

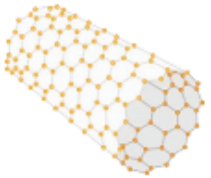
- Molecules of carbon shaped into hollow tubes or balls.
- Used to **deliver drugs into body**

Buckminsterfullerene
Formula = C_{60} →



- **Carbon nanotubes** = long narrow tubes
- Can conduct electricity

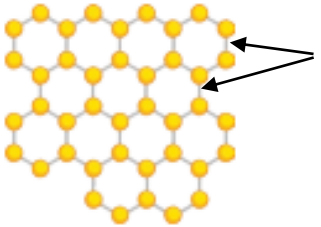
- Can strengthen materials without adding weight.



- Used in electronics and nanotechnology.

Graphene

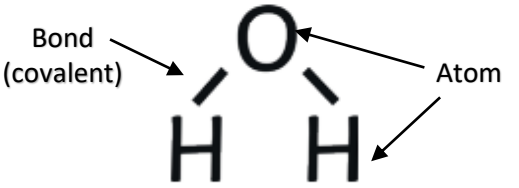
- Graphene = one layer of graphite.
- Very strong → lots of strong covalent bonds.

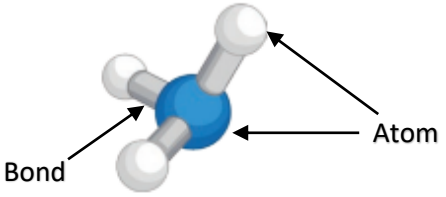


- Each carbon bonded to three others.
- One **free delocalised electron** → can move to **carry electrical current** throughout **the structure.**

Molecular models

- There are different ways to show a molecule other than dot and cross diagrams.





3D model

Year 9 Grammar Term 4 C2 – Bonding, structure, and the properties of matter

1. How many bonds do each carbon atom have in diamond?
2. What type of bonds are in diamond?
3. Why is diamond hard?
4. Why does diamond not conduct electricity?

1. What structure does silicon dioxide have?
2. Why does this structure have a high melting and boiling point?

1. What is graphene?
2. State a property of graphene.
3. How many bonds does each carbon have?
4. What does this allow graphene to do?

1. What element is graphite made from?
2. How many bonds does each carbon have?
3. Why can graphite conduct electricity?
4. What holds together the layers of graphite?
5. Why is graphite soft/slippery?
6. Does graphite have a high/low melting point?
7. Why?

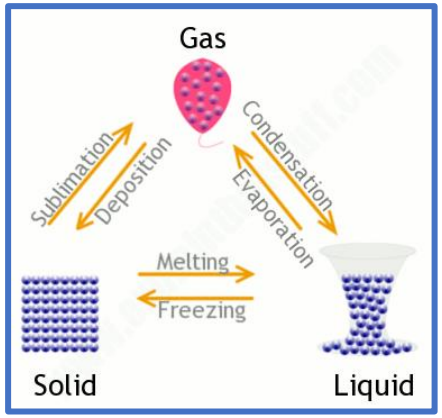
1. What can fullerenes be used for?
2. What is the formula of buckminsterfullerene?
3. State two uses of carbon nanotubes.

1. What are three ways that H_2O could be drawn?

Year 9 Grammar Term 4 C2 – Bonding, structure, and the properties of matter

States of Matter

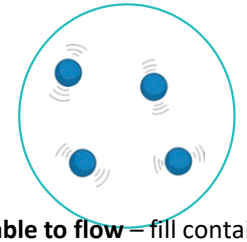
- Three states of matter: **solid, liquid & gas.**
- To change state, **energy** must be **transferred**.



- When heated, particles **gain energy**.
- **Attractive forces** between particles begin breaking when melting or boiling points are reached
- **Amount of energy** needed to change state depends on how strong forces are.

Gas

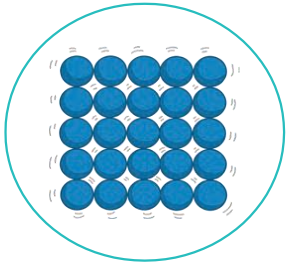
- Randomly arranged.
- Particles **move quickly** – all directions.
- Highest **amount** of **kinetic energy.**



- Gases **are able to flow** – fill containers
- **Can be compressed as there is space between particles**

Solid

- **Regular** pattern (rows and columns)
- Particles **vibrate** in a **fixed position**.
- Particles have **low amount of kinetic energy.**

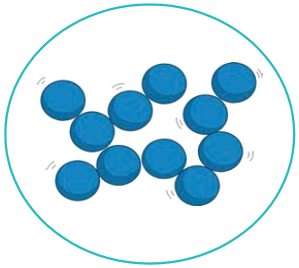


-

- Have a **fixed shape** – cannot flow because of strong forces of attraction between particles
- **Cannot be compressed** – particles close together.

Liquid

- Particles **randomly** arranged and touching.
- Particles can **move around.**
- **Greater amount** of **kinetic energy** than solid



- Liquids **able to flow** – take shape of containers.
- **Cannot be compressed** – particles are close together and cannot be pushed closer

State symbols

- States of matter shown in chemical equations:
- Solid **(s)**
- Liquid **(l)**
- Gas (**g)**
- Aqueous **(aq)**
- **Aqueous** solutions = substance dissolved in water.

Identifying Physical State of Substances

- If the temperature is **lower** than a substance's melting point – substance is **solid**.
- If the temperature is **between** the melting point and boiling point – substance is **liquid**.
- If the temperature is **higher** than the boiling point – substance is a **gas.**

Limitations of Particle Model (HT)

- No chemical bonds are shown.
- Particles shown as solid spheres – not the case, particles are mostly empty space like atoms.
- The diagrams don't show any of the forces between particles
- The diagrams are unable to show the movement of the particles.

Year 9 Grammar Term 4 C2 – Bonding, structure, and the properties of matter

1. What are the three states of matter?
2. What happens to particles when they are heated?
3. What happens to attractive forces when particles are heated?
4. What does the amount of energy needed to change state depend on?

1. How are gas particles arranged?
2. How do gas particles move?
3. Do particles in a gas have more or less kinetic energy than those in solids and liquids?
4. Can gases be compressed? Why?

1. How are solid particles arranged?
2. Do solid particles move?
3. Do particles in a solid have a high or low amount of kinetic energy?
4. Can solid particles flow?
5. Can solids be compressed?

1. How are liquid particles arranged?
2. Do particles in a liquid move?
3. Do the particles in a liquid have more or less kinetic energy than solids?
4. Can liquid particles flow?
5. Can liquids be compressed?

1. Where are state symbols used?
2. Write the symbols for solid, liquid, gas and aqueous.
3. What does aqueous mean?

1. If the temperature is lower than melting point, the substance is..
2. If the temperature is between melting and boiling point, the substance is..
3. When would a substance be gas?

1. State two limitations of the particle model.

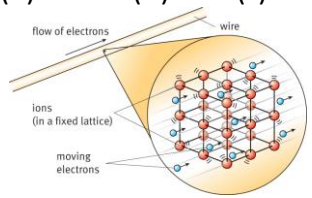
Year 9 Grammar Term 4 P2 – Electricity

Current, resistance and potential difference

Electrical current is the flow of electrical charge.
Current is measured in amps (A), charge is measured in Coulombs (C).
The size of the current depends on the rate of the flow of charge – ie how many coulombs of charge per second.

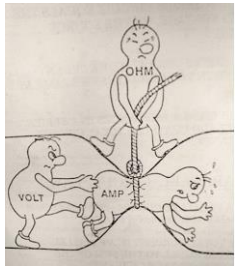
Q = I t

Charge = Current x time
(C) (A) (s)



Ohms Law

The current through a component depends on the potential difference and the resistance of the component.
If a component has high resistance, the current will be smaller for a given potential difference



potential difference = current x resistance

V = I R

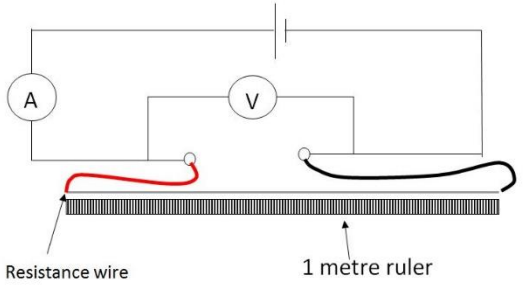
pd is measured in volts (V), resistance in Ohms (Ω)

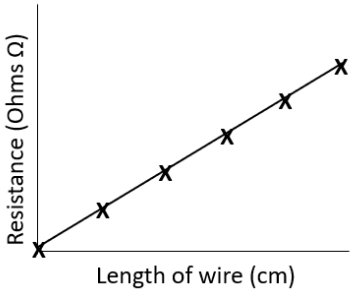
Hypothesis 'the length of the wire affects resistance'

Independent variable – length of wire
Dependent variable – resistance
Control variables – type of wire, temperature of the wire, diameter of the wire

1. Set up the circuit as shown, with an ammeter in the circuit and a voltmeter connected across the wire
2. Use crocodile clips to change the length of the wire in the circuit
3. Make the wire 10cm long and read the current and pd. Switch off the current between readings or the wire will got hot, increasing the resistance.
4. Repeat for 20, 30, 40, 50 cm. (5 minimum)
5. Calculate resistance using Ohms Law R = V/I

Plot length of wire (IV) against resistance (DV)



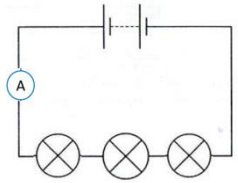


The relationship is directly proportional

Series and parallel circuits

Series circuits:

A series circuit is one single loop

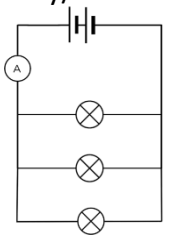


In a series circuit:

- the current is the same at all points in the circuit.
- potential difference is shared between components (equally if components are identical resistance)
- total resistance = sum of all resistors

Parallel circuits

A parallel circuit consists of more than one loop from the battery/cell.



In a parallel circuit:

- The current is shared amongst the branches
- The potential difference is the same across all components
- Resistance in the whole circuit is LESS than that of the smallest resistor

Year 9 Grammar Term 4 P2 – Electricity

Current, resistance and potential difference

1. What is current?
2. What is the unit for charge?
3. What is the unit for current?
4. What is the equation linking charge, current and time?
5. What is the equation linking current, potential difference and voltage?
6. If a component's resistance increases, what happens to current through that component?
7. What is the unit for resistance?

