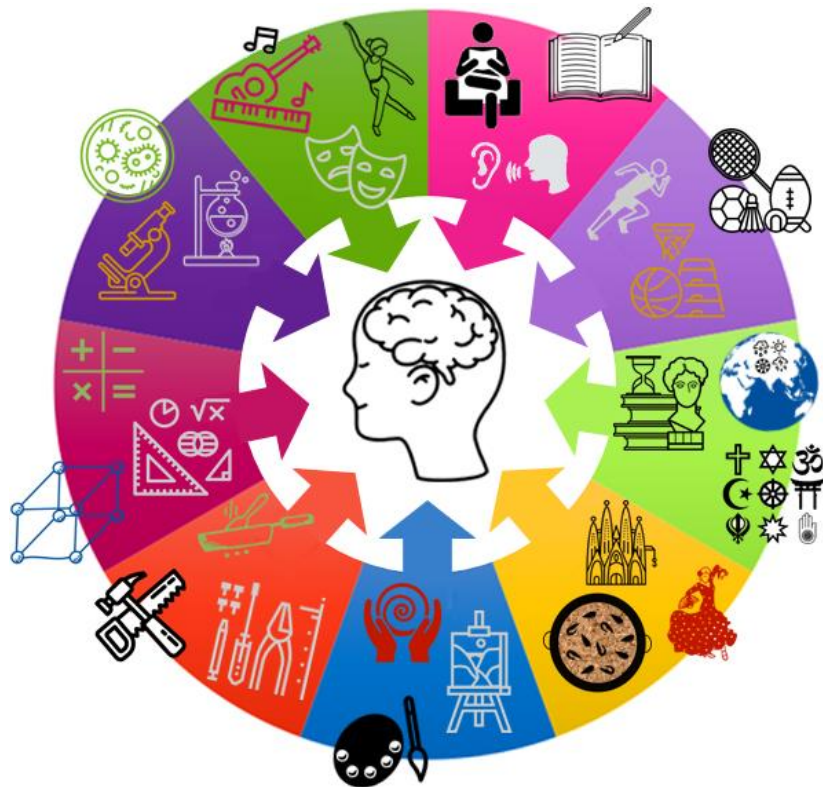


100% book - Year 9 Booster

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

Term 4



Swindon Academy 2022-23

Name:	
Tutor Group:	
Tutor & Room:	

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

Using your Knowledge Organiser and Quizzable Knowledge Organiser

Knowledge Organisers

Year 7 Term 1 Science/Chemistry - Topic: TOP Particles

What are we learning this term:
 1. Particle model
 2. Changing state
 3. Mixtures
 4. Separating techniques

4 Key Words for this term:
 1. Matter
 2. Particles
 3. Gases
 4. Mixing

1. Matter
 2. Condensation
 3. Evaporation
 4. Solids
 5. Solvent
 6. Solution

A. What is particle theory?
 The theory that all matter is made up of particles.

A. Describe the arrangement and movement of particles in the three states of matter.

Solid
 In a regular pattern. Particles can vibrate in a fixed position.

Liquid
 Particles are arranged randomly but are still touching each other. Particles can slide past each other and move around.

Gas
 Particles are far apart and are arranged randomly. Particles carry a lot of energy and they move in all directions in a high speed.

A. What is the law of conservation of mass?
 The Law of Conservation of Mass states that mass cannot be created or destroyed.

B. What are the different changes of state?

Melting: change of state from solid to liquid
 Freezing: change of state from liquid to solid
 Evaporation: change of state from liquid to gas
 Condensation: change of state from gas to liquid

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

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

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

Quizzable Knowledge Organisers

A. What is particle theory?

A. What is the law of conservation of mass?

A. Describe the arrangement and movement of particles in the three states of matter.

Solid

Liquid

Gas

B. What are the different changes of state?

Melting

Freezing

Evaporation

Condensation

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

Pure

Impure

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.

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

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

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

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

Top Tip

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

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 different subjects. On the right is a 'Knowledge Organiser' for 'What is particle theory?'. It includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams of particle arrangements for solid, liquid, and gas states.

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 corner 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?'. There are also diagrams of particle arrangements for solid, liquid, and gas states.

Step 3

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

The screenshot shows a student's prep book with the keywords/definitions/facts from the knowledge organiser written out in full. The text includes: '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 screenshot shows a student's prep book with the keywords/definitions/facts from the knowledge organiser written out three times. The text includes: 'Solid = regular pattern particles vibrate in fixed position', 'Solid = regular pattern particles vibrate in fixed position', and '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 missing words from the quizzable knowledge organiser written in the prep book. The text includes: 'Self quizzing', 'Arrangement/movement of matter', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid =', and 'Gas ='. There are also diagrams of particle arrangements for solid, liquid, and gas states.

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 screenshot shows a student's prep book with the keywords/definitions/facts from the knowledge organiser written out in full, with some corrections. The text includes: '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.

