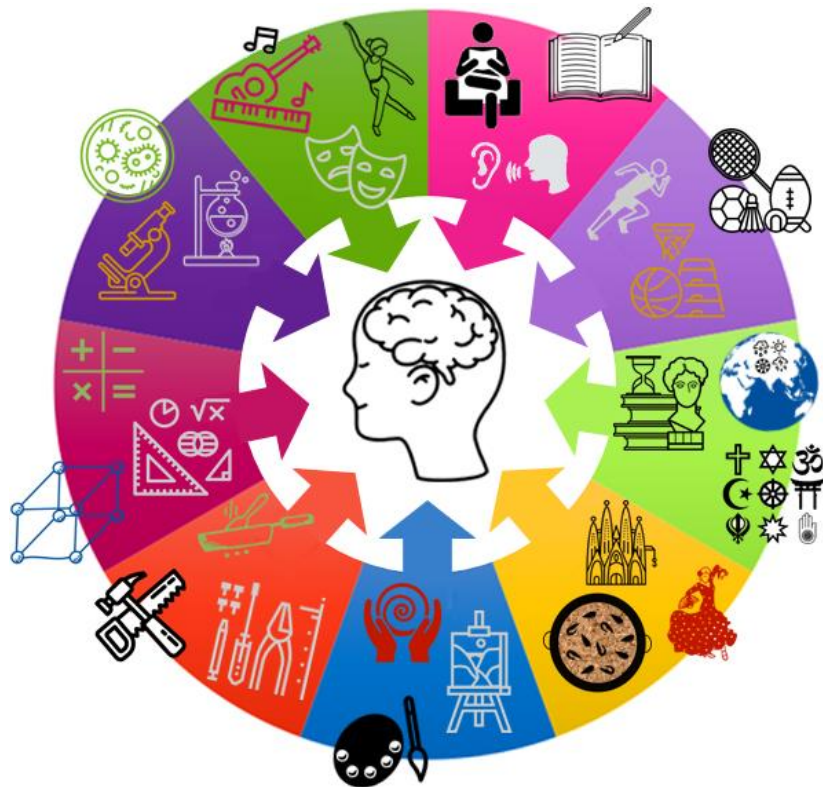


# 100% book - Year 9 Booster

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

## Term 4



Swindon Academy 2024-25	
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 from  
 3. Mixtures  
 4. Separating techniques

**Key Words for this term:**  
 1. Matter  
 2. Particles  
 3. Elements  
 4. Making  
 5. Freezing  
 6. Condensation  
 7. Evaporation  
 8. Solids  
 9. Solvent  
 10. Solution

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

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

solid	liquid	gas
• Particles are packed closely together in a regular pattern. • Particles vibrate in fixed positions. • Particles are arranged randomly but are still touching each other. Particles can slide past each other and move around. • Particles are far apart and are arranged randomly. Particles carry a lot of energy and they move in all directions in a high speed.	• Particles are packed closely together but are not in a regular pattern. • Particles are touching each other but can move past each other. • Particles are touching each other but can move past each other.	• 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**

Diagram showing particle arrangements for solid, liquid, and gas states.

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!

## 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 14th May 2020, with a grid for different subjects. On the right is a 'New Year's Homework/Revision: Topic TSP Pack' 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': T Knowledge Organiser

Plot breakdown		Characters	Vocabulary: Key words
<b>P</b>	<b>The Prologue</b> outlines the main conflict in the play and warns the audience of the tragic fate of Romeo and Juliet.	<b>Romeo (Montague)</b> 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>	<b>tragic</b> – describes something as being very sad, or as part of a tragedy.
<b>1.1</b>	The Montagues and Capulets fight in the streets of Verona. Prince Escalus swears that any further fighting will be punished by death.		<b>submissive</b> - ready to obey or conform to the authority or will of others
<b>1.2</b>	Paris asks Lord Capulet about marrying his daughter Juliet. Capulet tells Paris to wait as she is too young.		<b>narcistic</b> – self-obsessed
<b>1.3</b>	Lady Capulet advises Juliet to agree to marry Paris.		<b>feud</b> – a serious argument and sometimes violent argument between two people or groups that continues for a long time.
<b>1.5</b>	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.	<b>Juliet (Capulet)</b> 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>	<b>shrine</b> – a holy place that people go to pray.
<b>2.2</b>	In the balcony scene, Romeo and Juliet fall deeper in love. They agree to get married.		<b>status quo</b> – the situation that exists now, without any changes.
<b>2.3</b>	Romeo asks Friar Lawrence to marry him and Juliet. Lawrence agrees, thinking it will unite the warring families.	<b>Lord Capulet (Capulet)</b> 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>	<b>obstacle</b> – a problem that must be overcome.
<b>2.6</b>	Friar Lawrence marries Romeo and Juliet.		<b>vindictive</b> – vengeful
<b>3.1</b>	Montagues and Capulets fight in the streets. Tybalt kills Mercutio; Romeo kills Tybalt. Prince Escalus decides to banish Romeo from Verona.	<b>Paris (no family)</b> Nobleman of Verona. Wants to marry Juliet. Killed by Romeo at the end of the play.	<b>patriarchy</b> - a society in which power lies with men
<b>3.4</b>	Lord Capulet tells Paris that he can marry Juliet in three days' time.		<b>belligerent</b> - warlike
<b>3.5</b>	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.	<b>Friar Lawrence (no family)</b> 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>	<b>exile (vb.)</b> – to force them from their home and live in another place.
<b>4.1</b>	Friar Lawrence comes up with a plan: Juliet must pretend to be dead and then escape Verona with Romeo. She agrees to the plan.		<b>tenacious</b> – very determined
<b>5.3</b>	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.	<b>Prince Escalus (no family)</b> 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>	<b>catastrope</b> – a terrible accident.
Terminology: Key words			
<b>The Big Ideas:</b>  <b>Role of women:</b> 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.  <b>Evolution of Juliet's character:</b> 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.  <b>Tragedy:</b> 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.  <b>Fate and destiny:</b> 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?		<b>tragedy</b> – a play in which the main character brings about their own downfall. <b>prologue</b> – the introduction to a book, film, or play. <b>sonnet</b> – a type of love poem. It has 14 lines, a strict rhyme scheme and 10 syllables per line. <b>dramatic irony</b> – when the audience knows something that the character on stage does not <b>Tragic hero</b> – the main character in a Tragedy that makes an error of judgement that leads to their downfall. <b>soliloquy</b> – a speech in a play where the character speaks to himself or herself. <b>hyperbole</b> – exaggeration. <b>tragic flaw</b> - a character has a tragic flaw when what makes them so special also brings about their downfall. <b>foreshadow</b> – to show or warn that something bigger, worse, or more important is coming. <b>thesis</b> – the main idea that you want to discuss throughout an essay.	
		<b>Structure of Shakespearean tragedy (Bradley)</b>	
		<b>Exposition</b> Introduces the main characters and the obstacles they will overcome in the play.	
		<b>Rising tension</b> The heroes try to overcome the obstacles they face. They suffer.	
		<b>Catastrope</b> The play ends with the deaths of the heroes.	
		<b>Features of Shakespearean tragedy (Bradley)</b>	
		The characters are ' <b>high-status</b> ' – they are important people.	
		The tragic hero <b>acts</b> : they <b>try to do things</b> . They don't just let things happen to them.	
		Whatever they try to do, it always <b>puts them in a worse situation</b> .	
		They are <b>exceptional</b> – there is something that makes them special.	
<b>stoicism</b> – calm self control			



