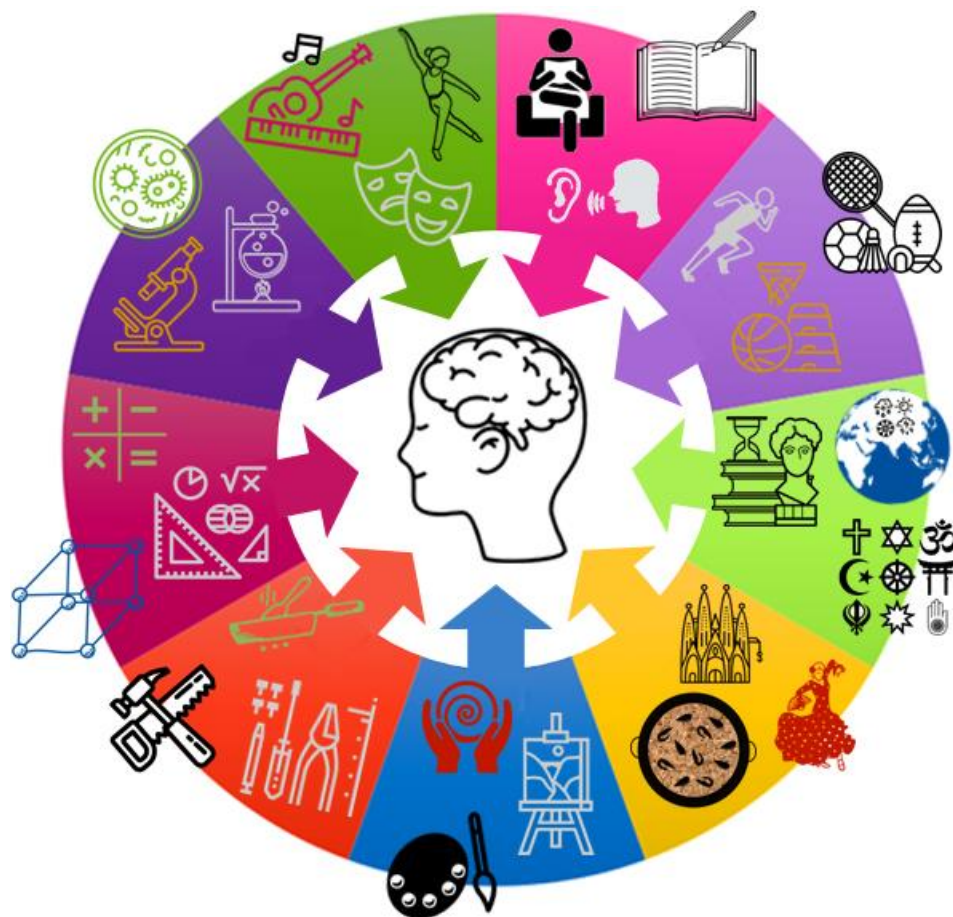


# Year 9 – Grammar Stream

## Knowledge Organisers

### Term 5



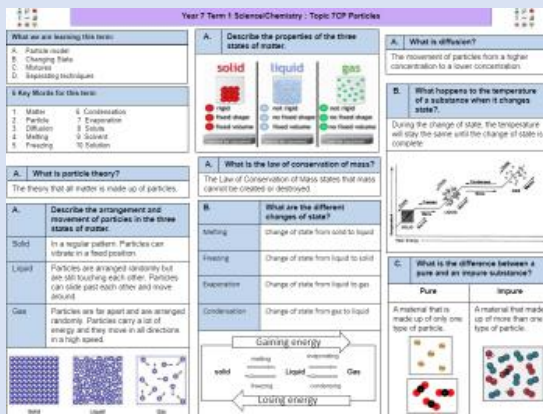
### Swindon Academy 2024-25

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

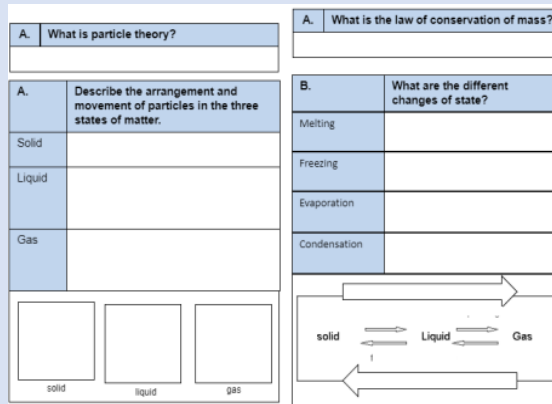
## Knowledge Organisers



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

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

## Quizzable Knowledge Organisers



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

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

### Top Tip

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

## Expectations for Prep and for using your Knowledge Organisers

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

# How do I complete Knowledge Organiser Prep?

## Step 1

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

The image shows the epraise.com website. On the left is a 'Planner' for the week of 10th May to 14th May 2020, with columns for Self-reflection, What I've learned, How I've learned, and How I've shared. On the right is a 'Knowledge Organiser' for 'What is particle theory?' with sections for 'What is particle theory?', 'What is the law of conservation of mass?', 'What are the different states of matter?', and 'What is the difference between a solid and a liquid?'.

## Step 2

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

The image 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?', 'What is the law of conservation of mass?', 'What are the different states of matter?', and 'What is the difference between a solid and a liquid?'.

## Step 3

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

The image shows a student's prep book. The keywords/definitions/facts from the knowledge organiser are 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 image shows a student's prep book. The keywords/definitions/facts from the knowledge organiser are written out in full, repeated 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 image shows a student's prep book. The missing words from the quizzable knowledge organiser are written in the prep book. The text includes: 'Self quizzing', 'Arrangement/movement of matter', 'Solid = regular pattern particles', 'Liquid =', and 'Gas ='. There are also checkboxes for 'solid', 'liquid', and 'gas'.

