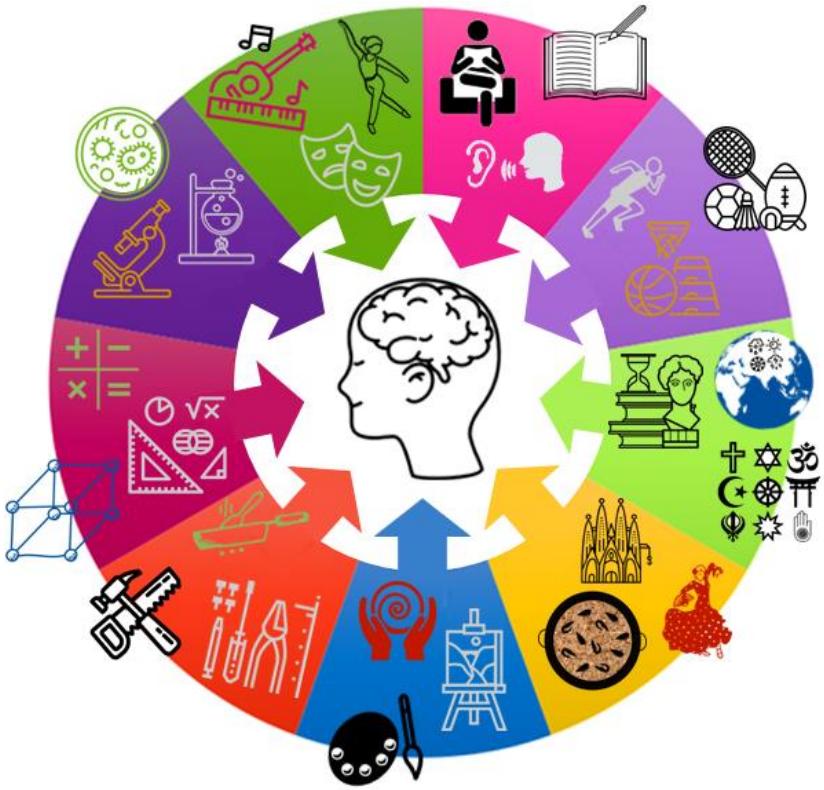
100% book – Year 9 Grammar

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



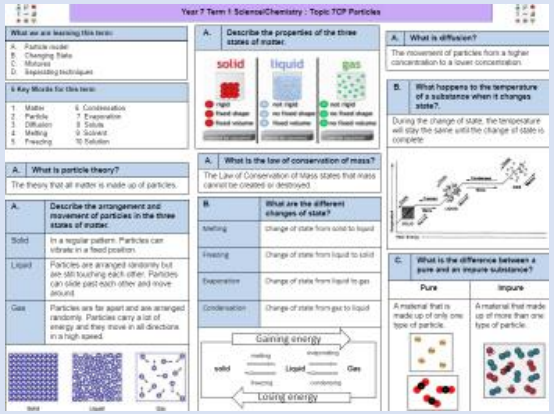
Term 2

Swindon Academy 2022-23	
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

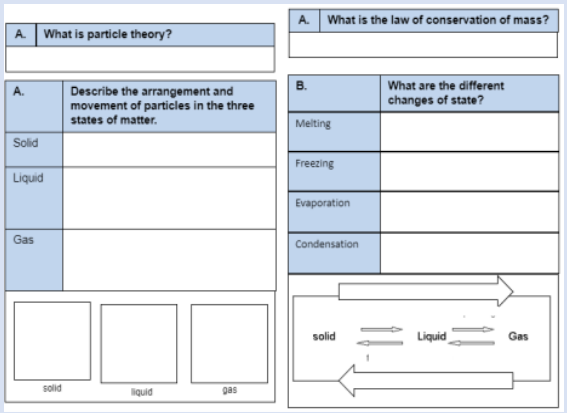
Knowledge Organisers



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!

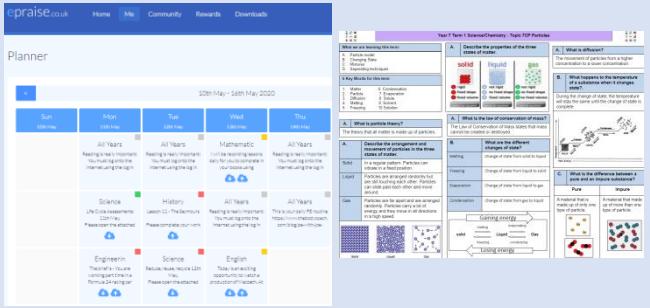
Expectations for Prep and for using your Knowledge Organisers

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?

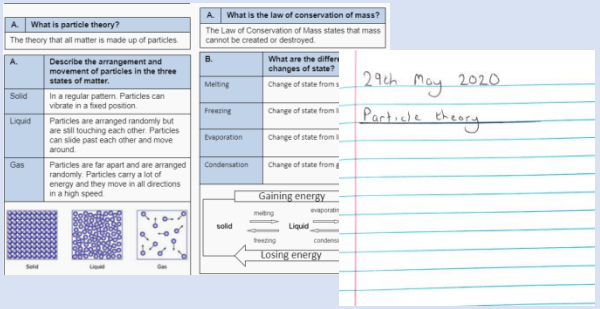
Step 1

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



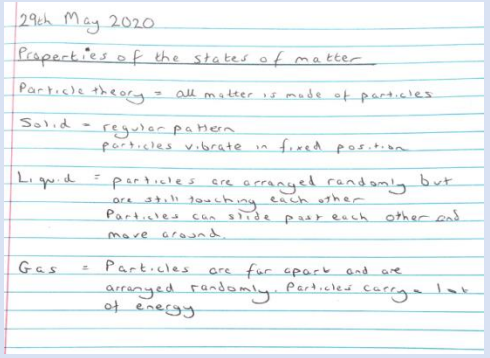
Step 2

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



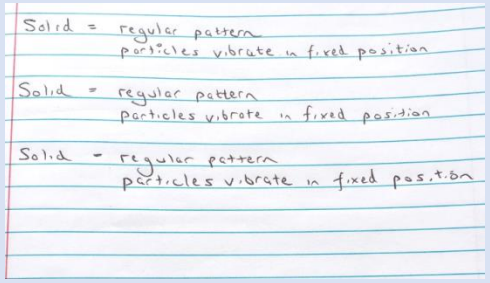
Step 3

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



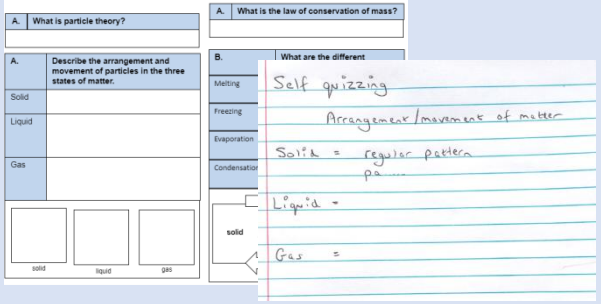
Step 4

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



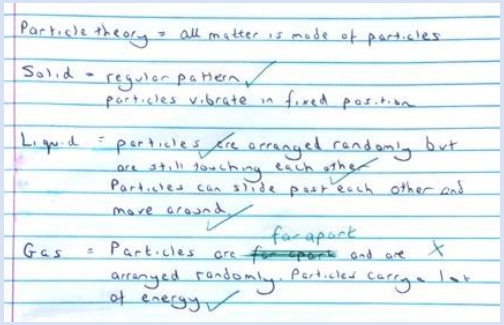
Step 5

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.

Year 9 Term 2 English Knowledge Organiser: Jane Eyre

Chapter breakdown of Jane Eyre

1	On a bitter day, Jane is curled up with a book when her cousin, John Reed, discovers her and hits her. She fights back and is sent to the red-room.
2	Jane is locked in the red-room. She sits in turmoil until she hears and sees something odd. She begs to be let out. She faints.
3	Jane wakes up in the nursery. Bessie and Mr Lloyd are there. Jane is miserable. Mr Lloyd talks to Jane about going to school.
4	Jane is visited by Mr Brocklehurst, the headteacher at Lowood School. After his visit, Jane and Mrs Reed argue. Jane says she will never call her 'aunt' again.
5	Jane travels to Lowood School. She meets Miss Temple, the kind teacher, and Helen Burns, another pupil.
6	Helen is thrashed for having dirty hands. Later, she talks with Jane and explains that it is better to forgive and be patient than to get angry and seek revenge.
7	Mr Brocklehurst visits Lowood School. He calls Jane to the front of the classroom and calls her a liar in front of all the teachers and pupils. Helen smiles at Jane, bringing Jane hope.
8	Afterwards, Jane and Helen visit Miss Temple. Miss Temple says she believes that Jane is not a liar. Jane listens to Miss Temple and Helen's fascinating conversations. Miss Temple hears from Mr Lloyd that Jane is not a liar and tells the school.
9	Jane enjoys the area around Lowood in the spring. Typhus breaks out at Lowood School. Lots of girls get sick. Many die. Helen Burns dies of tuberculosis.
10	Eight years pass. Jane has become a teacher at Lowood School. Mr Brocklehurst had his power removed when his treatment at the school was discovered. Jane applies to be a governess for a family at Milcote.

The Big Ideas:

1	Social Class: Jane is an orphan and dependent on the charity of her extended family. Jane is poor and of low class – powerless. She suffers abuse by John Reed, her 'master' Lowood is harsh and corrupt – religious hypocrisy.
2	Growth: Jane is constantly growing and maturing. She is an adult reflecting back on her childhood in the novel. She learns to manage her emotions. Her relationships with others help her grow .
3	Oppression: Oppression of women. Jane's abusive childhood is a form of oppression. Adults oppressing children in a huge theme in the novel. Religion as a form of oppression. In the novel.
4	Role of women in society: Jane is angry at her place in society. Lowood is an all-girls' school. Women as governesses, teachers, servants. Low class women are powerless.

Locations in the first 10 chapters

Gateshead Hall
Home of Mrs Reed, John, Georgiana, and Eliza Reed. Jane grows up here. Jane is locked in the red-room.

Lowood School
Jane is sent to Lowood by Mrs Reed. Mr Brocklehurst is the headteacher. Conditions are harsh and strict. The girls receive brutal punishments and are fed poorly. A typhus outbreak kills many of the girls.

Terminology: Key words

thesis – the main idea that you want to discuss throughout an essay.

juxtaposition – a literary technique where a writer places very different things or people close to each other. This helps to show how the things are similar or different.

Characters in Jane Eyre

Jane Eyre The main character. A young, intelligent, and passionate orphan. "You think I have no feelings, and that I can do without one bit of love or kindness; but I cannot live so"

Mrs Reed – Jane's aunt She neglects and abuses Jane and is glad to send her away to Lowood School. "Guard against her worst fault, a tendency to deceit"

Mr Brocklehurst – The governor of Lowood school A cruel and hypocritical Christian. He believes in driving evil from children through harsh discipline. "Punish her body to save her soul"

Helen Burns – Jane's friend A kind and forgiving Christian. She inspires Jane to be more patient and accepting. She dies of tuberculosis at 14. "Love your enemies; bless them that curse you; do good to them that hate you and despitefully use you."

