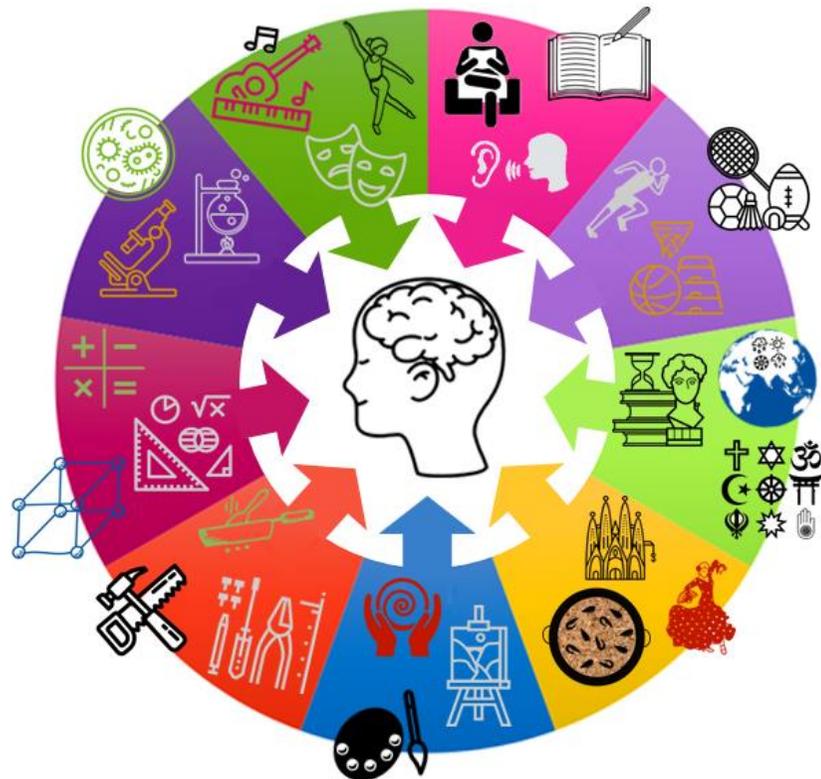


# 100% book - Year 9 Mainstream

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



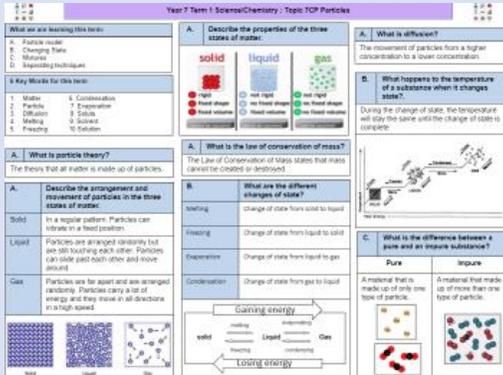
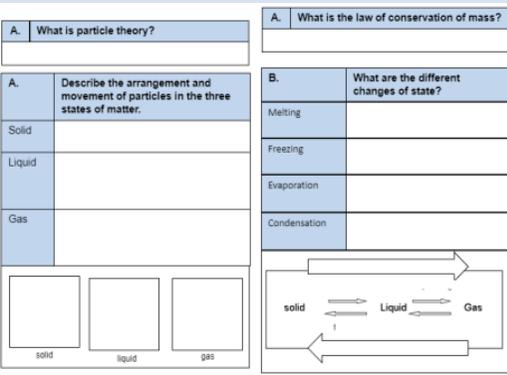
## Term 1

### 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."

# How to use your 100% book of Knowledge Organisers and Quizzable Organisers

Knowledge Organisers	Quizzable Knowledge Organisers
	
<p>Knowledge Organisers contain the essential knowledge that you <b>MUST</b> know in order to be successful this year and in all subsequent years.</p> <p>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.</p>	<p>These are designed to help you quiz yourself on the essential Knowledge.</p> <p>Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.</p>

**Top Tip**

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

## Expectations for Prep and for using your Knowledge Organisers

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

# How do I complete Knowledge Organiser Prep?

## Step 1

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

The screenshot shows the epraise website interface. On the left is a 'Planner' for the week of 10th May to 16th May 2020, with a grid for subjects like Science, History, and English. On the right is a 'Knowledge Organiser' for 'What is particle theory?' with sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'.

## Step 2

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

The screenshot shows a student's prep book. The date '29th May 2020' and the title 'Particle theory' are written in the top right of the knowledge organiser template. The template includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'.

## Step 3

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

The handwritten notes in the student's prep book define particle theory and the states of matter. The text reads: '29th May 2020', 'Properties of the states of matter', 'Particle theory = all matter is made of particles', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other particles can slide past each other and move around', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'.

## Step 4

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

The handwritten notes in the student's prep book show the definition of solid repeated three times: 'Solid = regular pattern particles vibrate in fixed position'.

## Step 5

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

The screenshot shows a student's prep book with the quizzable knowledge organiser template. The student has written 'Self quizzing' for 'What are the different changes of state?', 'Arrangement/movement of matter' for 'Describe the arrangement and movement of particles in the three states of matter', and 'Solid = regular pattern particles vibrate in fixed position' for 'Solid'. The template also includes sections for 'What is particle theory?' and 'What is the law of conservation of mass?'.

## Step 6

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

The handwritten notes in the student's prep book show corrections to the definitions of solid, liquid, and gas. The text reads: 'Particle theory = all matter is made of particles', 'Solid = regular pattern ✓ particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other ✓ particles can slide past each other and move around ✓', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy ✓'.

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



## 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	<b>Social Class:</b> 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	<b>Growth:</b> 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	<b>Oppression:</b> 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	<b>Role of women in society:</b> 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

<b>Gateshead Hall</b> Home of Mrs Reed, John, Georgiana, and Eliza Reed. Jane grows up here. Jane is locked in the red-room.
<b>Lowood School</b> 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

<b>thesis</b> – the main idea that you want to discuss throughout an essay.
<b>juxtaposition</b> – 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

<b>Jane Eyre</b> 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"
<b>Mrs Reed – Jane's aunt</b> 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

<b>protagonist</b> – the main character
<b>dependent</b> – someone who relies on another person to support them financially. Jane is a <b>dependent</b> because she relies on Mrs Reed to feed, clothe and house her.
<b>oppress (vb.)</b> – to treat a group of people in an unfair way, often by limiting their freedom.
<b>solitude</b> – state or situation of being alone
<b>sombre</b> – serious or sad
<b>conventional</b> – normal or accepted way
<b>obedience</b> – submission to another's authority
<b>ominous</b> – something bad that is going to happen
<b>clandestine</b> – something that is done in secret
<b>humiliate (vb.)</b> – to make someone feel stupid or ashamed. If something makes you feel stupid or ashamed, you could describe it as <b>humiliating</b> .
<b>hypocrite</b> – someone who says one thing but does the opposite at another time.
<b>comeuppance</b> – 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 <b>innocent</b> and <b>pure</b> . 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.



## 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	<b>Social Class:</b> 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	<b>Growth:</b> Jane is constantly _____ and _____. She is an adult _____ back on her _____ in the novel. She learns to manage her _____. Her _____ with _____ help her _____.
3	<b>Oppression:</b> 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	<b>Role of women in society:</b> 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

<b>Gateshead Hall</b> Home of _____, _____ and _____. _____ grows up here. _____ is locked in the _____ - _____.
<b>Lowood School</b> _____ 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

<b>thesis</b> –
<b>juxtaposition</b> –

## Characters in Jane Eyre

<b>Jane Eyre</b>
<b>Mrs Reed – Jane's aunt</b>
<b>Mr Brocklehurst – The governor of Lowood school</b>
<b>Helen Burns – Jane's friend</b>
<b>Miss Temple</b>

## Vocabulary: Key words

<b>protagonist</b> –
<b>dependent</b> –
<b>oppress (vb.)</b> –
<b>solitude</b> –
<b>sombre</b> –
<b>conventional</b> –
<b>obedience</b> –
<b>ominous</b> –
<b>clandestine</b> –
<b>humiliate (vb.)</b> –
<b>hypocrite</b> –
<b>comeuppance</b> –

## Victorian attitudes to childhood

1	A child is a blank slate...
2	A child is born completely <b>innocent</b> and <b>pure</b> ...
3	The child is born evil...

## Biographical information

1	'Jane Eyre' written in _____ by Charlotte _____.
2	Parts of 'Jane Eyre' were influenced by Brontë's experiences at _____ and as a young _____.
3	'Jane Eyre' was unusual when it was published because it is written in the _____.

**What we are learning this term:**

- A. Four Operations with Decimals
- B. Indices, Powers & Roots
- C. Ratio

**Key Words**

- 1) Priority
- 2) Powers
- 3) Roots
- 4) Indices
- 5) Ratio
- 6) Equal Parts

**B. Indices, Powers and Roots - definitions**

Powers	The power of a number dictates how many times we use it in a multiplication. Example $2^3 = 2 \times 2 \times 2$
Square Root	A <b>square root</b> of a number is a value that, when multiplied by itself, gives the number. Example: $4 \times 4 = 16$ , so a <b>square root</b> of 16 is 4
Cube Root	The <b>cube root</b> of a number is a special value that, when used in a multiplication three times, gives that number. Example: $3 \times 3 \times 3 = 27$ , so the <b>cube root</b> of 27 is 3.

C.	Ratio
Define: Ratio	<b>Ratio</b> is the comparison of two values of the same kind
Define: Equal Parts	Ratio stipulates how many equal parts represent a given quantity

James has some apples and oranges.  
The ratio of apples and oranges is 2:5  
He has 15 oranges.  
How many apples does James have?

Step 1: Allocate the equal parts and assigned them quantity if possible

Apples □ □

Oranges □ □ □ □ □ } 15

Step 2: Find the value of one part

$15 \div 5 = 3$

Each equal part = 3

Step 3: Answer the question

$2 \times 3 = 6$  apples

**A. Four Operations with Decimals**

Priority When calculating with multiple operations, certain operations have priority. BIDMAS encapsulates this.

Multiplying with Decimals

$4.5 \times 3.4$

Step 1: Multiply disregarding the decimal points

$$\begin{array}{r} 45 \times 34 \\ = 1530 \end{array}$$

Step 2: Consider where to place decimal point

$5 \times 3 = 15$   
Therefore  $4.5 \times 3.4 = 15.3$

**B Indices, Powers and Roots – Extended. Fractional Indices**

Indices	The <b>index</b> of a number says how many times to use the number in a multiplication
---------	--

$25^{\frac{1}{2}} = 5$

Step: Any integer raised to the power of  $\frac{1}{2}$  is to be squared rooted.