Hypothesis 'the length of the wire affects resistance'

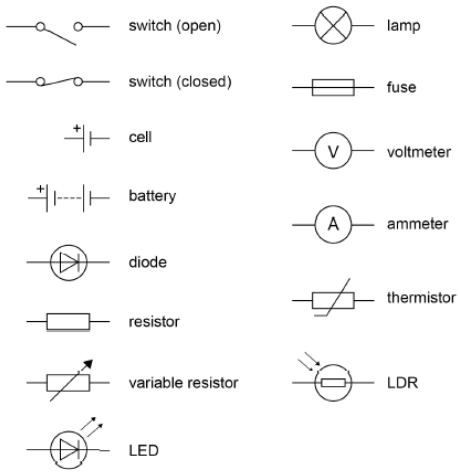
1. What is the independent variable in this investigation?
2. What is the dependent variable?
3. What is the minimum number of readings needed for a line graph?
4. What two readings are taken?
5. How is resistance calculated?
6. What sort of relationship is seen?
7. Why is it important to turn off the power in between readings?

Series and parallel circuits

1. What is a series circuit?
2. In a series circuit, the current is……
3. How do you find total resistance in a series circuit?
4. The potential difference is shared equally among components as long as……
5. What is a parallel circuit?
6. What is true about potential difference across all of the components in a parallel circuit?
7. How is total current calculated in parallel?
8. What is true for total resistance in a parallel circuit?

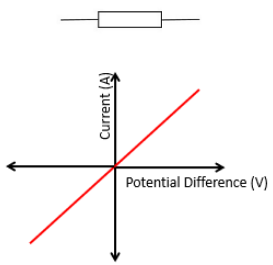
Year 9 Grammar Term 4 P2 – Electricity

Components

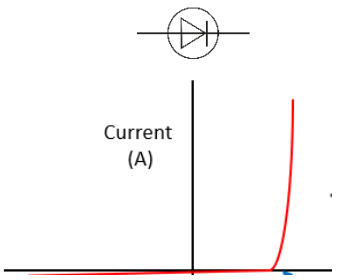


- A **diode** only allows current to flow one way in a circuit
- A **resistor** is a component that provides a fixed resistance in the circuit – e.g a 5 Ω resistor
- A **variable resistor** is a component whose resistance can be changed (e.g a dimmer switch)
- A **thermistor** is a resistor whose resistance changes with temperature – the higher the temperature the lower the resistance
- An **LDR** (light dependent resistor) has resistance that changes
- An LED (light emitting diode) is a light that only allows the flow of current one way

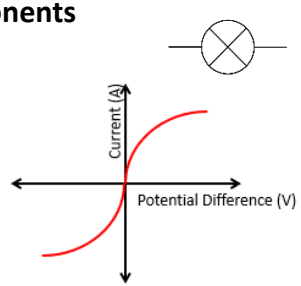
Current, potential difference and resistance for different components



A fixed (ohmic) resistor
has fixed resistance
current is directly proportional to potential difference
Resistance remains constant (at constant temp)

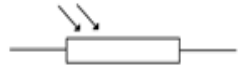


A diode very high resistance in one direction.
Only when the potential difference is positive does current flow

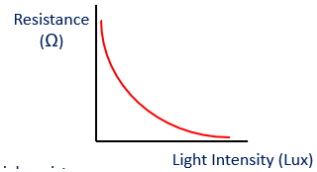


A filament bulb contains a thin wire that glows as current flows.
As the pd increases, the current initially increases.
However, at higher pd, the wire gets hot
The ions in the wire move faster and collide with the moving charges
Resistance increases, so current stops increasing

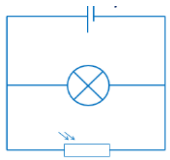
LDR



A light dependent resistor has varying resistance.
As the light intensity increases, the resistance decreases



LDRs can be used to switch on lights at night time.



In this circuit, when it is day time, the resistance in the LDR is low, so all current flows through the LDR.

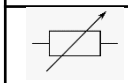
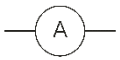
As light levels fall, resistance increases, until eventually there is less resistance in the bulb than the LDR, so current flows through the bulb – switching it on.

Thermistor

As the temperature increases, the resistance in a thermistor decreases.

Year 9 Grammar Term 4 P2 – Electricity

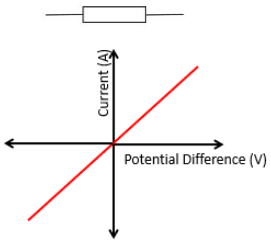
Components

Symbol	Name
	Cell
	
	fuse
	
	Voltmeter

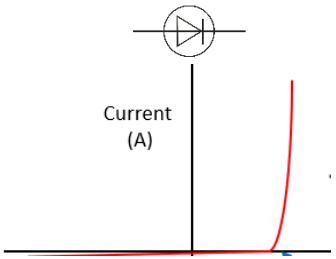
1. Complete the table opposite
2. Which component has a resistance that decreases as light intensity increases?
3. Which component only allows current to flow one way?
4. What is a fixed resistor?

Current, potential difference and resistance for different components

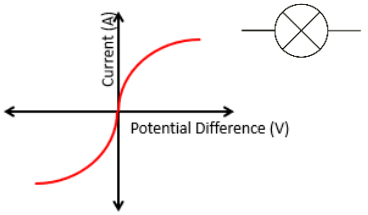
1. What readings would you need to take from a circuit to calculate resistance?



2. Describe the relationship shown



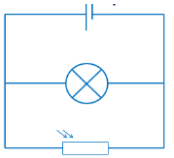
3. Why is there no current on one side of the graph?



4. What happens to current when the pd rises at first ?
5. What happens to the current as the pd gets higher?
6. Why does the resistance increase at higher pd?

LDR

1. Draw the symbol for an LDR
2. Draw the pattern you would expect for resistance as the light intensity increases.
3. The circuit below is for a night light. What is resistance in the LDR like during the day time? (high light levels)



4. Why does the light switch on when it goes dark?
5. Draw the symbol for a thermistor
6. Describe the relationship between temperature and resistance in a thermistor

Year 9 Grammar Term 4 P2 – Electricity

Domestic use of electricity

There are two types of electrical supply – direct (DC) and alternating current (AC)

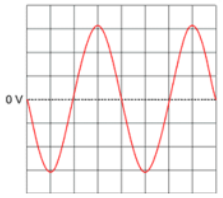
AC

The pd changes direction and magnitude, giving alternating current

The number of times the change of direction happens per second is the frequency.

UK mains is AC - **230V**

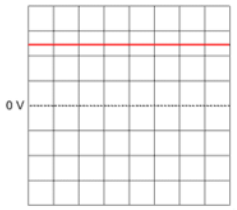
Frequency of **50 Hz**

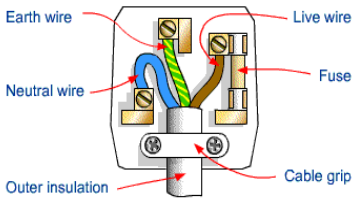


DC

A direct pd produces current that flows in one direction

Batteries supply DC



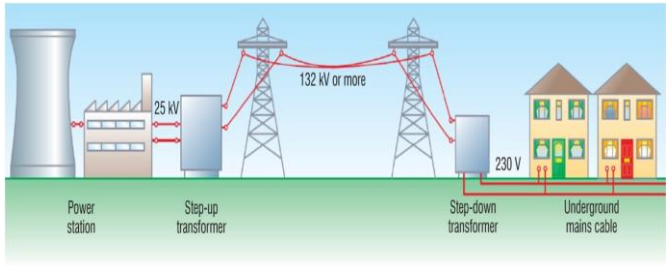


Electrical appliances are connected using 3 core cable

- Brown – live wire, with pd of 230V
- Blue – neutral, 0V, completes the circuit
- Yellow and green – Earth wire, is at 0V unless there is a fault, when it will become live

The National Grid

The National Grid is a system of cables and transformers connecting power stations to homes and businesses



The National Grid uses very high pd and low current.

High current causes heating in the wires and would result in large energy losses.

Step up transformers increase the pd from the power station (to around 400000V) so that low current can be used to transmit power.

This means the wires don't get hot, so less energy is lost.

Near homes and businesses, step down transformers reduce the pd to 230V for safety.

Appliances in the home and power

Power is measured in Watts (W) or kW

Power can be calculated by using:

Power = Voltage x current

$P = IV$

Power = current^2 x resistance

$P = I^2 R$

Appliances transfer energy.

Energy is measured in Joules (J) or kJ

The energy transferred can be calculated by using:

Energy = charge flow x potential difference

$E = Q V$

Energy = power x time

$E = p t$

For example

A kettle transfers energy from the thermal store of the filament in the kettle to the thermal store of the water inside.

Some energy is transferred to the thermal store of the surroundings.

Year 9 Grammar Term 4 P2 – Electricity

Domestic use of electricity

1. What are the two types of current?
2. What type of power supply produces DC current?
3. What are the two differences between AC and DC current?
4. What is the pd of the UK mains supply?
5. What is the frequency of UK mains supply?
6. What colour is the live wire in UK plugs?
7. What is the purpose of the blue wire in UK plugs?
8. When does the yellow and green wire carry a current?

The National Grid

1. What is the National Grid?
2. What sort of pd does the National Grid use to transmit electrical power?
3. What is used to increase the pd from the power station?
4. What is used to reduce the pd near homes and businesses?
5. Why is such a high pd used?

Appliances in the home and power

1. What is the equation linking current, potential difference and power?
2. What is the equation linking current, resistance and power?
3. What two factors affect how much energy an appliance transfers?
4. What is the equation linking energy, power and time?
5. What are the units for power?
6. What is the equation linking charge, energy and potential difference?
7. What are the units for energy?