‘Romeo and Juliet’: F Knowledge Organiser

Plot breakdown		Characters	Vocabulary: Key words
P	The Prologue outlines the main conflict in the play and warns the audience of the tragic fate of Romeo and Juliet.	Romeo (Montague) Young man. Falls in love with Juliet. Kills himself at the end of the play. <i>"Did my heart love till now? forswear it, sight! For I ne'er saw true beauty till this night"</i> ; <i>"Thus with a kiss I die"</i>	tragic – describes something as being very sad, or as part of a tragedy.
1.1	The Montagues and Capulets fight in the streets of Verona. Prince Escalus swears that any further fighting will be punished by death.		submissive - ready to obey or conform to the authority or will of others
1.2	Paris asks Lord Capulet about marrying his daughter Juliet. Capulet tells Paris to wait as she is too young.		narcistic – self-obsessed
1.3	Lady Capulet advises Juliet to agree to marry Paris.		feud – a serious argument and sometimes violent argument between two people or groups that continues for a long time.
1.5	At the Capulet's masked ball, Romeo sees Juliet and falls in love with her. They talk, kiss, and fall in love. As they depart, they learn they are from feuding families.	Juliet (Capulet) 13-year old girl. Falls in love with Romeo. Kills herself at the end of the play. <i>"Wherefore art thou Romeo? Deny thy father and refuse thy name"</i> ; <i>"O happy dagger, This is thy sheath; there rust, and let me die"</i>	shrine – a holy place that people go to pray.
2.2	In the balcony scene, Romeo and Juliet fall deeper in love. They agree to get married.		status quo – the situation that exists now, without any changes.
2.3	Romeo asks Friar Lawrence to marry him and Juliet. Lawrence agrees, thinking it will unite the warring families.	Lord Capulet (Capulet) Head of the Capulet family. Juliet's father. Orders her to marry his friend, Paris. <i>"She will be ruled In all respects by me"</i>	obstacle – a problem that must be overcome.
2.6	Friar Lawrence marries Romeo and Juliet.		vindictive – vengeful
3.1	Montagues and Capulets fight in the streets. Tybalt kills Mercutio; Romeo kills Tybalt. Prince Escalus decides to banish Romeo from Verona.	Paris (no family) Nobleman of Verona. Wants to marry Juliet. Killed by Romeo at the end of the play.	patriarchy - a society in which power lies with men
3.4	Lord Capulet tells Paris that he can marry Juliet in three days' time.		belligerent - warlike
3.5	After their wedding night, Romeo leaves Juliet for the last time. They have a vision of the other's death. After Romeo leaves, Lord Capulet orders Juliet to marry Paris, threatening to disown her if she disobeys.	Friar Lawrence (no family) Religious leader in Verona. Agrees to marry Romeo and Juliet, thinking it will bring peace to the city. <i>"For this alliance may prove To turn your households' rancour to pure love"</i>	exile (vb.) – to force them from their home and live in another place.
4.1	Friar Lawrence comes up with a plan: Juliet must pretend to be dead and then escape Verona with Romeo. She agrees to the plan.		tenacious – very determined
5.3	Romeo does not learn of Friar Lawrence's plan. He sneaks back into Verona and visits Juliet's tomb. He thinks she is dead, and kills himself with poison. Moments later, Juliet wakes up. She finds Romeo's body and kills herself with his dagger. The two families agree to end their feud.	Prince Escalus (no family) Ruler of Verona. Wants to bring peace to the city. <i>"If ever you disturb our streets again, Your lives shall pay the forfeit of the peace"</i>	catastrope – a terrible accident.
Terminology: Key words			
The Big Ideas: Role of women: Juliet is powerless to make her own decisions. She is ruled by her father who eventually decides to marry her off to a powerful man. She breaks the status quo when she defies her father and makes her own decisions. Evolution of Juliet's character: Juliet is a stereotypical Renaissance daughter at the outset, she is loyal and submissive. She becomes empowered and independent through her romance with Romeo. She becomes a tragic hero by acting in pursuit of her own desires. Tragedy: A Shakespearean tragedy is the story of one or two heroes of 'high-status,' such as Kings or Lords. They act in pursuit of one desire. The story leads up to and includes the death of the hero as a result of their actions. Fate and destiny: Fate is the idea that the events of someone's life are not in their control. The <i>star-crossed</i> lovers suggests they were fated for tragedy. This leads to many questions: Is the tragic ending inevitable? Do they act independently?		stoicism – calm self control	
		Tragedy – a play in which the main character brings about their own downfall.	
		prologue – the introduction to a book, film, or play.	
		sonnet – a type of love poem. It has 14 lines, a strict rhyme scheme and 10 syllables per line.	
		dramatic irony – when the audience knows something that the character on stage does not	
		Tragic hero – the main character in a Tragedy that makes an error of judgement that leads to their downfall.	
		soliloquy – a speech in a play where the character speaks to himself or herself.	
		hyperbole – exaggeration.	
		tragic flaw - a character has a tragic flaw when what makes them so special also brings about their downfall.	
		foreshadow – to show or warn that something bigger, worse, or more important is coming.	
Features of Shakespearean tragedy (Bradley)			
Structure of Shakespearean tragedy (Bradley) Exposition Introduces the main characters and the obstacles they will overcome in the play. Rising tension The heroes try to overcome the obstacles they face. They suffer. Catastrope The play ends with the deaths of the heroes.		thesis – the main idea that you want to discuss throughout an essay.	
		The characters are 'high-status' – they are important people.	
		The tragic hero acts : they try to do things . They don't just let things happen to them.	
Whatever they try to do, it always puts them in a worse situation .		They are exceptional – there is something that makes them special.	
		They are exceptional – there is something that makes them special.	

'Romeo and Juliet': F Knowledge Organiser

Plot breakdown		Characters	Vocabulary: Key words
P	The _____ outlines the main conflict in the play and warns the audience of the _____ fate of Romeo and Juliet.	Romeo (Montague) Young man. Falls in love with _____. Kills _____ at the end of the play. <i>"Did my heart love till now? forswear it, sight! For I ne'er saw true beauty till this night"; "Thus with a kiss I die"</i>	tragic – describes something as being very _____, or as part of a _____. submissive - ready to _____ or conform to the authority or will of others narcistic – _____ feud – a serious _____ and sometimes _____ argument between two people or groups that continues for a long time. shrine – a _____ place that people go to _____. status quo – the _____ that exists now, without any _____. obstacle – a _____ that must be overcome. vindictive – _____ patriarchy - a society in which _____ lies with _____ belligerent - _____ exile (vb.) – to _____ them from their _____ and live in another place. tenacious – very _____ catastrophe – a terrible _____. stoicism – calm _____
1.1	The Montagues and Capulets fight in the streets of Verona. Prince Escalus swears that any further fighting will be punished by _____.	Juliet (Capulet) _____ girl. Falls in love with _____. Kills herself at the end of the play. <i>"Wherefore art thou Romeo? Deny thy father and refuse thy name"; "O happy dagger, This is thy sheath; there rust, and let me die"</i>	Terminology: Key words
1.2	Paris asks Lord Capulet about _____ his daughter Juliet. Capulet tells Paris to wait as she is too _____.	Lord Capulet (Capulet) _____ of the Capulet family. _____ father. Orders her to marry his friend, _____. <i>"She will be ruled In all respects by me"</i>	Tragedy – a play in which the main character brings about their own _____. prologue – the _____ to a book, film, or play. sonnet – a type of _____ poem. It has 14 lines, a strict rhyme scheme and 10 syllables per line. dramatic irony – when the _____ knows something that the character on _____ does not Tragic hero – the main _____ in a Tragedy that makes an error of judgement that leads to their _____. soliloquy – a _____ in a play where the character speaks to himself or herself. hyperbole – _____. tragic flaw - a character has a tragic flaw when what makes them so _____ also brings about their _____. foreshadow – to show or _____ that something bigger, worse, or more important is _____. thesis – the main _____ that you want to discuss throughout an _____.
1.3	Lady Capulet advises Juliet to _____ to marry Paris.	Paris (no family) Nobleman of Verona. Wants to marry _____. Killed by _____ at the end of the play.	Features of Shakespearean tragedy (Bradley)
1.5	At the Capulet's masked ball, Romeo sees Juliet and falls in _____ with her. They talk, kiss, and fall in love. As they depart, they learn they are from _____ families.	Friar Lawrence (no family) _____ leader in Verona. Agrees to _____ Romeo and Juliet, thinking it will bring _____ to the city. <i>"For this alliance may prove To turn your households' rancour to pure love"</i>	Structure of Shakespearean tragedy (Bradley)
2.2	In the _____ scene, Romeo and Juliet fall deeper in love. They agree to get _____.	Mercutio (Montague) Romeo's friend. Killed by _____. <i>"A plague a'both your houses!"</i>	Exposition Introduces the main _____ and the _____ they will overcome in the play. Rising tension The _____ try to _____ the obstacles they face. They _____. Catastrophe The play ends with the _____ of the heroes.
2.3	Romeo asks Friar _____ to marry him and Juliet. Lawrence agrees, thinking it will _____ the warring families.		Tragic hero acts: they try to do things . They don't just _____ things happen to them. Whatever they try to do, it always puts them in a _____ situation . They are exceptional – there is something that makes them _____.
2.6	Friar Lawrence _____ Romeo and Juliet.		
3.1	Montagues and Capulets fight in the streets. Tybalt kills Mercutio; Romeo kills _____. Prince Escalus decides to _____ Romeo from Verona.		
3.4	Lord Capulet tells Paris that he can marry Juliet in _____ days' time.		
3.5	After their wedding night, Romeo leaves Juliet for the last time. They have a vision of the other's _____. After Romeo leaves, Lord Capulet orders Juliet to marry _____, threatening to _____ her if she disobeys.		
4.1	Friar Lawrence comes up with a plan: Juliet must pretend to be _____ and then escape Verona with Romeo. She agrees to the plan.		
5.3	Romeo does not learn of Friar Lawrence's plan. He sneaks back into Verona and visits Juliet's tomb. He thinks she is _____, and kills himself with _____. Moments later, Juliet wakes up. She finds Romeo's body and kills herself with his _____. The two families agree to _____ their feud.		
The Big Ideas:			
Role of women: Juliet is _____ to make her own decisions. She is _____ by her father who eventually decides to marry her off to a powerful man. She breaks the status quo when she _____ her father and makes her own decisions.			
Evolution of Juliet's character: Juliet is a stereotypical Renaissance daughter at the outset, she is loyal and _____. She becomes empowered and _____ through her romance with Romeo. She becomes a _____ by acting in pursuit of her own _____.			
Tragedy: A Shakespearean tragedy is the story of one or two _____ of 'high-status,' such as Kings or Lords. They act in pursuit of one _____. The story leads up to and includes the _____ of the hero as a result of their _____.			
Fate and destiny: Fate is the idea that the events of someone's life are not in their control. The _____ lovers suggests they were fated for _____. This leads to many questions: Is the tragic ending inevitable? Do they act independently?			