$125^{\frac{1}{3}} = 5$

Step: Any integer raised to the power of  $\frac{1}{3}$  is to be cube rooted.



**What we are learning this term:**

- A. Four Operations with Decimals
- B. Indices, Powers & Roots
- C. Ratio

**Key Words**

- 1) Priority
- 2) Powers
- 3) Roots
- 4) Indices
- 5) Ratio
- 6) Equal Parts

**B. Indices, Powers and Roots - definitions**

Powers

Square Root

Cube Root

A.

*Four Operations with Decimals*

Priority

Multiplying with Decimals

$$4.5 \times 3.4$$

Step 1:

Step 2:

B

*Indices, Powers and Roots – Extended.  
Fractional Indices*

Indices

$$25^{\frac{1}{2}}$$

Step:

$$125^{\frac{1}{3}}$$

Step:

C.

Ratio

Define:  
Ratio

Define:  
Equal Parts

James has some apples and oranges.  
The ratio of apples and oranges is 2:5  
He has 15 oranges.  
How many apples does James have?

Step 1:

Step 2:

Step 3:

**What we are learning this term:**

- A. Types of reaction
- B. Catalysts
- C. Energy in Reactions

**5 Key Words for this term**

- 1. Decomposition
- 2. Oxidation
- 3. Exothermic
- 4. Endothermic
- 5. Displacement

**A. What is a chemical reaction?**

The breaking of bonds in reactants and making of bonds to for products. A new substance is formed

**A. What is Thermal Decomposition?**

Thermal decomposition is a chemical reaction where heat is used to break down a substance.

**Does a thermal decomposition reaction give out energy, or take in energy from its surroundings?**

Thermal decomposition is an endothermic reaction - it takes in energy. Because thermal decomposition is endothermic, it means bonds are being broken.

Examples: Zinc Carbonate  $\rightarrow$  Zinc Oxide + Carbon dioxide  
 $ZnCO_3 \rightarrow ZnO + CO_2$



Magnesium carbonate  $\rightarrow$  Magnesium Oxide + Carbon dioxide  
 $MgCO_3 \rightarrow MgO + CO_2$



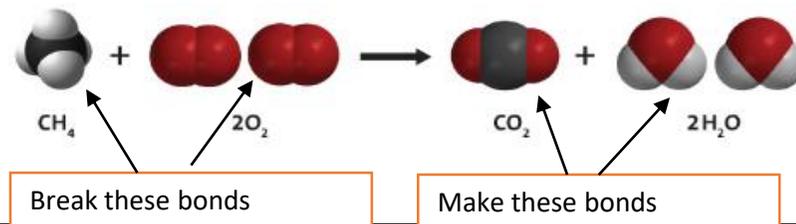
**A. What is Combustion?**

A chemical reaction where a fuel reacts with oxygen to make carbon dioxide and water

**Does a combustion reaction give out energy, or take in energy from its surroundings?**

Combustion is a exothermic reaction- it gives energy into the surroundings. Because combustion is exothermic, it means bonds are being made

Examples: methane + oxygen  $\rightarrow$  carbon dioxide + water  
 $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$



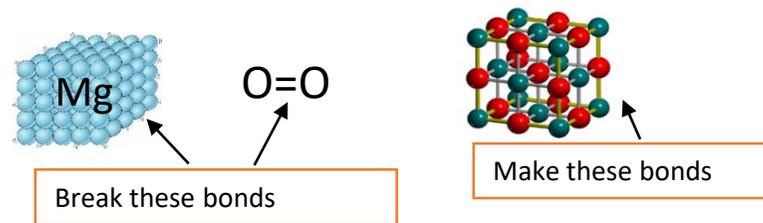
**A. What is oxidation?**

Oxidation is a chemical reaction where an element or compound reacts with oxygen

**Does an oxidation reaction give out energy, or take in energy from its surroundings?**

Oxidation reactions are mostly exothermic reactions- giving energy to the surrounding. Because oxidation reactions are exothermic, it means that bonds are being made.

Examples: Magnesium + Oxygen  $\rightarrow$  Magnesium Oxide  
 $Mg + O_2 \rightarrow MgO$



**What we are learning this term:**

- A. Types of reaction
- B. Catalysts
- C. Energy in Reactions

**5 Key Words for this term**

- 1.
- 2.
- 3.
- 4.
- 5.

**A. What is a chemical reaction?**

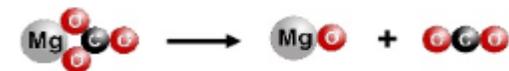
**A. What is Thermal Decomposition?**

Does a thermal decomposition reaction give out energy, or take in energy from its surroundings?

Examples: Zinc Carbonate →



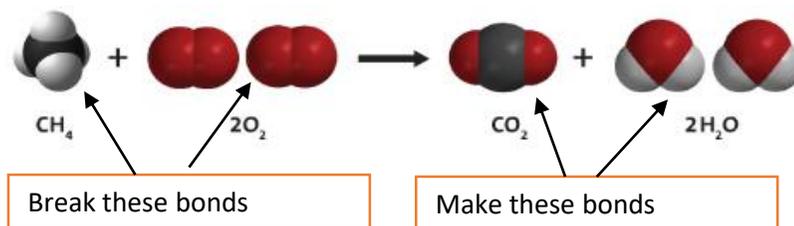
Magnesium carbonate →



**A. What is Combustion?**

Does a combustion reaction give out energy, or take in energy from its surroundings?

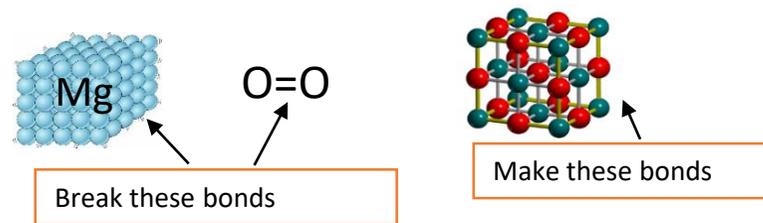
Examples: methane + oxygen →



**A. What is oxidation?**

Does an oxidation reaction give out energy, or take in energy from its surroundings?

Examples: Magnesium + Oxygen →





**B. What 2 things do you need for a successful reaction to happen?**

1. Particles to collide
2. Enough energy for a reaction to occur (activation energy)

**B. What is the rate of a reaction?**

The rate of reaction is the speed at which a chemical reaction is happening. This can vary hugely from reaction to reaction.

- |   |   |
|---|---|
| What factors can affect rate of reaction? | <ol style="list-style-type: none"> <li>1. Changing temperature</li> <li>2. Changing the concentration of a solution</li> <li>3. Changing the surface area of a solid</li> <li>4. Adding a catalyst</li> </ol> |
|---|---|

**B. What is a catalyst?**

A catalyst is a substance which speeds up a chemical reaction without being used up.

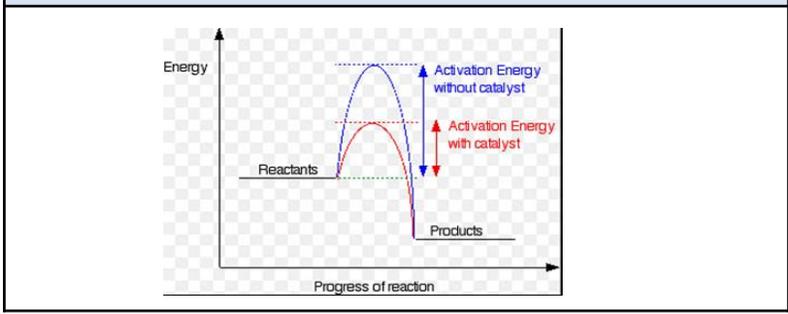
- They are specific to each reaction

**B. How do catalysts work?**

Catalysts speeds up a reaction by:

- Lowering the activation energy
- this means that there are more **successful collisions**
- Therefore a faster reaction.

**How can you show this on a reaction profile?**



**B. Why aren't catalysts written in the chemical equation of a reaction?**

Catalysts are not included in a chemical equation as they are not used up in a chemical reaction.

**C. What is Activation energy?**

The minimum energy required for a successful collision between reactants

**What is a reaction profile?**

A graph which show the energies of the reactants and products at different stages of the chemical reaction

**C. What are exothermic and endothermic reactions?**

	Exothermic reactions	Endothermic Reactions
What are they?	An exothermic reaction is a reaction in which energy is transferred from the reacting substances to their surroundings	An endothermic reaction is a reaction in which energy is transferred to the reacting substances from their surroundings.
Do things warm up or cool down?	Temperature <b>increases</b> : Energy is transferred to surroundings	Temperature <b>decreases</b> : Energy is absorbed from the surroundings
Bond making or breaking?	Bond <b>making</b> is an exothermic process	Bond <b>breaking</b> is an endothermic process
Reaction profile		



**B. What 2 things do you need for a successful reaction to happen?**

- 1.
- 2.

**B. What is the rate of a reaction?**

What factors can affect rate of reaction?

- 1.
- 2.
- 3.
- 4.

**B. What is a catalyst?**

**B. How do catalysts work?**

**How can you show this on a reaction profile?**

**B. Why aren't catalysts written in the chemical equation of a reaction?**

**C. What is Activation energy?**

**What is a reaction profile?**

**C. What are exothermic and endothermic reactions?**

	Exothermic reactions	Endothermic Reactions
What are they?		
Do things warm up or cool down?		
Bond making or breaking?		
Reaction profile		

**What we are learning this term:**

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

**3 Key Words for this term**

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

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

Sound	EM waves, like light
Requires a medium (particles) to travel	Does not require a medium (particles)
Longitudinal waves	Transverse Waves
Travels faster in more dense media	Travels slower in more dense material

**A. Types of Waves**

Waves transfer energy without transferring matter.