## 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 image shows a student's prep book. The keywords/definitions/facts from the knowledge organiser are written out in full, with corrections and checkmarks. 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': GS Knowledge Organiser

Plot breakdown	
<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>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>1.2</b>	Paris asks Lord Capulet about marrying his daughter Juliet. Capulet tells Paris to wait as she is too young.
<b>1.3</b>	Lady Capulet advises Juliet to agree to marry Paris.
<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>2.2</b>	In the balcony scene, Romeo and Juliet fall deeper in love. They agree to get married.
<b>2.3</b>	Romeo asks Friar Lawrence to marry him and Juliet. Lawrence agrees, thinking it will unite the warring families.
<b>2.6</b>	Friar Lawrence marries Romeo and Juliet.
<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>3.4</b>	Lord Capulet tells Paris that he can marry Juliet in three days' time.
<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>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>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.

## The Big Ideas:

**Role of women:** Juliet is powerless to make her own decisions. She is ruled by her father who eventually decides to marry her off to a powerful man. She breaks the status quo when she defies her father and makes her own decisions.

**Evolution of Juliet's character:** Juliet is a stereotypical Renaissance daughter at the outset, she is loyal and submissive. She becomes empowered and independent through her romance with Romeo. She becomes a tragic hero by acting in pursuit of her own desires.

**Tragedy:** A Shakespearean tragedy is the story of one or two heroes of 'high-status,' such as Kings or Lords. They act in pursuit of one desire. The story leads up to and includes the death of the hero as a result of their actions.

**Fate and destiny: Fate and destiny:** Fate is the idea that the events of someone's life are not in their control. The star-crossed lovers suggests they were fated for tragedy. This leads to many questions: Is the tragic ending inevitable? Do they act independently?