Year 9 Term 3 Geography Knowledge Organiser: Urban issues and challenges

A. Background:

- Urban = Towns and cities Rural = countryside
- **Urbanisation is the growth in the proportion of a country's population living in urban areas.** The rate of urbanisation differs between countries that are richer than those that are poorer.
- **HIC have very slow rates of urbanisation:** In richer parts of the world, urbanisation happened historically and most of the population now already live in urban areas. Many people in urban areas in HICs desire a better quality of life and are moving to rural area. Here they can commute to cities (because of better transport) or work from home (better communication).
- **LIC** are less economically developed e.g. Ethiopia. Not many of the population live in urban areas . However, people are starting to move away from jobs in farming (rural areas) to urban areas. They are experiencing rapid urban growth.
- **NEE** are those where economic development is increasing rapidly e.g. Brazil, India, Nigeria - They are experiencing rapid urban growth.

B. Factors affecting the rate of urbanisation

Rural-urban migration	the movement of people from rural to urban area. The rate is affected by push-pull theory.
Push factors	things that encourage people to leave (Push them out)
Pull factors	things that encourage people to move to an area (Pull them to an area)
Natural increase	birth rate is higher than death rate so population growth

C.

	Social	Economic
Opportunities	• Better access to services e.g.health care and education • Better access to resources such as clean water supply and electricity	• Increase economic development • As industry develops (industrialisation), more people move to urban areas to work in factories – there are more jobs and better wages than rural areas • Industries create and sell goods on the international market. Manufactured goods make greater profits than unprocessed goods so industrialised countries get wealthier.
	Social and economic (HEWE)	**Environmental (WART)**
Challenges	• Badly built houses and over crowded • No access to basic services (running water, sanitation, electricity) • Unclean conditions and lack of access to medical services mean people often have poor health • No access to education • High levels of unemployment and crime	• Rubbish isn't collected so it leaves toxic rubbish heaps, which damage the environment • Air pollution comes from burning fossil fuel from vehicles and factories • Sewage and toxic chemicals can get into rivers, causing health problems and harming wildlife • Infrastructure like road systems may not be able to cope with the growing number of vehicles. Congestion causes an increase in greenhouse gas emissions which cause global problems. Locally, problems with health and acid rain also occur.

D. Rio

Sanitation	Conditions relating to public health, especially the provision of clean drinking water and adequate sewage disposal.
Quality of life	General well-being of individuals and societies
Favela	Brazilian shack or shanty town; a slum

E.. Favela Bairro

Successes	Failures
-The quality of life in the favelas has improved. - 90% housing in Rocinha is now brick built and connected to all amenities -Paved, named roads formalise addresses allowing for local taxes (rates) to be collected to fund further improvements -Sanitation improvements	-$1 billion budget insufficient to cover all of Rio's favelas - creates winners and losers so hardly equable and a "favela lottery" -Families can not afford rent -ASH properties- still in areas of severe hazard risk via landslide - 2010: 24 dead and 13,000 properties lost

Year 9 Term 3 Geography Knowledge Organiser: Urban issues and challenges - QUIZZABLE

A.	Background:

- Urban = Towns and cities Rural = countryside
- **Urbanisation is the growth in the proportion of a country's population living in urban areas.** The rate of urbanisation differs between countries that are richer than those that are poorer.
- **HIC have very slow rates of urbanisation:** In richer parts of the world, urbanisation happened historically and most of the population now already live in urban areas. Many people in urban areas in HICs desire a better quality of life and are moving to rural area. Here they can commute to cities (because of better transport) or work from home (better communication).
- **LIC** are less economically developed e.g. Ethiopia. Not many of the population live in urban areas . However, people are starting to move away from jobs in farming (rural areas) to urban areas. They are experiencing rapid urban growth.
- **NEE** are those where economic development is increasing rapidly e.g. Brazil, India, Nigeria - They are experiencing rapid urban growth.

B.	Factors affecting the rate of urbanisation
Rural-urban migration	
Push factors	
Pull factors	
Natural increase	

D.	Social	Economic
Opportunities		
	Social and economic (HEWE)	**Environmental (WART)**
Challenges		

D.	Rio
Sanitation	
Quality of life	
Favela	

E..	Favela Bairro
Successes	**Failures**

Year 9 Term 4 History: The Holocaust

H.	*Can you define these key words?*
Anti-Semitism	Hostility or prejudice against Jewish people
Genocide	the deliberate killing of a large group of people, especially those of a particular nation or ethnic group
Holocaust	destruction or slaughter on a mass scale
Persecution	hostility and ill-treatment, especially because of race or political or religious beliefs; oppression
Discrimination	The unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex
Lebensraum	Living space in the East (g.g. Poland) where Hitler was planning to build his 1000 year Reich for the master/ superior race (Herenvolk)
Minorities	Anyone considered non-Aryan. Disabled people, homosexuals, Roma
Nuremberg Laws	A series of laws reducing German Jews human Rights such as their ability to marry Germans, to vote, and to be recognised at citizens
Pogrom	A violent attack on Jewish communities these had been occurring all over Eastern Europe and Russia since 1900,
Roma	Known as Gypsies, they were persecuted especially when the Nazi's moved East
SA	Known as Hitler's bullyboys in the early
SS	Hitler's elite part of the army, also responsible for concentration camps network under Himler
SS Einsatzgruppen	SS murder squads that went around Eastern Europe looking for Jews, capturing them and then murdering them
Sterilisation	Preventing men and women from breeding by an operation
Genocide	Killing of an entire race of people
Synagogue	A Jewish place of worship
Anti-Semitism	Discrimination against Jews as a religious group or race
The Final Solution	The Nazi government official policy which authorised the murder of all Jews within the Nazi Reich (Empire)
Aryan	Meaning pure German blood. Hitler believed that they would make Germany great again
Concentration Camps	Prison camps set up by the Nazis in 1933, firstly for political opponents (communists), then minorities form criminals, homosexuals, gypsies, Jews. Some later became extermination camps
Extermination Camps	A concentration camp designed for the systematic murder of prisoners eg. Treblinka or Sobibor
Eugenics	The study of races. The Nazis' distorted science such as Darwin's survival of the fittest
Euthanasia	The killing of those disabilities or diseases
Gestapo	Hitler's spy network, which relied on informants
Holocaust	The Holocaust took place in Europe between 1933 and 1945. Six million Jews were systematically and brutally murdered by the Nazis and their collaborators. Millions of non-jews, including Roma and Sinti (Gyptsies), Serbs, political dissidents, people with disabilities, homosexuals and Jehovah's Witnesses, were also persecuted by the Nazis.
Ghettos	Parts of cities reserved for Jews from 1939, they were unhygienic places to live, had a lack of water and healthcare. They acted as prisoners as they had large walls and curfews.
Kristallnacht	The Night of Broken Glass, people encouraged by the SS burned down synagogues, humiliated Jewish people and many were killed
Untermensch	Anyone considered an undesirable in Hitler's Germany: disabled, Roma, homosexuals and Jews

What we are covering whilst working from home: The Holocaust

We will be looking at:

- The history of anti-Semitism in Europe (I)
- How the persecution of the Jews started out in Nazi Germany and the consequences of this for German Jews (J)
- How Jewish persecution in Germany escalated from 1933-1939 eventually resulting in The Final Solution (K)
- Why we need to remember the Holocaust (L).

J. What were the consequences of the Nuremburg Laws for Jews in Nazi Germany?

What they were:	Consequences:
• On 15th September 1935 the Nuremburg Laws were passed which were a new set of laws which made it easier to persecute Jews. • The Reich Law on Citizenship stripped Jews of their citizenship (and all rights of it such as voting, working for the government etc) and made them 'subjects'. Jews now had to wear a yellow star shaped patch to identify themselves. • The Reich Law for the Protection of German Blood and Honour made it so that Jews were not allowed to marry or have intimate relations with German citizens. Racial infamy (as it became known) was a criminal offense.	• These laws redefined what it meant to be a Jew - being Jewish was now a race rather than a religion (you were considered a Jew if you had 3 or 4 Jewish grandparents). Grandparents born into a Jewish religious community were considered 'racially' Jewish and their 'racial' status was passed onto their children and grandchildren • This legal definition of a Jews covered tens of thousands of people who did not think of themselves as a Jews and had no religious or cultural ties to the Jewish community - many Jews who hadn't practiced Judaism for years found themselves caught in the grip of Nazi terror. Even people with Jewish grandparents who had converted to Christianity were defined as Jews. • For the first time in history, Jews faced persecution not for what they believed, but for who they were by birth. In Nazi German no profession of belief could convert a Jew into a German. • The Nuremburg Laws were a crucial step in Nazi racial laws that led to the ostracism of German Jews and ultimately to their segregation, confinement, and extermination.

I	What do these factors show about anti-Semitic attitudes in Medieval Europe?
The Crusades	• In 1095, Pope Urban II appealed to European Christians liberate the Holy Land from the Muslims, beginning what was to be known as the Crusades. • The religious passion that drove men, and later even children, on the Crusades was to have direct consequences for Jews • The Crusader army swept through Jewish communities looting, raping and massacring Jews as they went.
The Bubonic Plague	• In the 14th century, the Bubonic Plague spread throughout Europe, killing an estimated one-third of the population • Fear, superstition and ignorance prompted the need to find someone to blame, and the Jews were a convenient scapegoat because of the myths and stereotypes that were already believed about them • Though Jews were also dying from the plague, they were accused of poisoning wells and spreading the disease – in Germany and Austria approx. 100,000 Jews were burned alive for this.
Martin Luther	• The founder of the 16th century Reformation and Protestantism wrote a pamphlet in 1545 entitled The Jews and Their Lies, claiming that Jews thirsted for Christian blood and urging the slaying of the Jews

K. How did Jewish persecution increase from 1933 to 1939.

Boycott of Jewish Businesses 1933	Nuremburg Laws 1935	Kristallnacht 1938	Ghettos 1939
• On 30th March 1933, the Nazi Party announced that from 10am on 1st April an official boycott would behind of all Jewish businesses, doctors and lawyers. • SA members (paramilitary unit associated with the Nazis) painted Jewish stars or the word *Jude* (German word for Jew) outside Jewish businesses. • They then stood outside with banners ('Don't buy from Jews') discouraging people from going inside. • The boycott was not very successful- many people just ignored the signs and graffiti and still entered the shop and it lasted just a day, but it marked the beginning of a nationwide campaign by the Nazi Party against the entire German Jewish population	• On 15th September 1935 the Nuremburg Laws were passed which were a new set of laws which made it easier to persecute Jews. • The Reich Law on Citizenship stripped Jews of their citizenship (and all rights of it such as voting, working for the government etc) and made them 'subjects'. Jews now had to wear a yellow star shaped patch to identify themselves. • The Reich Law for the Protection of German Blood and Honour made it so that Jews were not allowed to marry or have intimate relations with German citizens. Racial infamy (as it became known) was a criminal offense.	• The first ***violent*** outburst of anti-Semitism in Germany • Groups of uniformed gangs ran amok amongst Jewish communities, destroying and burning homes, shops, businesses, synagogues and desecrated Jewish cemeteries. • Some gangs were in Nazi uniforms. • Other gangs such as the SA and Hitler Youth were told not to wear uniforms so that the violence would seem to be by the general public. • Some Germans were horrified, others watched with pleasure or joined in. • 100 Jews killed, 814 shop, 171, homes and 191 synagogues destroyed • Jews were blamed and made to pay for the damage • 20,000 Jews sent to camps.	• Key step in the process of brutally separating, persecuting and destroying Europe's Jews • 1st ghetto established in Poland in October 1939 • Jews who owned any businesses/property were forced to hand them over as they were placed in ghettos. • Some ghettos were shut in by walls, fences or barbed wire • Temporary– some only lasted a few days or weeks, others for years • The majority of ghetto inhabitants died from disease, starvation, shooting or deportation to extermination camps.