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

Transverse	Longitudinal
<ul style="list-style-type: none"> <li>• Transfer energy perpendicular to the direction of the wave</li> </ul>	<ul style="list-style-type: none"> <li>• Transfer energy parallel to the direction of the wave</li> </ul>

**B. What different behaviours do waves show?**

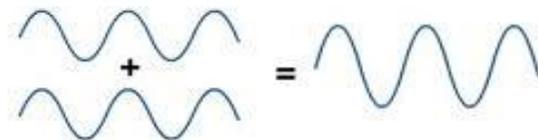
Waves can travel through all sorts of media, and different things can happen at the **boundary** between different media:

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

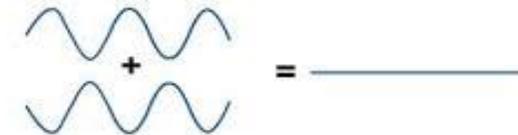
**B. What is Superposition**

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

**Constructive Interference**

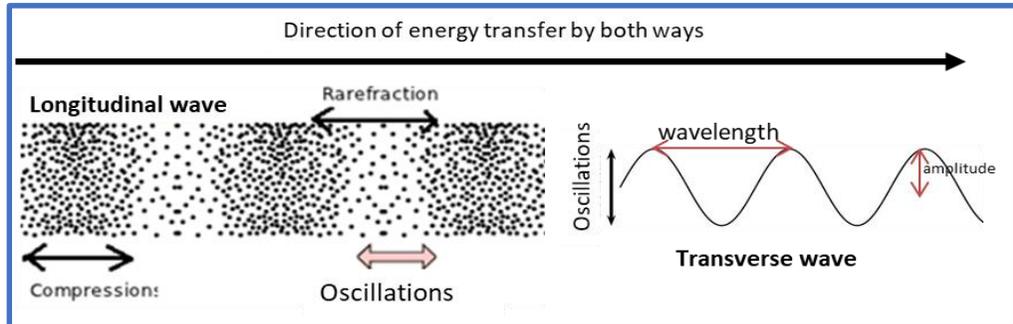


**Destructive Interference**



**C. Changes in sounds**

<b>What is pitch?</b>	The highness/lowness of a sound. Higher sounds have a higher frequency
<b>What is frequency?</b>	The number of oscillations in a wave per second. This is also the number of waves passing a point per second. It is measured in Hertz
<b>What is volume?</b>	The intensity of a sound – measured in decibels





**What we are learning this term:**

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

**3 Key Words for this term**

- 1.
- 2.
- 3.

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

<b>Sound</b>	<b>EM waves, like light</b>

**A. Types of Waves**

Waves transfer energy without transferring matter.

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


**B. What different behaviours do Waves show?**

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

**Transmission**

**Reflection**

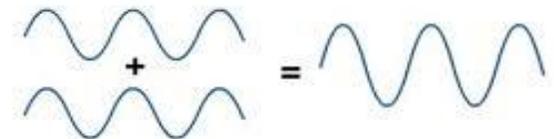
**Refraction**

**Absorption**

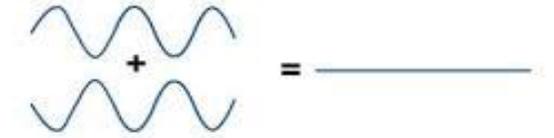
**Diffraction**

**B. What is Superposition?**

**Constructive Interference**



**Destructive Interference**



**C. Changes in sounds**

**What is pitch?**

**What is frequency?**

**What is volume?**

Direction of energy transfer by both ways

**Longitudinal wave**

Rarefaction



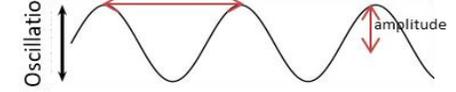
Compressions:

Oscillations

Oscillations

wavelength

amplitude



**Transverse wave**



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

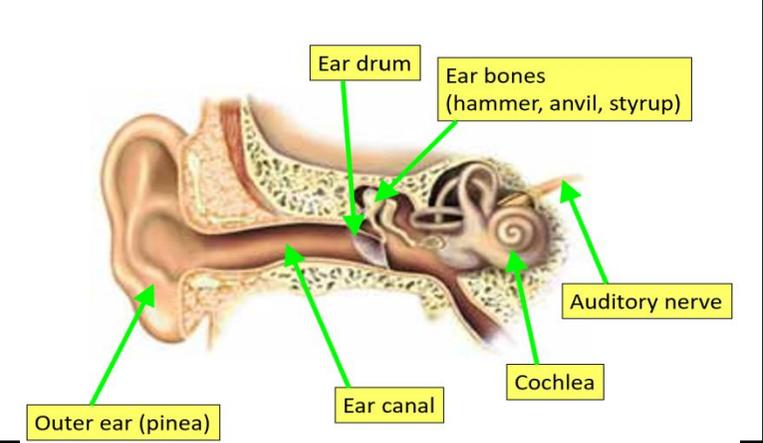
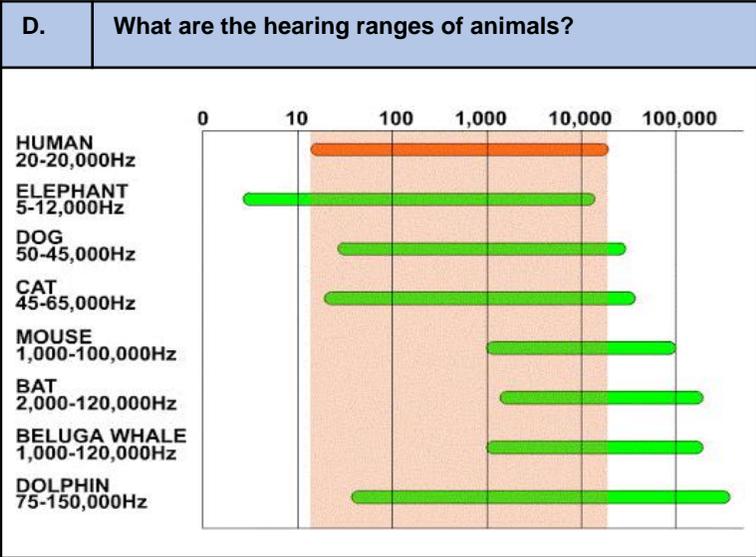
D.	Hearing ranges
What is the hearing range of humans?	Humans have a hearing range between 20 – 20000 Hz
What is Ultrasound?	Sounds with a frequency about 20000Hz
What is ultrasound used for?	Uses of ultrasound: <ul style="list-style-type: none"> <li>• Prenatal scans of unborn children</li> <li>• Ultrasonic cleaning of fragile objects</li> <li>• Breaking up deposits called kidney stones to prevent harm.</li> </ul>

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

E.	What is an echo?
	A reflected sound

E.	How do loudspeakers work?
	<ul style="list-style-type: none"> <li>• Loudspeakers are vibrating cones.</li> <li>• The pattern and frequency of the vibrations (oscillations) determines the sound.</li> </ul>

How do Microphones work?
<b>Microphones</b> have a vibrating <u>diaphragm</u> inside, which transfers the sound wave into an electrical signal in a circuit.



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



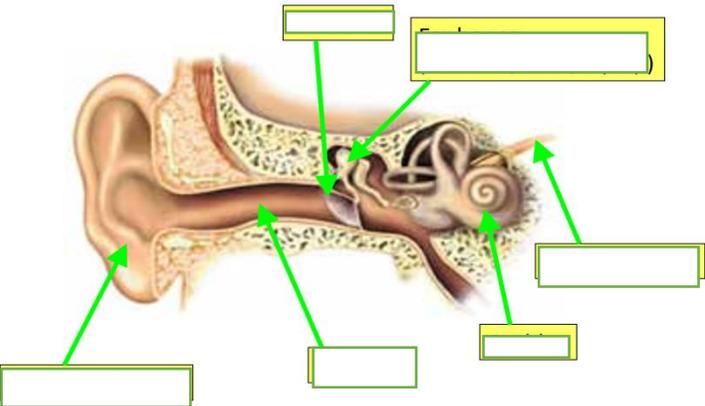
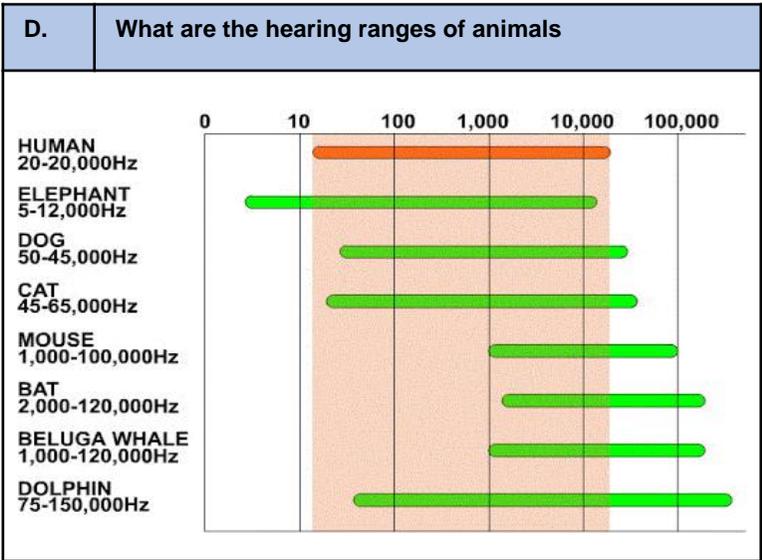
<b>C.</b>	<b>How is sound produced?</b>
<b>How does sound travel?</b>	
<b>Which media does sound travel fastest and why?</b>	

<b>D.</b>	<b>Hearing ranges</b>
What is the hearing range of humans?	
What is Ultrasound?	
What is ultrasound used for?	

<b>C.</b>	<b>Part of the Ear</b>	<b>What is the Function?</b>
1.	Outer ear (pinna)	
2.	Ear canal	
3.	Ear drum	
4.	Ear bones (hammer, anvil, stirrup)	
5.	Cochlea	
6.	Auditory nerve	

<b>E.</b>	<b>What is an echo?</b>

<b>E.</b>	<b>How do loudspeakers work?</b>
<b>How do Microphones work?</b>	



<b>D.</b>	<b>Seeing sounds – How can you see sounds?</b>
<b>Amplitude (volume) is shown by:</b>	
<b>The frequency is shown by:</b>	



# Y9- T1 - Life in an Emerging Country



Background:	
1.	Development means positive change that makes things better.
2.	As a country develops it usually means that the people's standard of living and quality of life improve. <b>(B)</b>
3.	Different factors can affect development such as economic, social and political factors. <b>(A)</b>
4.	Emerging countries have begun to experience higher rates of development, with a rapid growth in secondary industries. <b>(A, C)</b>
5.	Emerging countries have some of the fastest rates of urbanisation in the world. <b>(D)</b>
6.	This is causing urban areas (cities) to become highly populated, this process can have both opportunities and challenges. One such challenge is the growth of squatter settlements. <b>(E)</b>
7.	Emerging countries often host the factories of many transnational companies. They provide wages and taxes, and can promote development. However, they can also cause negatives. <b>(F, G)</b>

A.	Characteristics of emerging countries (7)
BRIC countries	Brazil, Russia, India, China.
MINT countries	Mexico, Indonesia, Nigeria, Turkey.
Industrialisation	The process of a country moving from mostly agriculture (farming) to manufacturing (making) goods.
Employment structure	How the workforce is divided up between primary, secondary, tertiary and quaternary employment.
Secondary industry	An industry which manufactures goods.
Exports	Sending goods to another country for sale.
Urbanisation	The growth in the number/ proportion of people living in towns and cities.