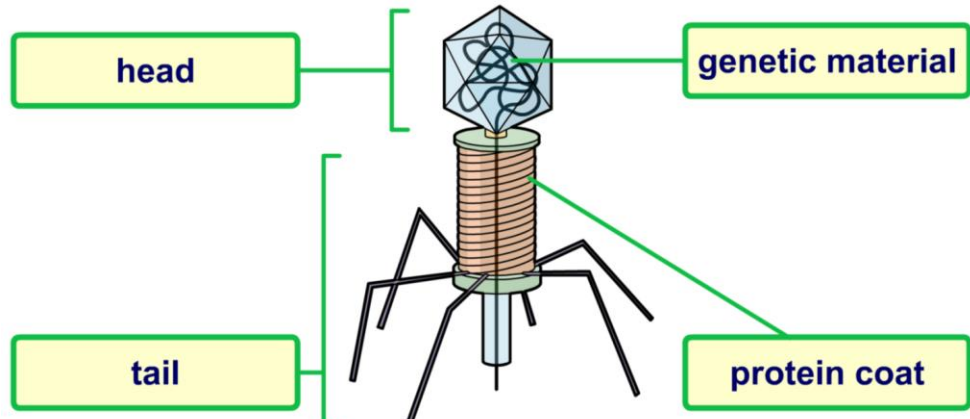
Characters	Vocabulary: Key words
<b>Romeo (Montague)</b> Young man. Falls in love with Juliet. Kills himself at the end of the play. <i>"Did my heart love till now? forswear it, sight! For I ne'er saw true beauty till this night"; "Thus with a kiss I die"</i>	<b>tragic</b> – describes something as being very sad, or as part of a tragedy. <b>submissive</b> – ready to obey or conform to the authority or will of others <b>narcissistic</b> – self-obsessed <b>feud</b> – a serious argument and sometimes violent argument between two people or groups that continues for a long time. <b>shrine</b> – a holy place that people go to pray. <b>status quo</b> – the situation that exists now, without any changes. <b>obstacle</b> – a problem that must be overcome. <b>vindictive</b> – vengeful <b>patriarchy</b> – a society in which power lies with men <b>belligerent</b> – warlike <b>exile (vb.)</b> – to force them from their home and live in another place. <b>tenacious</b> – very determined <b>catastrophe</b> – a terrible accident. <b>stoicism</b> – calm self control
<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"; "O happy dagger, This is thy sheath; there rust, and let me die"</i>	<b>Terminology: Key words</b> <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>peripeteia</b> – a sudden reversal of fortune. <b>hubris</b> – excessive pride or self-confidence <b>anagnorisis</b> – the moment when the character realises the true state of their affairs or the reality of their situation
<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>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>Paris (no family)</b> Nobleman of Verona. Wants to marry Juliet. Killed by Romeo at the end of the play.	
<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>Mercutio (Montague)</b> Romeo's friend. Killed by Tybalt. <i>"A plague a'both your houses!"</i>	
<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>	
Structure of Shakespearean tragedy (Bradley)	
<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>Catastrophe</b> The play ends with the deaths of the heroes.	



# 'Romeo and Juliet': GS Knowledge Organiser

Plot breakdown		Characters	Vocabulary: Key words
P	The Prologue	Romeo (Montague)	tragic –
1.1			submissive –
1.2			narcistic –
1.3		Juliet (Capulet)	feud –
1.5			shrine –
2.2			status quo –
2.3		Lord Capulet (Capulet)	obstacle –
2.6			vindictive –
3.1			patriarchy –
3.4		Paris (no family)	belligerent - warlike
3.5			exile (vb.) –
4.1			tenacious –
5.3		Friar Lawrence (no family)	catastrophe –
			stoicism –
			<b>Terminology: Key words</b>
		Mercutio (Montague)	Tragedy –
			prologue –
			sonnet –
		Prince Escalus (no family)	dramatic irony –
			Tragic hero –
			soliloquy –
		<b>Structure of Shakespearean tragedy (Bradley)</b>	hyperbole –
			tragic flaw -
			foreshadow –
		Exposition _____ – _____	peripeteia -
			anagnorisis -
			hubris -
		Development/Rising Action: _____ _____ _____	thesis –
			<b>Features of Shakespearean tragedy (Bradley)</b>
			_____
		Catastrophe: _____ – _____	_____
			_____
			_____
<b>The Big Ideas:</b>			
Role of women:			
Evolution of Juliet's character:			
Tragedy:			
Fate and destiny:			