What we are learning this term:
<ul style="list-style-type: none"> A. Forces B. Moments C. Springs D. Energy transfers in mechanical systems E. Balanced forces in mechanical systems

5 Key Words for this term
<ul style="list-style-type: none"> <li style="width: 50%;">1. Internal <li style="width: 50%;">4. Deformation <li style="width: 50%;">2. Work <li style="width: 50%;">5. Moment <li style="width: 50%;">3. Equilibrium

C.	What do these terms mean?
Deformation	Changing of shape by a force
Compression	Changing the shape by squashing
Tension	Changing the shape by stretching

D.	What is Internal energy?
Internal energy = kinetic energy of the particles + potential energy of the particles.	
Kinetic energy	All matter is made of particles that are moving
Potential energy	Energy due to the relative position of particles, and the attraction between particles.

D.	Work Done	
<i>work done = force × distance moved in the direction of the force</i>		
Applying a force to get an object to move is one way to transfer energy between stores.	Work is done (energy is transferred) when elastic objects are?	What is the amount of work done?
Transferring energy is also known as 'doing work'.	<ul style="list-style-type: none"> • Extended • Compressed 	The amount of elastic potential energy stored in the elastic object

A	Forces: Newtons Laws	
What is a Resultant Force?	The overall force of 2 or more forces acting in different directions	
What is Newton's First Law	<ul style="list-style-type: none"> • A stationary object stays stationary unless a resultant force acts on it. • A moving object keeps moving at a constant speed unless a resultant force acts on it. 	
What is Newton's Second Law	<ul style="list-style-type: none"> • A resultant force acting on an object causes acceleration, • This depends on the size of the resultant force and the mass of the object. <p>This formula shows the link:</p> $F_R = m \times a$ <p>F_R is the resultant force measured in newtons, m is the mass of the object measured in kilograms, a is the acceleration of the object measured in metres per second per second (m/s/s).</p>	
What is Newton's Third Law	<ul style="list-style-type: none"> • Forces are always caused by an interaction between two objects. • Each force has an equal and opposite reaction 	

All	What Unit is usually used?
Force	N (newton)
Energy	J (joule)
Distance	m (metre)
Moments	Nm (newton metres)

C.	Hookes Law is a linear relationship	
	What does Hookes law state?	The extension/compression of an elastic object is directly proportional to the force applied.
	What is the elastic limit?	When the material stretches to the point that it does not return to its original length
	What is a linear relationship?	The relationship between variables produces a straight line. If one doubles the other doubles

What we are learning this term:
<ul style="list-style-type: none"> A. Forces B. Moments C. Springs D. Energy transfers in mechanical systems E. Balanced forces in mechanical systems

5 Key Words for this term
<ul style="list-style-type: none"> <li style="width: 50%;">1. <li style="width: 50%;">4. <li style="width: 50%;">2. <li style="width: 50%;">5. <li style="width: 50%;">3.

C.	What do these phrases mean?
Deformation	
Compression	
Tension	

D.	What is Internal energy
Internal energy =	
	All matter is made of particles that are moving
	Energy due to the relative position of particles, and the attraction between particles.

D. What is the equation for Work Done?		
Applying a force to get an object to move is one way to transfer energy between stores.	Work is done (energy is transferred) when elastic objects are ?	What is the amount of work done?
Transferring energy is also known as ' doing work '.		

A Forces: Newtons Laws	
What is a Resultant Force?	
What is Newton's First Law	
What is Newton's Second Law	
What is Newton's Third Law	

All	What is the Unit <u>usually</u> used?
Force	
Energy	
Distance	
Moments	

C.	Hookes Law is a linear relationship
	What does Hookes law state?
	What is the elastic limit?
	What is a linear relationship?



E.	Turning effects
Both the effort and load are forces that have a turning effect – they make the lever rotate	
What is the moment of the force?	
The size of the forces turning effect	
How can you increase the moment of a force?	
<ul style="list-style-type: none"> • Increase the force • Increase the perpendicular distance from the pivot 	

E.	What are levers and what are the parts of them?
Levers involve turning, or rotation. Levers allow forces applied to be multiplied	
Pivot	Levers have a pivot, a fixed centre of rotation
Effort	The force applied to a lever
Load	The output force of the lever

E.	Equation to calculate the moment of a force
$moment = force \times perpendicular\ distance\ from\ pivot$	
Moments are measured in a compound measure using the units for force and distance, usually newtonmetres, Nm.	

E.	Moments
Ways to describe the direction of moments of a force	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>CLOCKWISE</p> </div> <div style="text-align: center;"> <p>ANTI-CLOCKWISE</p> </div> </div>

E.	Moments
Key terms	Definitions
lever	A simple machine that multiplies applied forces (efforts) through rotation around a pivot.
rotation	Turning, with a fixed centre of rotation. Rotation can be clockwise or anticlockwise – see diagram.
turning effect	The rotation of a lever caused by a force (effort OR load force).
moment	Another, more formal, name for ‘turning effect of a force’. See <i>equation</i> .
perpendicular	At right angles to.
equilibrium	Describes a lever that is NOT rotating because the clockwise and anticlockwise moments are equal.

E.	When does equilibrium in lever systems happen?
<ul style="list-style-type: none"> • When a lever is at equilibrium, it is NOT rotating. • Equilibrium happens when: <u>the clockwise moments = the anticlockwise moments</u> 	
<ul style="list-style-type: none"> • The forces in each direction are not necessarily equal, but the <i>moments</i> of the forces in each direction are equal at equilibrium. • Where there are multiple forces in one direction (clockwise or anticlockwise), the TOTAL moment in one direction is found by <u>adding up</u> the moments of each force in a particular direction. 	



E.	Turning effects
Both the effort and load are forces that have a turning effect – they make the lever rotate	
What is the moment of the force?	
How can you increase the moment of a force?	

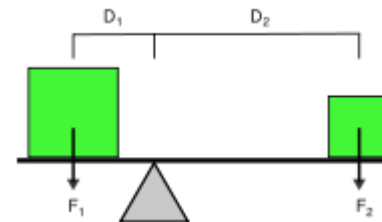
E.	What are levers and what are the different parts?
Levers involve turning, or rotation. Levers allow forces applied to be multiplied.	
Pivot	
Effort	
Load	

E.	What is the equation to calculate the moment of a force?
Moments are measured in a compound measure using the units for force and distance, usually newtonmetres, Nm.	

E.	Moments
What ways describe the direction of moments of a force?	

E.	Moments
Key terms	Definitions
lever	
rotation	
turning effect	
moment	
perpendicular	
equilibrium	

E.	When does equilibrium in lever systems happen?
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- The forces in each direction are not necessarily equal, but the *moments* of the forces in each direction are equal at equilibrium.
- Where there are multiple forces in one direction (clockwise or anticlockwise), the **TOTAL** moment in one direction is found by adding up the moments of each force in a particular direction.