Miss Temple The kind and understanding teacher at Lowood. Offers care and affection to Jane and Helen. "You shall be publicly cleared from every imputation: to me, Jane, you are clear now."

Vocabulary: Key words

protagonist – the main character

dependent – someone who relies on another person to support them financially. Jane is a **dependent** because she relies on Mrs Reed to feed, clothe and house her.

oppress (vb.) – to treat a group of people in an unfair way, often by limiting their freedom.

solitude – state or situation of being alone

sombre – serious or sad

conventional – normal or accepted way

obedience – submission to another's authority

ominous – something bad that is going to happen

clandestine – something that is done in secret

humiliate (vb.) – to make someone feel stupid or ashamed. If something makes you feel stupid or ashamed, you could describe it as **humiliating.**

hypocrite – someone who says one thing but does the opposite at another time.

comeuppance – when a villain receives some form of punishment for what they did.

Victorian attitudes to childhood

1	A child is a blank slate and can be trained to develop into a rational being.
2	A child is born completely **innocent** and **pure**. They are only contaminated by contact with corrupt forces.
3	The child is born evil and must therefore be controlled and punished in order to submit to the rules of God and society.

Biographical information

1	'Jane Eyre' written in 1847 by Charlotte Brontë.
2	Parts of 'Jane Eyre' were influenced by Brontë's experiences at school and as a young woman.
3	'Jane Eyre' was unusual when it was published because it is written in the first-person from a female perspective.

Year 9 Term 2 English Knowledge Organiser: Jane Eyre

Chapter breakdown of Jane Eyre

1	On a bitter day, Jane is curled up with a book when her cousin, John_____, discovers her and hits her. She _____back and is sent to the_____-_____.
2	Jane is locked in the _____-_____. She sits in turmoil until she hears and sees something odd. She begs to be let out. She_____.
3	Jane wakes up in the nursery. _____ and Mr _____are there. Jane is_____. Mr _____talks to Jane about going to school.
4	Jane is visited by Mr_____, the _____at _____ _____. After his visit, _____and Mrs _____ _____. Jane says she will _____call her '_____' again.
5	Jane travels to _____ School. She meets Miss_____, the kind_____, and Helen_____, another_____.
6	_____ is thrashed for having _____ hands. Later, she talks with Jane and explains that it is better to _____and be _____than to get _____and seek_____.
7	Mr Brocklehurst visits Lowood School. He calls Jane to the front of the classroom and calls her a _____ in front of all the _____and_____. Helen smiles at Jane, bringing Jane_____.
8	Afterwards, _____and _____visit Miss Temple. Miss Temple says she believes that Jane is _____ a_____. Jane listens to Miss Temple and Helen's _____ _____. Miss Temple hears from Mr _____ that Jane is not a _____ and tells the_____.
9	Jane _____ the area _____ _____in the_____. _____ breaks out at Lowood School. Lots of girls get_____. Many_____. Helen Burns _____ of_____.
10	_____ _____ pass. Jane has become a _____ at _____ _____. Mr _____ had his _____ _____ when his _____at the school was_____. Jane applies to be a governess for a family at Milcote.

The Big Ideas:

1	Social Class: Jane is an _____and _____on the _____ of her extended family. Jane is _____and of _____class – _____. She suffers _____by John Reed, her 'master'. Lowood is harsh and _____– religious_____.
2	Growth: Jane is constantly _____ and_____. She is an adult _____ back on her _____ in the novel. She learns to manage her_____. Her _____with _____help her _____.
3	Oppression: Oppression of_____. Jane's _____ childhood is a form of oppression. Adults oppressing _____ in a huge theme in the novel. _____as a form of oppression in the novel.
4	Role of women in society: Jane is _____at her place in_____. Lowood is an all-girls' school. Women as governesses, teachers, servants. Low class women as _____.

Locations in the first 10 chapters

Gateshead Hall
Home of_____ _____,_____,_____, and _____ _____. _____grows up here. _____ is locked in the _____-_____.

Lowood School
_____ is sent to _____ by Mrs _____. Mr _____ is the_____. Conditions are _____ and_____. The girls receive brutal _____and are fed_____. A _____ outbreak _____ many of the girls.

Terminology: Key words

thesis –.

juxtaposition –

Characters in Jane Eyre

Jane Eyre

Mrs Reed – Jane's aunt

Mr Brocklehurst – The governor of Lowood school

Helen Burns – Jane's friend

Miss Temple

Vocabulary: Key words

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Victorian attitudes to childhood

1	A child is a blank slate…
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Biographical information

1	'Jane Eyre' written in _____by Charlotte_____.
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3	'Jane Eyre' was unusual when it was published because it is written in the_____ _____

Year 9 Grammar Term 2 Biology : Topic B1.2 Cell Division

What we are learning this term:

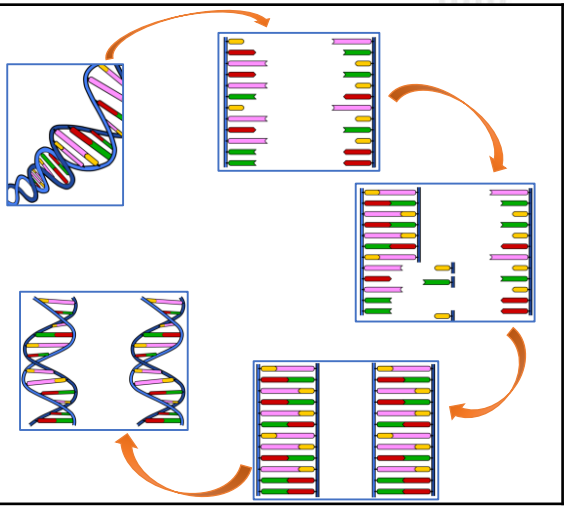
A. Cell cycle
B. Mitosis
C. Growth
D. Stem cells
E. Cloning

2 Key Words for this term

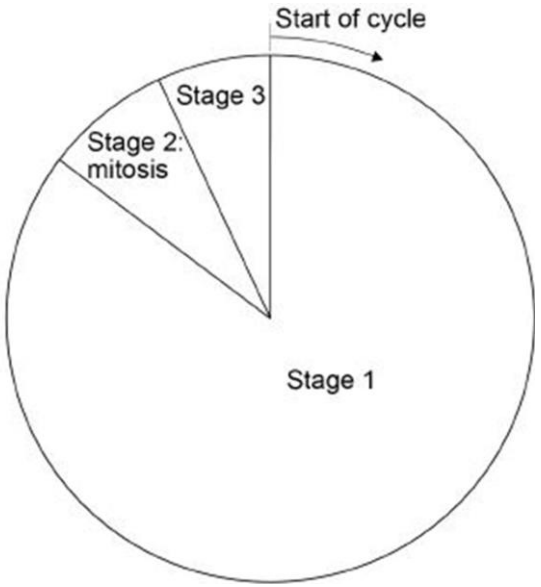
1. Mitosis
2. Differentiate

B. What are the stages of DNA replication?

1. The DNA molecule unwinds.
2. An enzyme moves along separating the two stands.
3. New complementary bases bond to the existing bases of one strand.
4. New complementary bases bond to the existing bases of the other strand.
5. The two complete molecules coil back into a helical shape.



A. Describe the stages of the cell cycle



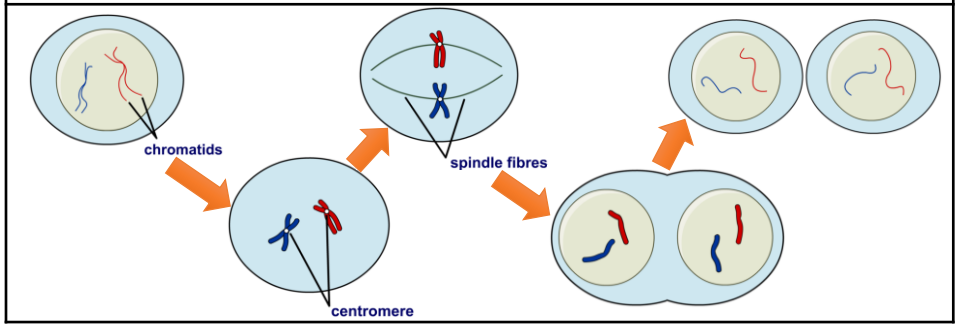
1) Replication of DNA to form two copies of each chromosome and synthesis of new sub-cellular structures

2) Nucleus divides

3) Cell divides in two

B. What is the order of the stages of mitosis?

1. chromosomes become shorter and thicker
2. spindle fibres attach to the chromosomes
3. chromosomes align in the centre of the cell
4. spindle fibres shorten, separating the chromosomes
5. chromatids move to opposite sides of the cell
6. the cell divides into two daughter cells



Year 9 Grammar Term 2 Biology : Topic B1.2 Cell Division

What we are learning this term:

A. Cell cycle
B. Mitosis
C. Growth
D. Stem cells
E. Cloning

2 Key Words for this term

1. Mitosis
2. Differentiate

B. What are the stages of DNA replication?

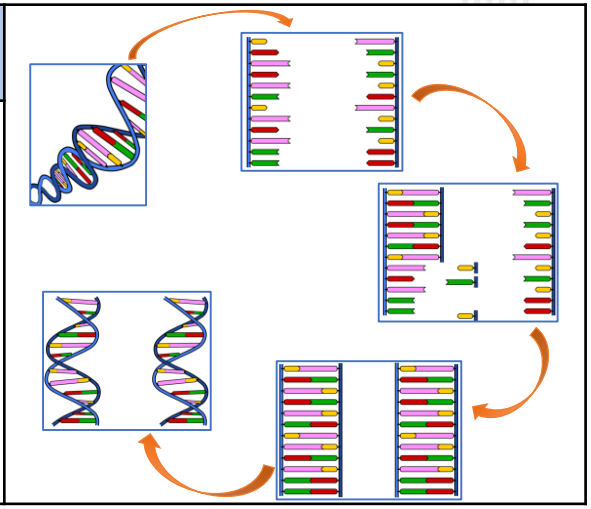
1.

2.

3.

4.

5.