<b>What we are learning this term:</b>		<b>A.</b>	<b>Define communicable disease</b>		<b>A.</b>	<b>Define non-communicable disease</b>	
A. Communicable vs Non-communicable B. Pathogens C. Preventing Infection D. Human Response		Can be <b>passed</b> on <b>from person to person</b> , or from an animal to a person.			<b>Cannot be caught</b> from another person or animal. These include genetic diseases, diseases caused by diet and lifestyle and diseases caused by aging.		
<b>2 Key Words for this term</b>		<b>B.</b>	<b>What the four types of pathogens?</b>			<b>B.</b>	<b>Define vector</b>
1. Pathogen 2. Antigen		<b>Pathogen</b>	<b>Example in animals</b>		<b>Example in plants</b>		
<b>A.</b>		<b>Define health</b>	<b>Viruses</b>	HIV potentially leading to AIDS	Tobacco mosaic virus		
A state of complete mental, physical and social <b>well-being</b> , and the <b>absence of disease</b> or infirmity.			<b>Bacteria</b>	Salmonella	Agrobacterium		
			<b>Fungi</b>	Athlete's foot	Rose black spot		
			<b>Protists</b>	Malaria	Downy mildew		
<b>B.</b>		<b>How are pathogens spread</b>					
<b>Bodily fluids</b>		HIV, hepatitis					
<b>Food</b>		<i>E.Coli, Salmonella</i>					
<b>Contact</b>		Athlete's foot, cold sores					
<b>Water</b>		Typhoid, cholera					
<b>Airborne droplets</b>		Colds, flu					
<b>Insects</b>		Typhus, malaria					
<b>B.</b>		<b>Define non-communicable disease</b>					
							

**C. List four methods of preventing infection**

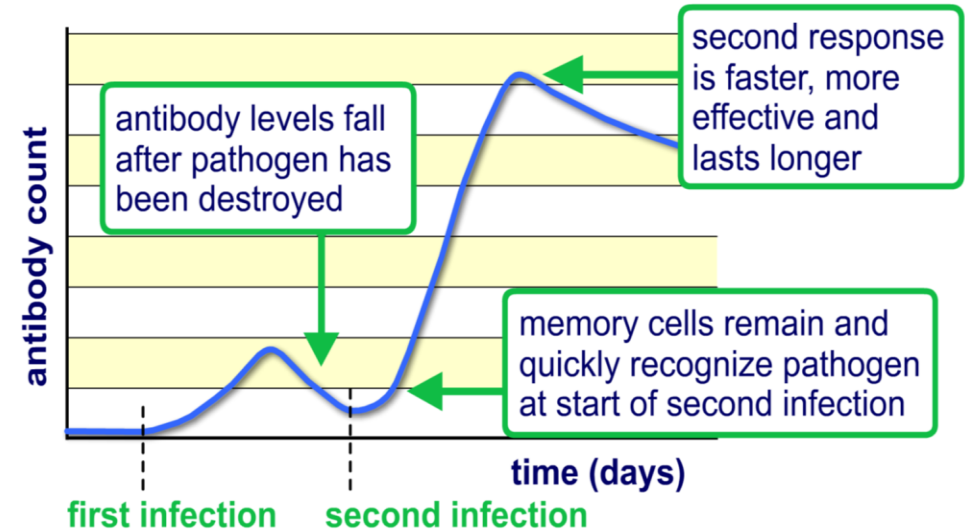
- Handwashing.
- Sterilisation & antiseptics.
- Isolating infected individuals.
- Destroying or controlling vectors.
- Vaccines.

**C. What are the two types of lymphocytes?**

<b>T-lymphocytes</b>	Recognize antigens and either attack them directly or co-ordinate the activity of other cells of the immune system.
<b>B-lymphocytes</b>	Recognize antigens and produce special chemicals called antibodies.)

**D. Label the respiratory system**

<b>pathogen</b>	<b>a micro-organism that causes disease</b>
<b>antigen</b>	<b>a molecule found on the surface of cells that triggers an immune response</b>
<b>lymphocyte</b>	<b>a type of white blood cell found in the blood and lymph nodes</b>
<b>antibody</b>	<b>a special protein produced by B-lymphocytes in response to antigens</b>

**Antibody count during two infections by the same pathogen****D. What are the body's physical and chemical defences?**

<b>Eyes</b>	Produce tears, which contain a natural antiseptic.
<b>Skin</b>	Forms an outer barrier to infection.
<b>Lungs</b>	Mucus and tiny called cilia in the airways trap and sweep out microbes
<b>Blood</b>	Cuts and wounds are sealed by platelets, which are transported in the blood plasma.
<b>Stomach</b>	Hydrochloric acid destroys many microbes.