What we are learning this term:

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

5 Key Words for this term

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

A. What is a chemical reaction?

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

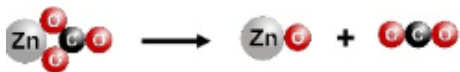
A. What is Thermal Decomposition?

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

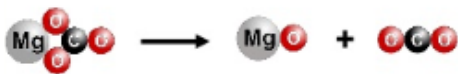
Does a thermal decompostion reaction give out energy, or take in energy from its surroundings?

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

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



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



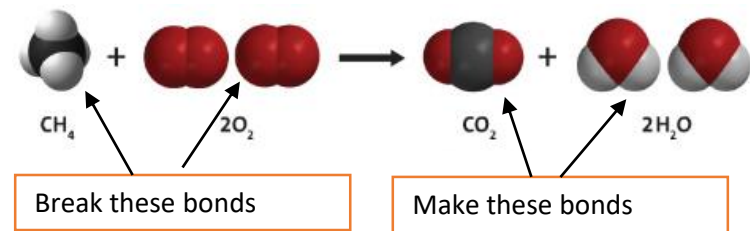
A. What is Combustion?

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 → carbon dioxide + water
 $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$



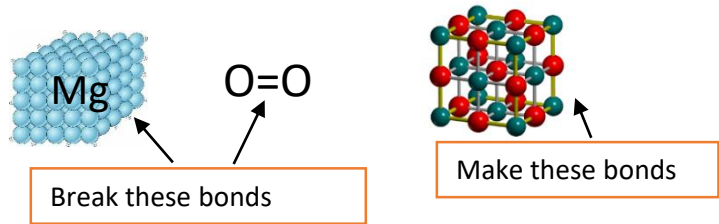
A. What is oxidation?

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 → 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

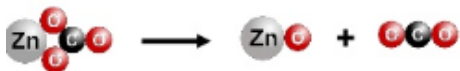
- 1.
- 2.
- 3.
- 4.
- 5.

A. What is a chemical reaction?

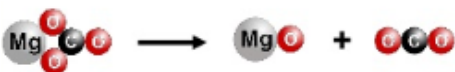
A. What is Thermal Decomposition?

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

Examples: Zinc Carbonate →



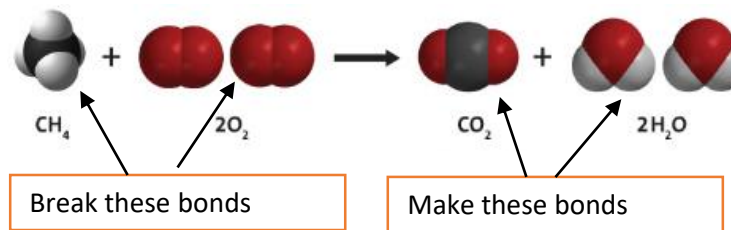
Magnesium carbonate →



A. What is Combustion?

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

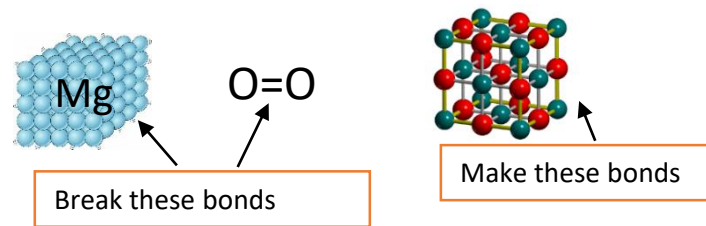
Examples: methane + oxygen →



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"> 1.Changing temperature 2.Changing the concentration of a solution 3.Changing the surface area of a solid 4. Adding a catalyst |
|---|--|

B. What is a catalyst?

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

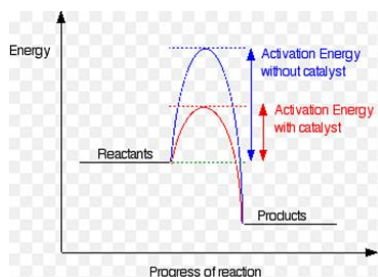
- They are specific to each reaction

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 increases : Energy is transferred to surroundings	Temperature decreases : Energy is absorbed from the surroundings
Bond making or breaking?	Bond making is an exothermic process	Bond breaking 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		
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Geography Knowledge Organiser: Year 9 Term 4 Climate Change



Background:	
1.	Since the 1860s the global climate has been recorded.
2.	Since then the climate globally has increased by 0.8° Celsius.
3.	Climate scientists can use methods to find out about the global climate before we started recording it. (B)
4.	From this evidence we can see that the planet has always gone through periods of warming and cooling. (A)
5.	However, the rapid increase of carbon dioxide in the atmosphere from burning fossil fuels, is causing the enhanced greenhouse effect. (D)
6.	The enhanced greenhouse effect is causing changes to the planet, such as the melting of Artic sea ice, rising temperatures, and an increase in extreme weather events such as tropical storms. (E, F)
7.	Countries are trying to resolve the climate change issue by limiting the amount of carbon dioxide released into the atmosphere, this is known as mitigation. (G, H)
8.	Some countries are trying to adapt to climate change by building flood barriers and growing drought resistant crops. (G, H)

A.	Changes in climate (3)
Climate change	The process of the Earth's climate changing over time.
Glacial periods	Cold periods.
Inter-glacial periods	Warm periods.

B.	Measuring climate change (3)
Ice cores	Each layer of ice in a core represents a different year. CO ₂ can be measured in each layer, and therefore the temperature.
Tree rings	Each ring represents a different year. Thicker rings show a warmer climate.
Historical evidence	Paintings and diaries e.g. paintings of ice fairs on the frozen Thames 500 years ago.

C.	Natural climate change (3)
Volcanic eruptions	Ash from volcanic eruptions can block sunlight, making it colder.
Sun spots	The sun can give out more energy due to an increase in sun spots.
Orbital change	The orbit of the sun changes from oval (ellipse) to circular approx. 98,000 yrs.

E.	Effects on people (6)
Tropical storms	Increase in frequency and intensity so more damage.
Sea-level rise	Increased risk of floods, damaging property and businesses.
Melting Arctic ice	Affects trading routes in the Arctic Circle.
More droughts/floods	Crop failure, could lead to starvation and famine.
Cost of defence	Governments have to spend more money on disasters instead of developing.
Environmental Refugees	Pressure on countries to accept refugees.

G.	Strategies to resolve climate change (4)
Adaptation	Adapting to climate change to make life easier.
Adaptation examples (3)	1. Building flood defences. 2. Growing new crops to suit the new climate. 3. Irrigation channels, sending water from areas of surplus to deficit.
Mitigation	Trying to stop climate change from happening by reducing greenhouse gases.
Mitigation examples (3)	1. International agreements. 2. Alternative energies. 3. Carbon capture.

D.	Human-induced climate change (5)
Greenhouse effect	The way that gases in the atmosphere trap heat from the sun. Like glass in a greenhouse they let heat in, but prevent most from escaping.
Greenhouse gases	Gases like carbon dioxide and methane that trap heat around the Earth, leading to climate change.
Transport	More cars, so more CO ₂ causing the enhanced greenhouse effect.
Farming	Farming livestock produces methane, this is a greenhouse gas.
Energy	More energy required, meaning more fossil fuels burnt, so more CO ₂ .