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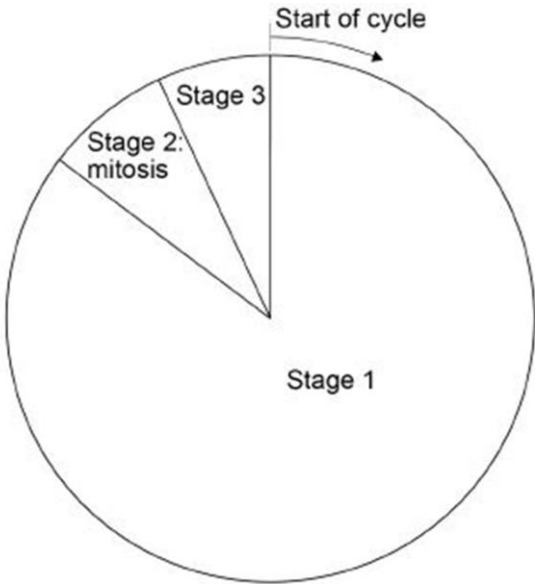


1)

2)

3)

B. What is the order of the stages of mitosis?

chromatids move to opposite sides of the cell

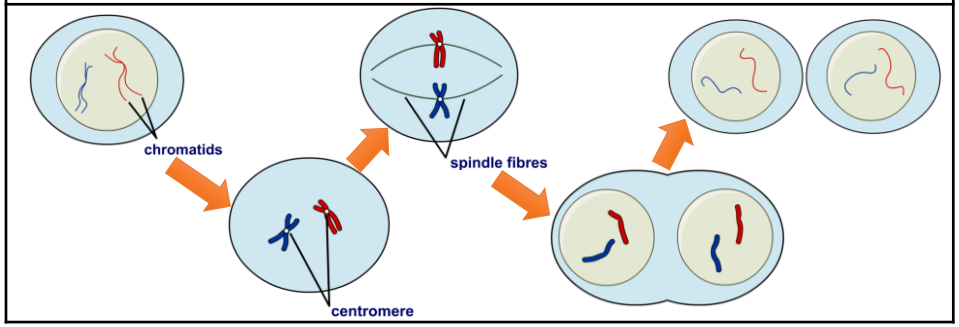
chromosomes align in the centre of the cell

chromosomes become shorter and thicker

spindle fibres shorten, separating the chromosomes

the cell divides into two daughter cells

spindle fibres attach to the chromosomes



C.	Match terms on growth to their definitions
differentiation	when a cell starts to become specialized
division	when a cell replicates
elongation	when a cell increases in size
stem cells	cells that can become any type of cell
tissue cells	cells that have begun to be specialized

D.	Describe the ethical concern around using embryonic stem cells.

Embryonic stem cell research is strongly criticized by people who believe it is unethical to kill embryos for their cells.

Work involving embryonic stem cells is subject to government regulation.

D.	What are the advantages of using adult stem cells?

- They come from volunteers so they are more ethically acceptable.
- A patient's own stem cells could be used to treat their own disease, avoiding the problem of immune rejection.
- It might be easier to guide their development into specific cell types.
- They are less likely to become cancerous.

D.	Describe these two types of human stem cell
Embryonic	• Up until the eight cell stage, all of the cells in a human embryo are identical. • They can develop into all the different types of cell in the body.
Adult	• They are found in small numbers in many organs, including bone marrow, brain, skin and muscle. • Can usually only make a small number of cell types.

D.	Describe plant stem cells
Meristem tissue	• Plant cells can differentiate to form specific cells throughout the plant's life.

D.	Define therapeutic cloning

A process where an embryo is produced that is genetically identical to the patient so the cells can be used in medical treatments.

Year 9 Grammar Term 2 Biology : Topic B1.2 Cell Division

C.	Match terms on growth to their definitions
differentiation	when a cell increases in size
division	cells that have begun to be specialized
elongation	when a cell replicates
stem cells	cells that can become any type of cell
tissue cells	when a cell starts to become specialized

D.	Describe the ethical concern around using embryonic stem cells.

D.	What are the advantages of using adult stem cells?

D.	Describe these two types of human stem cell
Embryonic	
Adult	

D.	Describe plant stem cells
Meristem tissue	

D.	Define therapeutic cloning

Year 9 Grammar Term 2 Chemistry : Topic C1.2 The Periodic Table

What we are learning this term:

A. Arrangement of the Periodic table
B. Development of the periodic table
C. Metals and non metals
D. Group 1
E. Group 7
F. Group 0

6 Key Words for this term

1. Halogens
2. Intermolecular

C. How many elements are metals?

Most elements in the periodic table are metal

What are ions?

Ions are formed when elements gain or lose electrons

What are positive ions?

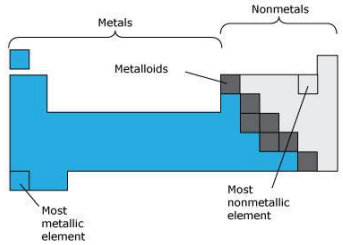
When an element loses an electron it forms a positive ion

What type of ions do metals form?

Metals react to form positive ions

Where are metals and non-metals found on the periodic table?

Metals are found to the left, towards the bottom.
Non-metals are found towards the top right of the periodic table



A. How are the elements in the periodic table arranged?

Elements are arranged in order of increasing atomic number.

What are Groups?

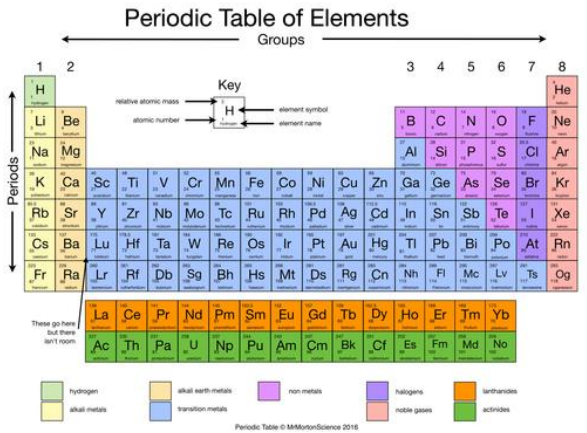
The vertical columns are groups.

What similarities do elements in groups have?

- Similar properties
- Same no of electrons on outer shell

What are periods?

The horizontal rows in a periodic table



B. Before the discovery of protons, how did scientists try to arrange elements?

Scientists tried to group elements in order of their atomic weights

What problems were often found with early periodic tables?

- Not all elements had been discovered
- Some elements placed in the wrong position when atomic weight was used

C, What are negative ions?

Ions formed when atoms gain electrons

What type of ions do non-metals form?

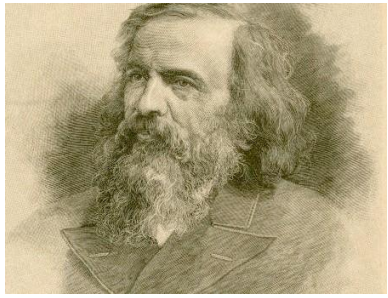
Non-metals do not form positive ions – they form negative ions

B. How did Mendeleev overcome some of the problems of grouping elements?

- He left gaps for possible elements that had not been discovered
- He sometimes changed the order based on atomic weights

What was discovered that helped explain why using atomic weights didn't always work?

Knowledge of isotopes



Year 9 Grammar Term 2 Chemistry : Topic C1.2 The Periodic Table

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A. Arrangement of the Periodic table
B. Development of the periodic table
C. Metals and non metals
D. Group 1
E. Group 7
F. Group 0

6 Key Words for this term

1. Halogens
2. Intermolecular

C. How many elements are metals?

What are ions?

What are positive ions?

What type of ions do metals form?

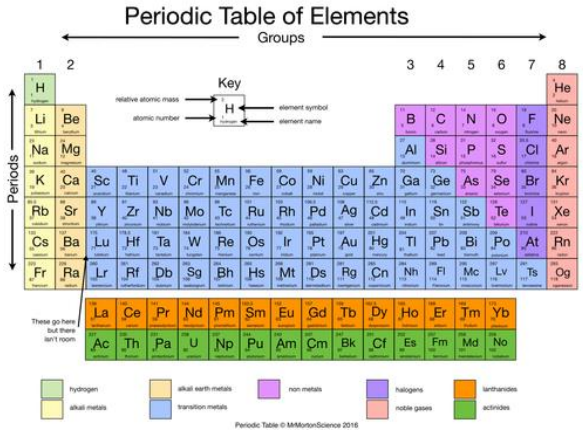
Where are metals and non-metals found on the periodic table?

A. How are the elements in the periodic table arranged?

What are Groups?

What similarities do elements in groups have?

What are periods?



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What problems were often found with early periodic tables?

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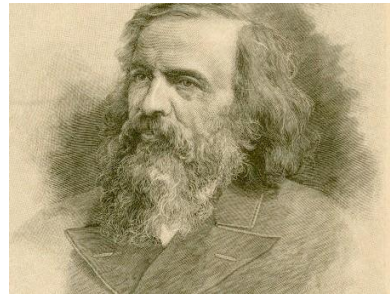
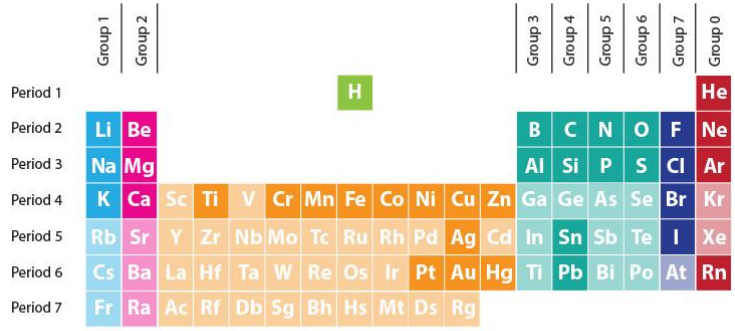


Year 9 Grammar Term 2 Chemistry : Topic C1.2 The Periodic Table

D	Group 1 of the Periodic Table -
What are group 1 elements known as?	Alkali Metals
Metal or non-metal	Metal
How many electrons are in the outer shell?	1 electron in the outer shell
How reactive are they?	• Group 1 metals easily lose the electron on the outer shell. • This makes group 1 elements very reactive • Vigorous reactions with water
What ions do they form?	• Group 1 elements readily lose electrons to form positive ions • This is so they can have a filled outer shell
How does reactivity change down the group?	Reactivity increases down the group

F.	Group 0 of the Periodic Table – Helium, Neon, Argon, Krypton, Xenon, Radon
What are group 0 elements known as?	The Noble Gases
Metal or non-metal	Non-metal
How many electrons are in the outer shell?	8 - Filled outer shell (except Helium that has 2)
How reactive are they?	Filled outer shell so not very reactive
How do boiling points change down the group?	Boiling point increases down the group as the atomic weight increases

E.	What is a Halogen Displacement reaction?
A more reactive halogen can displace a less reactive halogen from an aqueous solution from its salt **Cl_2 + 2KBr → 2KCl + Br_2**	



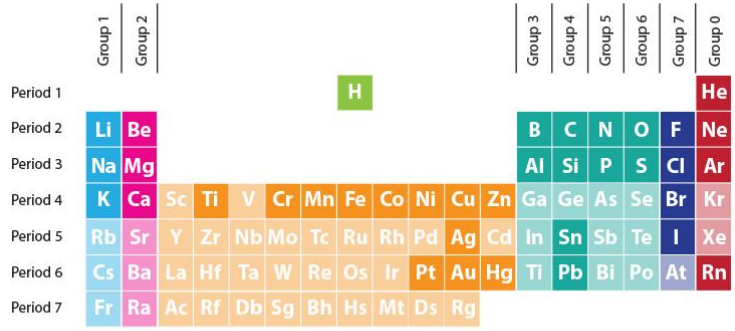
E.	Group 7 of the Periodic Table
What are group 7 elements known as?	Halogens
How are they found	Halogens travel in pairs – diatomic molecules (Cl_2, Br_2….)
Metal or non-metal	Non-metal
How many electrons are in the outer shell?	7 electrons in the outer shell
How reactive are they?	• Group 7 elements easily gain electrons • This makes group 7 elements very reactive
What ions do they form?	• Group 7 elements readily gain electrons to form negative ions. • This is so they can have a filled outer shell
How does reactivity change down the group	Reactivity decreases down the group
How do boiling points change down the group?	As you go down the group, the boiling point increases as the atomic weigh increases

Year 9 Grammar Term 2 Chemistry : Topic C1.2 The Periodic Table

D	Group 1 of the Periodic Table -
What are group 1 elements known as?	
Metal or non-metal	
How many electrons are in the outer shell?	
How reactive are they?	
What ions do they form?	
How does reactivity change down the group?	