E. .	How can plant diseases be detected?	E.	Name a viral plant disease	E.	Name an insect plant disease	
	<div>stunted growth</div> <ul style="list-style-type: none"><li>spots on leaves</li><li>areas of decay (rot)</li><li>growths</li><li>malformed stems or leaves</li><li>discolouration</li><li>the presence of pests</li></ul>	Tobacco mosaic virus		Aphids		
		E.	Name 2 ion deficiency disease in plants	E.	Name some physical plant defence responses	
		<ul style="list-style-type: none"><li>stunted growth caused by nitrate deficiency</li><li>chlorosis caused by magnesium deficiency.</li></ul>		<ul style="list-style-type: none"><li>Cellulose cell walls.</li><li>Tough waxy cuticle on leaves.</li><li>Layers of dead cells around stems (bark on trees) which fall off.</li></ul>		
E.	Name a fungal plant disease					
Black spot						

E.	Name some chemical plant defence responses	F.	How can bacteria be grown?	
<ul style="list-style-type: none"><li>Antibacterial chemicals.</li><li>Poisons to deter herbivores. Mechanical adaptations.</li><li>Thorns and hairs deter animals.</li><li>Leaves which droop or curl when touched.</li><li>Mimicry to trick animals.</li></ul>		Bacteria can be grown in a nutrient broth solution or as colonies on an agar gel plate.		
F. .	What is required for investigating the action of disinfectants and antibiotics.			
Uncontaminated cultures of microorganisms				
F.	How do we prepare an uncontaminated culture using aseptic technique?			
1	<ul style="list-style-type: none"><li>Petri dishes and culture media must be sterilised before use</li></ul>			
2	<ul style="list-style-type: none"><li>inoculating loops used to transfer microorganisms to the media must be sterilised by passing them through a flame</li></ul>			
3	<ul style="list-style-type: none"><li>the lid of the Petri dish should be secured with adhesive tape and stored upside down</li></ul>			
4	<ul style="list-style-type: none"><li>in school laboratories, cultures should generally be incubated at 25°C.</li></ul>			

F.	Why do the petri dishes and inoculating loop need to be sterilised?
To prevent contamination of other microorganisms onto the plate	



# Year 9GS - Term 5 - Science/Biology : Topic B2.5 Communicable Diseases

## Antibiotics & Painkillers

Antibiotics = kill bacteria (specific antibiotic for specific bacteria)

**THEY DO NOT KILL VIRUSES**

e.g. penicillin

Antibiotics cannot kill viruses because viruses live inside cells

Painkillers = stop pain (don't kill microbes, just help with symptoms)

e.g. paracetamol

## Development of Drugs

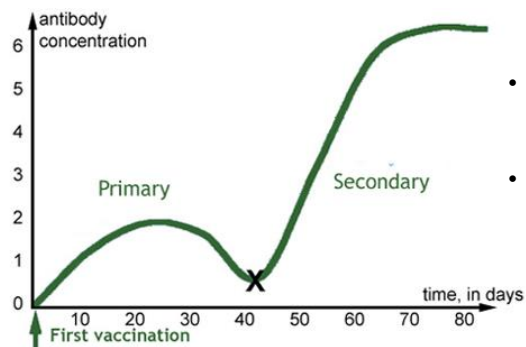
Testing for:

- Safety
- Efficacy (does it work)
- Dosage (how much is needed)

Stage	Description
1	Tested on cells and tissues. Side effects? Efficacy?
2	Tested on animals. Side effects?
3	Clinical trials = tested on humans. 1 <sup>st</sup> health volunteers, 2 <sup>nd</sup> patients with the illness. Dosage gradually increased to optimum.