B.	Development indicators (3)	
GDP per capita	The total value of goods and services sold by a country in a year divided by the population.	
HDI	A development measure which combines GDP per capita, life expectancy and literacy rate.	
Life expectancy	The average age you are expected to live to in a country.	

D.	Rural to urban migration (4)	
Rural to urban migration	The movement of people from rural areas (countryside) to urban areas (cities).	
Push factor	Things that make people want to leave an area e.g. a lack of jobs.	
Pull factor	Things that attract people to live in an area e.g. good health care.	
Mechanisation	When machines begin to do the work which humans once completed.	

F.	Transnational corporations (TNCs) (5)	
Transnational corporation	Those that operate across more than one country.	
Footloose	Industries which are not tied to a location due to natural resources or transport links.	
Globalisation	The increased connectivity of countries around the world e.g. through trade.	
Host country	The country where the TNC places it's factories e.g. in an emerging or developing country.	
Source country	The country where the headquarters for the TNC is located e.g. a developed country.	

C.	Encouraging development (4)	
Subsidy	Money given by a government to help an industry keep down the cost of exports.	
Tax breaks	This reduces the amount of tax a company must pay (normally for a fixed period), therefore increasing profit.	
Minimum wage	The lowest wage permitted by law in a country.	
Trade unions	An organisation of workers who work to protect the rights of those employed.	

E.	Squatter settlements (5)	
Squatter/ shanty settlement	An area (often illegal) of poor quality housing, lacking basic services e.g. water.	
Inequality	Differences in wealth, and wellbeing.	
Sanitation	Measures to protect public health e.g. clean water and disposing of sewage.	
Informal economy	Jobs which are not taxed, workers do not have contracts or rights.	
Quality of life	A measure of how 'wealthy' people are, but measured using housing, employment and environment, rather than income.	

G.	Impact of TNCs	
Positive: (5)	<ol style="list-style-type: none"> <li>1. More jobs.</li> <li>2. More taxes.</li> <li>3. Invest in infrastructure projects.</li> <li>4. GDP increases.</li> <li>5. Develop workers skills.</li> </ol>	
Negative: (3)	<ol style="list-style-type: none"> <li>1. Can exploit workers e.g. long hours.</li> <li>2. Most of the profits from TNCs leave the country where production takes place.</li> <li>3. Increased levels of pollution e.g. air and water (from industrial waste).</li> </ol>	



# Y9- T1 - Life in an Emerging Country - Quizzable



**Background:**

- Development means \_\_\_\_\_
- As a country develops it usually means \_\_\_\_\_. **(B)**
- Different factors can affect development such as \_\_\_\_\_. **(A)**
- Emerging countries have begun to experience higher rates of \_\_\_\_\_ with a rapid growth in \_\_\_\_\_. **(A, C)**
- Emerging countries have some of the \_\_\_\_\_ in the world. **(D)**
- This is causing urban areas (cities) to become \_\_\_\_\_, this process can have both opportunities and challenges. One such challenge is the growth of \_\_\_\_\_. **(E)**
- Emerging countries often host the factories of many transnational companies. They provide wages and taxes, and can promote development. However, they can also cause negatives. **(F, G)**

A.	Characteristics of emerging countries (7)
BRIC countries	
MINT countries	
Industrialisation	
Employment structure	
Secondary industry	
Exports	
Urbanisation	

B.	Development indicators (3)
GDP per capita	
HDI	
Life expectancy	

D.	Rural to urban migration (4)
Rural to urban migration	
Push factor	
Pull factor	
Mechanisation	

F.	Transnational corporations (TNCs) (5)
Transnational corporation	
Footloose	
Globalisation	
Host country	
Source country	

C.	Encouraging development (4)
Subsidy	
Tax breaks	
Minimum wage	
Trade unions	

E.	Squatter settlements (5)
Squatter/shanty settlement	
Inequality	
Sanitation	
Informal economy	
Quality of life	

G.	Impact of TNCs
Positive: (5)	<ol style="list-style-type: none"> <li></li> <li></li> <li></li> <li></li> <li></li> </ol>
Negative: (3)	<ol style="list-style-type: none"> <li></li> <li></li> <li></li> </ol>

## Year 9 Term 1 History Knowledge organiser: Topic = British Sector of the Western Front, 1914-1918: injuries, treatments and trenches.

What we are learning this term:	
A.	The main battles on the British Sector of the Western Front during WWI
B.	The trench system – structure and features
C.	Health problems caused by the conditions in the trenches
D.	How the wounded were evacuated and who treated them
E.	How the war led to improvements in medicine
F.	Usefulness of primary sources for historical enquiries
6 Key Words for this term – Section A	
1	<b>First Aid Nursing Yeomanry (FANY)</b> – A women’s voluntary organisation which provided medical services on the frontlines such as driving ambulances and emergency first aid
2	<b>Royal Army Medical Corps (RAMC)</b> – The branch of the army responsible for medical care
3	<b>No-man’s land</b> – The area between two opposing trenches during WWI
4	<b>Shrapnel</b> – Fragments of metal from exploded shells
5	<b>Salient</b> - An area of a battlefield that is surrounded by enemy territory on 3 sides
6	<b>Alliances</b> – An agreement countries make to support each other if they are attacked by other countries

C.	Causes of WWI
Militarism	Britain 'ruled the waves'. It had to most powerful Navy in the world. Germany wanted to rival Britain's empire so it began to build an even better navy. Once Britain heard about Germany's plans to build a navy, they too began to build a bigger and better navy. This is called the 'naval race'.
Alliances	In 1882 Austria, Germany and Italy signed the Triple Alliance. They promised to defend each other if either were attacked. This is called the <b>Triple Alliance</b> . <i>France and Russia</i> : France and Russia had had an alliance since 1904 – because they both thought the best way of controlling Germany was to surround her. This then turned into the <b>Triple Entente</b> with England in 1907 as England became increasingly worried about German naval strength. This left Germany surrounded
Imperialism	During the 19 <sup>th</sup> century both Britain and France conquered huge overseas empires – this gave them access to raw materials for industry and a market for their goods, it also gave them huge amounts of political power across the world Both Britain and France were very happy being the most powerful nations and wanted this to continue. Kaiser Wilhelm wanted to compete with Britain and conquer a German Empire that would challenge Britain's supremacy .
Nationalism	Before 1871 Germany didn't exist. Instead it was a series of separate kingdoms. The most powerful of these was called Prussia. Prussia was an industrialised nation, like Britain, and had a powerful army. In 1871 Prussia fought and defeated France in the Franco Prussian War. After the defeat of France, Germany united. Germany then had a big desire to 'nation build' – to build a national identity rather than separate identities for different kingdoms.
Assassination of Franz Ferdinand	The Austria-Hungary government saw the assassination as a direct attack on the country. They believed that the Serbians had helped the Bosnian terrorists in the attack. They made harsh demands on the Serbians which the Serbians rejected. At the same time, Russia began to mobilize their army to help protect Serbia. When Serbia rejected the demands, Austria-Hungary declared war on Serbia. A few days later, Germany declared war on Russia to help its ally Austria-Hungary. Then France began to mobilize to help its ally Russia, and Germany followed by declaring war on France. World War I had begun.
The Blank Cheque	On July 5, 1914, Germany gave Austria a " <b>blank cheque</b> " in handling its punishment of Serbia regarding the assassination of the heir to the Austrian throne.

B.	Describe two features of the key battles during WWI
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Battle	Features
1 <sup>st</sup> Battle of Ypres (1914)	This battle was aimed at stopping the German army from advancing towards the Belgium coast.
2 <sup>nd</sup> Battle of Ypres (1915)	This battle was the first time that the Germans used chlorine gas as a weapon against the British.
Battle of the Somme (1916)	Bloodiest battle in the whole of the war – total of 57,000 men were killed during the first day alone. The RAMC were not prepared for the amount of casualties and hospitals and casualty stations were overwhelmed.
Battle of Arras (1917)	This British used tunnels to dig near to the German trenches and surprise them with the attack. No progress was made and there were 160,000 casualties.
3 <sup>rd</sup> Battle of Ypres (1917)	During this battle the weather turned to heavy rain. The ground became waterlogged and many men fell into the mud and drowned.
Battle of Cambrai (1917)	This battle saw the first large-scale use of tank to break through the enemies barbed wire. Also the first time that there was a blood bank, which meant doctors could deliver a vital medical service to those soldiers who had lost too much blood.

B.	Describe two features of the trench system during the Western Front
1 – Dugout	This was an area where soldiers could be protected from light fire
2 – Barbed wire	This would make it more difficult for the enemy to get into the trench
3 – Sandbags	These could absorb the shock of the bullets and help the trench maintain its shape
4 – Fire step	This is what soldiers stepped on when they wanted to climb over the top. Between fighting it was often used as a bench or bed
5 - Duckboards	Wooden boards that were placed on the floor of the trench to provide a flatter and dryer ground for the soldiers to walk over
6 – Elbow rest	This is where soldiers would prop their guns to shoot out of the trench
7 - Parapet	This was a way of protecting soldiers as they shout out of the trench

F.	How did World War One end?
1917 – The Russian Revolution started. Russia left the war, surrendering to Germany in 1917. 1917 – Following the sinking of US ships, such as the Lusitania, and the potential threat of an alliance between Germany and Mexico leading to an attack on the USA, the USA joined the war on the side of the Triple Entente. 1918 – Entente forces on the Western Front push the German army back to the Hindenberg Line, the last line of German defenses. 1918 – Blockades enforced by the Entente led to lack of resources and food in Germany. Thousands of people in Germany were starving. 1918 – The Germany Navy began to Mutiny 1918 – The Kaiser abdicated. 11th November 1918 – An armistice is signed, formally ending the First World War	

E.	What health problems were caused by conditions in the trenches?
1 <b>Gangrene</b> – a condition where a loss of blood supply causes body tissue to die and usually occurred as a result of an injury. Treated by amputation of the affected area. <b>Gas Gangrene</b> – infection that produces gas in the gangrenous area. Caused by bacteria in the soil on the Western Front which had been heavily farmed using fertiliser. 2 <b>Shellshock</b> – a condition that was not really understood during the war. Caused by the constant noise and shell fire in the trenches, many soldiers experienced nightmares, loss of speech and a complete mental breakdown. 3 <b>Shrapnel wounds</b> – when shells exploded, shrapnel travelled at fast speeds over wide areas, causing injuries to anyone in their way 4 <b>Trench fever</b> – flu-like condition that was spread by lice in the trenches 5 <b>Trench foot</b> – painful swelling of the feet caused by standing in cold mud and water, which could lead to gangrene.	