L. Why is it important to remember the Holocaust?

- The Holocaust is a contemporary issue. It cannot, and should not, be an event lost to history
- The Holocaust demonstrates the atmosphere in which genocide can take place.
- It is important to remember the Holocaust because it is an example of how these trends could evolve into something far more threatening
- Remembering the Holocaust is an important act in itself and honouring its victims, particularly those with no family left to remember them, is so important
- Discussion about the Holocaust is particularly important when we remember it is not an isolated event e.g. Bosnia 1995, Rwanda 1994 etc.
- "He who does not learn from History is doomed to repeat it". – it is not enough to just learn from history we must tackle, challenge, debate, discuss, expose and teach so that it remains a current issue

Year 9 Term 4 History: The Holocaust

H.	*Can you define these key words?*
Anti-Semitism	
Genocide	
Holocaust	
Persecution	
Discrimination	
Lebensraum	
Minorities	
Nuremberg Laws	
Pogrom	
Roma	
SA	
SS	
SS Einsatzgruppen	
Sterilisation	
Genocide	
Synagogue	
Anti-Semitism	
The Final Solution	
Aryan	
Concentration Camps	
Extermination Camps	
Eugenics	
Euthanasia	
Gestapo	
Holocaust	
Ghettos	
Kristallnacht	
Untermensch	

What we are covering whilst working from home: The Holocaust

We will be looking at:

- The history of anti-Semitism in Europe (I)
- How the persecution of the Jews started out in Nazi Germany and the consequences of this for German Jews (J)
- How Jewish persecution in Germany escalated from 1933-1939 eventually resulting in The Final Solution (K)
- Why we need to remember the Holocaust (L).

J. What were the consequences of the Nuremburg Laws for Jews in Nazi Germany?

What they were:	Consequences:

I	What do these factors show about anti-Semitic attitudes in Medieval Europe?
The Crusades	
The Bubonic Plague	
Martin Luther	

K. How did Jewish persecution increase from 1933 to 1939.

Boycott of Jewish Businesses 1933	Nuremburg Laws 1935	Kristallnacht 1938	Ghettos 1939

L. Why is it important to remember the Holocaust?

Year 9 Religious Education: Matters of life and death

A.	*Can you define these key words?*
Key word	**Key definition**
Morality	Principles concerning the distinction between right and wrong or good and bad behaviour.
Ethics	Moral principles that govern a person's behaviour or the conducting of an activity.
Sanctity of Life	The view that all life is sacred because it is made by God.
Quality of Life	The standard of health, comfort, and happiness experienced by an individual or group.
Natural Moral Law	A system of laws based on close observation of human nature, given to humans by God.
Precept	A general rule intended to regulate behaviour or thought.
Reason	The power of the mind to think, understand, and form judgements logically.
Absolute	A value or principle which is regarded as universally valid.
Situation Ethics	The view that there should be flexibility in the application of moral laws according to circumstances.
Relativism	The view that morality exists in relation to culture, society, or historical context, and is not absolute.
Agape	Unconditional love, "the highest form of love, charity" and "the love of God for man and of man for God".
Abortion	A procedure to end a pregnancy.
Pro-Life	Opposing abortion and euthanasia.
Pro-Choice	Advocating the legal right of a woman to choose whether or not she will have an abortion.
Euthanasia	The painless killing of a patient suffering from an incurable and painful disease or in an irreversible coma.
Capital Punish ment	The legally authorized killing of someone as punishment for a crime.
Dominion	To be in charge of something or rule over it.
Stewardship	The job of supervising or taking care of something.

C	**What does the theory of Natural Moral Law say about moral behaviour?**	**What are the 5 precepts of NML that we must be fulfilling for morally good behaviour?**
	NML says absolute moral rules exist and are revealed to us through by God. Through the use of human reason we can look at the way things were created to know their God given design and functions. The way we are supposed to act according to the way we were created by God is morally good and any way that goes against it is morally wrong.	1. Preserve innocent life 2. Live in an ordered society 3. Educate children 4. Reproduce 5. Worship God

D	***What are the strengths of NML theory about what is morally good?***	***What are the weaknesses of NML theory about what is morally good?***
	The theory is based on reason so everyone can work out for themselves what is morally good It seems to be true that we do tend to follow the primary precepts- it is in our nature- and following them will generally bring about what we think of as good. For example, preserve life' means people will protect the innocent and also believe murder is wrong	If you do not believe in a God who has created absolute moral laws about right and wrong then NML cannot tell us anything about right or wrong. It can lead to classifying actions as immoral which mainstream society would argue are not. For example, the use of contraception is immoral according to NML because it does not contribute to reproduction.

E	**What does the theory of situation ethics say about moral behaviour?**	***What are the strengths of S.E theory about what is morally good?***	***What are the weakness of S.E theory about what is morally good?***
	There are no absolute moral laws about right or wrong. The only guiding principle about what is morally right is 'do the most loving thing' in any situation.	It allows flexibility and can avoid acts we would deem to be immoral. For example, an absolute rule like 'do not lie' cannot always be followed without sometimes needing to be broken. For example if a mad axeman came in asking for your mother.... you would not want to tell the truth because it could lead to her death!.	How can we be sure what is the most loving thing when we cannot be sure what the outcome of our actions will be

B.	***Bible quotes relating to the sanctity of life***
1	Humans were 'made in the image of God'
2	'All your days are ordained (set out) for you'
3	'The body is a temple of the holy spirit'
4	"Only God gives and takes life'
5	'Do not kill'

Year 9 Religious Education: Matters of life and death

A.	*Can you define these key words?*
Key word	**Key definition**
Morality	
Ethics	
Sanctity of Life	
Quality of Life	
Natural Moral Law	
Precept	
Reason	
Absolute	
Situation Ethics	
Relativism	
Agape	
Abortion	
Pro-Life	
Pro-Choice	
Euthanasia	
Capital Punish ment	
Dominion	
Stewardship	

C	What does the theory of Natural Moral Law say about moral behaviour?	What are the 5 precepts of NML that we must be fulfilling for morally good behaviour?

D	*What are the strengths of NML theory about what is morally good?*	*What are the weaknesses of NML theory about what is morally good?*

E	What does the theory of situation ethics say about moral behaviour?	*What are the strengths of S.E theory about what is morally good?*	*What are the weakness of S.E theory about what is morally good?*

B.	*Bible quotes relating to the sanctity of life*
1	
2	
3	
4	
5	

SPANISH Year 9 GCSE Term 4 Knowledge Organiser: Topic = Festivals & Relationships

What we are learning this term:

A. Talking about festivals and customs
B. Describing relationships with people
C. Learning about Spanish customs
D. Talking about future plans
E. Translation Practice
F. Key words across topics

6 Key Words for this term

1. Las relaciones
2. La fiesta
3. El costumbre
4. celebrar
5. Las tradiciones
6. La celebración

A. ¿Cómo es tu familia?

Alegre	Happy
Amable	Friendly
Anciano/a	Old
La barba	Beard
Cariñoso/a	Affectionate
Castaño	Chestnut (hair)
Delgado/a	Thin
Las gafas	Glasses
Gracioso/a	Funny
El / la hijo/a	Son / daughter
Joven	Young
Liso/a	Straight (hair)
Las pecas	Freckles
Pelirrojo	Ginger / red hair
Rizado	Curly
Viejo/a	Old
A menudo	Often
Comprensivo/a	Understanding
Conocer	To get to know
El consejo	Advice
Cuidar	To look after
La disputa	Argument
Egoísta	Selfish
Fastidiar	To annoy
Fuerte	Strong / loud
Hablador(a)	Talkative
Honrado/a	Honourable
Mismo/a	Same
Peligroso/a	Dangerous
Reírse	To laugh
Seguro/a	Sure / certain
Travieso/a	Naughty
Triste	Sad
El verano	Summer
La vida	Life

B. Hablando de Parejas

el beso	Kiss
Cada vez más	More and more
Cocinar	To cook
Comprar	To buy
Echar de menos	To miss
Enamorado/a	To be in love
Ya no	No longer
Las vacaciones	Holidays
Sonreírse	To smile
Los familiares	Relatives
Feliz	Happy
La gente	People
El / la invitado/a	Guest
Maleducado/a	Rude
El marido	Husband
El matrimonio	Marriage
La mujer	Woman / wife
El novio	Boyfriend
Parecer	To seem
La pareja	Partner

C. Planes para el futuro y las fiestas del mundo

La boda	Wedding
Buscar	To find
Cambiar	To change
El casamiento	The wedding
Casarse	To get married
El / la compañero/a	Colleague / friend
Decepcionado/a	Disappointed
Encontrar	To find
La felicidad	Happiness
Próximo/a	Next
Solo/a	Alone
Soltero/a	Single
Tener suerte	To be lucky
Los antepasados	Ancestors
La calavera	Skull
Celebrarse	To be held
El comentario	Cemetery
Disfrazado/a	Disguised
Muerto/a	Dead
Proteger	To protect
El pueblo	Town
El regalo	Present
La tumba	Grave
La vela	Candle
Vender	To sell