F.	Effects on the environment (4)
Sea temperature rises	Coral bleaching and destruction of marine ecosystems.
More droughts	Migration/ death of species which can not survive drought conditions.
Melting glaciers (ice rivers)	Will send more fresh water into the sea, causing the sea level to rise.
Melting Arctic ice	Loss of habitats for animals, such as polar bears.

H.	Place specific examples (2)
Adaption	The Thames Barrier. Positive: Stops flooding due to rising sea levels. Negative: Expensive
Mitigation	The Paris Agreement. Positive: Countries are trying to lower CO ₂ emissions. Negative: The USA pulled out and China did not sign up.



Geography Knowledge Organiser: Year 9 Term 4 Climate Change



Background:

1. Since the 1860s the global climate has been recorded.
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3. Climate scientists can use methods to find out about the global climate before we started recording it. **(B)**
4. From this evidence we can see that the planet has always gone through periods of warming and cooling. **(A)**
5. However, the rapid increase of carbon dioxide in the atmosphere from burning fossil fuels, is causing the enhanced greenhouse effect. **(D)**
6. The enhanced greenhouse effect is causing changes to the planet, such as the melting of Artic sea ice, rising temperatures, and an increase in extreme weather events such as tropical storms. **(E, F)**
7. Countries are trying to resolve the climate change issue by limiting the amount of carbon dioxide released into the atmosphere, this is known as mitigation. **(G, H)**
8. Some countries are trying to adapt to climate change by building flood barriers and growing drought resistant crops. **(G, H)**

A. Changes in climate (3)

Climate change	
Glacial periods	
Inter-glacial periods	

B. Measuring climate change (3)

Ice cores	
Tree rings	
Historical evidence	

C. Natural climate change (3)

Volcanic eruptions	
Sun spots	
Orbital change	

E. Effects on people (6)

Tropical storms	
Sea-level rise	
Melting Arctic ice	
More droughts/floods	
Cost of defence	
Environmental Refugees	

G. Strategies to resolve climate change (4)

Adaptation	
Adaptation examples (3)	
Mitigation	
Mitigation examples (3)	

D. Human-induced climate change (5)

Greenhouse effect	
Greenhouse gases	
Transport	
Farming	
Energy	

F. Effects on the environment (4)

Sea temperature rises	
More droughts	
Melting glaciers (ice rivers)	
Melting Arctic ice	

H. Place specific examples (2)

Adaption	
Mitigation	

Year 9 Term 4 History: The Holocaust

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

What we are covering whilst working from home: The Holocaust	
We will be looking at: <ul style="list-style-type: none"> The history of anti-Semitism in Europe (I) How the persecution of the Jews started out in Nazi Germany and the consequences of this for German Jews (J) How Jewish persecution in Germany escalated from 1933-1939 eventually resulting in The Final Solution (K) Why we need to remember the Holocaust (L). 	
J.	What were the consequences of the Nuremberg Laws for Jews in Nazi Germany?
What they were:	Consequences:
<ul style="list-style-type: none"> On 15th September 1935 the Nuremberg Laws were passed which were a new set of laws which made it easier to persecute Jews. The Reich Law on Citizenship stripped Jews of their citizenship (and all rights of it such as voting, working for the government etc) and made them 'subjects'. Jews now had to wear a yellow star shaped patch to identify themselves. The Reich Law for the Protection of German Blood and Honour made it so that Jews were not allowed to marry or have intimate relations with German citizens. Racial infamy (as it became known) was a criminal offense. 	<ul style="list-style-type: none"> These laws redefined what it meant to be a Jew - being Jewish was now a race rather than a religion (you were considered a Jew if you had 3 or 4 Jewish grandparents). Grandparents born into a Jewish religious community were considered 'racially' Jewish and their 'racial' status was passed onto their children and grandchildren This legal definition of a Jew covered tens of thousands of people who did not think of themselves as a Jew and had no religious or cultural ties to the Jewish community - many Jews who hadn't practiced Judaism for years found themselves caught in the grip of Nazi terror. Even people with Jewish grandparents who had converted to Christianity were defined as Jews. For the first time in history, Jews faced persecution not for what they believed, but for who they were by birth. In Nazi Germany no profession of belief could convert a Jew into a German. The Nuremberg Laws were a crucial step in Nazi racial laws that led to the ostracism of German Jews and ultimately to their segregation, confinement, and extermination.

I	What do these factors show about anti-Semitic attitudes in Medieval Europe?
The Crusades	<ul style="list-style-type: none"> In 1095, Pope Urban II appealed to European Christians liberate the Holy Land from the Muslims, beginning what was to be known as the Crusades. The religious passion that drove men, and later even children, on the Crusades was to have direct consequences for Jews The Crusader army swept through Jewish communities looting, raping and massacring Jews as they went.
	<ul style="list-style-type: none"> In the 14th century, the Bubonic Plague spread throughout Europe, killing an estimated one-third of the population Fear, superstition and ignorance prompted the need to find someone to blame, and the Jews were a convenient scapegoat because of the myths and stereotypes that were already believed about them Though Jews were also dying from the plague, they were accused of poisoning wells and spreading the disease – in Germany and Austria approx. 100,000 Jews were burned alive for this.
The Bubonic Plague	
Martin Luther	<ul style="list-style-type: none"> The founder of the 16th century Reformation and Protestantism wrote a pamphlet in 1545 entitled The Jews and Their Lies, claiming that Jews thirsted for Christian blood and urging the slaying of the Jews

K. How did Jewish persecution increase from 1933 to 1939.			
Boycott of Jewish Businesses 1933	Nuremberg Laws 1935	Kristallnacht 1938	Ghettos 1939
<ul style="list-style-type: none"> On 30th March 1933, the Nazi Party announced that from 10am on 1st April an official boycott would be held of all Jewish businesses, doctors and lawyers. SA members (paramilitary unit associated with the Nazis) painted Jewish stars or the word <i>Jude</i> (German word for Jew) outside Jewish businesses. They then stood outside with banners ('Don't buy from Jews') discouraging people from going inside. The boycott was not very successful- many people just ignored the signs and graffiti and still entered the shop and it lasted just a day, but it marked the beginning of a nationwide campaign by the Nazi Party against the entire German Jewish population 	<ul style="list-style-type: none"> On 15th September 1935 the Nuremberg Laws were passed which were a new set of laws which made it easier to persecute Jews. The Reich Law on Citizenship stripped Jews of their citizenship (and all rights of it such as voting, working for the government etc) and made them 'subjects'. Jews now had to wear a yellow star shaped patch to identify themselves. The Reich Law for the Protection of German Blood and Honour made it so that Jews were not allowed to marry or have intimate relations with German citizens. Racial infamy (as it became known) was a criminal offense. 	<ul style="list-style-type: none"> The first <i>violent</i> outburst of anti-Semitism in Germany Groups of uniformed gangs ran amok amongst Jewish communities, destroying and burning homes, shops, businesses, synagogues and desecrated Jewish cemeteries. Some gangs were in Nazi uniforms. Other gangs such as the SA and Hitler Youth were told not to wear uniforms so that the violence would seem to be by the general public. Some Germans were horrified, others watched with pleasure or joined in. 100 Jews killed, 814 shops, 171, homes and 191 synagogues destroyed Jews were blamed and made to pay for the damage 20,000 Jews sent to camps. 	<ul style="list-style-type: none"> Key step in the process of brutally separating, persecuting and destroying Europe's Jews 1st ghetto established in Poland in October 1939 Jews who owned any businesses/property were forced to hand them over as they were placed in ghettos. Some ghettos were shut in by walls, fences or barbed wire Temporary- some only lasted a few days or weeks, others for years The majority of ghetto inhabitants died from disease, starvation, shooting or deportation to extermination camps.