# 'Romeo and Juliet': T Knowledge Organiser

Plot breakdown		Characters	Vocabulary: Key words
<b>p</b>	<b>The Prologue</b> outlines the main _____ in the play and _____ the _____ of the _____ of _____ and _____.	<b>Romeo (Montague)</b> Young _____. Falls in love with _____. _____ at the end of the _____. "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"	<b>tragic</b> – <b>submissive</b> – <b>narcistic</b> – <b>feud</b> –
<b>1.1</b>	The _____ and _____ in the _____ of _____. Prince Escalus swears that any further fighting will be _____ by _____.	<b>Juliet (Capulet)</b> 13-y _____ - _____ girl. Falls in _____ with _____. Kills _____ at the end of the _____. "Wherefore art thou Romeo? Deny thy father and refuse thy name"; "O happy dagger, This is thy sheath; there rust, and let me die"	<b>shrine</b> – <b>status quo</b> –
<b>1.2</b>	_____ asks Lord _____ about marrying his _____ Juliet. Capulet tells Paris to wait as she is too young.		<b>obstacle</b> – <b>vindictive</b> – <b>patriarchy</b> – <b>belligerent</b> - warlike <b>exile (vb.)</b> –
<b>1.3</b>	Lady _____ advises _____ to agree to _____.	<b>Lord Capulet (Capulet)</b> Head of the _____ family. Juliet's _____. Orders her to marry his friend, Paris. "She will be ruled In all respects by me"	<b>tenacious</b> – <b>catastrophe</b> – <b>stoicism</b> –
<b>1.5</b>	At the Capulet's _____ ball, Romeo sees Juliet and _____ in love with her. They _____, _____, and fall in _____. As they depart, they learn they are from _____ families.		<b>terminology: Key words</b> <b>Tragedy</b> – <b>prologue</b> – <b>sonnet</b> –
<b>2.2</b>	In the _____ scene, Romeo and Juliet fall _____ in love. They _____ to get _____.		<b>dramatic irony</b> – <b>Tragic hero</b> – <b>soliloquy</b> – <b>hyperbole</b> – <b>tragic flaw</b> – <b>foreshadow</b> – <b>thesis</b> –
<b>2.3</b>	Romeo asks _____ to _____ him and _____. Lawrence _____, thinking it will _____ the _____.	<b>Paris (no family)</b> _____ of Verona. Wants to _____. Killed by _____ at the end of the play.	<b>features of Shakespearean tragedy (Bradley)</b> The characters are ' _____ - _____ ' – they are important people. The tragic hero _____: they <b>try to do</b> _____. They don't _____ things _____ to them. Whatever they try to do, it always <b>puts them in a worse situation</b> . They are _____ – there is something that makes them _____.
<b>2.6</b>	Friar _____ Romeo and _____.		<b>Exposition</b> _____ _____ _____ <b>Development/Rising Action:</b> _____ _____ <b>Catastrophe:</b> _____ _____ _____
<b>3.1</b>	_____ and _____ fight in the streets. _____ kills _____; _____ kills _____. Prince Escalus decides to _____ from Verona.	<b>Friar Lawrence (no family)</b> _____ in Verona. _____ to _____ Romeo and Juliet, thinking it will bring _____ to the city. "For this alliance may prove To turn your households' rancour to pure love"	
<b>3.4</b>	Lord _____ tells _____ that he can marry Juliet in three days' time.		
<b>3.5</b>	After their _____ night, Romeo leaves Juliet for the last time. They have a _____ of the other's _____. After Romeo leaves, Lord Capulet _____ Juliet to marry _____, threatening to _____ her if she _____.	<b>Mercutio (Montague)</b> Romeo's _____. Killed by _____. "A plague a'both your houses!"	
<b>4.1</b>	Friar Lawrence comes up with a _____; Juliet must _____ to be _____ and then _____ Verona with Romeo. She _____ to the plan.		<b>Prince Escalus (no family)</b> _____ of Verona. Wants to bring _____ to the city. "If ever you disturb our streets again, Your lives shall pay the forfeit of the peace"
<b>5.3</b>	Romeo _____ learn of Friar Lawrence's _____. He sneaks back into Verona and visits Juliet's _____. He thinks she is _____, and kills himself with _____. Moments later, Juliet wakes up. She finds Romeo's body and kills _____ with his dagger. The two _____ agree to end their _____.		
The Big Ideas:			
<b>Role of women:</b> Juliet is _____ to make her own decisions. She is _____ by her father who eventually decides to _____ her off to a _____ man. She breaks the _____ when she _____ her father and makes her own decisions.			
<b>Evolution of Juliet's character:</b> Juliet is a stereotypical _____ daughter at the _____, she is loyal and _____. She becomes _____ and independent through her romance with Romeo. She becomes a tragic hero by _____ in pursuit of her own desires.			
<b>Tragedy:</b> A Shakespearean tragedy is the story of one or two heroes of ' _____,' 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 _____.			
<b>Fate and destiny:</b> Fate is the idea that the _____ of a life are not in their control. The _____-crossed lovers suggests they were fated for _____. This leads to many questions: Is the tragic ending inevitable? Do they act _____?			



<b>What we are learning this term:</b>
<ul style="list-style-type: none"> <li>A. Movement</li> <li>B. Breathing and Fitness</li> <li>C. Effect of drugs</li> <li>D. Aerobic and Anaerobic respiration</li> <li>E. Reproduction and Heredity</li> </ul>

<b>6 Key Words for this term</b>
<ul style="list-style-type: none"> <li>1. Chromosomes</li> <li>2. Exchange</li> <li>3. Anaerobic</li> <li>4. Respiration</li> <li>5. Aerobically</li> <li>6. Cilia</li> </ul>

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

<b>A</b>	<b>Support – what is the main function of the spine?</b>
The spine supports the upper body and allows us to stand upright.	

<b>Protection – what is the function of the following:</b>	
Ribcage	Protects the heart and lungs
Cranium (skull)	Protects the brain

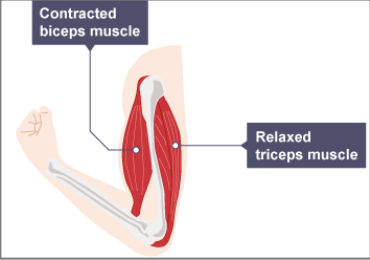
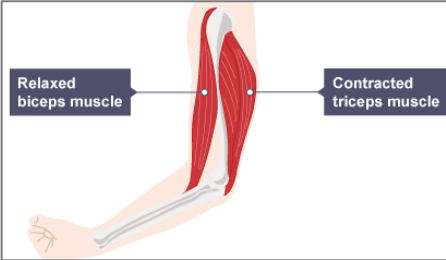
<b>A</b>	<b>Making blood cells – what part of the bone makes blood cells?</b>
Bone marrow produces: <ul style="list-style-type: none"> <li>1. <b>Red blood cells</b> (which transport O<sub>2</sub> and CO<sub>2</sub>)</li> <li>2. <b>White blood cells</b> (some of which fight disease)</li> <li>3. <b>Platelets</b> (which cause blood clotting e.g. when we cut ourselves)</li> </ul>	
<b>Why are bones hollow?</b>	
Long bones in the body are <b>hollow</b> – in the middle of the bone is a <b>marrow cavity</b> . The cavity contains <b>bone marrow</b> , from which blood is produced.	

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

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

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

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

<b>A</b>	<b>What are antagonistic muscles?</b>
In order to move bones in two directions (e.g. bending then stretching your arm), muscles are <b>paired antagonistically</b> (one moves the bone in one direction, the other in the opposite direction).	
<b>How do they work?</b>	 
<ul style="list-style-type: none"> <li>1. To <b>raise</b> the forearm, the biceps contracts and the triceps relaxes.</li> <li>2. To <b>lower</b> the forearm again, the triceps contracts and the biceps relaxes.</li> </ul>	

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

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



<b>What we are learning this term:</b>
<ul style="list-style-type: none"> <li>A. Movement</li> <li>B. Breathing and Fitness</li> <li>C. Effect of drugs</li> <li>D. Aerobic and Anaerobic respiration</li> <li>E. Reproduction and Heredity</li> </ul>

<b>6 Key Words for this term</b>						
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1.</td> <td style="width: 50%;">4.</td> </tr> <tr> <td>2.</td> <td>5.</td> </tr> <tr> <td>3.</td> <td>6.</td> </tr> </table>	1.	4.	2.	5.	3.	6.
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3.	6.					

<b>A.</b>	<b>Movement and muscles</b>
<b>What are the following:</b>	
<b>Ligaments</b>	
<b>Muscles</b>	
<b>Tendons</b>	

<b>A.</b>	<b>How does the muscular system help us move?</b>

<b>A.</b>	<b>How do your muscles move your bones?</b>

<b>A.</b>	<b>What are the 4 functions of the Skeletal System?</b>

<b>A.</b>	<b>What is Biomechanics?</b>

<b>A</b>	<b>Support – what is the main function of the spine?</b>

<b>A</b>	<b>What are antagonistic muscles?</b>

<b>Protection – what is the function of the following:</b>	
Ribcage	
Cranium (skull)	

<b>How do they work?</b>		
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<b>A</b>	<b>Making blood cells – what part of the bone makes blood cells?</b>

<b>A.</b>	<b>What is Osteoporosis</b>

<b>A.</b>	<b>What happens if you overstretch a tendon?</b>

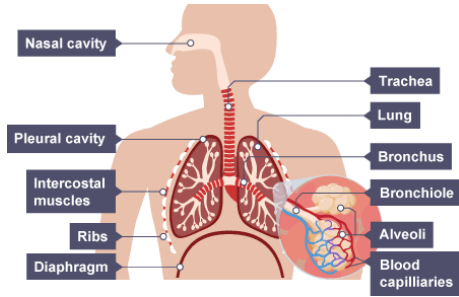
<b>Why are bones hollow?</b>

<b>What are rickets?</b>

<b>What is Tendonitis?</b>

**B. What is the Respiratory System?**

The organ system responsible for exchanging gases with the environment.



**How does the respiratory system work?**

- Air enters the body through the nasal cavity.
- Travels down the trachea, then one of two bronchi,
- Travels to one of many bronchioles and ends up in the alveoli.
- Oxygen diffuses into the blood stream.
- Carbon dioxide diffuses in the opposite direction,
- It then follows the reverse of the above journey, to leave the body.

**B. Measuring lung capacity: what do the following terms mean?**

<b>Vital capacity</b>	The volume of air you can breathe <b>out</b> after breathing <b>in</b> as much as you can.
<b>Residual volume</b>	Volume of air left in the lungs <b>after</b> breathing out as much as you can.
<b>Tidal volume</b>	Volume of air in a normal breath (in or out).

**What can you use to measure Lung Capacity?**

A spirometer

**What is the equation for lung capacity?**

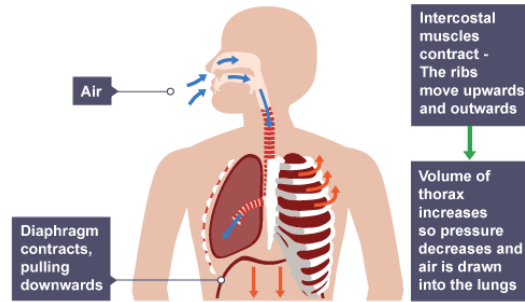
$$\text{Lung capacity} = \text{vital capacity} + \text{residual volume}$$

**B. What is Ventilation?**

**Ventilation** is the process of bringing gas in and expelling gas from the body.

**Why are ventilation and Respiration different?**

**Respiration** is a chemical reaction which happens in the body's cells and releases energy.  
**Ventilation** is the process of bringing gas in and expelling gas from the body.



**B. What is Asthma?**

**Asthma** is a disease where airways become inflamed. The muscles around the bronchioles **contract**, constricting the airways and making breathing difficult.