Ser	To be	Tener	To have	Infinitive	Present	Past	Future
Soy	I am	Tengo	I have	Hablar To speak	Hablo I speak	Hablé I spoke	Voy a Hablar I am going to speak
Eres	You are	Tienes	You have	Comer To eat	Como I eat	Comí I ate	Voy a comer I am going to eat
Es	s/he is	Tiene	s/he has	Ir To go	Voy I go	Fui/fue I am/it was	Voy a ir I am going to go
Somos	We are	Tenemos	We have	Ser To be	Soy I am	Fui I was	Voy a ser I am going to be
son	They are	tienen	They have	Tener To have	Tengo I have	Tuve I had	Voy a tener I am going to have

D. Algunas costumbres regionales

La actuación	Performance
El ambiente	Atmosphere
La batalla	Battle
El concurso	Competition
Conmemorar	To commemorate
Correr	To run
La costumbre	Custom
Demasiado	Too much
El desfile	Procession
El diablo	Devil
El encierro	Running of the bulls
Encontrar	To find
El espectáculo	Show / display
Extraño/a	Strange
Impresionante	Impressive
Incómodo/a	Uncomfortable
Llevar	To wear / carry
Pasarlo bien	To have a good time
El peligro	Danger
Precioso/a	Beautiful
Saltar	To jump
La suerte	Luck
El toro	Bull
La torre	Tower
El traje	Suit / costume
Vestirse de	To dress up as
La entrada	Entrance
La gente	People
Limpiar	To clear
Pronto	Soon
Sucio/a	Dirty
tirar	To throw

F. Key Words across Topics?

to have - tener	Me gusta – I like
to be - ser	Me encanta – I love
to go - ir	Odio - I hate
to do / make - hacer	Porque – because
to play - jugar	Divertido – fun
to see / watch - ver	Aburrido – boring
to listen - escuchar	Util – useful
to buy - comprar	Inutil – useless
to live - vivir	Comodo – comfy
to speak - hablar	Interestante- interesting
to have to - deber	Entretenido – entertaining
to want to - querer	Emocionante – exciting
to visit - visitar	Guay – cool
to eat - comer	Genial – great
to drink - beber	Soso – dull
to go out - salir	Asqueroso – disgusting
to read - leer	Malo- bad
to work - trabajar	Bueno - good
to think - pensar	
to write - escribir	

SPANISH Year 9 GCSE Term 4 Knowledge Organiser: Topic = Festivals & Relationships-QUIZABLE

What we are learning this term:

A. Talking about festivals and customs
B. Describing relationships with people
C. Learning about Spanish customs
D. Talking about future plans
E. Translation Practice
F. Key words across topics

6 Key Words for this term

1. Las relaciones
2. La fiesta
3. El costumbre
4. celebrar
5. Las tradiciones
6. La celebración

A. ¿Cómo es tu familia?

Alegre	_____
Amable	_____
Anciano/a	_____
La barba	Beard
_____	Affectionate
_____	Chestnut (hair)
_____	Thin
_____	Glasses
_____	Funny
_____	Son / daughter
_____	Young
_____	Straight (hair)
_____	Freckles
_____	Ginger / red hair
_____	Curly
_____	Old
_____	Often
Comprensivo/a	_____
Conocer	_____
El consejo	_____
_____	To look after
La disputa	_____
_____	Selfish
_____	To annoy
_____	Strong / loud
_____	Talkative
_____	Honourable
_____	Same
_____	Dangerous
_____	_____
Reírse	_____
Seguro/a	Naughty
_____	Sad
_____	Summer
_____	Life
_____	

B. Hablando de Parejas

el beso	_____
Cada vez más	_____
_____	To cook
_____	To buy
Echar de menos	_____
Enamorado/a	_____
Ya no	_____
_____	Holidays
_____	To smile
_____	Relatives
_____	Happy
_____	People
_____	Guest
_____	Rude
_____	Husband
_____	Marriage
_____	Woman / wife
_____	Boyfriend
Parecer	_____
La pareja	_____

C. Planes para el futuro y las fiestas del mundo

La boda	_____
_____	To find
_____	To change
El casamiento	_____
_____	To get married
El / la compañero/a	_____
_____	Disappointed
_____	To find
_____	Happiness
_____	Next
_____	Alone
_____	Single
Tener suerte	_____
Los antepasados	_____
La calavera	_____
Celebrarse	_____
El comentario	_____
Disfrazado/a	_____
_____	Dead
_____	To protect
_____	Town
_____	Present
La tumba	_____
La vela	_____
_____	To sell

Key Verbs

Ser To be	Tener To have	Present	Past	Future
_____ = I am	_____ = I have	_____ I speak	_____ I spoke	_____ I am going to speak
_____ = You are	Tienes = You have	_____ I eat	_____ I ate	_____ I am going to eat
_____= s/he is	_____ = s/he has	_____ I go	_____ I am/it was	_____ I am going to go
_____ = We are	_____ = We have	_____ I am	_____ I was	_____ I am going to be
_____ = They are	Tienen = They have	_____ I have	_____ I had	_____ I am going to have

D. Algunas costumbres regionales

La actuación	_____
El ambiente	_____
La batalla	_____
_____	Competition
Conmemorar	_____
_____	To run
_____	Custom
_____	Too much
_____	Procession
_____	Devil
_____	Running of the bulls
_____	To find
_____	Show / display
_____	Strange
_____	Impressive
_____	Uncomfortable
_____	To wear / carry
_____	To have a good time
_____	Danger
_____	Beautiful
_____	To jump
La suerte	_____
_____	Bull
La torre	_____
El traje	_____
Vestirse de	_____
La entrada	_____
_____	People
_____	To clear
_____	Soon
_____	Dirty
_____	To throw

F. Key Words across Topics?

to have = _____	_____– I like
to be = _____	_____– I love
to go =_____	_____ - I hate
to do =_____	_____ –
to play =_____	because
to see =_____	_____ – fun
to listen=_____	_____ – boring
to buy =_____	_____ – useful
to live =_____	_____ – useless
to speak= _____	_____ – comfy
to have to =_____	_____
to want to=_____	interesting
to visit = _____	_____ – entertaining
to eat = _____	_____ – exciting
to drink = _____	_____ – cool
to go out = _____	_____ – great
to read = _____	_____ – dull
to work = _____	_____ –
to think = _____	_____ bad
to write =_____	_____ - good

Year 9 COMPUTER SCIENCE Term 1 – Digital Literacy

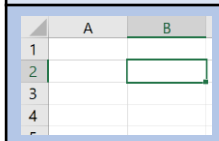
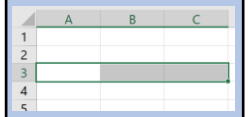
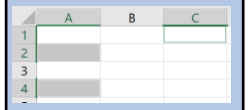
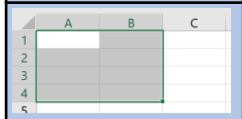
A Passwords and Shortcuts

A feature of a strong password has…	
1	10 to 15 characters
2	Special characters
3	Upper- and lower-case letters
4	Numbers
5	NO patterns or sequences
6	Only been used for one website/account
7	NO obvious letter substitutions (for example, ‘E’ replaced by 3)
8	NO personal information
9	To be memorable

What do the following shortcuts do?	
Ctrl-C	Copy
Ctrl-V	Paste
Ctrl-X	Cut
Ctrl-Z	Undo
Ctrl-A	Select all
Ctrl-S	Save
F2	Rename (file/folder)
Ctlr-Shift-N	Create a new folder
Ctrl-P	Print
Ctrl-B	Bold text
Ctrl-U	Underline text

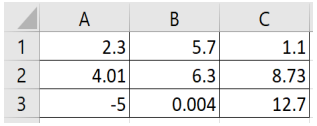
B Excel Cell References

What is the cell reference for the following…

	B2
	A3:C3
	A2,A4,C1
	A1:B4

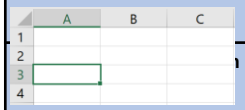
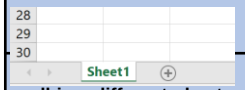
C Excel Formulae

What is the Excel formula for…

	Adding cells B1 and C2 **=B1+C2**
	Subtracting cell A1 from cell A3 **=A3-A1**
Finding the mean of cells: A1, A2, A3, B1, B2 and B3 **=AVERAGE(A1:B3)**	Multiplying cells B3 and C1 **=B3*C1**
Finding the maximum of cells: A1, A2, A3, B1, B2, B3, C1, C2 and C3 **=MAX(A1:C3)**	Dividing cell A2 by cell B2 **=A2*B2**
Finding the product of cells: A1, A2, A3, C1, C2 and C3 **=PRODUCT(A1:A3,C1:C3)**	Raising A1 to the power of 7 **=A1^7**

1	2.3	5.7	1.1
2	4.01	6.3	8.73
3	-5	0.004	12.7

D Excel Absolute Cell References

Why are absolute cell references used?	To stop a cell reference from being modified automatically
What is the absolute cell reference for the following	A3
	1. Right click the sheet we want to copy. 2. Select ‘move or copy’. 3. Select ‘create a copy’. 4. Choose where you want the copy to be placed. 5. Press ‘OK’.
 cell in a different sheet	=Sheet Name!Cell Reference For example, cell H3 in Sheet5 Would be referenced as =Sheet5!H3

E Excel Tools

What do the following buttons in Excel do?	
	Accounting Number Format (format the cell in a currency, £, $, and so on)
	Bold (make text bold)
	Fill Colour (change the colour of selected cells)
	Borders (put an outline around selected cells)
	Merge & Center (combine multiple cells into one)
	Wrap Text (make the selected text fit in one cell)

Year 9 COMPUTER SCIENCE Term 1 – Digital Literacy

A Passwords and Shortcuts

A feature of a strong password has…

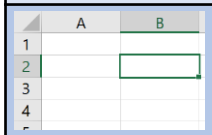
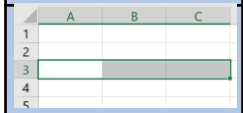
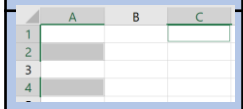
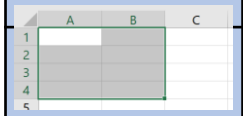
1	
2	
3	
4	
5	
6	
7	
8	
9	

What do the following shortcuts do?