L. Why is it important to remember the Holocaust?
<ul style="list-style-type: none"> The Holocaust is a contemporary issue. It cannot, and should not, be an event lost to history The Holocaust demonstrates the atmosphere in which genocide can take place. It is important to remember the Holocaust because it is an example of how these trends could evolve into something far more threatening Remembering the Holocaust is an important act in itself and honouring its victims, particularly those with no family left to remember them, is so important Discussion about the Holocaust is particularly important when we remember it is not an isolated event e.g. Bosnia 1995, Rwanda 1994 etc. "He who does not learn from History is doomed to repeat it". – it is not enough to just learn from history we must tackle, challenge, debate, discuss, expose and teach so that it remains a current issue

Year 9 Term 4 History: The Holocaust

H.	Can you define these key words?	What we are covering whilst working from home: The Holocaust								
Anti-Semitism		We will be looking at: <ul style="list-style-type: none"> The history of anti-Semitism in Europe (I) How the persecution of the Jews started out in Nazi Germany and the consequences of this for German Jews (J) How Jewish persecution in Germany escalated from 1933-1939 eventually resulting in The Final Solution (K) Why we need to remember the Holocaust (L). 				I		What do these factors show about anti-Semitic attitudes in Medieval Europe?		
Genocide						The Crusades				
Holocaust							The Bubonic Plague			
Persecution								Martin Luther		
Discrimination				J.	What were the consequences of the Nuremburg Laws for Jews in Nazi Germany?					
Lebensraum				What they were:		Consequences:				
Minorities										
Nuremberg Laws										
Pogrom										
Roma										
SA										
SS										
SS Einsatzgruppen										
Sterilisation										
Genocide										
Synagogue		K. How did Jewish persecution increase from 1933 to 1939.								
Anti-Semitism		Boycott of Jewish Businesses 1933		Nuremberg Laws 1935		Kristallnacht 1938		Ghettos 1939		
The Final Solution										
Aryan										
Concentration Camps										
Extermination Camps										
Eugenics										
Euthanasia										
Gestapo										
Holocaust										
Ghettos		L. Why is it important to remember the Holocaust?								
Kristallnacht										
Untermensch										

Year 9 Religious Education: Matters of life and death

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

C	What does the theory of Natural Moral Law say about moral behaviour?	What are the 5 precepts of NML that we must be fulfilling for morally good behaviour?
	<p>Some actions are always morally good / bad because god says so.</p> <p>We can look at human nature to see what is good and bad.</p>	<ol style="list-style-type: none"> 1. Preserve innocent life 2. Live in an ordered society 3. Educate children 4. Reproduce 5. Worship God

D	What are the strengths of NML theory about what is morally good?	What are the weaknesses of NML theory about what is morally good?
	<p>Everyone can see for themselves what is morally good</p> <p>It seems to be true that we do follow the primary precepts- it is in our nature- and following them will generally bring about what we think of as good. For example, 'preserve life' means people will protect the innocent and also believe murder is wrong</p>	<p>If you do not believe in a God who has created absolute moral laws about right and wrong then NML cannot tell us anything about right or wrong.</p> <p>It might make us do bad actions. For example, the use of contraception is wrong according to NML because it does not contribute to reproduction.</p>

E	What does the theory of situation ethics say about moral behaviour?	What are the strengths of S.E theory about what is morally good?	What are the weakness of S.E theory about what is morally good?
	<p>There are no absolute moral laws about right or wrong. The only guiding principle about what is morally right is 'do the most loving thing' in any situation.</p>	<p>It allows flexibility</p> <p>For example, if a mad axeman came in asking for your mother.... you would not want to tell the truth because it could lead to her death!</p>	<p>How can we be sure what is the most loving thing when we cannot be sure what the outcome of our actions will be</p>

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

Year 9 Religious Education: Matters of life and death

A.	<i>Can you define these key words?</i>
<u>Key word</u>	<u>Key definition</u>
Morality	
Ethics	
Sanctity of Life	
Quality of Life	
Natural Moral Law	
Precept	
Reason	
Absolute	
Situation Ethics	
Relativism	
Agape	
Abortion	
Pro-Life	
Pro-Choice	
Euthanasia	
Capital Punishment	
Dominion	
Stewardship	

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

D	<i>What are the strengths of NML theory about what is morally good?</i>	<i>What are the weaknesses of NML theory about what is morally good?</i>

E	<u>What does the theory of situation ethics say about moral behaviour?</u>	<i>What are the strengths of S.E theory about what is morally good?</i>	<i>What are the weakness of S.E theory about what is morally good?</i>

B	<i>Bible quotes relating to the sanctity of life</i>
1	
2	
3	
4	
5	



What we are learning this term:

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



B Answer the questions about Frank Stella

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



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

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

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

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

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



Example

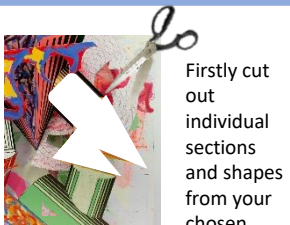
Your response

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

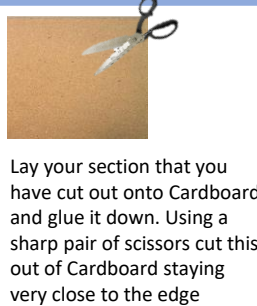


To create a relief sculpture you will need Cardboard or a strong yet easily cut material. Start by having an image to create from. The image on the left has been created by many layers of cut Cardboard. As more layers are added they create a 3-dimensional illusion.

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



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



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



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



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



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

Slab



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

Score& Slip



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

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



What we are learning this term:

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



B Answer the questions about Frank Stella

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



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

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

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

1.

2.

3.

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



Example

Your response

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



.....

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.....

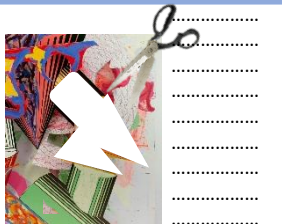
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Write a step by step guide to making a cardboard template for relief sculpture



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

Slab



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Score & Slip



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	Keywords
Abstract	
Geometric	
Sculpture	
Formal Elements	
Ines Kouidis	
Collage	

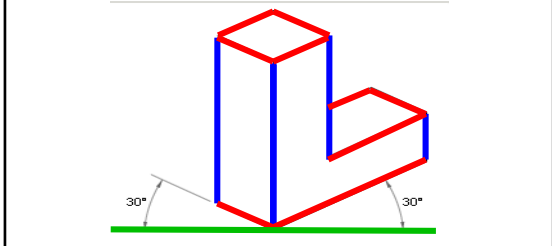


What we are learning this term:	
A.	Drawing Skills
B.	Wood Theory
C.	Wooden Joints & Their Uses
D.	Tools & Machinery

A. Drawing Skills

Isometric Technical Drawing

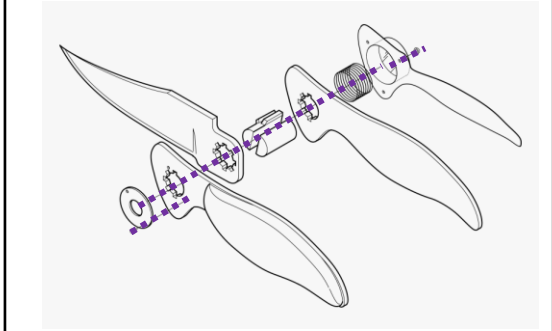
Made up of a series of parallel **vertical lines** and parallel **30-degree lines**. But no **horizontal lines**.