F.	Group 0 of the Periodic Table – Helium, Neon, Argon, Krypton, Xenon, Radon
What are group 0 elements known as?	
Metal or non-metal	
How many electrons are in the outer shell?	
How reactive are they?	
How do boiling points change down the group?	

E.	What is a Halogen Displacement reaction?



E.	Group 7 of the Periodic Table
What are group 7 elements known as?	
How are they found	
Metal or non-metal	
How many electrons are in the outer shell?	
How reactive are they?	
What ions do they form?	
How does reactivity change down the group	
How do boiling points change down the group?	

Year 9 Grammar Term 2 Physics : Topic P1.2 Energy Transfer by Heating

What we are learning this term:

A. Conduction
B. Insulators
C. Specific heat capacity
D. Heating and insulating buildings

6. Key Words for this term

A. What are the factors that affect conduction?

1. Material
2. Cross-sectional area
3. Surface contact
4. Temperature difference

B. Why do insulators not conduct heat?

They do not have any free electrons to move through the material and transfer the energy.

A. What is a good conductor?

A material that allows heat and electricity to pass through.

What are examples of good and bad conductors (insulators)?

Good	Bad (insulators)
Metals: silver, copper, gold, aluminium	Glass, air, plastic, rubber and wood.

A. What are the three main processes that heat can be transferred by?

1. Conduction 2. Convection 3. Radiation

In what direction does heat energy flow?

From HOT to COLD
From a warmer to cooler area

In what state (s, l, g) does conduction happen?

Solids

How do metals conduct heat?

The outer electrons are not attached, are free to move (delocalised). When the metal is heated they gain electrons and transfer the energy through the metal.

B. What materials make good insulators?

Rubber, wood, air, glass, plastic

B. Why is air a good insulator?

Because its a gas. Therefore its spread-out molecular configure resists heat transfer to some degree

B. Why are cotton sheets good insulators?

Because the cotton does not conduct any heat as there are no free electrons.
There is also air trapped in the cotton and air is not a good conductor.

C. What can the heat energy stored in a material be thought of as?

The total kinetic energy of all the particles.

C. Which has more heat energy, a bath of hot water or a spark from a sparkler? And why?

The particles in a spark from a fire move around very quickly, so it has a high temperature. However, there are only a few particles, so it has very little stored heat energy
Compared to a spark, the particles in a bath of water move slowly, so it has a relatively low temperature, but there is a large amount of energy stored since there are many particles.

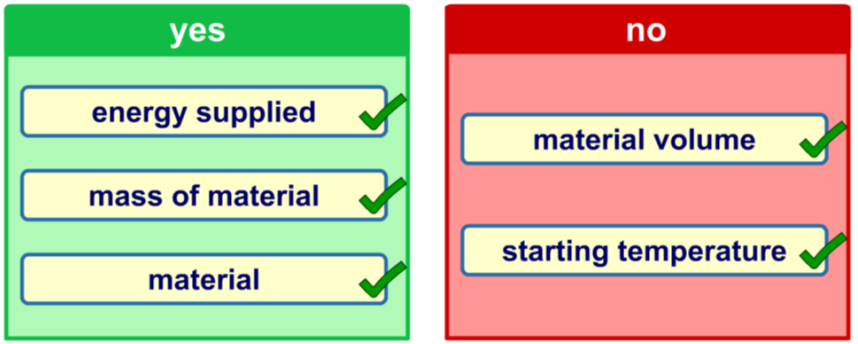
C. Why do copper and water require a different amount of energy to get to increase their temperature to the same amount?

Because they have a different specific heat capacity.

What is specific heat capacity?

SHC is the amount of energy required to increase the temperature of 1 kg of a material by 1 °C

C. Do the following factors affect the temperature change of a material when it is heated?



Year 9 Grammar Term 2 Physics : Topic P1.2 Energy Transfer by Heating

What we are learning this term:

A. Conduction
B. Insulators
C. Specific heat capacity

6. Key Words for this term

A. What are the factors that affect conduction?

1.
2.
3.
4.

B. Why do insulators not conduct heat?

B. Why are cotton sheets good insulators?

C. What can the heat energy stored in a material be thought of as?

C. Which has more heat energy, a bath of hot water or a spark from a sparkler? And why?

A. What is a good conductor?

What are examples of good and bad conductors (insulators)?

Good	Bad (insulators)

B. What materials make good insulators?

B. Why is air a good insulator?

C. Why do copper and water require a different amount of energy to get to increase their temperature to the same amount?

What is specific heat capacity?

A. What are the three main processes that heat can be transferred by?

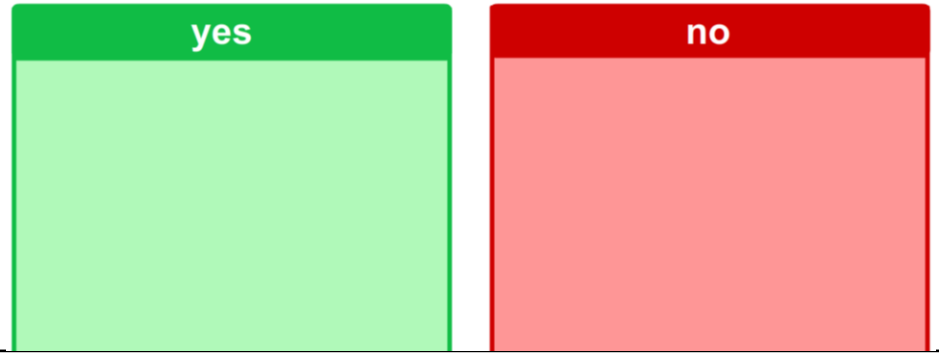
1. 2. 3.

In what direction does heat energy flow?

In what state (s, l, g) does conduction happen?

How do metals conduct heat?

C. Do the following factors affect the temperature change of a material when it is heated? Energy supplied, mass of material, material, material volume, starting temperaturw.



Year 9 Grammar Term 2 Physics : Topic P1.2 Energy Transfer by Heating

C. What are the factors which affect the amount f energy required to increase the temperature of an object?

Energy supplies
Material
Mass of material

Why would a material with a high specific heat capacity be beneficial?

It can store a large amount of heat energy for a minimal temperature change.
For example, radiators have water in the because it as a high SHC.

C. What is the equation for energy, in which you use specific heat capacity?

Energy = mass x specific heat capacity x temperature change
Energy is measured in joules (J).
Mass is measured in kilograms (kg).
Temperature change is measured in °C.
Specific heat capacity is measured in J/kg°C.

How much energy is needed to increase the temperature of 0.5 kg of water by 80 °C in a kettle? SHC of water = 4,200 J/kg°C

Energy = 0.5 kg x 4200 J/kg°C x 80°C = 168,000 J

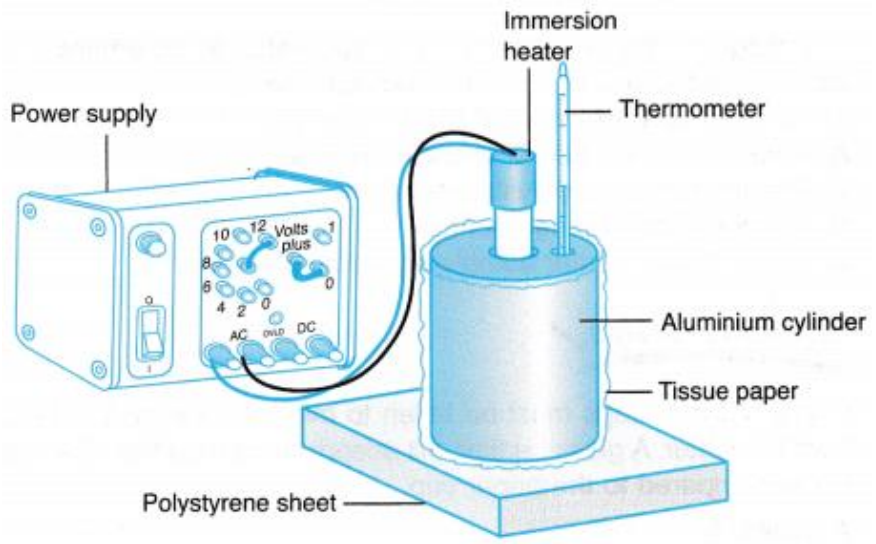
How can we rearrange this equation to calculate SHC?

$$SHC = \frac{energy}{mass \times temp.change}$$

What is the SHC of copper if 11500 J raises the temperature of 1.5 kg by 10°C

$$SHC = \frac{11{,}500\ J}{1.5\ kg \times 10°C} = 766.66\ J/kg°C$$

C. This is the apparatus used to measure the SHC of an aluminium block.



D. If the white, yellow and red areas show the warmest and the blue and green areas show the coolest parts of the house, which [arts are the best insulated?

the walls are the best insulated as they are the coolest. The roof and windows are the least insulated as they appear the warmest, they are letting lots of heat out.

F. How else can heat loss from homes be reduced?

All draughts should be eliminated. Use curtains for this, as well as draught excluders over gaps in doors and window. Carpets also trap air.

F. How can heat loss from homes be reduced from the windows?

Double glazing. It is two panes of glass with trapped air between them which is an insulator.

How can heat loss from homes be reduced from the roof?

Roof insulation. Stops the warm air that has risen escaping.

How can heat loss from homes be reduced from the walls?

Outside walls have an empty space between them called a cavity this had air trapped in it (an insulator) and stops any conduction from the bricks.

How can heat loss from homes be reduced from the radiators?

A shiny foil can be put between the wall and radiator to prevent radiation by reflecting it back into the room.

D. What is payback time and how is it calculated?

Payback time is the time it takes for the cost of installing insulation to be equalled by the savings made from reduced energy costs.

$$\textbf{payback time (years)} = \frac{\textbf{cost of insulation}}{\textbf{saving each year}}$$

Year 9 Grammar Term 2 Physics : Topic P1.2 Energy Transfer by Heating

C. What are the factors which affect the amount f energy required to increase the temperature of an object?

Why would a material with a high specific heat capacity be beneficial?