G.			
Why is it called a World War?	Why did WW1 End?	Was the Treaty of Versailles harsh on Germany?	
Many soldiers from all over the world fought on the Western Front. Many came from the Empires of Britain and France.	Germany was starving because of the British blockade Allies had many new inventions such as tanks. Many new allied troops were entering the war from the USA. Germany faced many rebellions as Germany was starving	Germany had inflicted a much harsher treaty on Russia called the Treaty of Brest Litovsk.  Germany had to pay £6.3 billion German army was limited to 100 thousand. (previously was ten million. Germany gave up la	
War also took place in colonies around the world such as in Africa and Asia. There was also fighting on the Eastern Front in Russia.			

**Year 9 Term 1 History Knowledge organiser: Topic = British Sector of the Western Front, 1914-1918: injuries, treatments and trenches.**

<b>What we are learning this term:</b>
A. The main battles on the British Sector of the Western Front during WWI
B. The trench system – structure and features
C. Health problems caused by the conditions in the trenches
D. How the wounded were evacuated and who treated them
E. How the war led to improvements in medicine
F. Usefulness of primary sources for historical enquiries
<b>6 Key Words for this term – Section A</b>

<b>C.</b>	<i>Causes of WWI</i>
Militarism	
Alliances	
Imperialism	
Nationalism	
Assassination of Franz Ferdinand	
The Blank Cheque	

<b>B.</b>	<b>Describe two features of the key battles during WWI</b>
<u>Battle</u>	<u>Features</u>
1 <sup>st</sup> Battle of Ypres (1914)	
2 <sup>nd</sup> Battle of Ypres (1915)	
Battle of the Somme (1916)	
Battle of Arras (1917)	
3 <sup>rd</sup> Battle of Ypres (1917)	
Battle of Cambrai (1917)	

<b>B.</b>	<b>Describe two features of the trench system during the Western Front</b>
1 – Dugout	
2 – Barbed wire	
3 – Sandbags	
4 – Fire step	
5 - Duckboards	
6 – Elbow rest	
7 - Parapet	

<b>F.</b>	<b>How did World War One end?</b>

<b>E.</b>	<b>What health problems were caused by conditions in the trenches?</b>

<b>G.</b>		
Why is it called a World War?	Why did WW1 End?	Was the Treaty of Versailles harsh on Germany?

<b>What we are learning this term:</b>	<b>B.</b>	<b>How has Biblical criticism influenced the rise of atheism ?</b>
The development of Atheism and worldviews	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.

<b>A.</b>	<b>Can you define these key words?</b>
<b>Key word</b>	<b>Key definition</b>
Dogma	Beliefs or principles laid down by authority as unquestioningly true .
Doctrine	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 <i>know</i>
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.

<b>C.</b>	<b>Explain 4 reasons people are atheist or reject religion</b>
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 1 <sup>st</sup> 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?

<b>D.</b>	<b>Explain Hume's main arguments against miracles</b>
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' .

<b>E.</b>	<b>Explain Neitzche's ideas about religion and morality</b>
	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.
	<b>Explain how Freud challenges religious truth</b>
	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.
	<b>Explain how Feuerbach challenges religious truth</b>
	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.
	<b>Explain how Marx challenges religious truth</b>
	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.

<b>F.</b>	<b>Explain 2 reasons why science is a challenge to religion</b>
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.
	<b>Explain 2 religious responses to the challenge of science</b>
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

<b>What we are learning this term:</b>
The development of Atheism and worldviews

<b>B.</b>	<b>How has Biblical criticism influenced the rise of atheism ?</b>
1	

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

<b>C.</b>	<b>Explain 4 reasons people are atheist or reject religion</b>
1	
2	
3	
4	

<b>D.</b>	<b>Explain Hume's main arguments against miracles</b>
1	
2	
3	

<b>E.</b>	<b>Explain Neitzche's ideas about religion and morality</b>
	<b>Explain how Freud challenges religious truth</b>
	<b>Explain how Feuerbach challenges religious truth</b>
	<b>Explain how Marx challenges religious truth</b>

<b>F.</b>	<b>Explain 2 reasons why science is a challenge to religion</b>
1	
2	
	<b>Explain 2 religious responses to the challenge of science</b>
1	
2	

**What we are learning this term:**

- A. Foods/drinks
- B. Healthy living
- C. Smoking
- D. Free time activities
- E. Free time activities x 2
- F. Key words across topics

**6 Key Words for this term**

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

**A. ¿Qué te gusta comer?**

el almuerzo	Lunch
el azúcar	Sugar
barato/a	Cheap
el bistec	Steak
la carne	Meat
caro/a	Expensive
la cena	evening meal
la comida	Food
la comida basura	junk food
el desayuno	Breakfast
la ensalada	Salad
la fruta	Fruit
la galleta	Biscuit
la grasa	Fat
el helado	ice-cream
la leche	Milk
las legumbres	Vegetables
los mariscos	Seafood
el pastel	Cake
el perrito caliente	hot dog
picante	Spicy
el plato	Dish
el pollo	Chicken
rico/a	Tasty
saludable	healthy
sano/a	Healthy
la tortilla	Omelette
la tostada	Toast
las verduras	green vegetables

**B ¿Llevas una vida sana?**

acostarse	to go to bed
Cambiar	to change
cansado/a	Tired
el cuerpo	Body
deportista	Sporty
dormir	to sleep
el ejercicio	Exercise
la energía	Energy
el esfuerzo	Effort
estar en forma	to be fit
evitar	to avoid
fumar	to smoke
joven	Young
llevar una vida (sana)	to lead a(healthy)life
mantenerse en forma	to keep fit
morir	to die
necesario/a	Necessary
relajarse	to relax
la salud	health

**C. ¿Qué es tu opinion de fumar?**

Afectar	to affect
asqueroso/a	disgusting / filthy
causar	to cause
el cigarrillo	Cigarette
el corazón	Heart
el daño	damage / harm
dejar de (fumar)	to stop (smoking)
la enfermedad	illness / disease
el / la fumador(a)	Smoker
el fumar pasivo	passive smoking
la muerte	Death
la mujer	Woman
el olor	Smell
el peligro	danger

**D. 3.1G ¿Qué haces en tu tiempo libre?**

Bailar	To dance
Cantar	To sing
De vez en cuando	From time to time
Entretenido	Entertaining
Estimulante	Challenging
Leer	To read
Libre	Free (as in free time)
Pelicula	Film
Salir	To go out
Tarde	Late
Ver	To see

**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

**E. 3.1F Que te gusta hacer en tu tiempo libre?**

bastante	quite
cada	each, every
cenar	to have an evening meal
Charlar	to chat to rest
descansar	cartoons
los dibujos animados	documentary
el documental	weekend
el fin de semana	great
genial	news
las noticias	never
nunca	occupied, busy
ocupado/a	police, crime (adj.)
policíaco/a	to put
poner	in general
por lo general	always
siempre	theatre
el teatro	soap opera
la telenovela	to finish
terminar	time
el tiempo	all, every
todo/a/os/as	silly, stupid
tonto/a	time, occasion
la vez	

**F. Key Words across Topics?**

to have = tener	Divertido – fun
to be = ser	Aburrido – boring
to go = ir	Útil – useful
to do = hacer	Inútil – useless
to play = jugar	Comodo – comfy
to see = ver	Interesante- 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	

**What we are learning this term:**

- A. Foods/drinks
- B. Healthy living
- C. Smoking
- D. Free time activities
- E. Free time activities x 2
- F. Key words across topics

**6 Key Words for this term**

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

**A. ¿Qué te gusta comer?**

- |                  |                  |
|------------------|------------------|
| el almuerzo      | _____            |
| el azúcar        | Cheap            |
| _____            | Meat             |
| el bistec        | Expensive        |
| _____            | evening meal     |
| _____            | Food             |
| la comida basura | Breakfast        |
| _____            | Salad            |
| _____            | Fruit            |
| _____            | Biscuit          |
| la grasa         | ice-cream        |
| _____            | Milk             |
| las legumbres    | Seafood          |
| _____            | Cake             |
| _____            | hot dog          |
| _____            | Spicy            |
| el plato         | Chicken          |
| _____            | Tasty            |
| _____            | healthy          |
| _____            | Healthy          |
| _____            | Omelette         |
| _____            | Toast            |
| _____            | green vegetables |

**B ¿Llevas una vida sana?**

- |                        |              |
|------------------------|--------------|
| _____                  | to go to bed |
| _____                  | to change    |
| _____                  | Tired        |
| _____                  | Body         |
| _____                  | Sporty       |
| _____                  | to sleep     |
| _____                  | Exercise     |
| _____                  | Energy       |
| _____                  | Effort       |
| estar en forma         | _____        |
| _____                  | to avoid     |
| _____                  | to smoke     |
| _____                  | Young        |
| llevar una vida (sana) | _____        |
| mantenerse en forma    | to die       |
| _____                  | Necessary    |
| _____                  | to relax     |
| _____                  | health       |

**C. ¿Qué es tu opinion de fumar?**

- |                 |                     |
|-----------------|---------------------|
| Afectar         | _____               |
| _____           | disgusting / filthy |
| _____           | to cause            |
| _____           | Cigarette           |
| el corazón      | _____               |
| el daño         | to stop (smoking)   |
| la enfermedad   | _____               |
| _____           | Smoker              |
| el fumar pasivo | _____               |
| _____           | Death               |
| el olor         | Woman               |
| _____           | danger              |

**D. 3.1G ¿Qué haces en tu tiempo libre?**

- |                  |                        |
|------------------|------------------------|
| _____            | To dance               |
| _____            | To sing                |
| De vez en cuando | From time to time      |
| _____            | Entertaining           |
| _____            | Challenging            |
| _____            | To read                |
| _____            | Free (as in free time) |
| _____            | Film                   |
| _____            | To go out              |
| _____            | Late                   |
| _____            | To see                 |

**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

**E. 3.1F Que te gusta hacer en tu tiempo libre?**

- |                |                         |
|----------------|-------------------------|
| _____          | quite                   |
| _____          | to have an evening meal |
| _____          | to chat to rest         |
| _____          | cartoons                |
| _____          | documentary             |
| _____          | weekend                 |
| _____          | great                   |
| _____          | never                   |
| las noticias   | occupied, busy          |
| _____          | _____                   |
| _____          | to put                  |
| _____          | _____                   |
| policíaco/a    | always                  |
| _____          | _____                   |
| por lo general | _____                   |
| _____          | _____                   |
| el teatro      | _____                   |
| la telenovela  | _____                   |
| terminar       | _____                   |
| _____          | _____                   |
| el tiempo      | all, every              |
| _____          | silly, stupid           |
| _____          | _____                   |
| la vez         | _____                   |