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

Exploded Technical Drawing

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



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

B. Wood Theory

<i>Natural</i>	Advantages	Disadvantages
Hardwood: <ul style="list-style-type: none"> Stronger & durable Weather resistant Fire resistant 	<ul style="list-style-type: none"> Harder to cut / curve More expensive Longer to grow 	
Softwood: <ul style="list-style-type: none"> Easy to cut / curve Cheaper Quicker to grow 	<ul style="list-style-type: none"> Not weather resistant Not fire resistant Weaker & less durable 	
<i>Manufactured</i>	Advantages	Disadvantages
MDF: <ul style="list-style-type: none"> Easy to cut and sand Takes paint well Comes in wide sheets 	<ul style="list-style-type: none"> Not as aesthetically pleasing Doesn't stain well 	
Plywood: <ul style="list-style-type: none"> Strong board Can be waterproof Comes in wide sheets 	<ul style="list-style-type: none"> Not as aesthetically pleasing Doesn't stain well 	

Sustainability = Natural Wood Vs Manufactured Boards

Manufactured boards are more sustainable than natural woods because made from wasted wood and offcuts.	Softwood is more sustainable than hardwood, because it grows a lot quicker.
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C. Wooden Joints & Their Uses

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

D. Tools & Machinery

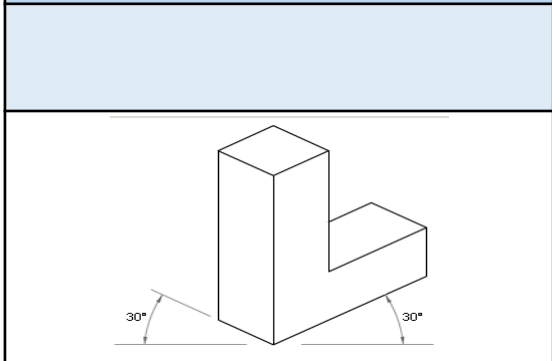
Steel Rule	Tri Square	Mitre Square	Dowels	Quick Clamp	Wooden Vice	Tenon Saw	Bandfacer	Pillar Drill



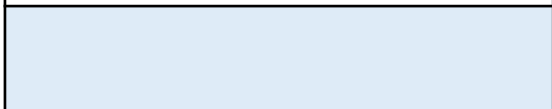
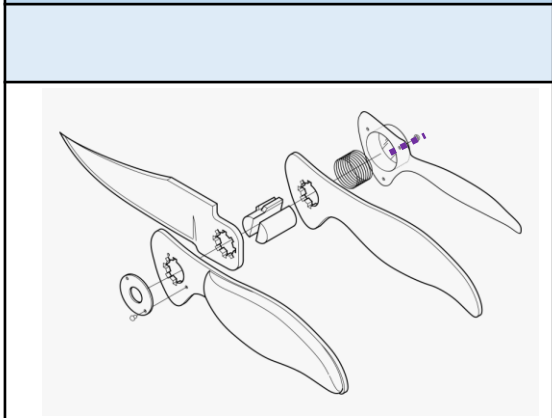
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A.	Drawing Skills	
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Isometric Technical Drawing

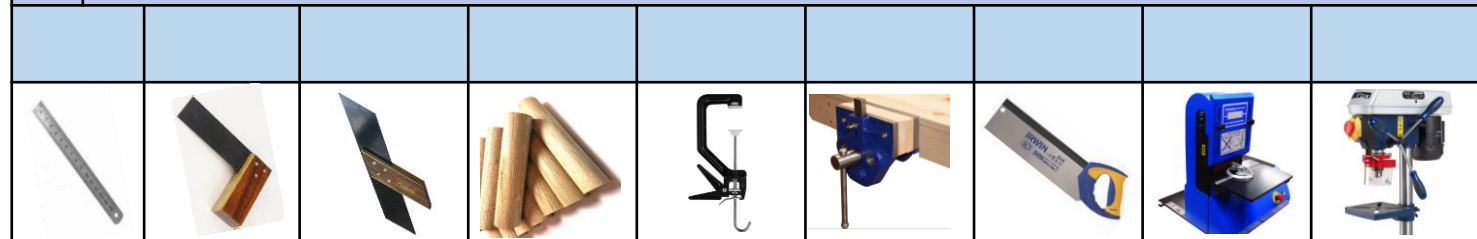


Exploded Technical Drawing



B.	Wood Theory		
<i>Natural</i>	Advantages	Disadvantages	
Hardwood:			
Softwood:			
<i>Manufactured</i>	Advantages	Disadvantages	
MDF:			
Plywood:			
Sustainability = Natural Wood Vs Manufactured Boards			

D.	Tools & Machinery								
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C.	Wooden Joints & Their Uses	
Joint	Uses	Image
Mitre Joint		
Dowel Joint		
Mortise and Tenon		
Cross Halving Joint		

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

Year 9 – High Skills

B.	Can you list 5 of the dietary requirements of a teenager?
<p>1 A diet high in carbohydrate as a teenager is normally an energetic person. 2 A diet with 2-3 portions of protein to maintain muscle growth and cell repair 3 A diet with 2 -3 sources of calcium to build developing teeth and bones. 4 A diet low in fat to avoid becoming obese or developing other health problems. 5 Drinking 2 litres of water a day.</p>	

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

E.	Keywords
Hygiene	A method of keeping yourself and equipment clean
Research	Information that you find out to help you with a project
Nutritious	A meal that is healthy and contains vital nutrients.
Target Market	The age or type of person you re creating a product for.
Carbohydrates	Foods that give you energy
Protein	Food that grow and repair your muscles
Fibre	Foods that keep your digestive system healthy and avoid constipation.
Calcium	Foods that make your teeth and bones strong
Design Idea	A sketch or plan of how you are hoping a project to turn out.
Organisation	Having everything ready for a lesson and following instructions
Time keeping	Using the time to remain organised.
Sensory analysis	Use your senses to taste and describe a product
Mood Board	A collage of photos and key words based on a project
Time Plan	Instructions of wat you are going to do and how long it should take.
Skills Test	Demonstrating your knowledge of a cooking term.
Teenager	Someone between the age of 13 – 19.

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

FOOD SAFETY CHOPPING BOARDS
If used correctly, colour coded chopping boards can eliminate or reduce the risk of cross contamination during food preparation

- RAW MEAT
- RAW FISH
- COOKED MEATS
- SALAD & FRUIT PRODUCTS
- VEGETABLE PRODUCTS
- BAKERY & DAIRY PRODUCTS

! Clean and store chopping boards correctly after use



A	What is cross contamination and how can it be prevented?	
.	Cross contamination happens when you use the wrong chopping board or equipment to prepare food which can therefore result in food poisoning. You must use the correct equipment for the correct ingredients. You must also ensure that you are always following good hygiene practices when cooking.	
B. What do the following terms mean?		
Grilling	Using the top part of the oven. It involves a significant amount of direct, radiant heat, and tends to be used for cooking meat and vegetables quickly. It is also a healthier method of cooking meat products.	
Baking	Baking is a method of preparing food that uses dry heat, normally in an oven. Heat is gradually transferred from the surface of cakes, cookies, and breads to their centre.	
Frying	Frying is the cooking of food in oil or another fat. It is usually done in a frying pan using the hob of the cooker. It also known to be unhealthy.	