**What triggers Asthma?**

Asthma is **non-communicable** but can be **triggered** by environmental factors such as infections, allergies and exercise

**How can it be treated?**

Asthma is treated using **steroids**.

**B. What effects can smoking have on the gas exchange system?**

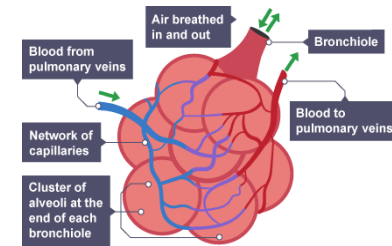
1. Destroys **cilia** in the airways so they are less able to sweep **mucus** containing pathogens out of the lungs, leading to **smoker's cough**
2. Irritates the **bronchi**, causing **bronchitis**
3. Destroys alveoli, reducing the surface area for gas exchange and causing **emphysema**
4. Cigarette smoke contains **carbon monoxide** (CO) which binds to red blood cells, so they can carry less oxygen to cells and the **heart has to work harder**
5. Increases the risk of lung, throat, mouth and oesophagus cancers

**B. Where does gas exchange happen?**

The lungs are the site of gas exchange between the body and the environment.  
 Oxygen for respiration diffuses into the bloodstream and waste carbon dioxide diffuses out of the blood into the alveoli, from where it is expelled in ventilation.

**What are Alveoli?**

Balloon-like structures which are responsible for exchanging oxygen and carbon dioxide between the blood and the lung cavity



**What adaptations do the alveoli have?**

1. **High surface area** thanks to their balloon-like shape
2. Many **capillaries** give a **good blood supply** for gas exchange
3. Walls only **one cell thick**
4. **Moist** walls pick up gases (gases dissolve in water)

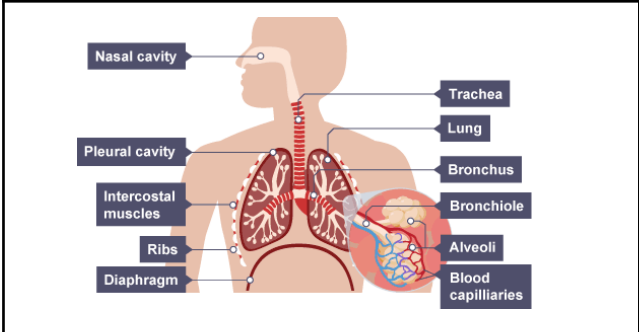
**What is Diffusion?**

Diffusion is the net movement of anything (for example, atom, ions, molecules) from a region of higher concentration to a region of lower concentration.





**B. What is the Respiratory System?**



**How does the respiratory system work?**

**B. Measuring lung capacity: what do the following terms mean?**

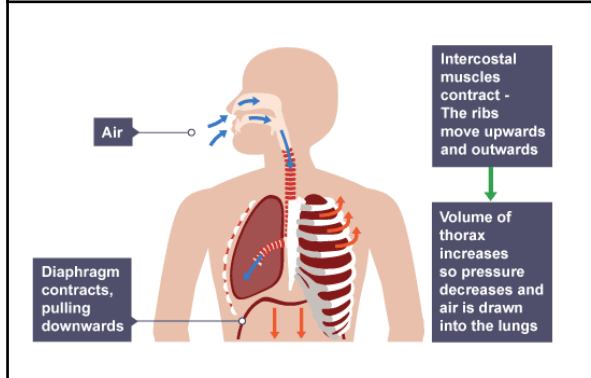
Vital capacity	
Residual volume	
Tidal volume	

**What can you use to measure Lung Capacity?**

**What is the equation for lung capacity?**

**B. What is Ventilation?**

**Why are ventilation and Respiration different?**



**B. What is Asthma?**

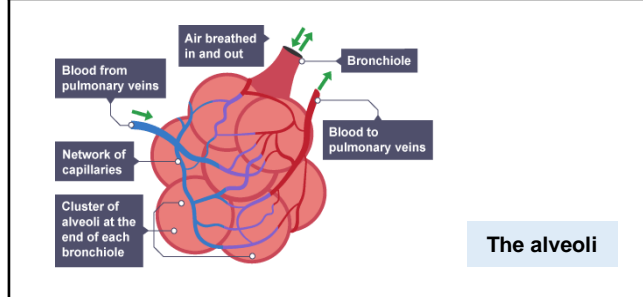
**What triggers Asthma?**

**How can it be treated?**

**B. What effects can smoking have on the gas exchange system?**

**B. Where does gas exchange happen?**

**What are Alveoli?**



**What adaptations do the alveoli have?**

**What is Diffusion?**



<b>B.</b>	<b>What benefits come from regular exercise?</b>
Regular training has the following effects:	
<ul style="list-style-type: none"> <li>Heart muscles are strengthened</li> <li><b>Cardiac output</b> increases</li> <li>Resting <b>heart rate</b> is lower (fewer beats needed because heart muscles are stronger)</li> <li>Recovery (returning to resting heart rate) happens more quickly after exercise</li> </ul>	
Why do you breathe quicker during exercise?	
More oxygen is required as body is working harder.	

<b>C.</b>	<b>What is a drug?</b>	
A drug is a substance that affects the way your body works		
<b>C.</b>	<b>What are the 2 types of recreational drugs, and what effect do they have on the body?</b>	
	<b>Stimulants</b>	<b>Depressants</b>
	<ul style="list-style-type: none"> <li>Stimulants cause the nervous system to carry nerve impulses faster</li> <li>They can increase reaction times</li> <li>But can also speed up heart rate, and put strain on the body</li> </ul> Examples include: Caffeine, Cocaine, Ecstasy	<ul style="list-style-type: none"> <li>Depressants cause the nervous system to slow down</li> <li>They can decrease reaction times</li> <li>They can stop vital organs working, and stop parts of the brain working</li> </ul> Examples include: Alcohol, Heroin, Solvents

<b>D.</b>	<b>What is Respiration?</b>	
Respiration is a chemical reaction that releases energy from food molecules.		
<b>Why is respiration important?</b>		
An organism can use the energy produced by respiration in several different ways including:		
<ol style="list-style-type: none"> <li>To build large molecules from smaller ones (grow)</li> <li>To move</li> <li>To keep warm</li> </ol>		
<b>What are the 2 types of respiration?</b>		
	Aerobic	Anaerobic
Main difference?	With Oxygen	Without Oxygen
Where does it take place?	Mitochondria	Cytoplasm
What is the equation?	glucose + oxygen → carbon dioxide + water	In animals: <b>glucose → lactic acid</b>  In plants/yeast: <b>glucose → ethanol and carbon dioxide</b>
Which produces the most energy?	Aerobic respiration produces more energy	Anaerobic produces less energy

<b>D.</b>	<b>What happens when Lactic Acid builds up in muscles from anaerobic respiration?</b>
If lactic acid builds up in muscle cells it causes fatigue.	
<b>How does the body get rid of lactic acid?</b>	
We continue to have an elevated heart rate and breathing rate after exercise so that more oxygen enters the cells. This oxygen reacts with the lactic acid removing it from our muscles allowing them to work efficiently again.	

<b>D.</b>	<b>What is fermentation?</b>
When plants/yeast respire anaerobically, they produce ethanol and carbon dioxide.	
<b>What are the uses of fermentation?</b>	
It is useful as the ethanol can be used to make alcoholic drinks and the carbon dioxide is what makes bread rise.	

<b>E.</b>	<b>Who discovered DNA?</b>
<b>Rosalind Franklin and Maurice Wilkins 1952</b>	
Using x-ray photography, Franklin and Wilkins produced high-resolution photographs of DNA fibres. They used these to deduce that DNA had a <b>helical</b> structure and that the outside of the molecule contained <b>phosphates</b>	
<b>James Watson and Francis Crick 1953</b>	
Using the x-ray data from Wilkins and Franklin, and using models, Watson and Crick managed to discover the double-helix structure of DNA. They and Wilkins were awarded the Nobel Prize in 1962.	

<b>E.</b>	<b>What is DNA?</b>
Deoxyribonucleic acid – the genetic material of all organisms	
<b>What is a double helix?</b>	
Two helical strands wound around each other	



<b>B.</b>	<b>What benefits come from regular exercise?</b>
Why do you breathe quicker during exercise?	

<b>C.</b>	<b>What is a drug?</b>
<b>C.</b>	<b>What are the 2 types of recreational drugs, and what effect do they have on the body?</b>

<b>D.</b>	<b>What is Respiration?</b>	
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Which produces the most energy?		