Ctrl-C	
Ctrl-V	
Ctrl-X	
Ctrl-Z	
Ctrl-A	
Ctrl-S	
F2	
Ctlr-Shift-N	
Ctrl-P	
Ctrl-B	
Ctrl-U	

B Excel Cell References

What is the cell reference for the following…

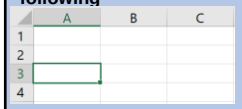
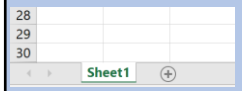
C Excel Formulae

What is the Excel formula for…

	A	B	C
1	2.3	5.7	1.1
2	4.01	6.3	8.73
3	-5	0.004	12.7

Adding cells B1 and C2	
Subtracting cell A1 from cell A3	
Finding the mean of cells: A1, A2, A3, B1, B2 and B3	Multiplying cells B3 and C1
Finding the maximum of cells: A1, A2, A3, B1, B2, B3, C1, C2 and C3	Dividing cell A2 by cell B2
Finding the product of cells: A1, A2, A3, C1, C2 and C3	Raising A1 to the power of 7

D Excel Absolute Cell References

Why are absolute cell references used?	
What is the absolute cell reference for the following 	
How do you duplicate an existing sheet? 	
How do you reference a cell in a different sheet	

E Excel Tools

What do the following buttons in Excel do?

Year 9 Art Term 4: Topic = Frank Stella

What we are learning this term:

A. Cubism
B. Frank Stella
C. Segments and Templates
D. Relief Sculpture
E. Clay, Score & Slip

B — Answer the questions about Frank Stella

1. What type of sculptures does Frank make? Relief Sculptures
2. What materials does he use? Frank uses a range of metal and Cardboard to create skeleton of the sculpture
3. How big are his sculptures? His sculptures can fill a whole room and usually fill up a whole wall.

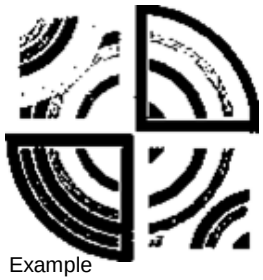
C. — Segments & Templates- Looking at the image below, what describing words could you use to describe this artwork by Frank Stella. Use your formal elements to guide you.

1. Organic, natural, colourful, curvy, bright, bold, pattern, skewed, misshaped, mixed, disconnected, random, thought provoking

A. — Cubism- List 3 facts about Cubism. What does it look like? Who created it? What different types of cubism are there?

1. Cubism can be described as angular and a smashed mirror effect
2. Cubism was created by Georges Braque and Pablo Picasso in 1907
3. There are two types of Cubism; Analytical and Synthetic. Analytical is sharp and dull colours, Synthetic is bright and organic

Using the grid method technique, draw this Frank Stella image into 'Your response' box.



Example

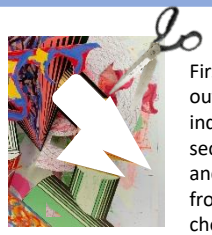
Your response

	Keywords
Abstract	Abstract art is art that does not attempt to represent an accurate depiction of a visual reality but instead use shapes, colours, forms and gestural marks to achieve its effect
Geometric	Is something associated with geometry, or the use of straight lines and shapes. An example of geometric is an art piece made from rectangles, squares and circles
Sculpture	The art of processing by carving, modeling with plastic or hard materials into works of art. A three-dimensional work of art such as a statue
Formal Elements	are line, shape, form, tone, texture, pattern, colour and composition
Ines Kouidis	A collage artist who collages famous people
Collage	A piece of art made by sticking various materials such as photographs and pieces of paper or fabric on to a backing.

D — This is a relief sculpture; how has it been made and what materials have been used?

To create a relief sculpture you will need Cardboard or a strong yet easily cut material. Start by having an image to create from. The image on the left has been created by many layers of cut Cardboard. As more layers are added they create a 3-dimensional illusion.

Write a step by step guide to making a cardboard template for relief sculpture



Firstly cut out individual sections and shapes from your chosen image. use scissors

Lay your section that you have cut out onto Cardboard and glue it down. Using a sharp pair of scissors cut this out of Cardboard staying very close to the edge

Once you have cut out all of your shapes and sections from the Cardboard you can arrange them and layer them onto

Finally seal all of your relief sculpture together with PVA glue .this will help to secure it , give it extra

E — Write a step- by- step guide to slab method & score and slip.

Slab

Firstly, start off by having your wooden board your wooden slats and your rolling pin With your ball of clay in the middle. Make sure the slats are the same thickness. Start off by gently rolling out your ball of clay in a rectangle, lifting up the clay every so often to rotate it so that you create a square. The slats will prevent the Play from going too thin. The rolling pin should now be rested on the slats as you roll, therefore the clay cannot go any thinner.

Score& Slip

Score and slip enables you to join 2 pieces of clay together. The scoring on each side of the clay will create a rough surface for attachment. The slip is watered down clay to create a paste. Using the slip like glue, add

Year 9 Art Term 4: Topic = Frank Stella

What we are learning this term:

A. Cubism
B. Frank Stella
C. Segments and Templates
D. Relief Sculpture
E. Clay, Score & Slip

B — *Answer the questions about Frank Stella*

1. What type of sculptures does Frank make?.....
2. What materials does he use?.....
3. How big are his sculptures?.....

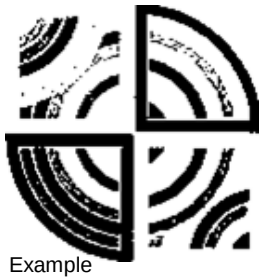
A. Cubism- List 3 facts about Cubism. What does it look like? Who created it? What different types of cubism are there?

1.

2.

3.

Using the grid method technique, draw this Frank Stella image into 'Your response' box.



Example

Your response

	Keywords
Abstract	
Geometric	
Sculpture	
Formal Elements	
Ines Kouidis	
Collage	

C. — *Segments & Templates- Looking at the image below, what describing words could you use to describe this artwork by Frank Stella. Use your formal elements to guide you.*

1.....
2.....
3.....

D — *This is a relief sculpture; how has it been made and what materials have been used?*

.....
.....
.....
.....
.....
.....
.....

Write a step by step guide to making a cardboard template for relief sculpture

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

E — *Write a step- by- step guide to slab method & score and slip.*

Slab

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Score& Slip

.....
.....
.....
.....
.....
.....
.....

Year 9 PRODUCT DESIGN

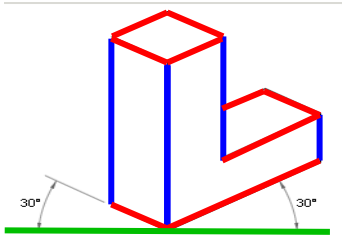
What we are learning this term:

A. Drawing Skills
B. Wood Theory
C. Wooden Joints & Their Uses
D. Tools & Machinery

A. Drawing Skills

Isometric Technical Drawing (3D NOT 2D)

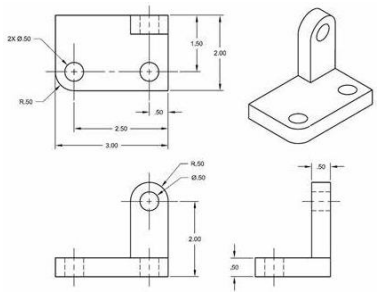
Made up of a series of par parallel **vertical lines** and parallel **30-degree lines**. But no **horizontal lines.**



Used to show a 3D (3-dimensional) perspective of a object or product.

Orthographic Projection (2D NOT 3D)

This shows 2D views of a 3D object from different angles – front, plan and end.
Lines are dimensions have specific meaning to avoid confusion.



Commonly used in industry to help the manufacturer understand the design.

B. Wood Theory

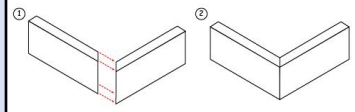
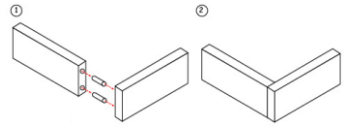
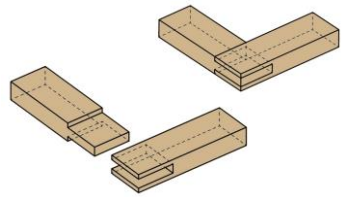
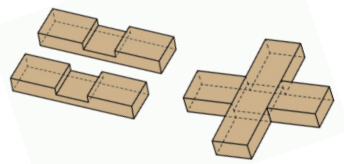
Natural	Advantages	Disadvantages
Hardwood:	• Stronger & durable • Weather resistant • Fire resistant	• Harder to cut / curve • More expensive • Longer to grow
Softwood:	• Easy to cut / curve • Cheaper • Quicker to grow	• Not weather resistant • Not fire resistant • Weaker & less durable
Manufactured	**Advantages**	**Disadvantages**
MDF:	• Easy to cut and sand • Takes paint well • Comes in wide sheets	• Not as aesthetically pleasing • Doesn't stain well
Plywood:	• Strong board • Can be waterproof • Comes in wide sheets	• Not as aesthetically pleasing • Doesn't stain well

Sustainability = Natural Wood Vs Manufactured Boards

Manufactured boards are more sustainable than natural woods because made from wasted wood and offcuts.

Softwood is more sustainable than hardwood, because it grows a lot quicker.

C. Wooden Joints & Their Uses

Joint	Uses	Image
Mitre Joint	Used mainly for picture frames. Great aesthetics but not very strong unless a dowel is added.	
Dowel Joint	Can be used to repair stripped screw holes and in toy making they are the perfect axles in toy vehicles.	
Mortise and Tenon	Mainly used for furniture. This joint is very strong and durable as well as looking very professional.	
Cross Halving Joint	Mainly used for cabinets, doors and windows. This joint has very good resistance to side-to-side movement.	