C. What is the equation for energy, in which you use specific heat capacity?

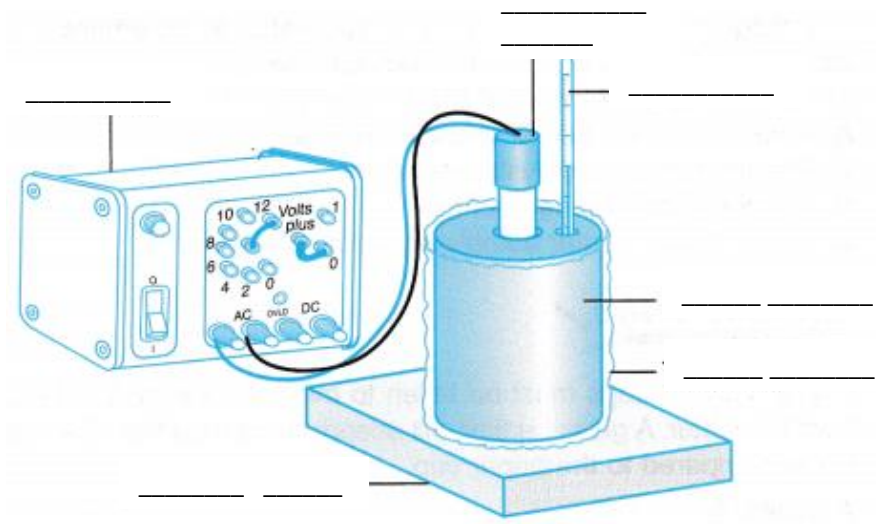
_____ is measured in _____
_____ is measured in _____
_____ is measured in _____
_____ is measured in _____

How much energy is needed to increase the temperature of 0.5 kg of water by 80 °C in a kettle? SHC of water = 4,200 J/kg°C

How can we rearrange this equation to calculate SHC?

What is the SHC of copper if 11500 J raises the temperature of 1.5 kg by 10°C

C. This is the apparatus used to measure the SHC of an aluminium block. Label this.



D. If the white, yellow and red areas show the warmest and the blue and green areas show the coolest parts of the house, which [arts are the best insulated?

F. How else can heat loss from homes be reduced?

D. What is payback time and how is it calculated?

F. How can heat loss from homes be reduced from the windows?

How can heat loss from homes be reduced from the roof?

How can heat loss from homes be reduced from the walls?

How can heat loss from homes be reduced from the radiators?

SPANISH Year 9 GCSE Term 2 Knowledge Organiser: Topic = Food, drink and sports

What we are learning this term:

A. Free time activites
B. Food and Drink
C. Sports
D. Foods
E. Sports
F. Key words across topics

6 Key Words for this term

1. Almuerzo	4. Peligroso
2. Ceno	5. evitar
3. Desayuno	6. cambiar

A. 3.1H Hablando del tiempo libre

aburrido/a	boring
agradable	pleasant
al aire libre	in the open air
batería	drums
la canción	song
dar un paseo	to go for a walk
de vez en cuando	From time to time
Desafiante	Challenging
divertido/a	fun
Emocionante	exciting
entretenido/a	entertaining
la entrevista	interview
estar en forma	to be fit
grabar	to record
la letra	lyrics, words
relajante	relaxing
la rutina	routine
la tarde	afternoon, evening
el terror	horror

B. 3.2G Comer y beber

el agua (mineral)	(mineral) water
beber	to drink
el bocadillo	sandwich
la carne	meat
la cena	evening meal
cenar	to eat evening meal
comer	to eat
la comida	lunch, food, meal
desayunar	to have breakfast
el desayuno	breakfast
después	afterwards
el perrito caliente	hot dog
el pollo	chicken
el postre	dessert, pudding
el queso	cheese
Tomar	to take, to have (food, drink)
la tortilla	omelette
la tostada	toast
el vaso	glass

C. 3.3G ¿Haces deporte?

activo/a	active
al aire libre	in the open air, outdoors
ayudar	to help
el baloncesto	basketball
el campo	countryside, field
la cancha	court (tennis)
los deberes	homework
la equitación	horse riding
el estadio	stadium
montar a caballo	to ride a horse
montar en bicicleta	to ride a bike
la natación	Swimming
pasar	to spend time
el patinaje	skating
la pista de hielo	ice rink
el polideportivo	sports centre
tranquilo/a	peaceful, quiet

Key Verbs

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

D. 3.2HUna cena especial

la aceituna	olive
la basura	rubbish, junk
el bocadillo	Sandwich
el/la camarero/a	waiter
dejar	to leave, to let,
escoger	to choose
los espaguetis	Spaghetti
el/la esposo/a	husband, wife
el gusto	taste
la lata	tin, can
las legumbres	Pulses (lentils)
optar por	to opt for

E. 3.3F ¿Qué deportes harás?

el alpinismo	rock climbing
cansado/a	tired
la carrera	race
el concurso	Competition(contest)
durante	during
el entrenamiento	training
entrenar	to train
el equipo	team
ganar	to win
el jugador	player
mañana	tomorrow
el miembro	member
el partido	match

F. Key Words across Topics?

to have = tener	Divertido – fun
to be = ser	Aburrido – boring
to go = ir	Util – useful
to do = hacer	Inutil – useless
to play =jugar	Comodo – comfy
to see = ver	Interestante- interesting
to listen=escuchar	Entretenido – entertaining
to buy =comprar	Emocionante – exciting
to live =vivir	Guay – cool
to speak= hablar	Genial – great
to have to = deber	Soso – dull
to want to=querer	Asqueroso – disgusting
to visit = visitar	Malo- bad
to eat - =comer	Bueno – good
to drink = beber	Arriesgado- risky
to go out = salir	Educativo- educational
to read = leer	Estimulate- stimulating
to work = trabajar	Peligroso- dangerous
to think = pensar	
to write =escribir	

SPANISH Year 9 GCSE Term 2 Knowledge Organiser: Topic = Food, drink and sports-QUIZABLE

What we are learning this term:

A. Free time activites
B. Food and Drink
C. Sports
D. Foods
E. Sports
F. Key words across topics

6 Key Words for this term

1. Almuerzo
2. Ceno
3. Desayuno
4. Peligroso
5. evitar
6. cambiar

A. 3.1H Hablando del tiempo libre

_____	boring
_____	pleasant
al aire libre	_____
batería	_____
_____	song
dar un paseo	_____
de vez en cuando	_____
Desafiante	_____
_____	fun
_____	exciting
_____	entertaining
la entrevista	_____
estar en forma	_____
grabar	_____
la letra	_____
_____	relaxing
_____	routine
_____	afternoon, evening
_____	horror

B. 3.2G Comer y beber

_____	(mineral) water
_____	to drink
_____	sandwich
_____	meat
_____	evening meal
_____	to eat evening meal
_____	to eat
_____	lunch, food, meal
_____	to have breakfast
_____	breakfast
_____	afterwards
_____	hot dog
_____	chicken
_____	dessert, pudding
_____	cheese
_____	to take, to have (food, drink)
_____	omelette
_____	toast
_____	glass

C. 3.3G ¿Haces deporte?

activo/a	_____
al aire libre	_____
_____	_____
_____	to help
la cancha	basketball
_____	countryside,
la equitación	_____
_____	homework
montar a caballo	_____
montar en bicicleta	stadium
_____	_____
pasar	_____
el patinaje	Swimming
la pista de hielo	_____
_____	_____
_____	_____
	sports centre
	peaceful, quiet

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. 3.2HUna cena especial

_____	olive
_____	rubbish, junk
_____	Sandwich
_____	waiter
dejar	_____
_____	to choose
_____	Spaghetti
_____	husband, wife
_____	taste
la lata	_____
las legumbres	_____
optar por	_____

E. 3.3F ¿Qué deportes harás?

el alpinismo	_____
_____	tired
la carrera	_____
el concurso	_____
_____	during
el entrenamiento	_____
_____	to train
_____	team
_____	to win
el jugador	_____
_____	tomorrow
el miembro	_____
_____	match

F. Key Words across Topics?

to have = _____	Divertido –
to be = _____	_____
to go = _____	Aburrido -_____
to do = _____	Util – _____
to play = _____	Inutil – _____
to see = _____	Comodo –
to listen= _____	_____
to buy = _____	Interestante-
to live = _____	_____
to speak= _____	Entretenido –
to have to = _____	_____
to want to= _____	Emocionante –
to visit = _____	_____
to eat = _____	Guay – _____
to drink = _____	Genial – _____
to go out = _____	Soso – _____
to read = _____	Asqueroso –
to work = _____	_____
to think = _____	Malo-_____
to write = _____	Bueno – _____
	Arriesgado-
	_____
	Educativo-_____
	Estimulate-
	_____
	Peligroso-_____

Year 9 Term 2 Geography Knowledge Organiser

Y9- T2 -

A.	Background:
1.	**Natural Hazard is a threat to people and property**
2.	**Hazard risk** is the **probability (chance)** that a natural hazard occurs.
3.	Earthquakes and **volcanoes** are **distributed** in narrow belts across the world. They are mostly found along **plate margins**, for example the **Pacific ring of fire** is a circle of volcanoes and earthquakes that surrounds the Pacific ocean.
4.	**Volcanoes** are also found in **hotspots** across the world. These are areas where the crust of the earth is slightly thinner, allowing **magma** to rise to the surface.
5.	People live in areas at risk of **tectonic hazards** as they hold benefits such as **geothermal power** and **fertile soils** around volcanoes, examples of this are **Iceland**. People in poverty also live in **hazardous areas** as they cannot afford to move out
6.	Earthquakes that occur under the sea can create huge, destructive waves called **Tsunamis** as the water is **displaced**.

B.	What happens at plate margins?
Destructive plate margin	At **destructive plate boundaries**, two plates move towards each other, the denser oceanic plate is forced under the less dense continental plate in a process called subduction
Constructive plate margin	At **constructive plate boundaries**, two plates are moving away from each other.. This creates **a gap**, magma rises to fill the gap.
Conservative plate margin	At conservative plate margins, two plates are **moving past each other**. The plates get stuck which builds up pressure. The sudden release of this **pressure** causes **violent** earthquakes.

D.	Example of Tectonic Hazard HIC: Chile
Date	27 February 2010
Magnitude	8.8
No. Dead	521
Epicentre	Off the coast of Chile
Causes	Destructive plate: South American (continental) & Nazca Plate (oceanic)
Primary effects	- 500 dead - 12,000 injured - 500,000 homes damaged - Santiago airport slightly damaged - Several bridges and roads damaged and a hospital
Secondary effects	- Much of Chile lost power, water supplies and communication cut off - Tsunami warning - A fire in a chemical plant > evacuation - Copper mines suffered damage (Copper crucial to economy)
Short term responses	- After day Ten 90% houses had power back, roads quickly fixed - Temporary repairs to main roads
Long-term responses	- One month later houses rebuilding plan, due to the strong economy, it recovered and rebuilt without aid.