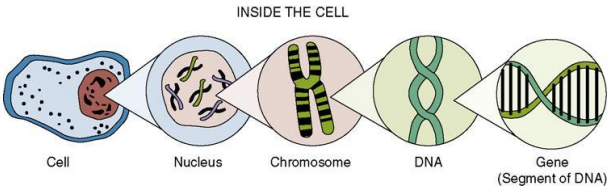
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<b>What is a double helix?</b>	

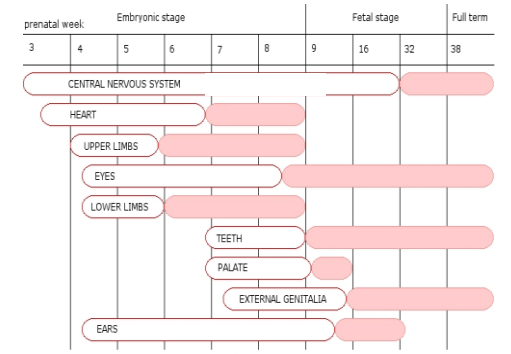


<b>E.</b>	<b>What makes up DNA?</b>
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	<b>What are the 4 bases and how are they paired?</b>
	<ul style="list-style-type: none"> <li>The bases are <b>adenine, thymine, cytosine</b> and <b>guanine</b> (A, T, C, and G)</li> <li>A has a <b>complementary shape</b> to T</li> <li>C has a <b>complementary shape</b> to G</li> </ul>
	<b>What are Chromosomes?</b>
	DNA wound up tightly. There are 23 pairs in human cells (but a different number of pairs in other species)
	<b>What are Genes?</b>
	A short section of DNA which codes for characteristics
	

<b>E.</b>	<b>What are the different types of reproduction and how are they different?</b>	
	Sexual reproduction	Asexual reproduction
	How many parents?	2 parents
	Will offspring inherit features from parents?	Offspring have features of both parents
		Offspring are clones of the 1 parent

<b>E.</b>	<b>What is Heredity?</b>
	Heredity is the process by which genetic information is transmitted from one generation to the next
	<b>What is a Genetic Disease?</b>
	Genetic diseases are passed on from parents to children through their genetic material. Children will be born with the disease

<b>E.</b>	<b>What is Gestation?</b>
	Gestation describes the development of a foetus in the womb.
	<b>What does a foetus need to develop?</b>
	In order to do all of this growing, the foetus needs to get <b>nutrients</b> and <b>oxygen</b> .
	<b>How does a foetus get what it needs to develop?</b>
	Since they can't eat or breathe, they get this from the mother's blood. Nutrients and oxygen <b>diffuse</b> from the mother's blood into the baby's blood vessels, then <b>umbilical cord</b> in the <b>placenta</b> .
	<b>What is the Placenta?</b>
	An organ which develops during pregnancy, and supplies the developing foetus with oxygen and nutrients, while also removing waste.
	<b>What is the Umbilical cord?</b>
	A tube which connects the baby to the placenta.



<b>E.</b>	<b>How can an expectant mother's behaviour affect her unborn baby?</b>	
	The mother's behaviour during gestation can affect the development of the unborn baby because of the transfer of substances across the placenta.	
	<b>What problems can be caused by different drugs during gestation?</b>	
	Cigarettes	Alcohol
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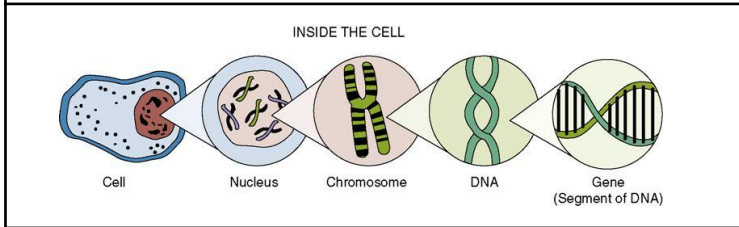


**E. What makes up DNA?**

**What are the 4 bases and how are they paired?**

**What are Chromosomes?**

**What are Genes?**



**E. What are the different types of reproduction and how are they different?**

How many parents?		
Will offspring inherit features from parents?		

**E. What is Heredity?**

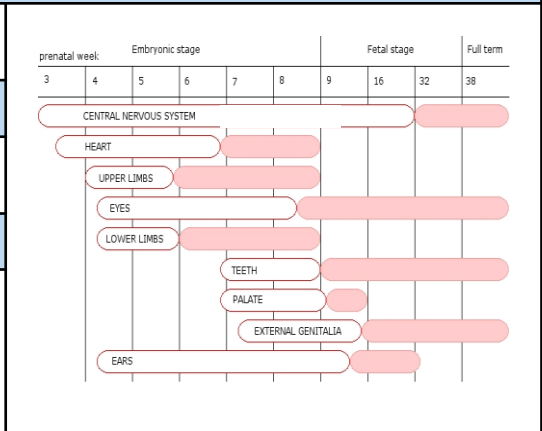
**What is a Genetic Disease?**

**E. What is Gestation?**

**What does a foetus need to develop?**

**How does a foetus get what it needs to develop?**

**What is the Placenta?**



**What is the Umbilical cord?**

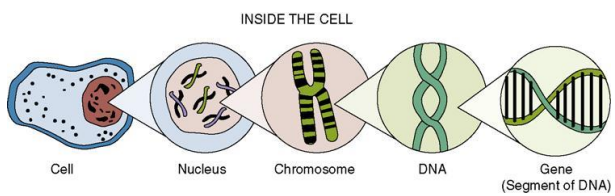
**E. How can an expectant mother's behaviour affect her unborn baby?**

**What problems can be caused by different drugs during gestation?**

Drugs	Problems
Cigarettes	
Alcohol	
Other illegal drugs	



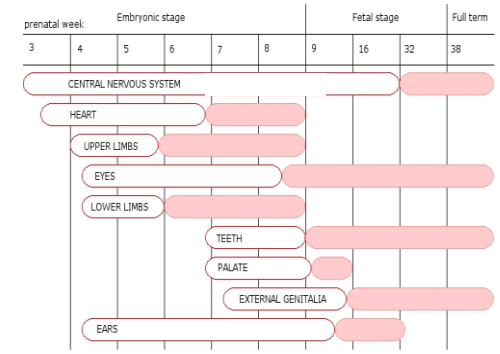


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What we are learning this term:
<ul style="list-style-type: none"> <li>A. Forces</li> <li>B. Moments</li> <li>C. Springs</li> <li>D. Energy transfers in mechanical systems</li> <li>E. Balanced forces in mechanical systems</li> </ul>

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

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	
<b><i>work done = force × distance moved in the direction of the force</i></b>		
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"> <li>• Extended</li> <li>• Compressed</li> </ul>	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"> <li>• A stationary object stays stationary unless a resultant force acts on it.</li> <li>• A moving object keeps moving at a constant speed unless a resultant force acts on it.</li> </ul>	
What is Newton's Second Law	<ul style="list-style-type: none"> <li>• A <b>resultant force</b> acting on an object causes acceleration,</li> <li>• This depends on the size of the resultant force and the mass of the object.</li> </ul> <p>This formula shows the link:</p> $F_R = m \times a$ <p><math>F_R</math> is the <b>resultant force</b> measured in newtons,  <math>m</math> is the <b>mass</b> of the object measured in kilograms,  <math>a</math> is the <b>acceleration</b> 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"> <li>• Forces are always caused by an interaction between <b>two</b> objects.</li> <li>• Each force has an equal and opposite reaction</li> </ul>	

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



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1.	4.
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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?		
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What is a Resultant Force?	
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All What is the Unit <u>usually</u> used?	
Force	
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C. Hookes Law is a linear relationship	
	What does Hookes law state?
	What is the elastic limit?
	What is a linear relationship?



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

<b>E.</b>	<b>What are levers and what are the parts of them?</b>
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

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

<b>E.</b>	<b>Moments</b>
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>

<b>E.</b>	<b>Moments</b>
<b>Key terms</b>	<b>Definitions</b>
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.

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



<b>E.</b>	<b>Turning effects</b>
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?	

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

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

<b>E.</b>	<b>Moments</b>
What ways describe the direction of moments of a force?	

<b>E.</b>	<b>Moments</b>
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<b>A.</b>	<b>Background:</b>
	<ul style="list-style-type: none"> <li>Urban = Towns and cities Rural = countryside</li> <li><b>Urbanisation is the growth in the proportion of a country's population living in urban areas.</b> The rate of urbanisation differs between countries that are richer than those that are poorer.</li> <li><b>HIC have very slow rates of urbanisation:</b> In richer parts of the world, urbanisation happened historically and most of the population now already live in urban areas. Many people in urban areas in HICs desire a better quality of life and are moving to rural area. Here they can commute to cities (because of better transport) or work from home (better communication).</li> <li><b>LIC</b> are less economically developed e.g. Ethiopia. Not many of the population live in urban areas. However, people are starting to move away from jobs in farming (rural areas) to urban areas. They are experiencing rapid urban growth.</li> <li><b>NEE</b> are those where economic development is increasing rapidly e.g. Brazil, India, Nigeria - They are experiencing the fastest growth</li> </ul>

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

<b>c.</b>	<b>Social</b>
Opportunities	<ul style="list-style-type: none"> <li>Better access to services e.g. health care and education</li> <li>Better access to resources such as clean water supply and electricity</li> </ul>
	<b>Social and economic (HEWE)</b>
Challenges	<ul style="list-style-type: none"> <li>Badly built houses and over crowded</li> <li>No access to basic services (running water, sanitation, electricity)</li> <li>Unclean conditions and lack of access to medical services mean people often have poor health</li> <li>No access to education</li> <li>High levels of unemployment and crime</li> </ul>

<b>Economic</b>
<ul style="list-style-type: none"> <li>Increase economic development</li> <li>As industry develops (industrialisation), more people move to urban areas to work in factories – there are more jobs and better wages than rural areas</li> <li>Industries create and sell goods on the international market. Manufactured goods make greater profits than unprocessed goods so industrialised countries get wealthier.</li> </ul>
<b>Environmental (WART)</b>
<ul style="list-style-type: none"> <li>Rubbish isn't collected so it leaves toxic rubbish heaps, which damage the environment</li> <li>Air pollution comes from burning fossil fuel from vehicles and factories</li> <li>Sewage and toxic chemicals can get into rivers, causing health problems and harming wildlife</li> <li>Infrastructure like road systems may not be able to cope with the growing number of vehicles. Congestion causes an increase in greenhouse gas emissions which cause global problems. Locally, problems with health and acid rain also occur.</li> </ul>

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

<b>E..</b>	<b>Favela Bairro</b>				
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D.	Rio
Sanitation	
Quality of life	
Favela	