D. Tools & Machinery

Steel Rule	Tri Square	Mitre Square	Dowels	Quick Clamp	Wooden Vice	Tenon Saw	Bandfacer	Pillar Drill
								

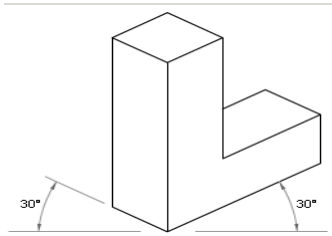
Year 9 PRODUCT DESIGN

What we are learning this term:

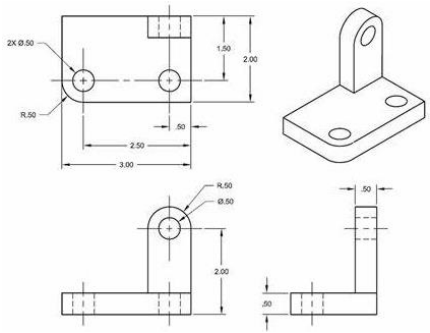
A. Drawing Skills
B. Wood Theory
C. Wooden Joints & Their Uses
D. Tools & Machinery

A. Drawing Skills

Isometric Technical Drawing



Orthographic Projection

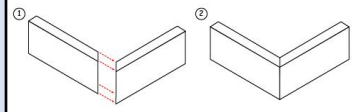
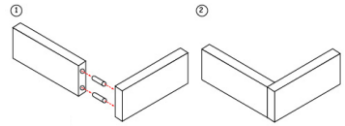
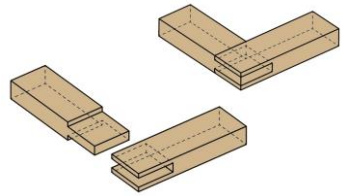
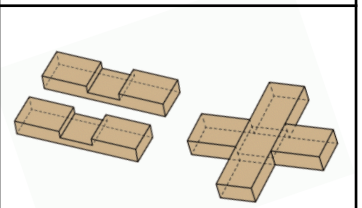


B. Wood Theory

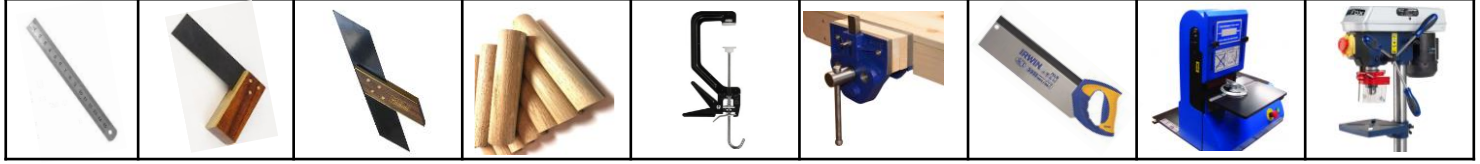
Natural	Advantages	Disadvantages
Hardwood:		
Softwood:		
Manufactured	**Advantages**	**Disadvantages**
MDF:		
Plywood:		

Sustainability = Natural Wood Vs Manufactured Boards

C. Wooden Joints & Their Uses

Joint	Uses	Image
Mitre Joint		
Dowel Joint		
Mortise and Tenon		
Cross Halving Joint		

D. Tools & Machinery



Year 9 – High Skills

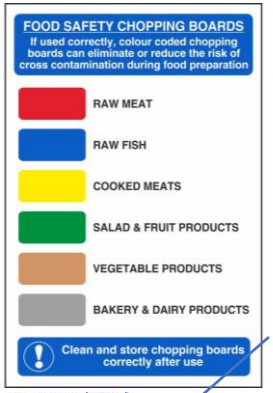
What we are learning this term:
A. Health, safety and hygiene in the kitchen
B. The Eatwell guide and nutrients
C. The Dietary requirements of a teenager
D. Skills testing
E. Healthy cooking
F. Chopping Board Colours

6 Key Words for this term	
1 Hygiene	4 Healthy
2 Dietary Requirements	5 Teenager
3 Skills Test	6 Cross Contamination

B.	*Can you list 5 of the dietary requirements of a teenager?*

1 A diet high in carbohydrate as a teenager is normally an energetic person.
2 A diet with 2-3 potions of protein to maintain muscle growth and cell repair
3 A diet with 2 -3 sources of calcium to build developing teeth and bones.
4 A diet low in fat to avoid becoming obese or developing other health problems.
5 Drinking 2 litres of water a day.

A.	**Explain the main four things that you should do when you enter the kitchen area.**
Remove all of your jewellery.	Jewellery can harbour bacteria and could fall off into the food.
Tie back your hair	Hair could fall into the food or touch equipment.
Wash your hands with hot soapy water.	To remove any germs and bacteria from your hands and nails.
Put on and apron and tie it back.	To protect you from the food and equipment and the food from touching you.



A.	*What is cross contamination and how can it be prevented?*

Cross contamination happens when you use the wrong chopping board or equipment to prepare food which can therefore result in food poisoning. You must use the correct equipment for the correct ingredients. You must also ensure that you are always following good hygiene practices when cooking.

B. What do the following terms mean?	
Grilling	Using the top part of the oven. It involves a significant amount of direct, radiant heat, and tends to be used for cooking meat and vegetables quickly. It is also a healthier method of cooking meat products.
Baking	Baking is a method of preparing food that uses dry heat, normally in an oven. Heat is gradually transferred from the surface of cakes, cookies, and breads to their centre.
Frying	Frying is the cooking of food in oil or another fat. It is usually done in a frying pan using the hob of the cooker. It also known to be unhealthy.

C.	*Can you list 5 reasons for why we cook food and why it is important?*
Rule	Why it is important
• 1 to get rid of bacteria on the food	• 1 to stop food poisoning
• 2 to make the food taste better	• 2 to make the food more appealing
• 3 to make food chewable	• 3 it could be raw or a choking hazard
• 4 to ensure that food is not raw	• 4 to stop food poisoning
• 5 to add colour to the food	• 5 to make it look more appetising or change its use

E.	**Keywords**
Hygiene	A method of keeping yourself and equipment clean
Research	Information that you find out to help you with a project
Nutritious	A meal that is healthy and contains vital nutrients.
Target Market	The age or type of person you re 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
Time Plan	Instructions of wat you are going to do and how long it should take.
Skills Test	Demonstrating your knowledge of a cooking term.
Teenager	Someone between the age of 13 – 19.

Year 9 – High Skills

What we are learning this term:

A. Health, safety and hygiene in the kitchen
B. The Eatwell guide and nutrients
C. The Dietary requirements of a teenager
D. Skills testing
E. Healthy cooking
F. Chopping Board Colours

6 Key Words for this term

1 Hygiene
2 Dietary Requirements
3 Skills Test
4 Healthy
5 Teenager
6 Cross Contamination

A.	Explain the main four things that you should do when you enter the kitchen area.

B.	*Can you list 5 of the dietary requirements of a teenager?*

1
2
3
4
5

A.	*What is cross contamination and how can it be prevented?*

B. What do the following terms mean?	
Grilling	
Baking	
Frying	

C.	*Can you list 5 reasons for why we cook food and why it is important?*

Rule	Why it is important
• 1	• 1
• 2	• 2
• 3	• 3
• 4	• 4
• 5	• 5

E.	Keywords
Hygiene	
Research	
Nutritious	
Target Market	
Carbohydrates	
Protein	
Fibre	
Calcium	
Design Idea	
Organisation	
Time keeping	
Sensory analysis	
Mood Board	
Time Plan	
Skills Test	
Teenager	

Year 9: Music in the Movies set 9GS, 1, 5 — Term 4

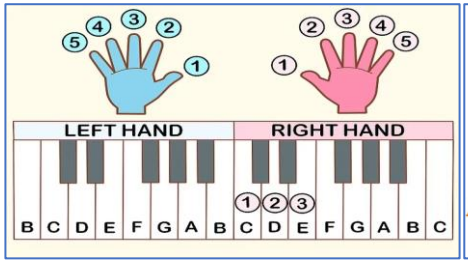
What we are learning this term:

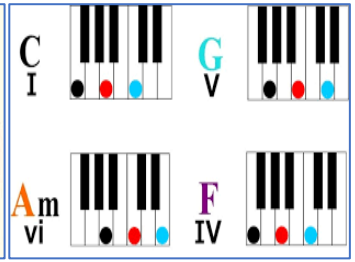
A. Film Composers and Orchestra Instruments
B. How to write a perfect Evaluation
C. Playing the Keyboard / Chords
D. What are the musical elements?
E. What are the music symbols – Note Values
F. Keywords
G. How to read music – treble clef and bass clef

7 Key Words for this term

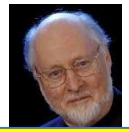
1 Leitmotif
2 Soundtrack
3 Underscore
4 Synchronising
5 Non-Diagetic
6 Mickey-Mousing
7 Atonal

C — Playing the Keyboard / Chords





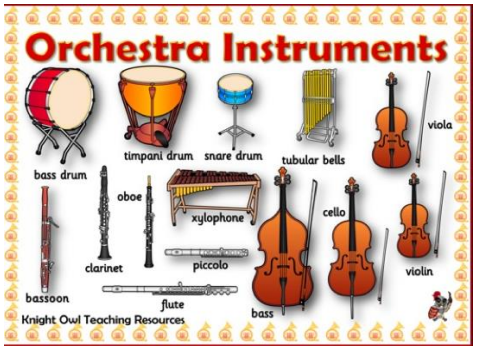
A — Famous Film Composers / Instruments of the Orchestra


John Williams


Danny Elfman


Hanz Zimmer


Bernard Hermann



D — What are the musical elements?

Timbre	Sound quality
Pitch	High or low sounds
Texture	How many sounds
Tempo	Fast or slow
Duration	Long or short
Structure	The musical plan
Dynamics	Loud or quiet
Silence	No sound / rests in the music
Attack/Decay	How notes start and stop

F — Keywords

Leitmotif / motif	a **recurrent theme** throughout a musical composition, associated with a person, idea, or situation
Musical Clichè	A cliché is a **phrase which is often used**, or overused
Theme Tune	A piece of **music that is known for representing** the film/tv show
Soundtrack	The **collection of songs and musical arrangements** played during a film/TV show.
Underscore	the **background music** used in a film to set the mood/atmosphere.
Opening / Closing Credits	A list of **important people involved in the production of film/tv shows** included at the start and end of films.
Mickey-Mousing	When the **music perfectly fits with the action** on the screen.
Atonal	term used to define **music that seems to lack a clear tonal center – it doesn't sound good**. It is perfect for horror movies!
Synchronising	The process of **combining music/audio with moving image**
Non-Diegetic	**Sound and effects** that are added for dramatic effect.