## Vaccination

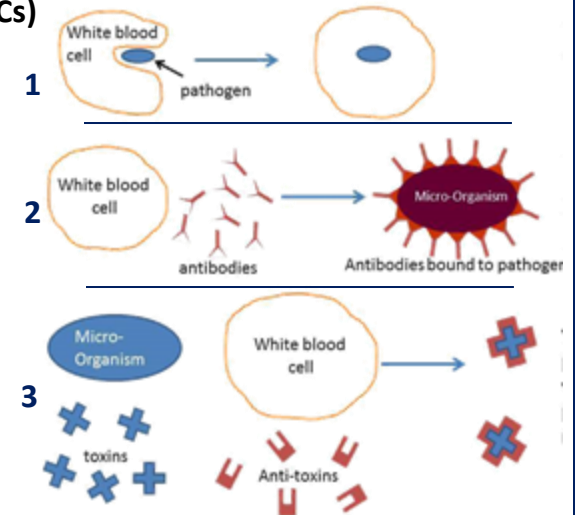
- Introducing small quantities of dead or inactive forms of pathogen into the body.
- Stimulates WBCs to produce antibodies.



- If same pathogen returns (X), WBCs remember how to make the right antibodies.
- They make MORE antibodies, MORE QUICKLY, and they stay in body for LONGER.

## White Blood Cells (WBCs)

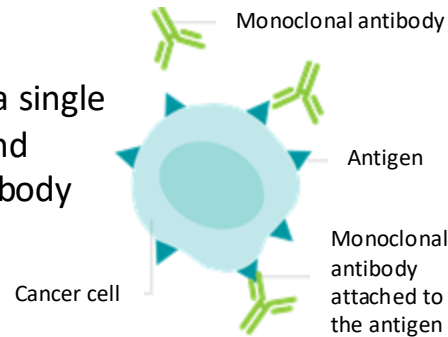
1. Phagocytosis – engulfing the pathogen
2. Producing antibodies – specific to the antigen
3. Producing antitoxins – to neutralise toxins



# Year 9GS - Term 5 - Science/Biology : Topic B2.5 Communicable Diseases

## Monoclonal antibodies

An antibody produced by a single clone of cells or cell line and consisting of identical antibody molecules.

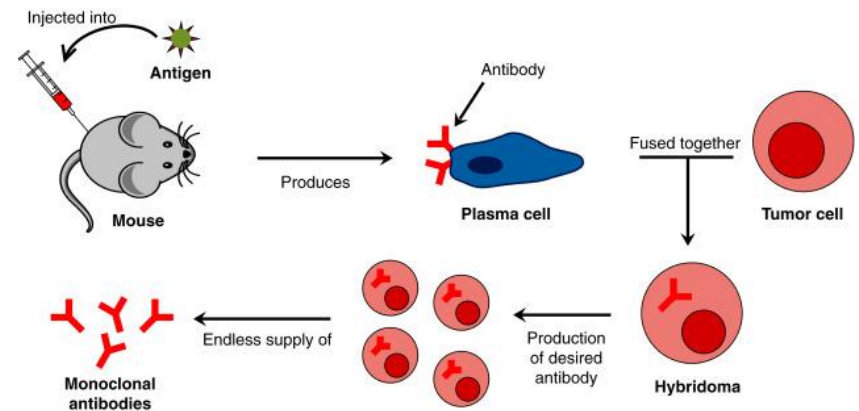


Monoclonal antibodies are produced from a single clone of cells. The antibodies are specific to one binding site on one protein antigen and so are able to target a specific chemical or specific cells in the body.

## Uses of monoclonal antibodies

- For diagnosis such as in pregnancy tests
- In laboratories to measure the levels of hormones and other chemicals in blood, or to detect pathogens
- In research to locate or identify specific molecules in a cell or tissue by binding to them with a fluorescent dye
- To treat some diseases: for cancer the monoclonal antibody can be bound to a radioactive substance, a toxic drug or a chemical which stops cells growing and dividing. It delivers the substance to the cancer cells without harming other cells in the body

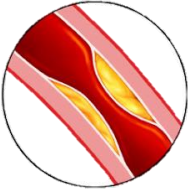
## Production of monoclonal antibodies



1. They are produced by stimulating mouse lymphocytes to make a particular antibody.
2. The lymphocytes are combined with a particular kind of tumour cell to make a cell called a hybridoma cell.
3. The lymphocytes are combined with a particular kind of tumour cell to make a cell called a hybridoma cell.
4. Single hybridoma cells are cloned to produce many identical cells that all produce the same antibody.
5. A large amount of the antibody can be collected and purified.