**F. Key Words across Topics?**

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



<b>G. Translation Practice</b>	
I like going shopping	m g i d c
I love to go out with friends	m e s c a
I like quite watching TV	m g b v l t
I don't like playing the guitar in my free time	n m g t l g e m t l
I don't like going shopping	n m g i d c
He likes playing the piano	l g t e p
She likes going out with her friends	l g s c s a
He likes watching TV in his free time	l g v l t e s t l
From time to time I read a book in the evening	d v e c l u l p l t
Always I play the guitar with my group	s t l g c m g
Sometimes I go shopping in my free time	a v v d c e m t l
Each week he likes to watch TV in the evening	c s l g v l t p l t
Usually she watches TV one time per week	a m v l t u v e l s
Sometimes she plays football in the evening	a v j a f p l t
Often they play basketball in the free time	a m j a b e l t l
Usually we listen to music every day	a m e m t l d
I hope to visit my grandma's house	e v l c d m a
I'm going to cook chicken and chips	v a c p c p f
I have to cook every day	t q c t l d
I'm thinking of watching TV tonight	p v l t h p l t
For breakfast, I drink milk and eat a sandwich	p e d, b l y c u b
For desert, they eat cake	p e p, c p
For breakfast, I take salad and chicken	p e d, t e y p
For lunch, she takes a Spanish tortilla	p e a, t u t e

<b>H. Key Questions: Answer the following in your own words. Use these model answers</b>	
<b>¿Qué te gusta comer/beber?</b> What do you like to eat/drink	Me gusta comer la comida sana. Normalmente desayuno cereales con leche y tostadas con mantequilla y mermelada y bebo zumo de naranja. Para mi almuerzo como un bocadillo con jamón o con queso y para la cena tomo patatas o verduras con carne. Me gusta comer los cereales porque son sabrosos pero no me gusta comer la carne es grasienta y quiero ser vegetariano
<b>¿Eres Sano?</b> About your family	Si, pienso que soy sano porque no fumo y no tomo drogas. También no como nunca caramelos pero como demasiado chocolate. Tengo que comer más fruta y beber menos coca cola
<b>¿Qué es tu opinión de fumar?</b> What is your opinion on smoking	Odio fumar. Mi madre no fuma pero mi padre fuma y pienso que es asqueroso. No fumo porque huele mal y te da mal aliento. También causa cáncer que es muy peligroso.
<b>¿Qué te gusta hacer en tu tiempo libre y por qué?</b> What do you like doing in your free time	Normalmente juego al futbol todos los días después del colegio. Lo que me encanta es jugar al futbol con mis amigos porque es bueno para la salud y es emocionante y relajante jugar contra tus amigos. De vez en cuando juego con videojuegos pero ayer hice ciclismo, hice mis deberes y toque mi guitarra.

<b>I. Key Questions: Try to translate the model answers using words from the KO</b>	
<b>¿Qué te gusta comer/beber?</b> What do you like to eat/drink	For breakfast I like to eat toast but I never eat cereals because they aren't tasty. For lunch I eat a sandwich with ham or cheese or I eat pizza with ham or sausage. For my main meal normally I eat chips with meat or fish or vegetables with potatoes
<b>¿Eres Sano?</b> About your family	I think I'm healthy because I don't smoke and I like to eat lots of fruit. I like to eat vegetables but I have to eat more vegetables and I have to eat less sweets
<b>¿Qué es tu opinión de fumar?</b> What is your opinion on smoking	I do not like smoking because I think that it is stupid. My brother smokes and it smells bad. Also, it causes cancer and is really dangerous
<b>¿Qué te gusta hacer en tu tiempo libre y por qué?</b> What do you like doing in your free time	Normally in my free time I like to play football. I play football after school every day and from time to time I play rugby. I don't like to dance because it's boring and I love to play computer games because they are exciting

<b>J. Key Grammar</b>	
Make sure adjectives agree eg blanco/blanca/blancos/blancas	Mi casa es blanca = My house is white Mi perro es blanco = My dog is white
Using verbs correctly in the present tense	Hablar hablo, hablas, habla, hablamos, habláis, hablan Como, comes, come, comemos, coméis, comen
Comparatives More /less Better/worse The best/the worst	Más/menos que – more/less than Mejor/peor que – better/worse than Lo mejor/lo peor = the best/the worst



**What we are learning this term:**



- A. Line Drawing
- B. Introduction into Surrealism
- C. Rene Magritte
- D. Photomontage
- E. Observational drawing
- F. Key Words

**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

**F. Keywords**

<b>Portrait</b>	An image which shows a person/animal
<b>Identity</b>	Information about a person's personality, interests, friend's family – what makes someone who they are
<b>Collage</b>	Using torn or cut paper in an artwork
<b>Material</b>	The substance used to create the artwork
<b>Photomontage</b>	process and the result of making a composite photograph by cutting, gluing, rearranging and overlapping two or more photographs
<b>Characteristics</b>	A list of describing words about a person or thing.
<b>Surreal</b>	<u>strange</u> ; not <u>seeming</u> <u>real</u> ; like a <u>dream</u> :
<b>Observation</b>	the action or process of closely observing or monitoring something or someone
<b>Mixed media</b>	An artwork made from more than one material



What is the difference between lines?



**B. What are the similarities and differences between MERVE ÖZASLAN and Magritte? List 3 of each.**

**Similarities:**

- Surreal appearance
- Use of juxtaposition
- Sinister atmosphere created

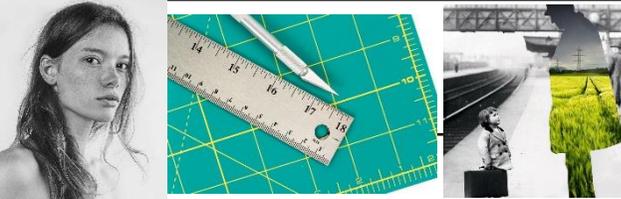


**Differences:**

- Use of everyday objects
- Painting vs photomontage
- Contrast colour scheme (black and white vs colour)

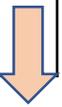


**Describe what is happening in each stage of the making?**



**C. List 3 words to describe the Surrealism style of artwork?**

- 1.) Strange, uncanny, abnormal
- 2.) Juxtaposition, contrast
- 3.) dream-like, unconscious



**D. Answer the following questions on MERVE ÖZASLAN and Marcelo Monreal?**

1	What materials does she use to create her work? Photographs/images craft knife and matt
2	What subject matter does she use? Portraits and landscapes
3	What messages could she be portraying in her work? Human effect on nature Urbanization Detachment with nature
4	How does he create his work? Collage, cutting and sticking images/photographs
5	What is his subject matter? Celebrity portraits and flowers
6	What messages might he be presenting in his work? People are made of flowers Beauty within people
7	What are the techniques both artist use? Photomontage and collage

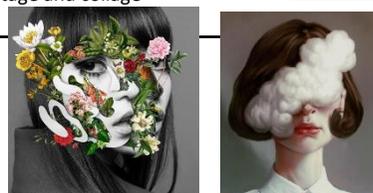


**D. What is the definition for photomontage?**

Photomontage is the process and the result of making a composite photograph by cutting, gluing, rearranging and overlapping two or more photographs into a new image. Sometimes the resulting composite image is photographed so that the final image may appear as a seamless physical print.

**E. Write a step-by-step guide to a successful observational drawing**

1. Identify horizon line
2. Draw outline of objects
3. Identify where the light source is
4. Add highlight, shadows and mid-tones
5. Add in any extra details (pattern, lines and texture)





**What we are learning this term:**



- A. Line Drawing
- B. Introduction into Surrealism
- C. Rene Magritte
- D. Photomontage
- E. Observational drawing
- F. Key Words

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

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Using continuous line drawing, recreate the face below.



Example

Your response

**F. Keywords**

Portrait	
Identity	
Collage	
Material	
Photomontage	
Characteristics	
Surreal	
Observation	
Mixed media	



What is the difference between lines?



**B. What are the similarities and differences between MERVE ÖZASLAN and Magritte? List 3 of each.**

**Similarities:**



**Differences:**

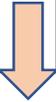


**Describe what is happening in each stage of the making?**



**C. List 3 words to describe the Surrealism style of artwork?**

- 1.)
- 2.)
- 3.)



**D. Answer the following questions on MERVE ÖZASLAN and Marcelo Monreal ?**

1. What materials does she use to create her work?
2. What subject matter does she use?
3. What messages could she be portraying in her work?
4. How does he create his work?
5. What is his subject matter?
6. What messages might he be presenting in his work?
7. What are the techniques both artist use?



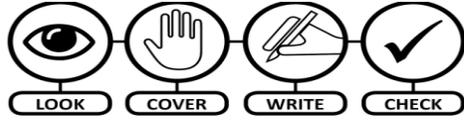
**D. What is the definition for photomontage?**

**E. Write a step-by-step guide to a successful observational drawing**





A	What we are learning about this term...
1	History of samba and carnival
2	Polyrhythms, grooves and breaks
3	Call and response/improvising



B	Keywords
<b>PULSE</b>	The <b>steady beat</b>
<b>RHYTHM</b>	A combination of <b>long and short sounds and silence</b>
<b>POLYRHYTHM</b>	<b>Two or more rhythms</b> played at the same time
<b>SAMBISTA</b>	The <b>leader of the ensemble</b> , gives musical cues to the performers using the <b>APITO</b> (Samba Whistle)
<b>CALL AND RESPONSE</b>	Where a <b>pattern is played by the leader</b> , and then <b>repeated or responded to</b> by the rest of the performers.
<b>SYNCOPIATION</b>	accenting or <b>emphasising the weaker beats of the bar</b>
<b>OSTINATO</b>	Songs and tunes <b>passed down by EAR</b> , not by writing them down
<b>MONOPHONIC / POLYPHONIC</b>	<b>One single rhythm</b> or melody line / <b>Lots of rhythms layered</b> to create a thick texture
<b>IMPROVISATION</b>	Music made up on the spot, <b>without preparation</b>

**C Samba Rhythms**

"Shake the ganza quickly shake the ganza slow"  
 "we can play Samba all day long"  
 "Tamborim Tamborim Tamborim Samba"  
 "1 2 3 4 Steady Surdo"

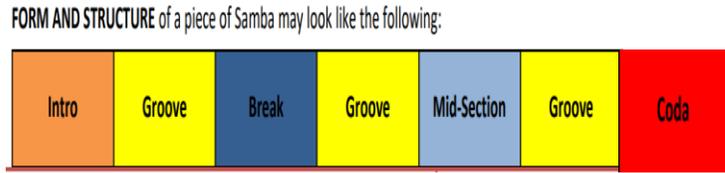
**D Analysing Samba Music from Brazil**

Listen to Raio De Sol... do you notice how the texture begins **monophonic** (one single rhythm) using **call and response**?