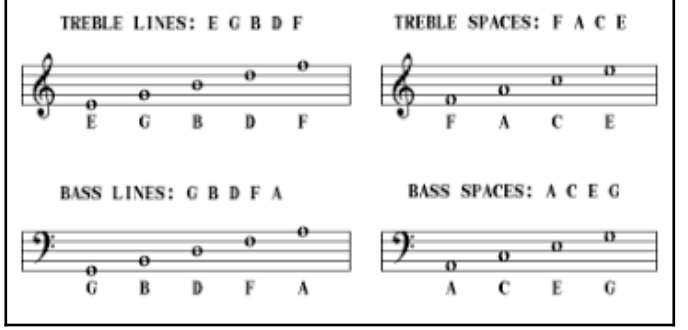
B — How to write a perfect Evaluation?

1	Write a full sentence explaining what your musical performance or music composition was about
2	Explain what you were trying to communicate to an audience and how you did it
3	Pick out at least two moments that worked really well, using specific examples and say what you did that made them successful
4	Pick out one moment that you could make better. Explain why it needed improving and how you would make it better if you did your performance again
5	Sum up your evaluation and discuss one thin that you will take forward into your next work

E — What are the music symbols?

Note	Name	Beats	Rest	Note	Name	Beats	Rest
𝅝	Semibreve, Whole Note	4 beats	𝄻	𝅝.	Dotted Semibreve, Dotted Whole Note	6 beats	𝄻.
𝅗𝅥	Minim, Half Note	2 beats	𝄼	𝅗𝅥.	Dotted Minim, Dotted Half Note	3 beats	𝄼.
♩	Crotchet, Quarter Note	1 beat	𝄽	♩.	Dotted Crotchet, Dotted Quarter Note	1½ beats	𝄽.
♪	Quaver, Eighth Note	1/2 beat	𝄾	♪.	Dotted Quaver, Dotted Eighth Note	¾ beat	𝄾.

G — How to read music – treble clef and Bass Clef



Year 9: Music in the Movies set 9GS, 1, 5 — Term 4

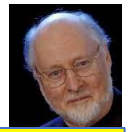
What we are learning this term:

A. Film Composers and Orchestra Instruments
B. How to write a perfect Evaluation
C. Playing the Keyboard / Chords
D. What are the musical elements?
E. What are the music symbols – Note Values
F. Keywords
G. How to read music – treble clef and bass clef

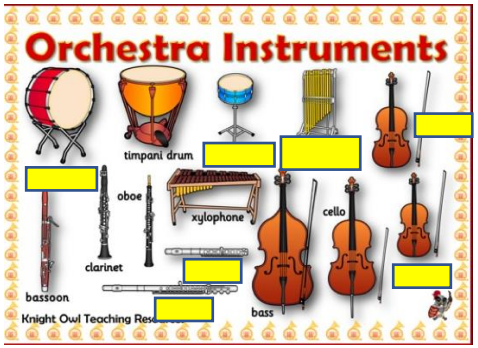
7 Key Words for this term

1
2
3
4 S
5 M
6 M
7 A

A — Famous Film Composers / Instruments of the Orchestra



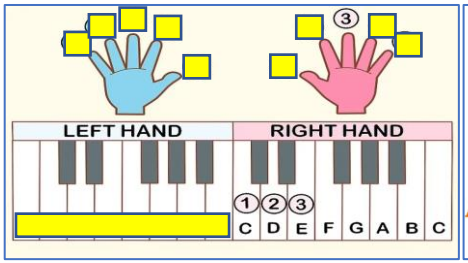


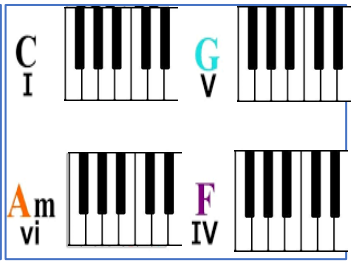


B — How to write a perfect Evaluation?

1	Write a full sentence explaining what your musical performance or music composition was about
2	Explain what you were trying t ate to an audience and how you did it
3	examples and say what you did that made them successful
4	improving and how you would make it better if you did your performance
5	Sum up your evaluation and discuss one thin that you will take forward into your next work

C — Playing the Keyboard / Chords





D — What are the musical elements?

Timbre	
Pitch	
Texture	
Tempo	
Duration	
Structure	
Dynamics	
Silence	
Attack/Decay	

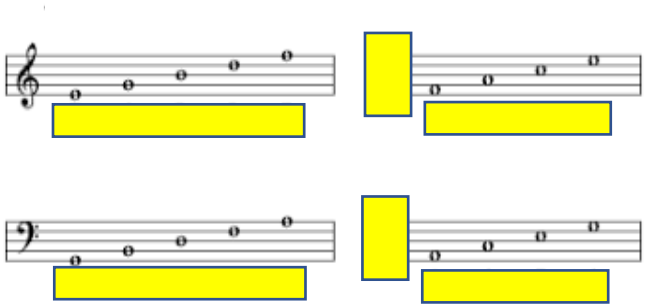
E — What are the music symbols?

Note	Name	Beats	Rest	Note	Name	Beats	Rest
𝅝		4 beats		𝅝.	Dotted Semibreve, Dotted Whole Note		
𝅗𝅥		2 beats		𝅗𝅥.	Dotted Minim, Dotted Half Note		
♩		1 beat		♩.	Dotted Crotchet, Dotted Quarter Note		
♪		1/2 beat		♪.	Dotted Quaver, Dotted Eighth Note		

F — Keywords

Leitmotif / motif	a **recurrent theme** throughout a musical composition, associated with a person, idea, or situation
	A cliché is a **phrase which is often used**, or overused
Theme Tune	A piece of **music that is known for representing** the film/tv show
Soundtrack	
	the **background music** used in a film to set the mood/atmosphere.
Opening / Closing Credits	
	When the **music perfectly fits with the action** on the screen.
Atonal	
Synchronising	
	Sound and effects that are added for dramatic effect.

G — How to read music – treble clef and Bass Clef



Year 9 Term 4: Pantomime!

What we are learning this term:

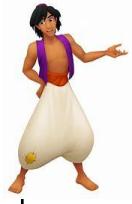
A. What stock characters you would find in most pantomimes.
B. How new techniques learnt in lessons can be applied to your own pantomime style performance.
C. What technical aspects can be added to a performance to create 'wowness

Pantomime Techniques- this term's key words

Audience Participation	Encouraged to get involved either by singing along with the songs, being brought onto the stage, boo the villain or argue with the Dame.
Vocal Skills	How you interpret a character using Pitch, Pace, Volume, Accent or Tone
Stock Characters	Stereotypical fictional characters who audiences recognise from their frequent recurrences.
Comedy	A genre in drama.
Clocking the Audience	When an actor looks straight at the audience giving them a chance to understand what the character is thinking
Exaggeration	Over the top gestures or facial expressions
Sound Effects	Sound effects in drama are sounds that are created or used in a theatrical production to enhance the action, mood or atmosphere of a scene
Atmosphere	Overall feeling created in a performance
Staging	The method of presenting a play or other dramatic performance

The History of: Pantomime

Pantomime is a type of musical comedy stage production designed for family entertainment. It was developed in England and is performed throughout the United Kingdom, Ireland and in other English-speaking countries, especially during the Christmas and New Year season. Modern pantomime includes songs, gags, slapstick comedy and dancing. It generally combines gender-crossing actors and topical humour with a story based on a well-known fairy tale, fable or folk tale. Pantomime is a participatory form of theatre, in which the audience is encouraged and expected to sing along with certain parts of the music and shout out phrases to the performers.



Popular Pantomimes

Cinderella

Aladdin

Snow White

Jack and the Beanstalk

Sleeping Beauty

Robinson Crusoe

Who are the key characters?

Hero (Principal Boy)	Often played by a female. Main lead and usually the hero of the story. Fights the villain. Sings
Heroine (Principal Girl)	Beautiful. Appears youthful. Innocent and has to be rescued from the villain's capture.
Dame	Comic over the top female character always played by a male. Costumes are always colourful, outrageous and have hidden props, pockets and surprises.
Villain	The character everybody loves to hate and boo! His aim is to capture the heroine.
Goodies	Other characters such as fairies that help out the Hero and Heroine
Clowns	Often a double act or solo comedian. The ugly sisters in Cinderella are an example of this.

Year 9 Term 4: He's Behind You!

What we are learning this term:
A. What stock characters you would find in most pantomimes. B. How new techniques learnt in lessons can be applied to your own pantomime style performance. C. What technical aspects can be added to a performance to create 'wowness'

Pantomime Techniques- this term's key words	
	Encouraged to get involved either by singing along with the songs, being brought onto the stage, boo the villain or argue with the Dame.
Vocal Skills	How you interpret a character using… **List the 5 vocal skills**
	Stereotypical fictional characters who audiences recognise from their frequent recurrences.
Comedy	
C t e A e	When an actor looks straight at the audience giving them a chance to understand what the character is thinking
Exaggeration	Over the top….
Sound Effects	Sound effects in drama are….
	Overall feeling created in a performance
S g	

The History of:	Pantomime

What Style of theatre and Genre is a pantomime?

What time of year are pantomimes usually performed?

What are Pantomimes usually based on?

What techniques are used in a pantomime?

Popular Pantomimes

How many can you name?

Who are the key characters?	
	.

SWINDON ACADEMY READING CANON

Year 7

- The Canterbury Tales
- War Horse
- Adventures of a Young Naturalist
- A Monster Calls
- The Pearl
- Number the Stars
- The Hunger Games
- Chinese Cinderella
- Sir Gawain and the Green Knight

Year 8

- The Dark Lady
- Trash
- The Diary of a Young Girl
- Ghost Boys
- The Amazing Maurice
- The Bone Sparrow
- Salt to the Sea
- The Giver
- Witch Child

Year 9

- Skin
- I am Malala
- Noughts and Crosses
- Liccle Bit
- Fahrenheit 451
- The Black Flamingo
- One
- Simon vs the Homo Sapiens Agenda
- Long Way Down
- Northern Lights
- The Boy Who Steals Houses
- The Woman in Black
- The Book Thief

Year 10

- The Underground Railroad
- The Curious Incident of the Dog in the Night-Time
- The Hate U Give
- Rani and Sukh
- Pigeon English
- The Boxer
- 1984
- Orangeboy
- The Outsiders
- The Art of Being Normal
- A Selection of Short Stories
- To Kill a Mockingbird

#ReadingisPower