E.	Example of Tectonic Hazard LIC: Nepal
Date	25 April 2015
Magnitude	7.9
No. Dead	521
Epicentre	80km from the capital city Kathmandu
Causes	Destructive plate: Indo-Australian plate colliding with the Eurasian plate
Primary effects	- 9000 dead - 20,000 injured - 3 million made homeless - Electricity, water supplies and communications affected - 7000 schools destroyed, 50% of shops destroyed
Secondary effects	- Landslides and avalanches that blocked roads - Avalanches on Mount Everest killed at least 19 people - Landslides blocked the Kali Gandaki River causing flooding North of Kathmandu
Short term responses	Search and rescue teams - Emergency food and water/ aid from the UK
Long-term responses	- 7000 schools to be rebuilt or repaired - Stricter controls on building codes

C	What happens at plate margins?
Immediate responses	Keeping survivors alive by providing food, water, shelter.
Long-term responses	Re-building and reconstruction, with the aim of returning life back to normal.

F.	How do we manage tectonic hazards?
Monitoring	Warning signs: gases, sides of volcanoes swell, change shape and size, heat melts snow, rocks fracture, earthquakes. Monitored through seismographs, and tiltmeters (shape).
Prediction	Based on scientific monitoring as above.
Protection	Little can be done. However, you can create earth embankments or explosives to divert lava away from property.
Planning	When machines begin to do the work which humans once completed.

Year 9 Term 2 Geography Knowledge Organiser

Y9- T2 -

A.	Background:

1. **Natural Hazard is a threat to people and property**
2. **Hazard risk** is the **probability (chance)** that a natural hazard occurs.
3. Earthquakes and **volcanoes** are **distributed** in narrow belts across the world. They are mostly found along **plate margins**, for example the **Pacific ring of fire** is a circle of volcanoes and earthquakes that surrounds the Pacific ocean.
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6. Earthquakes that occur under the sea can create huge, destructive waves called **Tsunamis** as the water is **displaced**.

B.	What happens at plate margins?
Destructive plate margin	
Constructive plate margin	
Conservative plate margin	

D.	Example of Tectonic Hazard HIC: Chile
Date	
Magnitude	
No. Dead	
Epicentre	
Causes	
Primary effects	
Secondary effects	
Short term responses	
Long-term responses	

E.	Example of Tectonic Hazard LIC: Nepal
Date	
Magnitude	
No. Dead	
Epicentre	
Causes	
Primary effects	
Secondary effects	
Short term responses	
Long-term responses	

C	What happens at plate margins?
Immediate responses	
Long-term responses	

F.	How do we manage tectonic hazards?
Monitoring	
Prediction	
Protection	
Planning	

Year 9 Term 1 History Knowledge organiser: Topic: The Suffragettes

What we are learning this term:

A. Key words for this unit
B. Key people and their roles in the suffrage movement
C. Key events and dates in the suffrage movement
D. D. Suffragists vs Suffragettes

6 Key Words for this term – Section A

- **Act** a written law passed by Parliament
- **Propaganda** information used to promote a political point that can be misleading or untrue
- **Ballot** a system of voting on a particular issue
- **Reform** make changes in order to improve something
- **Charter** a written statement of the rights of a specified group of people
- **Representation** Speaking or acting on behalf of someone
- **Democracy** system of government by the whole population typically through elected representatives.
- **Rotten boroughs** a borough that was able to elect an MP despite having very few voters, the choice of MP typically being in the hands of one person or family.
- **Enfranchisement** To be given the right to vote
- **Strike** an organised refusal to do something expected or required typically to gain a concession
- **Manifesto** A public set of political aims written down
- **Suffrage** the right to vote
- **Parliament** a group of people who make the laws for their country
- **Tactics** An action or strategy carefully planned to achieve a specific end
- **Petition** a formal written request, typically one signed by many people, appealing to authority in respect of a particular cause

B.	Key people and their roles in the suffrage movement
Person	Role
Nancy Astor	The first women elected as a Member of Parliament (MP)
Emily Davison	Joined the WSPU (Suffragettes) in 1906. Was struck by the King's horse at the Epsom Derby and killed in 1913.
Benjamin Disraeli	A Conservative Prime Minister (1868, 1874-80) who introduced the Second Reform Act
Millicent Fawcett	Founded the Suffragists/NUWSS in 1897
William Gladstone	A Liberal politician who served in Parliament for over 60 years and four times as Prime Minister. He passed the Third Reform Act, extending the vote to all male homeowners.
Earl Grey	A Whig Prime Minister who proposed the Great Reform Act in 1831 and resigned when the House of Lords rejected it.
Annie Kenney	A working-class socialist feminist who was active in the WSPU (Suffragettes) as a militant member and was arrested.
William Lovett	The leader of the Chartist movement and wrote the People's Charter in 1838
Christabel Pankhurst	Speaker for the WSPU (Suffragettes) in 1905. She trained as a lawyer but could not practice as a woman. She fled the country in 1912 for fear of re-arrest, and unsuccessfully ran for parliament in 1918.
Emmeline Pankhurst	Founded the WSPU (Suffragettes) in October 1903 and encouraged militant action as a form of protest. Was arrested many time, she went on hunger strike and was force-fed. Mother of Christabel.

C.	Key events and dates in the suffrage movement
Date	Event
1832	Great Reform Act is passed
1838	The Chartists wrote the People's Charter
1867	Second Reform Act is passed
1884	Third Reform Act is passed
1897	The Suffragists/NUWSS movement is formed with Millicent Fawcett as their leader
1903	The Suffragettes/WSPU movement is formed by Emmeline Pankhurst and her daughters
1913	Emily Davison is struck by the King's horse at the Epsom Derby and dies
1914	World War I begins, all leaders urge women to join the war effort
1918	The Representation of the People Act is passed
1919	Nancy Astor is elected the first female MP
1928	Equal Franchise Act– women are given the vote on equal terms with men

D	Suffragists	Suffragettes
Men who were fighting for the right to vote		Women fighting for the right to vote
Leader – Millicent Fawcett		Leader – Emmeline Pankhurst
Formed in 1897		Formed in 1903 after splitting from the Suffragists
Used pamphlets, petitions and marches to help persuade people to their cause		Used Protests and damaging property to help persuade people to their cause
		Were given the right to vote on equal terms in 1928

Year 9 Term 1 History Knowledge organiser: Topic: The Suffragettes

What we are learning this term:

A. Key words for this unit
B. Key people and their roles in the suffrage movement
C. Key events and dates in the suffrage movement

6 Key Words for this term – Section A

- **Act** -
- **Propaganda -**
- **Ballot** -
- **Reform** -
- **Charter** -
- **Representation** -
- **Democracy** -
- **Rotten boroughs** -

- **Enfranchisement** -
- **Strike** -
- **Manifesto** -
- **Suffrage** -
- **Parliament** -
- **Tactics** -
- **Petition** -

D. Suffragists vs Suffragettes

C.	**Key events and dates in the suffrage movement**
Date	Event
1832	
1838	
1867	
1884	
1897	
1903	
1913	
1914	
1918	
1919	
1928	

B.	**Key people and their roles in the suffrage movement**
Person	Role
Nancy Astor	
Emily Davison	
Benjamin Disraeli	
Millicent Fawcett	
William Gladstone	
Earl Grey	
Annie Kenney	
William Lovett	
Christabel Pankhurst	
Emmeline Pankhurst	

D	**Suffragists**	**Suffragettes**

Year 9 Religious Education:Atheism

What we are learning this term:
The development of Atheism and worldviews

B.	*How has Biblical criticism influenced the rise of atheism ?*
1	Biblical criticism is the study of the Bible using scientific criteria (historical and literary) and human reason to understand and explain the meaning intended by the biblical writers." People question what the Bible means , rather than looking at it as a literal word of God that cannot be interpreted. Therefore, people have been able to challenge the 'truths' that are found in the book.

A.	*Can you define these key words?*
Key word	**Key definition**
Dogma	Beliefs or principles laid down by authority as unquestioningly true .
Doctorine	Beliefs and teachings given by a religion. Frequently used to mean Christian teaching as given by an organised Church/ denomination
Epistemology	Epistemology is a branch of philosophy which seeks to answer questions about what we can actually *know*
Theist	a person who believes in the existence of a god or gods, specifically of a creator who intervenes in the universe.
Atheist	a person who disbelieves or lacks belief in the existence of God or gods because they believe there is proof against the existence of God .
Agnostic	A person who believes that nothing is known about the existence or nature of God; a person who claims neither faith nor disbelief in God because there is not enough proof for either claim.
Salvation	being saved from the sins of Adam and Eve and suffering through access to heaven. Being rescued by God from the consequences of our wrongdoing
Grace	The free and undeserved favour of God, as manifested in the salvation of sinners and the blessings God gives us.
Secular	attitudes, activities, or other things that have no religious or spiritual basis.
Emirical/empiricist	Knowledge is based on what is seen or experienced rather than theory or pure logic.
Reason	the power of the mind to think, understand and form judgements by a process of logic
Biblical criticism	The use of critical analysis/ context/ knowledge of history to understand and explain meaning in the Bible.
A priori	(an argument/statement which is supposed to be true because it is true by definition eg all bachelors are unmarried males, or God is perfect therefore he exists)
Fundamentalist	a person who believes in the strict, literal interpretation of scripture in a religion.

C.	Explain 4 reasons people are atheist or reject religion
1	Problem of evil… which is the inconsistent triad. All loving, all knowing, all powerful God + the existence of evil and suffering is illogical.
2	Abrahamic religions are strongly based on miracles. Miracles are not logical therefore the religious stories are not believable.
3	Religious doctrine is sometimes harmful and contrary to current moral values eg the teaching that homosexuality is a sin/ punishable by death
4	The design (teleological) and the 1st cause (cosmological) arguments fail to prove the existence of God since the world could just as possibly be a random existence/coincidence. If we are happy to say God doesn't need a creator, why can't we just say that about the universe?

D.	*Explain Hume's main arguments against miracles*
1	If there are millions of bits of evidence to suggest a law of nature, it is not rational to believe one bit of evidence to say the law is wrong. Eg if people can't travel from mecca to Jerusalem by foot or by camel overnight, then why believe the tale that Muhammed did?
2	Miracles have mainly been proclaimed by scientifically uneducated peoples so why believe their stories when advanced modern understanding shows the events to be impossible eg walking on water
3	Humans are natural believers, love surprise and wonder .He argues that this tendency in our nature leads to the 'end of common sense' .

E.	**Explain Neitzche's ideas about religion and morality**
	God is a psychological fabrication created to soothe distress, ease trauma, and provide companionship in the face of suffering and also to make rule we must stick to in order to be safe. We can however instead of needing religion, set our own moral rules and goals and concentrate on human flourishing without religion.
	Explain how Freud challenges religious truth
	Religion is a psychological projection of our deeply rooted need for a protective authority figure Freud refers to religion as an illusion. Rreligion provides for defence against "the crushingly superior force of nature" and "the urge to rectify the shortcomings of civilization". We don't want to die so follow religion to sooth this fear. People cope with unhappy lives by pretending it is God's plan for them.
	Explain how Feuerbach challenges religious truth
	God does not exist. Humans have made up the idea of a 'God'. They have done this in order to give human life a reason to live and strive. It is something for humans to aim towards to give meaning to our lives. We have projected ourselves out into the cosmos and anthropomorphised God- making him in our likeness!! We have given God the perfect qualities that we should aim for, eg forgiving and loving.
	Explain how Marx challenges religious truth
	It is a form of social oppression. The powerful and rich use it as a way to control the masses into particular behaviour eg 'do not kill' and also to pacify them so they do not rise up against the rich and powerful who are oppressing them. Religion has stupified people just like drugs do.