Samba music is also designed for performance at large festivals with singers, dancers and processions, called **carnivals**, so the music is usually **forte/fortissimo (very loud)**.

The interesting patterns that are created by **layering lots of different rhythms (ostinatos)** are called **cross-rhythms** and are played at a fast tempo for the dancing and marching along the streets in the carnival!

**Listen here ->**



**E Samba Instruments**

<b>SURDO</b> 	<b>REPINIQUE</b> 	<b>TAMBORIM</b> 	<b>CHOCOLO</b> 
<b>APITO</b> 	<b>AGOGO BELLS</b> 	<b>CAIXA DE GUERRO</b> 	

**F Note Values – 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	1 1/2 beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	3/4 beat	

**G Describing music – MAD T SHIRT**

M	A	D	T	S	H	I	R	T
<b>Melody</b>	<b>Articulation</b>	<b>Dynamics</b>	<b>Texture</b>	<b>Structure</b>	<b>Harmony/Tonality</b>	<b>Instruments</b>	<b>Rhythm</b>	<b>Tempo</b>
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 PRODUCT DESIGN Rotation Knowledge Organiser



<b>What we are learning this term:</b>	
A. Drawing Skills B. Materials C. Wooden Joints & Their Uses D. Tools & Machinery	
<b>A.</b>	<b>Drawing Skills</b>
<b>Isometric Technical Drawing</b>	
Made up of a series of parallel <b>vertical lines</b> and parallel <b>30-degree lines</b> . But no <b>horizontal lines</b> .	
Used to show a 3D (3-dimensional) perspective of a object or product.	
<b>Orthographic Projection</b>	
This shows 2D views of a 3D object from different angles – front, plan and end.	
Commonly used in industry to help the manufacturer understand the design.	

<b>B.</b>	<b>Materials</b>	
<b>Timbers</b> come from trees		
	<b>Scots pine</b> – which you used for your frame – is a <b>softwood</b>	<b>Softwood</b> trees have needle like leaves and are more sustainable
	<b>Dowels</b> are a common <b>component</b> in joinery	
	<b>Dowels</b> – which you used in your dowel joint – is a <b>hardwood</b>	<b>Hardwood</b> trees have broad like leaves and lose their leaves in winter
	<b>Polymers</b> come from <b>crude oil</b>	
	<b>Acrylic</b> – which you used for your stand – is a <b>polymer</b>	<b>Acrylic</b> is a <b>thermoforming</b> polymer which means it can be reheated and reshaped again and again

<b>C.</b>	<b>Wooden Joints &amp; Their Uses</b>		
<b>Joint</b>	<b>Uses</b>	<b>Image</b>	
<b>Mitre Joint</b>	<ul style="list-style-type: none"> <li>Picture Frames.</li> <li>Joining Mouldings</li> <li>Window or Door Frames</li> <li>Trim and Skirtings</li> </ul>		
<b>Dowel Joint</b>	<ul style="list-style-type: none"> <li>Make joints stronger.</li> <li>Axles on toys.</li> <li>Frames</li> <li>Shelves</li> <li>Table or Chair Leg Attachments</li> </ul>	<p>By K. Cooper 2006</p>	
<b>Mortise and Tenon Joint</b>	<ul style="list-style-type: none"> <li>Tables</li> <li>Chairs</li> <li>Door</li> <li>Beds</li> <li>Windows</li> <li>Cabinets</li> <li>Panelling</li> </ul>		
<b>Cross Halving Joint</b>	<ul style="list-style-type: none"> <li>Picture frames</li> <li>Drawers</li> <li>Cabinets</li> <li>Structural Framing</li> </ul>		

<b>D.</b>	<b>Tools &amp; Machinery</b>								
Steel Rule	Tri Square	Mitre Square	Tenon Saw	Wooden Mallet	Chisel	Bandfacer	Pillar Drill	Mortice	



# Year 9 PRODUCT DESIGN Rotation Knowledge Organiser

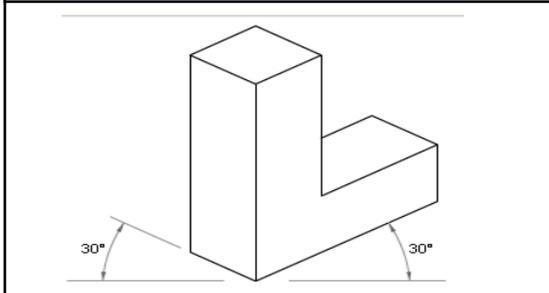


<b>What we are learning this term:</b>
A. Drawing Skills
B. Materials
C. Wooden Joints & Their Uses
D. Tools & Machinery

<b>A. Drawing Skills</b>
<b>Technical Drawing</b>

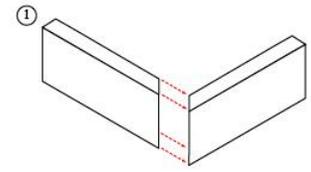
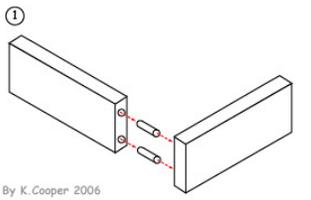
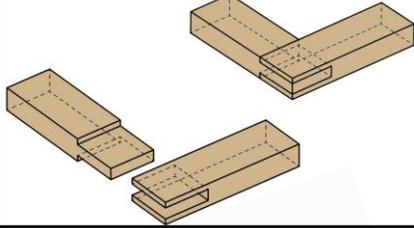
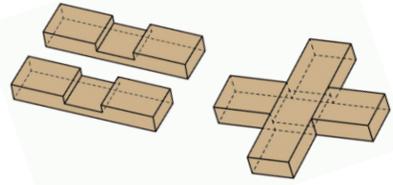
This is used for \_\_\_\_\_

\_\_\_\_\_



**Practice drawing the shapes below**

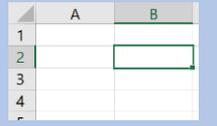
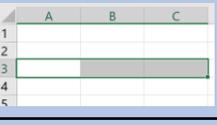
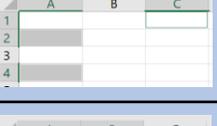
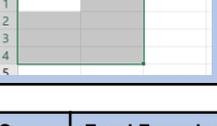
<b>B. Materials</b>	
<b>Timbers</b> come from _____	
	<p><b>Scots pine</b> – which you used for your frame – is a _____</p> <p><b>Softwood</b> trees have _____</p> <p>and are more sustainable</p>
_____ are a common <b>component</b> in joinery	
	<p><b>Dowels</b> – which you used in your dowel joint – is a _____</p> <p><b>Hardwood</b> trees have _____</p> <p>and lose their leaves in winter</p>
<b>Polymers</b> come from _____	
	<p><b>Acrylic</b> – which you used for your stand – is a _____</p> <p><b>Acrylic</b> is a <b>thermo-</b>_____ polymer which means it can be _____</p>

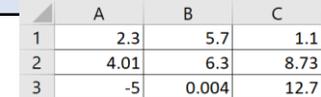
<b>C. Wooden Joints &amp; Their Uses</b>		
<b>Joint</b>	<b>Uses</b>	<b>Image</b>
	<ul style="list-style-type: none"> <li>_____</li> <li>_____</li> <li>_____</li> </ul>	
	<ul style="list-style-type: none"> <li>_____</li> <li>_____</li> <li>_____</li> </ul>	 <small>By K. Cooper 2006</small>
	<ul style="list-style-type: none"> <li>_____</li> <li>_____</li> <li>_____</li> </ul>	
	<ul style="list-style-type: none"> <li>_____</li> <li>_____</li> <li>_____</li> </ul>	

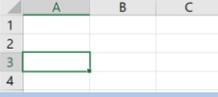
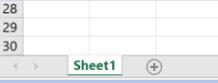
<b>D. Tools &amp; Machinery</b>								
								



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	
Ctrl-Shift-N	
Ctrl-P	
Ctrl-B	
Ctrl-U	

B	Excel Cell References
What is the cell reference for the following...	
	
	
	
	

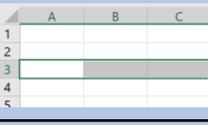
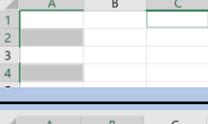
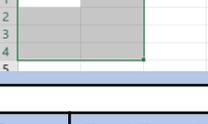
C	Excel Formulae
What is the Excel formula for...	
	Adding cells B1 and C2
	Subtracting cell A1 from cell A3
Finding the mean of cells: A1, A2, A3, B1, B2 and B3	Multiplying cells B3 and C1
Finding the maximum of cells: A1, A2, A3, B1, B2, B3, C1, C2 and C3	Dividing cell A2 by cell B2
Finding the product of cells: A1, A2, A3, C1, C2 and C3	Raising A1 to the power of 7

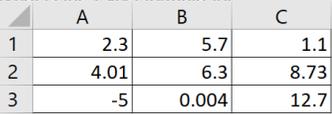
D	Excel Absolute Cell References
Why are absolute cell references used?	
What is the absolute cell reference for the following	
How do you duplicate an existing sheet?	
How do you reference a cell in a different sheet	

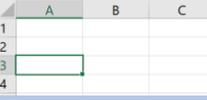
E	Excel Tools
What do the following buttons in Excel do?	
	
<b>B</b>	
	
	
	
	



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)
Ctrl-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

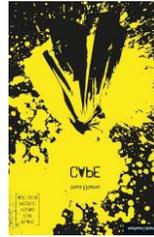
D Excel Absolute Cell References	
Why are absolute cell references used?	To stop a cell reference from being modified automatically
What is the absolute cell reference for the following	\$A\$3
	
How do you duplicate an existing sheet?	<ol style="list-style-type: none"> <li>Right click the sheet we want to copy.</li> <li>Select 'move or copy'.</li> <li>Select 'create a copy'.</li> <li>Choose where you want the copy to be placed.</li> <li>Press 'OK'.</li> </ol>
	
How do you reference a 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)



**What we are learning this term:**

- A. How to develop our vocal techniques.
- B. How to develop our physical techniques.
- C. How to interpret the director's creative intention for a group piece.
- D. How to reflect, analyse and evaluate our development.