C.	Can you list 5 reasons for why we cook food and why it is important?	
	<p><u>Rule</u></p> <ul style="list-style-type: none"> 1 to get rid of bacteria on the food 2 to make the food taste better 3 to make food chewable 4 to ensure that food is not raw 5 to add colour to the food 	<p><u>Why it is important</u></p> <ul style="list-style-type: none"> 1 to stop food poisoning 2 to make the food more appealing 3 it could be raw or a choking hazard 4 to stop food poisoning 5 to make it look more appetising or change its use

Year 9 – High Skills

What we are learning this term:

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

6 Key Words for this term

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

B.	<i>Can you list 5 of the dietary requirements of a teenager?</i>
1	
2	
3	
4	
5	

FOOD SAFETY CHOPPING BOARDS
 If used correctly, colour coded chopping boards can eliminate or reduce the risk of cross contamination during food preparation

-  COOKED MEATS
-  SALAD & FRUIT PRODUCTS
-  VEGETABLE PRODUCTS
-  BAKERY & DAIRY PRODUCTS

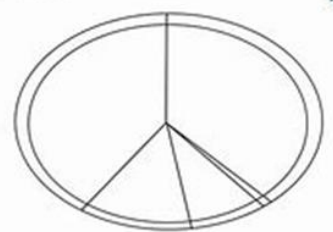
 Clean and store chopping boards correctly after use



A	<i>What is cross contamination and how can it be prevented?</i>	
.		
B. What do the following terms mean?		
Grilling		
Baking		
Frying		

C.	<i>Can you list 5 reasons for why we cook food and why it is important?</i>	
<u>Rule</u>		<u>Why it is important</u>
• 1		• 1
• 2		• 2
• 3		• 3
• 4		• 4
• 5		• 5

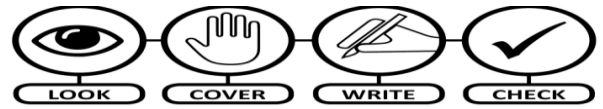
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E.	Keywords
Hygiene	
Research	
Nutritious	
Target Market	
Carbohydrates	
Protein	
Fibre	
Calcium	
Design Idea	
Organisation	
Time keeping	
Sensory analysis	
Mood Board	
Time Plan	
Skills Test	
Teenager	



A	What we are learning about this term...
1	Basic Song Structure
2	How to write a perfect Evaluation
3	Playing an instrument / Chords / Melody
4	What are the music symbols – Note values
5	Keywords
6	How to read music - Treble clef and bass clef



B	Keywords
Instrumental Break	An instrument section during a song – no singing
Lyrics	The words of a song
Verse	A section of a song telling the story , followed by a chorus
Chorus	Repeated idea within a song, lyrics and music usually remain the same
Bridge / Middle 8	Passage of music that contrasts the verse and chorus
Outro / Coda	Passage of music that brings the song to an end
Album	A collection of audio recordings
Arrangement	A rework of a musical composition so that it can be played by different combinations of instruments
Genre	A style or category of art, music, or literature
Cover Song	A performance of a song by someone other than the original artist/band.

C Instruments in popular music

BASIC SONG STRUCTURE

The fundamental elements of a pop song

Intro: The first verse sets the scene and starts the story.

Verse: The chorus is the main hook of the song. Lyrics should broadly summarize the message of the song.

Verse: The second chorus is usually same as the first. This is your opportunity to re-emphasize your message after the 2nd verse.

Bridge: The bridge is usually very different from both the verses and the chorus. It's either the climax of the song or the buildup to the final chorus.

Chorus: The chorus is the main hook of the song. Lyrics should broadly summarize the message of the song.

Chorus: The second chorus is usually same as the first. This is your opportunity to re-emphasize your message after the 2nd verse.

Chorus: The last chorus brings it home, tying up the story. Sometimes the last chorus is repeated twice.

Coda: The last chorus brings it home, tying up the story. Sometimes the last chorus is repeated twice.

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

E How to read music – treble clef and Bass Clef							
Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Semibreve, Whole Note	4 beats			Dotted Semibreve, Dotted Whole Note	6 beats	
	Minim, Half Note	2 beats			Dotted Minim, Dotted Half Note	3 beats	
	Crotchet, Quarter Note	1 beat			Dotted Crotchet, Dotted Quarter Note	1½ beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	¾ beat	

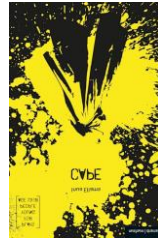
F How to read music – treble clef and Bass Clef			
TREBLE LINES: E G B D F		TREBLE SPACES: F A C E	
BASS LINES: G B D F A		BASS SPACES: A C E G	

G Describing music – MAD T SHIRT

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



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.



KEY WORDS	
articulation	the clarity or distinction of speech
aside	Lines spoken by an performer to the audience and not supposed to be overheard by other characters on-stage.
business	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.
characterisation	how a performer uses body, voice, and thought to develop and portray a character.
dialogue	spoken conversation used by two or more characters to express thoughts, feelings, and actions.
focus	in acting, the act of concentrating or staying in character.
gesture	any movement of the performer's head, shoulder, arm, hand, leg, or foot to convey meaning.
imaging	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.
improvisation	the spontaneous use of movement and speech to create a character or object in a particular situation; acting done without a script.
inflection	change in pitch or loudness of the voice.
Interaction	the action or relationship among two or more characters
language	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.
mannerism	a peculiarity of speech or behaviour.
mime	acting without words.
mirroring	copying the movement and/or expression or look of someone else exactly.
monologue	a long speech made by one performer; a monologue may be delivered alone or in the presence of others.
motivation	the reason or reasons for a character's behaviour; an incentive or inducement for further action for a character.
movement	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.
pace	rate of movement or speed of action
performance elements	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).
pitch	the particular level of a voice, instrument or tune.

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.

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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- D. How to reflect, analyse and evaluate our development.



<p>Noughts and Crosses by M..... B.....</p>	<p>Cape by I..... A.....</p>	<p>Gone Too Far by O..... A.....</p>
<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. 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? 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>

KEY WORDS	
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Themes and Issues Explored	
	<p>Being composed of differing elements and variety. The inclusion of people of different races, cultures, etc. in a group or organization.</p>
	<p>Behaviour or attitudes that reflect and foster this belief : racial discrimination or prejudice.</p>
	<p>Connecting or binding people in either a family, friendship or work collaboration.</p>
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SWINDON ACADEMY READING CANON

Year 7



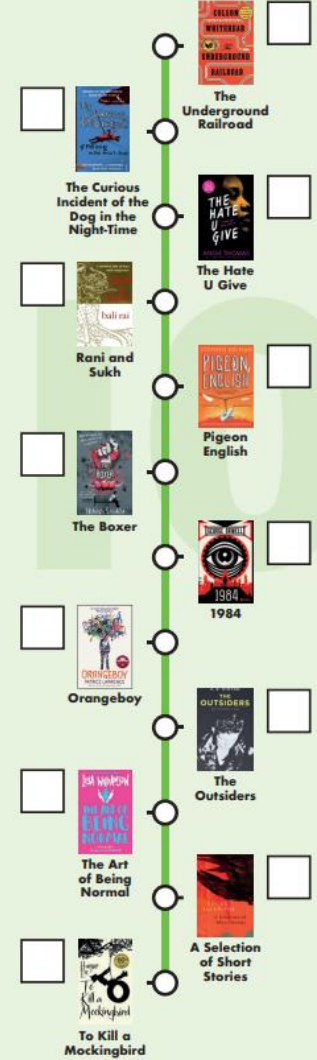
Year 8



Year 9



Year 10



#ReadingisPower