E..	Favela Bairro	
<b>Successes</b>		<b>Failures</b>

## History Year 9 Term 4 KO

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 (eg. Poland) where Hitler planned to take land for his 1000 year Reich for the superior German (Aryan) race
Nuremberg Laws	A series of laws reducing German Jews human rights, such as their ability to marry Germans, vote, and citizenship
Pogrom	A violent attack on Jewish Communities, these had been occurring in Europe since 1900
Roma	Known as Gypsies, they were persecuted by the Nazis
SA	Brownshirts Nazi thugs that attacked Nazi enemies
SS	Hitler's Elite soldiers (Blackshirts), led by Himmler. They fought in the army and ran the concentration and death camps.
SS Einsatzgruppen	SS murder squads in Eastern Europe, capturing and murdering Jews
Sterilisation	Preventing men and women from breeding through surgery
Genocide	Killing of an entire race of people
Synagogue	A Jewish place of worship
The Final Solution	The Nazi plan to murder all Jews in Europe
Aryan	German superior race as believed by the Nazis
Concentration Camp	Prison camps set up by the Nazis from 1933. They held political prisoners and minority groups in terrible conditions
Extermination 'Death' Camp	A concentration camp designed for murdering huge numbers of people such as Jews in gas chambers
Eugenics	The study of races. Nazis' distorted view on science such as Darwin's survival of the fittest

What we are covering whilst working from home: The Holocaust
<p>We will be looking at:</p> <ul style="list-style-type: none"> <li>The history of anti-Semitism in Europe (I)</li> <li>The start of the persecution of Jews in Nazi Germany and the consequences for German Jews (J)</li> <li>How Jewish persecution in Germany escalated from 1933-1939 resulting in The Final Solution (K)</li> <li>Why we need to remember the Holocaust (L).</li> </ul>

J.	What were the consequences of the Nuremberg Laws for Jews in Nazi Germany?
<p><b>What they were:</b></p> <ul style="list-style-type: none"> <li>On 15<sup>th</sup> September 1935 the Nuremberg Laws were passed which were a new set of laws which made it easier to persecute Jews.</li> <li>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.</li> <li>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.</li> </ul>	<p><b>Consequences:</b></p> <ul style="list-style-type: none"> <li>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</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>

I	What do these factors show about anti-Semitic attitudes in Medieval Europe?
Adolf Hitler	Nazi dictator of Germany 1933-45
Heinrich Himmler	Leader of the SS. It was that carried out the mass extermination of the Jewish people
Adolf Eichman	Adolf Eichmann was a German-Austrian high ranking SS officer and one of the major organisers of the Holocaust
Josef Goebbels	Nazi minister of propaganda
Rudolf Hoss	Hoss was the longest serving officer in charge of Auschwitz

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"> <li>On 30<sup>th</sup> March 1933, the Nazi Party announced that from 10am on 1<sup>st</sup> April an official boycott would be behind of all Jewish businesses, doctors and lawyers.</li> <li>SA members (paramilitary unit associated with the Nazis) painted Jewish stars or the word <i>Jude</i> (German word for Jew) outside Jewish businesses.</li> <li>They then stood outside with banners ('Don't buy from Jews') discouraging people from going inside.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>On 15<sup>th</sup> September 1935 the Nuremberg Laws were passed which were a new set of laws which made it easier to persecute Jews.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The first <b>violent</b> outburst of anti-Semitism in Germany</li> <li>Groups of uniformed gangs ran amok amongst Jewish communities, destroying and burning homes, shops, businesses, synagogues and desecrated Jewish cemeteries.</li> <li>Some gangs were in Nazi uniforms.</li> <li>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.</li> <li>Some Germans were horrified, others watched with pleasure or joined in.</li> <li>100 Jews killed, 814 shops, 171 homes and 191 synagogues destroyed</li> <li>Jews were blamed and made to pay for the damage</li> <li>20,000 Jews sent to camps.</li> </ul>	<ul style="list-style-type: none"> <li>Key step in the process of brutally separating, persecuting and destroying Europe's Jews</li> <li>1<sup>st</sup> ghetto established in Poland in October 1939</li> <li>Jews who owned any businesses/property were forced to hand them over as they were placed in ghettos.</li> <li>Some ghettos were shut in by walls, fences or barbed wire</li> <li>Temporary- some only lasted a few days or weeks, others for years</li> <li>The majority of ghetto inhabitants died from disease, starvation, shooting or deportation to extermination camps.</li> </ul>

# History Year 9 Term 4 KO

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Persecution	
Discrimination	
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Gestapo	

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J.	What were the consequences of the Nuremberg Laws for Jews in Nazi Germany?
What they were:	Consequences:

H.	Can you define these key words?
Ghettos	
Kristallnacht	
Unternehmen	
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What we are learning this term:	
A. Key words B. Religion and equality C. Racism D. Gender	E. LGBTQ F. Disability

A.	Can you define these key words?
Key words	Key definition
Equality	The state of being equal in status, rights or opportunities
Discrimination	The unequal treatment of different groups of people based on race, age, sex etc.
Prejudice	A negative opinion about someone before knowing them based on their belonging to a certain group
Privilege	A special right or advantage given to a person or group
Racism	Discriminating against or preferring someone based on their race
Feminism	A movement fighting for women's rights
Status	A person's position in society
Persecution	mistreatment of an individual or group due to race, religion, gender, sexuality, etc.
Disability	A physical or mental condition that limits a person's movements, senses or activities
Diversity	The practice or quality of including or involving a range of different people

F.	Disability
	<ul style="list-style-type: none"> <li>Disability discrimination is illegal (being treated badly or put at a disadvantage due to disability)</li> <li>Bible – Jesus healed the sick and help disabled people</li> <li>Qur'an – encourages good treatment and giving help to those who are disabled</li> <li>Buddhism and Hinduism – disability comes from bad karma</li> </ul>

B	Equality and religion
	<ul style="list-style-type: none"> <li>People experience prejudice due to sex, disability, race, sexual orientation</li> <li>Equality is important to make society fair</li> <li>Christianity – “you are all one in Christ”</li> <li>Hinduism – the Divine is present in all human beings</li> <li>Islam – the only way one human is better than another is through goodness</li> </ul>

C	Racism
	<ul style="list-style-type: none"> <li>Islam – “There is no superiority...”</li> <li>Christianity – “You are all one in Christ”</li> <li>Hinduism – “There is none high or low amongst you”</li> <li>The Bible, says “slaves obey your masters” and some use this to justify actions e.g. Ku Klux Klan.</li> <li>Quakers are Christians who called for the liberation of Slaves</li> <li>Martin Luther King was inspired by Christianity</li> </ul>

D	Gender				
	<table border="0"> <tr> <td>Gender equality is equal access to resources and opportunities regardless of gender</td> <td>Women in worship</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>Christianity – God made men and women differently</li> <li>Traditional gender roles in many religions</li> <li>Islam - “the Messenger of God never struck a woman, child or a servant”</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>Catholic church does not allow women into priesthood</li> <li>Men and women worship in the Mosque separately from men</li> <li>Some mosques are now female led</li> <li>Catholic Women's Ordination campaign for women to have the right to be ordained</li> </ul> </td> </tr> </table>	Gender equality is equal access to resources and opportunities regardless of gender	Women in worship	<ul style="list-style-type: none"> <li>Christianity – God made men and women differently</li> <li>Traditional gender roles in many religions</li> <li>Islam - “the Messenger of God never struck a woman, child or a servant”</li> </ul>	<ul style="list-style-type: none"> <li>Catholic church does not allow women into priesthood</li> <li>Men and women worship in the Mosque separately from men</li> <li>Some mosques are now female led</li> <li>Catholic Women's Ordination campaign for women to have the right to be ordained</li> </ul>
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E.	LGBTQ
	<ul style="list-style-type: none"> <li>Homosexuality was illegal in the UK until 1967</li> <li>Members of the LGBTQ community have faced persecution in the UK and abroad</li> <li>Christianity – “God created man in His image”</li> <li>Christianity – “You shall not lie with a male as with a woman; it is an abomination”</li> <li>Buddhism, Sikhism and Hinduism do not mention homosexuality</li> <li>Dalai Lama – “a relationship between two men is wrong”</li> <li>Catholic – Welcomes all those who are homosexual but invites them to live a life of <b>celibacy</b></li> </ul>





What we are learning this term:	
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**Key Verbs**

Salir To go out	Ir To go	Jugar To play	Hacer – to do/make	Tocar To play (ins)
Salgo I go out	Voy I go	Juego I play	Hago I do	Toco I play
Sales You go out	Vas You go	Juegas You play	Haces You do	Tocas You play
Sale He/she goes out	Va s/he goes	Juega He/she plays	Hace s/he does	Toca He/she plays
Salimos We go out	Vamos They go	Jugamos We play	Hacemos We do	Tocamos We play
Salen They go out	Van They go	Juegan They play	Hacen They do	Tocan They play

**What we are learning this term:**

- A. Talking about free time
- B. Talking about your plans for the weekend
- C. Talking about eating out
- D. Talking about special occasion meals
- E. Extending what you can say about sport
- F. Talking about sport in the world

**6 Key Words for this term**

- |                 |                |
|-----------------|----------------|
| 1. disfrutar    | 4. campeones   |
| 2. jugar        | 5. formentar   |
| 3. los deportes | 6. a selección |

**3.1F ¿Qué haces en tu tiempo libre?**

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

**3.2G Comer y Beber**

el perrito caliente	hot dog
el pescado	fish
el pollo	chicken
el postre	dessert, pudding
el queso	cheese
la sopa	soup
el té	tea
tomar	to take, to have (food, drink)
la tortilla	omelette
la tostada	toast
el vaso	glass
las verduras	vegetables

**3.1H Hablando del tiempo libre y de los planes**

aburrido/a	boring
agradable	pleasant
al aire libre	in the open air, outdoors
la batería	drums
la canción	song
dar un paseo	to go for a walk
de vez en cuando	from time to time, occasionally
desafiante	challenging
divertido/a	fun
emocionante	exciting