F.	*Explain 2 reasons why science is a challenge to religion*
1	The theory of evolution shoes that the creatures took million sof year sto evolove to what we see now, therefore there was no created species in one day as recorded in the Abrahamic faiths.
2	The big bang theory says that the universe took billions of years to form to the point it is in today. This means that the genesis story of a 6 day creation is technically not a scientific truth.
	Explain 2 religious responses to the challenge of science
1	Science glorifies god by showing the complexity and awesome nature of creation. For example it has revealed that the human eye is perfectly structured in a way which generates sight. This structure suggests design eg God.
2	The creation stories do not need to be taken as a literal truth, it is the messages which are important. For example, God is all powerful as He created a universe. This means science and religious truths can be true at the same time.

Year 9 Religious Education:Atheism

What we are learning this term:
The development of Atheism and worldviews

B.	*How has Biblical criticism influenced the rise of atheism ?*
1	

A.	*Can you define these key words?*
Key word	**Key definition**
Dogma	
Doctorine	
Epistemology	
Theist	
Atheist	
Agnostic	
Salvation	
Grace	
Secular	
Emirical/empiricist	
Reason	
Biblical criticism	
A priori	
Fundamentalist	

C.	Explain 4 reasons people are atheist or reject religion
1	
2	
3	
4	

D.	*Explain Hume's main arguments against miracles*
1	
2	
3	

E.	**Explain Neitzche's ideas about religion and morality**
	Explain how Freud challenges religious truth
	Explain how Feuerbach challenges religious truth
	Explain how Marx challenges religious truth

F.	*Explain 2 reasons why science is a challenge to religion*
1	
2	
	Explain 2 religious responses to the challenge of science
1	
2	

Year 9 Art Term 2 : Topic = Distorted Portraits









What we are learning this term:

A. Line Drawing
B. Introduction into Cubism
C. Pablo Picasso
D. Colour Theory
E. Grid Method
F. Key Words

B. What are the characteristics of Analytical and Synthetic Cubism? List 3 of each.

Analytical:
- 1) Grey, black and white tones or tones from one colour
- 2) Very angular and rigid, points and lines
- 3) The first type of Cubism created

Synthetic:
- 1) Bright, modern and bold colours
- 2) Organic in shapes, curves, natural shapes
- 3) The second type of Cubism created

A. What are 3 rules for successful continuous line drawing?

1. Using a sharp pencil

2. Keeping your pencil on the page and not taking it off

3. Lighter areas have fewer pencil lines and darker areas have far more pencil lines.

Using continuous line drawing, recreate the face below.

Example

Your response

Describe what is happening in each stage of the making?

In this image, we have acetate- mainly used for photocopying. A see- through clear plastic.
A roll of masking tape, used to fix the image onto the acetate.

In this image, the image behind has been removed to reveal the permanent marker trace. From here you can add in your own detail and patterns

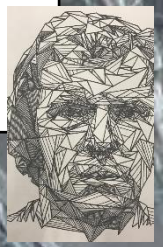
In this image, the acetate has been painted using acrylic.
Acrylic is plastic based so when dry, it will move with the flexible acetate

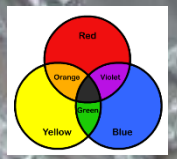
C. List 3 words to describe the Cubism style of artwork in this Picasso piece?

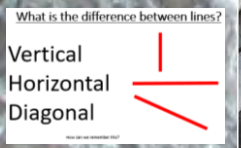
1.) Angular, Crooked, Sharp, Shattered,
2.) Jagged, Cornered, Smashed, Dull colours
3.) Staggered, Skewed, Destroyed, Misplaced

D. Answer the following questions on colour theory and acrylic painting.

1	List the secondary colours Purple, orange, green
2	Name 3 cool/ cold colours Blue, green, purple
3	3. Name 3 warm/ hot colours Red, orange, yellow
4	What is a complementary colour? Two colours which work well together/ They look good next to each other
5	How do you make a tertiary colour? By mixing a Primary and a Secondary colour together
6	List the 6 formal elements of Art Line, Tona, Texture, Shape, pattern, Colour
7	What are tints and shades? Tint is a colour mixed with white. Shade is a colour mixed with black

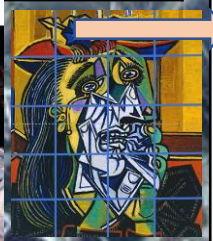







Jeremy Kyler 2000


Francis Bacon 1972



F. Keywords

Portrait	An image which shows a person/animal
Identity	Information about a person's personality, interests, friend's family – what makes someone who they are
Collage	Using torn or cut paper in an artwork
Material	The substance used to create the artwork
Cubism Movement	The movement that Ines tries to push throughout her work. Creating angular portraits .
Characteristics	A list of describing words about a person or thing.
Acetate	Clear plastic sheeting
Permanent pen	A pen that won't wash off with water
Mixed media	An artwork made from more than one material

D. Colour theory- complete the missing words

Red + Blue= Purple
Blue + Yellow= Green
Red + Yellow= Orange

E. Write a step by step guide to a successful grid method

1.Firstly, have a sharp pencil, plain paper and a ruler
2. Using the width of your ruler, mark out lines vertically. Press lightly because you will be rubbing these lines out.
3.Using the width of your ruler, mark out lines horizontally
4.Your page should now be full of equal distant squares. Repeat this process onto the image you'd like to copy.
5.Using your source image, start by working in the 1st box
6.Work box by box rather than looking at the image as a whole.
7.Once you have copied each box, rub out your grid lines

Year 9 Art Term 2 : Topic = Distorted Portraits









What we are learning this term:

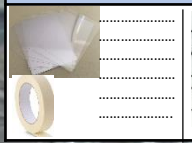
A. Line Drawing
B. Introduction into Cubism
C. Pablo Picasso
D. Colour Theory
E. Grid Method
F. Key Words

B. What are the characteristics of Analytical and Synthetic Cubism? List 3 of each.

Analytical:
- 1)
- 2)
- 3)

Synthetic:
- 1)
- 2)
- 3)

Describe what is happening in each stage of the making?



A. What are 3 rules for successful continuous line drawing?

1.

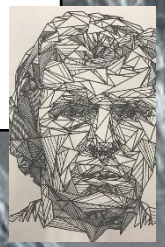
2.

3.

Using continuous line drawing, recreate the face below.

Example

Your response



C. List 3 words to describe the Cubism style of artwork in this Picasso piece?

1.)
2.)
3.)



D. Answer the following questions on colour theory and acrylic painting.

1	List the secondary colours
2	Name 3 cool/ cold colours
3	3. Name 3 warm/ hot colours
4	What is a complementary colour?
5	How do you make a tertiary colour?
6	List the 6 formal elements of Art
7	What are tints and shades?

F. Keywords

Portrait	An image which shows a person/animal
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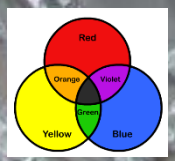
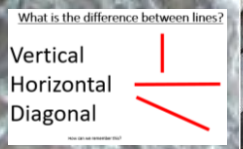





Jeremy Kyler 2000


Francis Bacon 1972

D. Colour theory- complete the missing words

Red + Blue= ……
Blue + Yellow= ……
Red + Yellow= ……

E. Write a step by step guide to a successful grid method

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

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.
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.

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.	*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

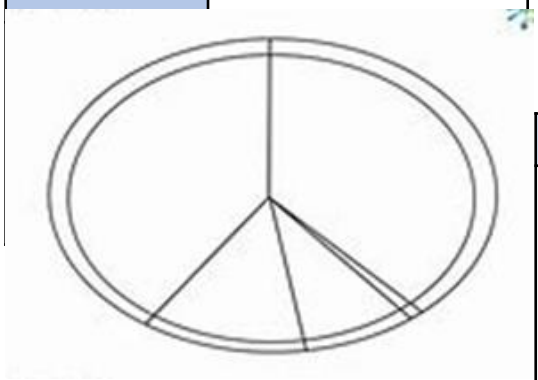
1 Hygiene
2 Dietary Requirements
3 Skills Test
4 Healthy
5 Teenager
6 Cross Contamination

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	

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



C.	*Can you list 5 reasons for why we cook food and why it is important?*
Rule • 1 • 2 • 3 • 4 • 5	Why it is important • 1 • 2 • 3 • 4 • 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 PRODUCT DESIGN Term 2

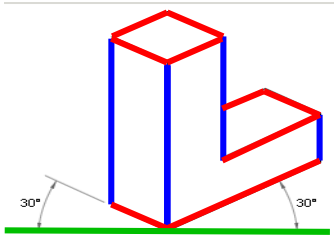
What we are learning this term:

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

A. Drawing Skills

Isometric Technical Drawing

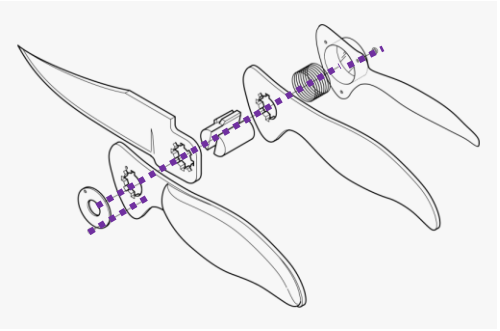
Made up of a series of par parallel **vertical lines** and parallel **30-degree lines**. But no **horizontal lines.**



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

Exploded Technical Drawing

Isometric drawing of all the parts and components of an object.