Noughts and Crosses by Malorie Blackman	Cape by Inua Allams,	Gone Too Far by ola Agbaje
A stage adaptation of Malorie Blackman's best selling novel, the world of the Crosses and the noughts is reminiscent of Shakespeare's Romeo and Juliet. It's a modern-day tale of star-crossed lovers, race and violence. Noughts and Crosses is about a segregated society teetering on a volatile knife edge. As violence breaks out, Sephy and Callum draw closer, but this is a romance that will lead them into terrible danger.	Someone mugged Bruce's mum and he is not having it. The shock is still visible in her trembling fingers, rippling out across the calm waters of their lives. He grabs his hoodie, his uniform, his cape and goes out to find the culprit. Smithy wants everyone to stay inside, Uhuru wants everyone out. Tanya thinks it's boyish fun and games until, very suddenly, it isn't.	Nigeria, England, America, Jamaica; are you proud of where you're from? Dark skinned, light skinned, afro, weaves, who are your true brothers and sisters?  When two brothers from different continents go down the street to buy a pint of milk, they lift the lid on a disunited nation where everyone wants to be an individual but no one wants to stand out from the crowd.

KEY WORDS	
<b>articulation</b>	the clarity or distinction of speech
<b>aside</b>	Lines spoken by an performer to the audience and not supposed to be overheard by other characters on-stage.
<b>business</b>	a piece of unscripted or improvised action, often comic in intention, used to establish a character, fill a pause in dialogue, or to establish a scene. An author may simply suggest 'business' to indicate the need for some action at that point in the play.
<b>characterisation</b>	how a performer uses body, voice, and thought to develop and portray a character.
<b>dialogue</b>	spoken conversation used by two or more characters to express thoughts, feelings, and actions.
<b>focus</b>	in acting, the act of concentrating or staying in character.
<b>gesture</b>	any movement of the performer's head, shoulder, arm, hand, leg, or foot to convey meaning.
<b>imaging</b>	a technique which allows performers to slow down and focus individually on an issue. The performers, sitting quietly with eyes closed, allow pictures to form in their minds. These images may be motivated by bits of narration, music, sounds, smells, etc.
<b>improvisation</b>	the spontaneous use of movement and speech to create a character or object in a particular situation; acting done without a script.
<b>inflection</b>	change in pitch or loudness of the voice.
<b>Interaction</b>	the action or relationship among two or more characters
<b>language</b>	in drama, the particular manner of verbal expression, the diction or style of writing, or the speech or phrasing that suggests a class or profession or type of character.
<b>mannerism</b>	a peculiarity of speech or behaviour.
<b>mime</b>	acting without words.
<b>mirroring</b>	copying the movement and/or expression or look of someone else exactly.
<b>monologue</b>	a long speech made by one performer; a monologue may be delivered alone or in the presence of others.
<b>motivation</b>	the reason or reasons for a character's behaviour; an incentive or inducement for further action for a character.
<b>movement</b>	stage blocking or the movements of the performers onstage during performance; also refers to the action of the play as it moves from event to event.
<b>pace</b>	rate of movement or speed of action
<b>performance elements</b>	include acting (e.g., character motivation and analysis, empathy), speaking (breath control, vocal expression and inflection, projection, speaking style, diction), and nonverbal expression (gestures, body alignment, facial expression, character blocking, movement).
<b>pitch</b>	the particular level of a voice, instrument or tune.

Tongue Twisters	
<i>Peter Piper</i>	Peter Piper picked a peck of pickled peppers A peck of pickled peppers Peter Piper picked If Peter Piper picked a peck of pickled peppers Where's the peck of pickled peppers Peter Piper picked?
<i>Betty Botter</i>	Betty Botter bought some butter But she said the butter's bitter If I put it in my batter, it will make my batter bitter But a bit of better butter will make my batter better So 'twas better Betty Botter bought a bit of better butter

	Themes and Issues Explored
Diversity	Being composed of differing elements and variety. The inclusion of people of different races, cultures, etc. in a group or organization.
Racism	Behaviour or attitudes that reflect and foster this belief : racial discrimination or prejudice.
Relationships	Connecting or binding people in either a family, friendship or work collaboration.
Responsibility	Moral, legal or mental accountability.
Society	A community, nation, or broad grouping of people having common traditions, institutions, and collective activities and interests

**Script Work- Key focus**

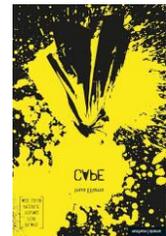
You will explore the different techniques needed to explore how to perform a character. Through a series of workshops and rehearsals you will explore the different Stanislavski techniques used to perform a naturalistic scene. You will explore different physical and vocal exercises needed to perform a character. You will learn what it takes for an actor to memorise the words and movements of a character in a scene and then will perform your chosen scene to an audience in the final week.





**What we are learning this term:**

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- B. How to develop our physical techniques.
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KEY WORDS	
articulation	
aside	
business	
characterisation	
dialogue	
focus	
gesture	
imaging	
improvisation	
inflection	
Interaction	
language	
mannerism	
mime	
mirroring	
monologue	
motivation	
movement	
pace	
performance elements	
pitch	

Noughts and Crosses by M..... B.....	Cape by I..... A.....	Gone Too Far by O..... A.....
<p>A stage adaptation of M..... B..... best selling novel, the world of the Crosses and the noughts is reminiscent of Shakespeare's Romeo and Juliet. It's a modern-day tale of star-crossed lovers, race and violence.</p> <p>Noughts and Crosses is about a segregated society teetering on a volatile knife edge. As violence breaks out, Sephy and Callum draw closer, but this is a romance that will lead them into terrible danger.</p>	<p>Someone mugged Bruce's mum and he is not having it. The shock is still visible in her trembling fingers, rippling out across the calm waters of their lives. He grabs his hoodie, his uniform, his cape and goes out to find the culprit. Smithy wants everyone to stay inside, Uhuru wants everyone out. Tanya thinks it's boyish fun and games until, very suddenly, it isn't.</p>	<p>Nigeria, England, America, Jamaica; are you proud of where you're from? Dark skinned, light skinned, afro, weaves, who are your true brothers and sisters?</p> <p>When two brothers from different continents go down the street to buy a pint of milk, they lift the lid on a disunited nation where everyone wants to be an individual but no one wants to stand out from the crowd.</p>

Tongue Twisters	
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Themes and Issues Explored	
	Being composed of differing elements and variety. The inclusion of people of different races, cultures, etc. in a group or organization.
	Behaviour or attitudes that reflect and foster this belief : racial discrimination or prejudice.
	Connecting or binding people in either a family, friendship or work collaboration.
	Moral, legal or mental accountability.
	A community, nation, or broad grouping of people having common traditions, institutions, and collective activities and interests



**Script Work- Key focus**

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# #AIMHIGH CHALLENGE TASKS Y9

Hard Work ... Kindness...Responsibility



Subject	Reading	Watching	Other Opportunities
<b>English</b>	Read: <a href="https://www.bl.uk/romantics-and-victorians/articles/charlotte-bronte-the-familiar-and-the-fantastical">https://www.bl.uk/romantics-and-victorians/articles/charlotte-bronte-the-familiar-and-the-fantastical</a>	Watch: <a href="https://www.youtube.com/watch?v=Mv0snnk0kio">https://www.youtube.com/watch?v=Mv0snnk0kio</a>	<a href="https://www.bronte.org.uk/">https://www.bronte.org.uk/</a>
<b>Maths</b>	Read: Identifying features of a quadratic function – BBC Bitesize <a href="#">Worked examples - Identifying features of a quadratic function - National 5 Maths Revision - BBC Bitesize</a>	Watch: Beautiful Trigonometry – Numberphile YouTube <a href="#">Beautiful Trigonometry - Numberphile - Bing video</a>	Using your knowledge of patterns and sequences can you solve this famous ancient maths puzzle? Tower of Hanoi <a href="#">Tower Of Hanoi (transum.org)</a>
<b>Science</b>	Read: Difference Between Endothermic and Exothermic Reactions <a href="https://byjus.com/chemistry/endothermic-exothermic-reactions-difference/">https://byjus.com/chemistry/endothermic-exothermic-reactions-difference/</a>	Watch : Hydrogen peroxide catalyst video- watch it expand! <a href="https://www.youtube.com/watch?v=3Tn-7JcZJuQ">https://www.youtube.com/watch?v=3Tn-7JcZJuQ</a>	Dissolving laundry detergent in water is an exothermic reaction. Simply dissolve powdered laundry detergent in your hand with a small amount of water. Feel the heat? WASH YOUR HANDS
<b>Geography</b>	Read Climate Change: Stopping Climate Change	Watch: <a href="#">BBC iPlayer - Climate Change - The Facts</a>	Count how many days the weather in the UK reaches above 20 degrees. Compare this with previous years using Historic station data - Met Office to see how things have changed.
<b>History</b>	Read Wounded –by Emily Mayhew	Watch: <a href="#">World War One (ALL PARTS) (2021 Re-edit) - YouTube</a>	Visit: The Blunsdon and Cricket Railway Village. SN25 2DA
<b>Spanish</b>	Read: the Spanish and English whilst watching this video of a tour of Barcelona: <a href="https://www.youtube.com/watch?v=l7bHX9Wkr0E">https://www.youtube.com/watch?v=l7bHX9Wkr0E</a>	Watch: this video about what Spanish people eat in their day to day lives: <a href="https://www.youtube.com/watch?v=n7Ma6Vu7COs">https://www.youtube.com/watch?v=n7Ma6Vu7COs</a>	Check out how many Spanish destinations EasyJet Fly to. Find out a little bit about each destination: <a href="https://www.easyjet.com/en">https://www.easyjet.com/en</a>
<b>Art</b>	Read: How to develop your ideas in preparation for GCSE <a href="https://www.bbc.co.uk/bitesize/guides/zc7mng8/revision/1">https://www.bbc.co.uk/bitesize/guides/zc7mng8/revision/1</a>	Watch: How to use a sketchbook to develop your ideas <a href="https://www.youtube.com/watch?v=Kha7-GPgWok">https://www.youtube.com/watch?v=Kha7-GPgWok</a>	Try visiting an art gallery to see how an artist has created artwork in real life. The Tate website is an amazing tool to find 100's of established artists <a href="https://www.tate.org.uk/art">https://www.tate.org.uk/art</a>

# SWINDON ACADEMY READING CANON

## Year 7

-  War Horse
-  The Canterbury Tales
-  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
-  Naughts and Crosses
-  Licke 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 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