**3.2F Vamos a comer fuera**

el atún	tuna
el bacalao	cod
la barra	loaf
el bistec	steak
los calamares	squid
la cebolla	onion
el cerdo	pork
la cerveza	beer
los champiñones	mushrooms
el chorizo	chorizo
la chuleta	chop
el cordero	lamb
el filete	fillet
la fresa	strawberry
las gambas	prawns
el gazpacho	chilled tomato soup
los guisantes	peas
el jamón serrano	cured ham
las judías verdes	green beans

**3.3F ¿Qué deportes harás?**

el alpinismo	rock climbing
cansado/a	tired
la carrera	race
el concurso (contest)	competition
contestar	to answer
durante	during
el ejercicio	exercise
el entrenamiento	training
entrenar	to train
el equipo	team
el esquí	skiing
este, esta	this
ganar	to win
el jugador	player
mañana	tomorrow
el miembro	member
el partido	match
probar	to try, to test

**3.1G ¿Qué te gusta hacer?**

aburrido/a	boring
bailar	to dance
cantar	to sing
el cine	cinema
de vez en cuando	from time to time, occasionally
entretenido/a	entertaining
estimulante	challenging
jugar	to play (game, sport)
leer	to read
libre	free
odiar	to hate
la película	film
practicar	to practise
salir	to go out
la tarde	afternoon, evening
el teclado	keyboard
tocar	to touch, to play(an instrument)
ver	to see, watch

**3.2G Comer y Beber**

el (fem.) agua (mineral)	(mineral) water
beber	to drink
el bocadillo	sandwich
la carne	meat
la cena	evening meal
cenar	to have supper / to have an evening meal
comer	to eat
la comida	lunch, food, meal
desayunar	to have breakfast
el desayuno	breakfast
después	afterwards
el helado	ice cream
el huevo	egg
el jamón	ham
la leche	milk
las legumbres	pulses
la mantequilla	butter
la manzana	apple
la mermelada	jam, marmalade
las patatas fritas	chips, fries

**3.3G ¿Haces deporte?**

activo/a	active
al aire libre	in the open air, outdoors
ayudar	to help
el baloncesto	basketball
el campo	countryside, playing field
la cancha	court
los deberes	homework
la equitación	horse riding
el estadio	stadium
montar a caballo	to ride a horse
montar en bicicleta	to ride a bike



Translation Practice. G – blue F – orange H - Green	
No me gusta _____	I don't like <b>going shopping</b>
Me encanta _____ con mis amigos	I love <b>going out</b> with my friends
Me _____ escuchar música	I <b>love</b> listening to music
No me gusta _____	I don't like <b>dancing</b>
Si tengo _____	If I have <b>the time</b>
Hago _____ de música	I <b>do</b> music classes
De vez en cuando _____ una novela	From time to time, I <b>read</b> a novel
Siempre _____ la guitarra con la banda	I always <b>play</b> the guitar with the group
A veces _____ a algún concierto	Sometimes I <b>go</b> to some concert
El fin de semana _____ juego al fútbol	On the weekend I <b>always</b> play football
Siempre _____ muy preocupada	I <b>am</b> always busy
Generalmente _____ música por las tardes	Generally I <b>listen</b> to music in the evenings
Me _____ jugar a los videojuegos	Playing video games <b>interests me</b>
Ella quiere patina en la pista de _____	She wants to skate on the <b>ice rink</b>
_____ al gimnasio	I <b>will come</b> to the gym
_____ if there is a match?	<b>Will you know</b> if there's a match?
_____ el ciclismo	I <b>will try</b> cycling
Fue una buena _____	It was a good <b>party</b>
No quiero _____	I don't want <b>to participate</b>

Key Questions: Answer the following in your own words. Use these model answers	
¿Qué haces en tu tiempo libre? Frecuencia? Opiniones?	-Normalmente juego al fútbol todos los días después del colegio. Lo que me encanta es jugar al fútbol 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. Ayer, fui al colegio durante el día. Después del colegio fui al polideportivo con mis amigos y jugué/jugamos al baloncesto juntos. Ayer por la mañana fui de compras en el centro de la ciudad con mi madre y fuimos a las tiendas de ropa. Lo que me encantó/gustó fue que ví una película entretenido por la noche/ fue que jugué mi deporte favorito y podía entrenarme. Todos los días juego al fútbol y al baloncesto, que son mis deportes favoritos. De vez en cuando hago ciclismo y practico el atletismo pero son muy estresantes, duros y no son relajantes. Lo que me encanta es jugar al fútbol en mi equipo los fines de semana.
¿Te gusta ver la televisión? Qué has visto en la televisión recientemente? Tienes un programa favorito?	Si, me gusta ver la televisión, me gustan los programas de horror, de tele-realidad, los documentales y de deporte. Lo que me encanta es ver los dibujos-animados porque son más entretenidos que las noticias. Ayer ví las noticias con mis padres. Mi programa favorito es ... porque es ....
¿Qué es tu película favorita? Qué película has visto recientemente en el cine?	Mi película favorita es ... porque me encantan las películas de acción/tiene mucha violencia/tiene buenos actores/es muy romántica/me encanta la historia/tiene buenos efectos especiales.
¿Cuándo se cena en Inglaterra y en España? ¿Cuándo prefieres cenar o almorzar?	Normalmente se cena en Inglaterra a las seis, como mi almuerzo a las dos, como mi desayuno a las ocho.
Describe una cena especial	Recientemente fui a un restaurante con mi familia para celebrar el cumpleaños de mi abuelo. Fuimos a un restaurante chino porque es la comida favorita de mi abuela. Primero, comí .. y bebí. Para el postre comí y bebí . Lo que me gustó fue la buena comida/ver a y hablar con toda mi familia. Fue muy emocionante.

Key Grammar	
Forming the preterite (past tense). Always remove the –AR, –ER, –IR endings first	Remember the preterite (past) tense endings for –AR, –ER, –IR verbs. They are:  -AR: -é, -aste, -ó, -amos, -astéis, -aron -ER: -í, -iste, -ió, -imos, -istéis, -ieron -IR : -í, -iste, -ió, -imos, -istéis, -ieron
Forming the future tense ('will')	<b>Future Tense ('will...')</b>  <b>All verb groups:</b> -é, -ás, -á, -emos, -éis, -án
<b>Imperfect Tense</b> ( <i>Past, ongoing actions, descriptions, 'used to' or 'was doing'</i> )	<b>-ar</b> -aba, -abas, -aba, -ábamos, -abais, -aban  <b>-er and -ir</b> -ía, -ías, -ía, -íamos, -íais, -ían



# Year 9 COMPUTER SCIENCE Term 3 – Programming



## What we are learning this term:

- A. Matching Operators      B. Definitions      C. Python Code      D. Data Types

Multiply
Assignment
Is greater than or equal to
Is equal to
Is not equal to
Is less than

>=
=
!=
<
==
*

B	Definitions
Computer Science Terms	
Identifier	
IF Statement - Selection	
Loops - Iteration	
Operator	
Relational Operator	
Variable	

C.	Python Code	
This is an example of:		
<b>if username == "Tim":</b>		
<b>print("Hello World")</b>		
<b>dogAge = 8</b>		
<b>while userNum &lt; 3:</b>		
D.	Data Types	Example
	Boolean	
	Character	
	Integer	
	String	
	Real/Float	



# Year 9 COMPUTER SCIENCE Term 3 – Programming



## What we are learning this term:

A. Matching Operators      B. Definitions      C. Python Code      D. Data Types

Multiply	>=
Assignment	=
Is greater than or equal to	! =
Is equal to	<
Is not equal to	==
Is less than	*

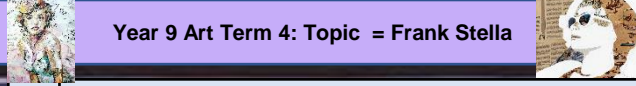
*Note: Orange lines in the original image connect 'Multiply' to '\*', 'Assignment' to '=', 'Is greater than or equal to' to '>=', 'Is equal to' to '<', 'Is not equal to' to '!=', and 'Is less than' to '<'.*

B	Definitions
Computer Science Terms	
Identifier	A name, usually for part of the program such as a constant, variable, array etc.
IF Statement - Selection	A statement that lets a program select an action depending on whether it is true or false.
Loops - Iteration	Repeating an action, activity or section within a program.
Operator	A character which determines what action is to be considered or determined. Example: =
Relational Operator	An operator which compares two values. Example: <
Variable	A memory location within a computer where values are stored.

C.	Python Code
This is an example of:	
<b>if username == "Tim":</b>	Selection
<b>print("Hello World")</b>	Output
<b>dogAge = 8</b>	Assignment
<b>while userNum &lt; 3:</b>	Iteration

D.	Data Types	Example
Boolean	TRUE/FALSE or 1/0	TRUE or 1
Character	A single, alphanumeric character.	1 or A or !
Integer	Whole numbers	15
String	One or more alphanumeric characters.	1A!
Real/Float	Decimal numbers	15.5





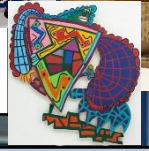
**What we are learning this term:**

- 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.



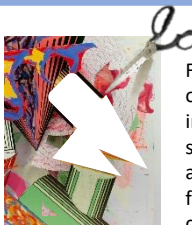
Your response

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

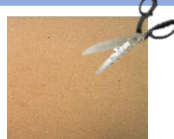


To create a relief sculpture you will need Cardboard or a strong yet easily cut material. Start by having an image to create from. The image on the left has been created by many layers of cut Cardboard. As more layers are added they create a 3-dimensional illusion.