All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

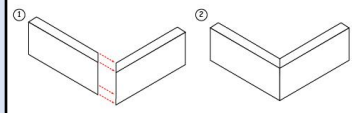
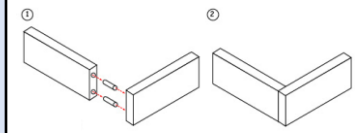
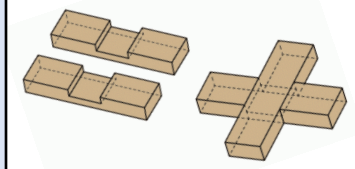
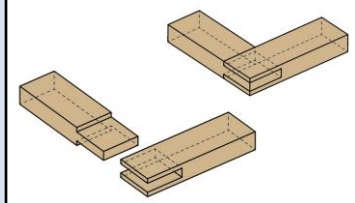
B. Wood Theory

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	Bench Hook	Quick Clamp	Wooden Vice	Tenon Saw	Bandfacer	Pillar Drill
								

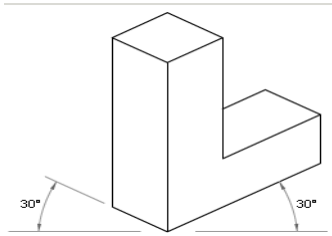
Year 9 PRODUCT DESIGN Term 2

What we are learning this term:

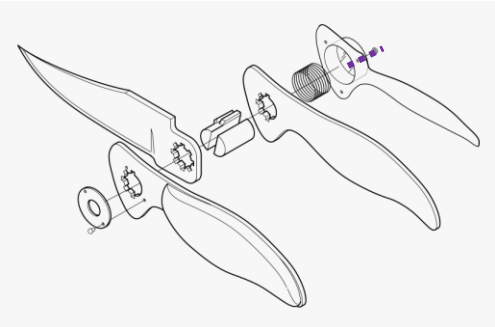
A. Drawing Skills
B. Wood Theory
C. Wooden Joints & Their Uses
D. Tools & Machinery

A. Drawing Skills

Isometric Technical Drawing



Exploded Technical Drawing

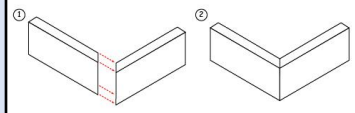
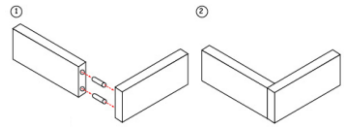
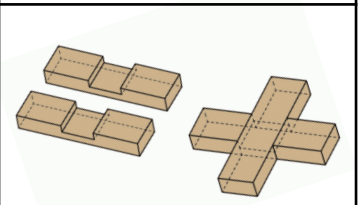
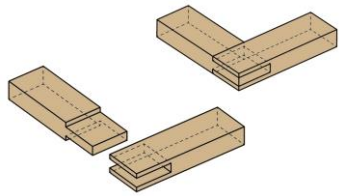


B. Wood Theory

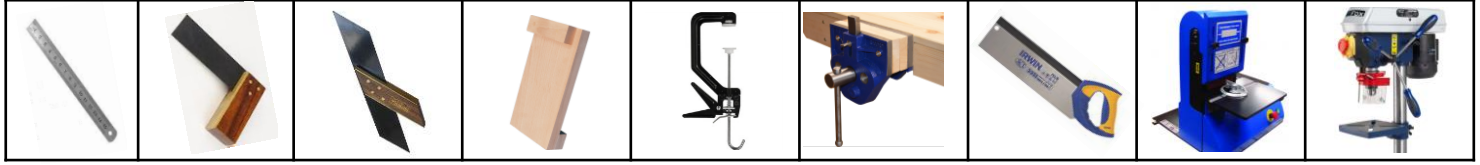
Natural	Advantages	Disadvantages
Hardwood:		
Softwood:		
Manufactured	**Advantages**	**Disadvantages**
MDF:		
Plywood:		

Sustainability = Natural Wood Vs Manufactured Boards

C. Wooden Joints & Their Uses

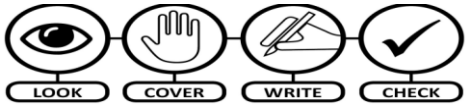
Joint	Uses	Image
Mitre Joint		
Dowel Joint		
Mortise and Tenon		
Cross Halving Joint		

D. Tools & Machinery



Year 9: What Makes a Good Song? Term 2

A	What we are learning about this term…
1	Popular song structure
2	Lyrics , hooks and riffs in popular music
3	Melody – conjunct and disjunct
4	Range, instruments and lead sheets in pop music

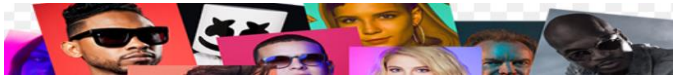


B	Keywords
Lyrics	The words of a song – split into **verses and choruses**
Hook	the **'catchy bit' of the song** that you will remember. It is short and repeated in different places throughout the song.
Riff (Ostinato)	**Short, repeated musical pattern** often used in the introduction and instrumental breaks in a song.
Melody **Counter-melody**	The tune – usually **lead singer** has this **An 'extra' melody** often performed 'on top of' the main melody to compliment it
Homophonic (texture)	A texture that has a **melody and accompaniment** (e.g chords/bassline)
Lead Sheet	Form of **notation that only shows the essential parts** (eg lyrics, bassline and chords) to perform from
Arrangement	**Adapting songs** to be performed by other instruments or in a different style
Cover Version	A new **performance by someone OTHER than the original artist**/songwriter

C Instruments in popular music

Pop Bands often feature a **DRUM KIT** and **PERCUSSION** to provide the rhythm along with **ELECTRIC GUITARS (LEAD GUITAR, RHYTHM GUITAR** and **BASS GUITAR)** and **KEYBOARDS**. Sometimes **ACOUSTIC INSTRUMENTS** are used such as the **PIANO** or **ACOUSTIC GUITAR**. **ORCHESTRAL INSTRUMENTS** are often found in pop songs such as the **STRINGS, SAXOPHONE, TROMBONE** and **TRUMPET.**

Singers are essential to a pop song - **LEAD SINGER** – Often the "frontline" member of the band (most famous) who sings most of the melody line to the song. **BACKING SINGERS** support the lead singer providing **HARMONY** or a **COUNTER-MELODY** (a melody that is often higher in pitch and different, but still 'fits with' the main melody) and do not sing all the time but just at certain points within a pop song e.g. in the chorus.



D Exploring Conjunct and Disjunct Melodies

CONJUNCT MELODIC MOTION – Melodies which move mainly by step or use notes which are next to or close to one another.

SCAN ME

DISJUNCT MELODIC MOTION – Melodies which move mainly by leap or use notes which are not next to or close to one another.

MELODIC RANGE – The distance between the lowest and highest note in a melody

F Note Values and Dotted Note Values

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 Describing music – MAD T SHIRT

M	A	D	T	S	H	I	R	T
Melody	**Articulation**	**Dynamics**	**Texture**	**Structure**	**Harmony/Tonality**	**Instruments**	**Rhythm**	**Tempo**
The tune	How notes are played	Loud/quiet and any other volume changes	Layers of sound / how they fit together	The sections and organising	Chords used / the mood	Types of instruments heard	Pattern of notes	The speed

Year 9: What Makes a Good Song?

Term 2

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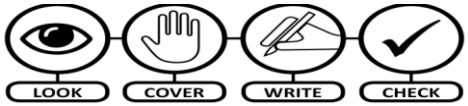
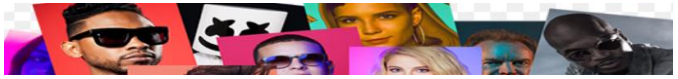


B	Keywords

C	Instruments in popular music
Read the information and provide a SUMMARY here of the main points • Instruments used in pop music	



D – Exploring Conjunct and Disjunct Melodies

C_____**MELODIC MOTION** – Melodies which move_____ _____or use notes which are next to or close to one another.

Conjunct

SCAN ME

D_____ **MELODIC MOTION** – Melodies which _____or use notes which are not next to or close to one another.

Disjunct

MELODIC RANGE – The _____note in a melody

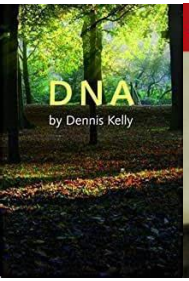
F – Note Values and Dotted Note Values

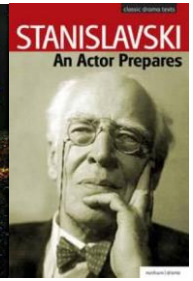
Note	Name	Beats	Rest	Note	Name	Beats	Rest

G – Describing music – MAD T SHIRT

M	A	D	T	S	H	I	R	T
M_____	A_____	D_____	T_____	S_____	H_____/T_____	I_____	R_____	T_____

YEAR 9 INTRODUCTION TO BTEC DRAMA KNOWELDGE ORAGNISER – COMPONENT ONE





FRANTIC ASSEMBLY

Splendid Productions

What we are learning this term:

A. Understanding different styles of performance
B. What is style
C. What is a practitioner
D. How do we analyse a performance
E. What are physical skills
F. What are interpretive skills
G. Different performance styles / genres

Keywords

Practitioners	A professional theatre maker who creates in a specific style led by a specific theatre ideology.
Performance material	The practical work that a practitioner creates for performance.
Creative Intentions	The ideas behind the performance why the director chose to create the work.
Reflect	Look over your current work and the work of others and be able to review and comment on your own and others practice using subject specific vocabulary.
Analyse/ Evaluate	Watch and then analyse your own performance and the work of others and giving comments and judgements on what you see
Influences	How the practitioner has been influenced by others, their experiences, their training and how this has affected the work they create.
Physical skills	The physical attributes that an actor uses, stamina, strength, flexibility, control, to dance with technical accuracy.

What are you doing this term?

<u>An introduction to Btec Performing Arts and the way you would work in year 10 if you decided to take Drama</u>

Explore the following three practitioner's and their style of theatre:
Frantic Assembly

A physical theatre company who started in 1994 and whose style is visual storytelling using powerful music and lights to make an impact of their audiences. They want to make theastre relevant to young audiences making it accessible, doing it about current topics and by getting young people involved in their productions.

Splendid Productions

An epic theatre style company that uses a trio of performers and a slapstick style performance to re-tell some well know stories with social and political messages.

Dennis Kelley's DNA

A powerful playwright who writes for young people, understanding their lives and worries. He uses a mixture of naturalism and non naturalism to convey explosive storylines. He has also written Matilda the musical with Tim Minchin.

Building a character

Physical skills	1. Stance 2. Gesture 3. Facial Expressions 4. Stride 5. Weight 6. Pace 7. Mime 8. Gait 9. Internal Rhythm 10. Stance
Vocal Sills	1. Pitch 2. Pace 3. Pause 4. Breath 5. Accent 6. Articulation 7. Sight Reading 8. Intonation 9. Volume 10. Tone 11. Personality/ Age 12. Emphasis

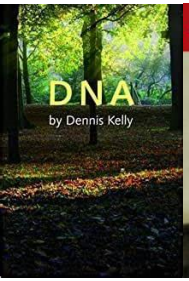
Key question – What is the artistic purpose of a performance work?

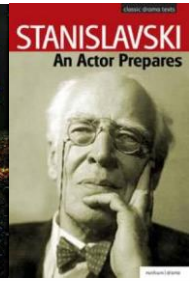
When watching a professional performance, the key questions you need to think about are the following…
How do we Explore artistic purpose?
Explore artistic purpose (across all three disciplines/styles) including:
to educate
to inform
to entertain
to provoke
to challenge viewpoints
to raise awareness
to celebrate.

Further reading:

www.franticassembly.com
www.splendidproductions.com
English Literature / Drama GCSE: Plot Overview: DNA by Dennis Kelly - BBC Teach

YEAR 9 INTRODUCTION TO BTEC DRAMA KNOWELDGE ORAGNISER – COMPONENT ONE





Splendid Productions

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Building a character

Physical skills	
Vocal Sills	

Keywords

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