**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.














# Year 9 PRODUCT DESIGN Rotation Knowledge Organiser



What we are learning this term:


A. Workshop Tools    B. Materials    C. Key concepts    D. Key Words    E. Evaluating Work

## A. Workshop Tools


Steel Rule	Tri-Square	Laser Cutter	Mitre square	Tenon Saw	Pillar Drill	Bandfacer
						

## B. Materials


Timbers come from trees

	<p><b>Scots pine</b> – which you used for your box walls – is a <b>softwood</b></p> <p><b>Softwoods</b> come in planks and boards</p>
--	---

Manufactured Boards come from wood pulp

	<p><b>Plywood</b> – which you used as your base and Lid– is a <b>manufactured board</b></p> <p><b>Manufactured Boards</b> come in sheets</p>
---	--

Polymers come from crude oil

	<p><b>Acrylic</b> – which you used as your lid decoration for your trinket box – is a <b>polymer</b></p> <p><b>Polymers</b> come in sheets, graduals and filament</p>
--	---

## C. Key concepts

Designers research and investigate resources and materials to help inspire ideas.

**Computer-aided design (CAD)** is the process of using computer software to create 2D or 3D designs.

Advantages	Disadvantages
Designs can be <b>created</b> , <b>saved</b> and <b>edited</b> quickly, saving time	CAD takes a <b>long time to learn</b>
Designs or parts of design can be easily viewed from <b>different angles</b> , <b>copied</b> or <b>repeated</b>	Software can be <b>very expensive</b>
CAD is <b>very accurate</b>	CAD files can become <b>corrupted</b> or <b>lost</b>

**Hazards** – these are something that could potentially harm you. There are many such as:





- Bags and chairs acting as a trip hazard
- Untucked shirts, baggy clothes and untied hair are common things to get caught on tools and machines.
- Drinks and liquids, if spilled can become slip hazards

**Preventative measures** – rules put in place to minimize the likelihood of a hazard occurring.


- No food and drink in workshops
- Bags and chairs stored neatly in designated areas
- Long hair must be tied up and correct uniform worn.

**Personal protective equipment (PPE)**  
The three used most often are aprons, safety goggles and ear defenders.

## C. Key Words

<b>Prototype</b> 	An early model or sample of a product used to test a concept
<b>Tolerance</b> 	The margin of error allowed for a dimension without negatively impacting a product
<b>Depth stop</b> 	A part on a tool which is used to help cut or drill a specific depth.
<b>Assemble</b> 	Creating a product by bringing several components together.

## D. Evaluation of Products

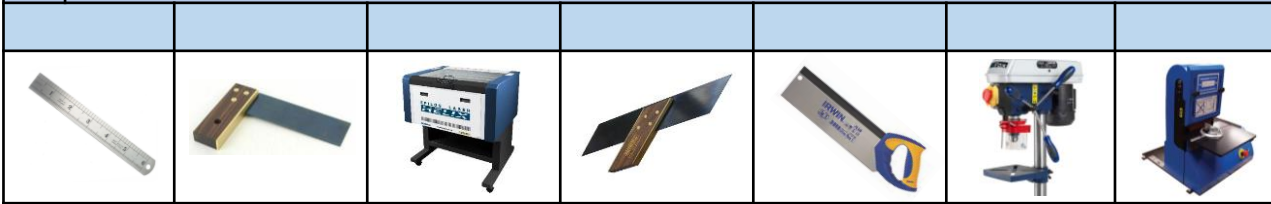
<b>Evaluate</b> 	To judge and give an opinion.
<p>Designers will evaluate their products to see what works well and what doesn't. This way they can make any improvements on their current designs to ensure a high-quality product.</p> <p><b>When writing an evaluation it is important to include the following three things:</b></p> <ol style="list-style-type: none"> <li>1. Positives – what works well</li> <li>2. Negatives – what doesn't work well</li> <li>3. Possible improvements – how could you make it better?</li> </ol> <p><b>For example:</b></p> <p>My trinket box is well constructed and uses bright colours to look appealing. However, under closer inspection, the paint is messy and overlaps in some places. One improvement I could make is by applying the paint with a smaller brush so that it is easier to control and will make it look neater.</p>	



What we are learning this term:

A. Workshop Tools    B. Materials    C. Key concepts    D. Key Words    E. Evaluating Work

**A. Workshop Tools**



**B. Materials**

Timbers come from \_\_\_\_\_



**Scots pine** – which you used for your box walls – is a **softwood**

**Softwoods** come in \_\_\_\_\_

Manufactured Boards come \_\_\_\_\_



**Plywood** – which you used as your base and Lid– is a **manufactured board**

**Manufactured Boards** come in \_\_\_\_\_

Polymers come from \_\_\_\_\_



**Acrylic** – which you used as your lid decoration for your trinket box – is a **polymer**

**Polymers** come in \_\_\_\_\_

**C. Key concepts**

Designers research and investigate \_\_\_\_\_

\_\_\_\_\_ (CAD) is the process of using computer \_\_\_\_\_.

Advantages	Disadvantages

**Hazards** – these are something that could potentially harm you. There are many such as:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Preventative measures** – rules put in place to minimize the likelihood of a hazard occurring.

\_\_\_\_\_

\_\_\_\_\_

**Personal protective equipment (PPE)**  
The three used most often are \_\_\_\_\_

\_\_\_\_\_

**C. Key Words**

<b>Prototype</b> 	
<b>Tolerance</b> 	
<b>Depth stop</b> 	
<b>Assemble</b> 	

**E. Evaluation of Products**

Evaluate \_\_\_\_\_

**Think back to your completed Trinket box. Evaluate one positive aspect of it, one negative aspect of it and an improvement you would like to have made if you had time.**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Possible sentence starters:**

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



**What we are learning this term:**

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

**6 Key Words for this term**

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

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

Remove all of your jewellery.	Jewellery can harbour bacteria and could fall off into the food.
Tie back your hair	Hair could fall into the food or touch equipment.
Wash your hands with hot soapy water.	To remove any germs and bacteria from your hands and nails.
Put on and apron and tie it back.	To protect you from the food and equipment and the food from touching you.

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

- 1 A diet high in carbohydrate as a teenager is normally an energetic person.
- 2 A diet with 2-3 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.



**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

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

Rule

- 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

Why it is important

- 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

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.



**What we are learning this term:**

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

**6 Key Words for this term**

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

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

<b>B.</b>	<b>Can you list 5 of the dietary requirements of a teenager?</b>
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.** What is cross contamination and how can it be prevented?

.

**B.** What do the following terms mean?

Grilling	
Baking	
Frying	

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

<u>Rule</u>	<u>Why it is important</u>
• 1	• 1
• 2	• 2
• 3	• 3
• 4	• 4
• 5	• 5



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

# YEAR 9 GRAPHIC COMMUNICATION

## What are we learning this term?

A Logos	B Typography	C Computer skills	D Key words	E Evaluation
------------	-----------------	----------------------	----------------	-----------------

### A | Logos

What is a logo?

A graphic design element that includes words and images, shapes, symbols or colour.

How does Alex Trochut design logos?

Alex Trochut collaborates with brands to create new catchy designs. He uses text and imagery to create visual art. The viewer first notices the imagery but looks closer to find a hidden message through typography.

### B | Typography

Draw your initials in the typographic style of designer Alex Trochut work



### C | Computer skills

What is the shortcut for copy?

Ctrl + C

What is the shortcut for paste?

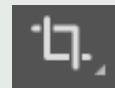
Ctrl + V

What does this symbol stand for?



Photoshop

What does this symbol mean?



Cropping

### D | Key words

Merchandise	Branded products used to promote and sell a product
Combined Logo	A logo that uses both images and text
Photoshop	A software for editing photos and graphics. It is used for image editing, making illustrations or web design.
Photo Editing	The act of image and enhancement and manipulation

### E | Evaluation

Evaluation: To judge or give an opinion

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

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

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

**For example:**

My tote bag looks great, the colours are bright which appeals to the audience of the festival. However, I have not designed a combined logo. One improvement I could make is to use images and text to create a combined logo.



# YEAR 9 GRAPHIC COMMUNICATION

## What are we learning this term?

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

What is a logo?

How does Alex Trochut design logos?

### B | Typography

Please use pencil for the drawing of your design

### C | Computer skills

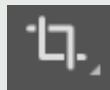
What is the shortcut for copy?

What is the shortcut for paste?

What does this symbol stand for?



What does this symbol mean?



### D | Key words

Merchandise

Combined Logo

Photoshop

Photo Editing

### E | Evaluation

Evaluation: To judge or give an opinion

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

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

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**What we are learning this term:**

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

**7 Key Words for this term**

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

**C Playing the Keyboard / Chords**

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

**A Famous Film Composers / Instruments of the Orchestra**

John Williams

Danny Elfman

Hanz Zimmer

Bernard Hermann

**Orchestra Instruments**

Drums: bass drum, timpani drum, snare drum, tubular bells

Brass: trumpet, trombone, saxophone, xylophone

Woodwinds: oboe, clarinet, piccolo, flute, bassoon

Strings: cello, violin, viola, bass, violin

Knight Owl Teaching Resources

**D What are the musical elements?**

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

**E What are the music symbols?**

Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Semibreve, Whole Note	4 beats			Dotted Semibreve, Dotted Whole Note	6 beats	
	Minim, Half Note	2 beats			Dotted Minim, Dotted Half Note	3 beats	
	Crotchet, Quarter Note	1 beat			Dotted Crotchet, Dotted Quarter Note	1 1/4 beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quavers, Dotted Eighth Note	3/4 beat	

**G 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

**B How to write a perfect Evaluation?**

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



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

**7 Key Words for this term**

1	4	7
2	5	
3	6	

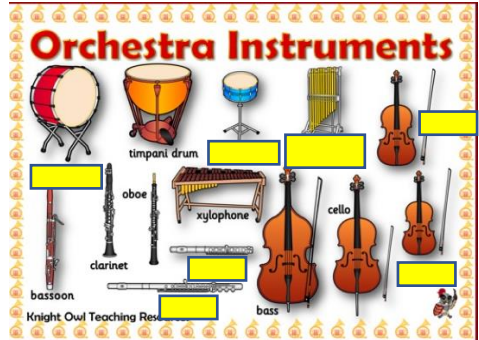
**C Playing the Keyboard / Chords**

LEFT HAND      RIGHT HAND

1 2 3      C D E F G A B C

C      G  
Am      F

**A Famous Film Composers / Instruments of the Orchestra**



**D What are the musical elements?**

Timbre	
Pitch	
Texture	
Tempo	
Duration	
Structure	
Dynamics	
Silence	
Attack/Decay	

**F Keywords**

<b>Leitmotif / motif</b>	a <b>recurrent theme</b> throughout a musical composition, associated with a person, idea, or situation A cliché is a <b>phrase which is often used</b> , or overused
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<b>Opening / Closing Credits</b>	
	When the <b>music perfectly fits with the action</b> on the screen.
<b>Atonal</b>	
<b>Synchronising</b>	
	<b>Sound and effects</b> that are added for dramatic effect.

**B How to write a perfect Evaluation?**

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

**E What are the music symbols?**

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

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



## What we are learning this term:

- A. Three influential practitioners in Drama.
- B. What the techniques are that they created/implemented into a variety of plays.
- C. Devise a performance using one of the chosen practitioners' techniques and influences.

## A- Key Words for this term

1. Devising- Creation of an original performance in response to a stimulus.
2. Naturalism- seeks to mirror life with the utmost fidelity.
3. Theatre of cruelty- Style of theatre that aims to shock and confront the audience
4. Epic theatre- emphasizes the audience's perspective and reaction to the piece through a variety of techniques that deliberately cause them to individually engage in a different way.
5. Multi-rolling- When an actor plays more than one character on stage
6. Placards- A sign or additional piece of written information presented onstage
7. Script analysis- Actors interrogate a script for its intended meaning
8. Given Circumstances- Who, what, why, how and where of a character in a play
9. Method Acting- A technique or type of acting in which an actor aspires to encourage sincere and emotionally expressive performances by fully inhabiting the role of the character
10. Practitioners- Someone who creates pieces of dramatic work or style of theatre.

## Bertold Brecht 1898-1956



### Verfremdungseffekt (Veffect) (Alienation Techniques)

The process of 'making strange'. This is where the audience experience something familiar, but it is presented in an unrecognisable way or context .The audience then must reach a new understanding to 'move past' the strangeness.

### This effect can be created through the use of:

Direct Address	Narration
Placards	Montage
Multi-rolling	Speaking stage directions
Music/song	Props table / costumes change on stage

Naturalism was at its peak, but Brecht thought that theatre should be political and be a force for change. He wanted his audiences to remain objective and distant from emotional involvement, so that they could make considered and rational judgements about the issues in the play – this is called **Epic Theatre**

## Thinking questions.

1. Brecht said that in naturalistic theatre “ audiences hang up their brains with their hats in the cloakroom.” what do you think he was saying here?

2. What makes a successful, naturalistic performance?

3. In an Artaudian performance of Little Red Riding Hood, HOW would you play to all 5 senses?

## Constantin Stanislavski 1863-1938



A Russian actor and theatre director, he created The System of 'method acting'. As a reaction to the melodramatic acting of the late 19th century, he developed methods to help actors create the illusion of reality on stage – **Naturalism**.

**Objectives:** The actor needs to know what their character wants in each unit of the play – what are they trying to achieve?

**Super Objective:** The character's ultimate goal over the whole play – each objective should 'link in' and help the character achieve this goal.

**The Magic If:** How would the actor react/ behave if they were in the same situation as the character?

**Units** – Dividing a play or scene into different units of action.

**Emotional Memory:** Relating the actors own personal and emotional experience to that of their character .



## Antonin Artaud 1896-1948

Famous for “**Theatre of Cruelty.**” Wanted his audiences to experience and FEEL the pieces not just watch them. He felt that theatre should be cathartic-taboo subjects explored on stage, so that audience members didn't need to go and do these things in “real life.”

**Extremes** – Artaud would portray the extremes and put his actors through extremes before performances. This was to access their “visceral” reactions and emotions.

**Attack the senses.** He believed that performances should be seen, heard, felt, smelt and tasted . The audience were always made to feel uncomfortable.

**Universal language-** He felt that all “writing is garbage” so he used a series of grunts, groans, noises and physical gesture to communicate meaning with an audience. This way, everyone could understand.



## What we are learning this term:

- A. Three influential practitioners in Drama.
- B. What the techniques are that they created/implemented into a variety of plays.
- C. Devise a performance using one of the chosen practitioners' techniques and influences.

## A- Key Words for this term

1. D \_\_\_\_\_ - Creation of an original performance in response to a stimulus.
2. Naturalism-
3. Theatre of \_\_\_\_\_ - Style of theatre that aims to shock and confront the audience
4. Epic theatre- emphasizes the audience's p \_\_\_\_\_ and r \_\_\_\_\_ to the piece through a variety of techniques that deliberately cause them to individually e \_\_\_\_\_ in a different way.
5. M \_\_\_\_\_ - When an actor plays more than one character on stage
6. Placards-
7. Script a \_\_\_\_\_ - Actors interrogate a script for its intended meaning
8. Given Circumstances- W \_\_\_\_\_ , w \_\_\_\_\_ , w \_\_\_\_\_ , h \_\_\_\_\_ and w \_\_\_\_\_ of a character in a play
9. \_\_\_\_\_ - A technique or type of acting in which an actor aspires to encourage sincere and emotionally expressive performances by fully inhabiting the role of the character
10. Practitioners-

## Bertold Brecht 1898-1956



### Verfremdungseffekt (Veffect) (Alienation Techniques)

The process of 'm \_\_\_\_\_ s \_\_\_\_\_'. This is where the audience experience something familiar, but it is presented in an unrecognisable way or context. The audience then must reach a new understanding to 'move past' the strangeness.

This effect can be created through the use of:

Naturalism was at its peak, but Brecht thought that theatre should be political and be a force for change. He wanted his audiences to remain objective and distant from emotional involvement, so that they could make considered and rational judgements about the issues in the play – this is called \_\_\_\_\_ **Theatre**

## Thinking questions.

1. Brecht said that in naturalistic theatre “audiences hang up their brains with their hats in the cloakroom.” what do you think he was saying here?

2. What makes a successful, naturalistic performance?

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## Constantin Stanislavski 18 3-19



A Russian actor and theatre director, he created The System of 'method acting'. As a reaction to the melodramatic acting of the late 19th century, he developed methods to help actors create the illusion of reality on stage – **Naturalism**.

### Objectives:

### Super Objective:

### The Magic If:

### Units:

### Emotional Memory:



## Antonin Artaud 1896-1948

Famous for “ \_\_\_\_\_ .” Wanted his audiences to experience and FEEL the pieces not just watch them. He felt that theatre should be cathartic-taboo subjects explored on stage, so that audience members didn't need to go and do these things in “real life.”

### Extremes:

### Attack the senses:

### Universal language:



# SWINDON ACADEMY READING CANON

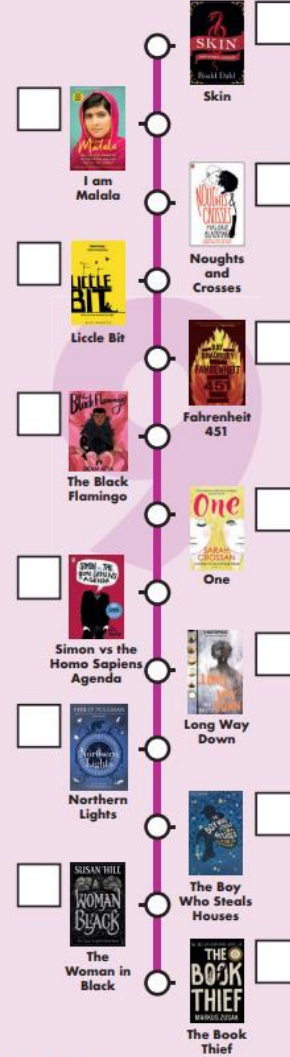
## Year 7



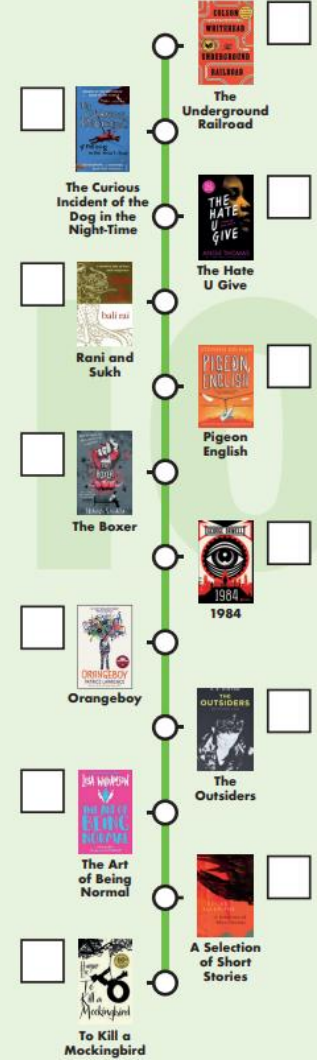
## Year 8



## Year 9



## Year 10



#ReadingisPower