# Year 9GS - Term 5 - Science/Biology : Topic B2.5 Communicable Diseases

## Coronary Heart Disease (CHD)



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

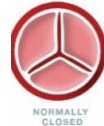
## Faulty Valves

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

faulty



healthy



## Interaction of Diseases

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

## Heart Disease Treatment – Statins vs Stents

Statins	Stents
<ul style="list-style-type: none"> <li>• Medication to be taken everyday</li> <li>• Lowers blood cholesterol</li> <li>• Does not work immediately</li> </ul>	<ul style="list-style-type: none"> <li>• Mesh tube to be inserted into artery to hold it open</li> <li>• Surgery required</li> <li>• Works immediately</li> </ul>



## Risk Factors

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

## Cancer

Uncontrolled cell growth

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

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



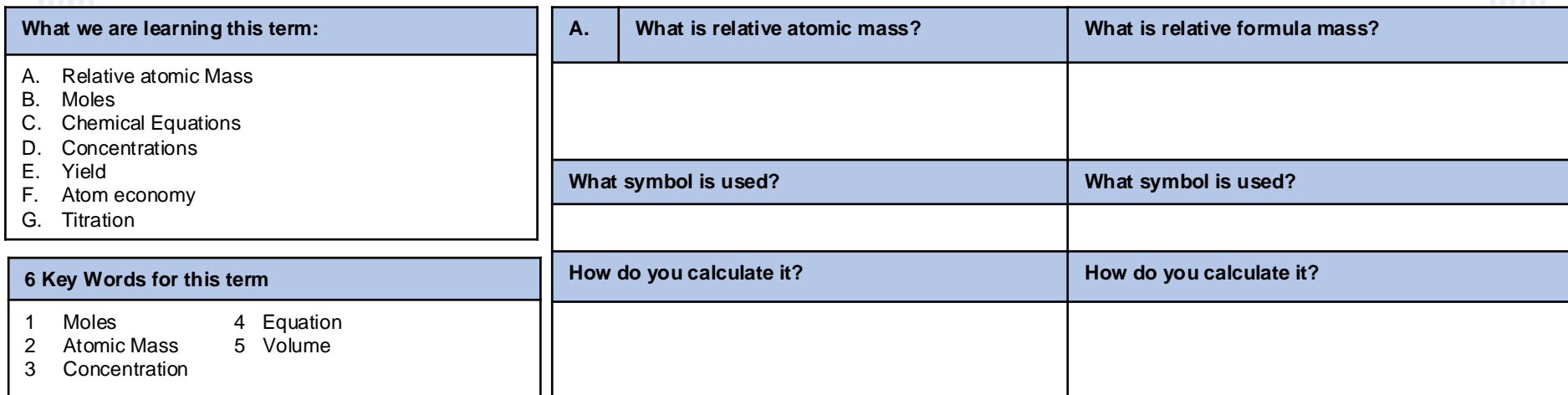
What we are learning this term:		A.	What is relative atomic mass?	What is relative formula mass?
A. Relative atomic Mass B. Moles C. Chemical Equations D. Concentrations E. Yield F. Atom economy G. Titration H. Volume of gases			The average mass of the atoms of an element compared with Carbon-12. (It must take isotopes into account)	The total of the relative atomic masses, added up in the ratio shown in the chemical formula
6 Key Words for this term		What symbol is used?		What symbol is used?
1 Moles 2 Atomic Mass 3 Concentration		A <sub>r</sub>		M <sub>r</sub>
		How do you calculate it?		How do you calculate it?
4 Equation 5 Volume		<ul style="list-style-type: none"><li>Find out the abundance of each isotope</li><li>The fraction of the mass contributed by each isotope is added together</li></ul>		Add the A <sub>r</sub> of each element in the compound together

B.	What is a Mole?
The amount of substance in the relative atomic or formula mass of a substance in grams.	
How many particles are in a mole?	
6 x 10 <sup>23</sup> particles in 1 mole	
What is this number called?	
Avogadro's number	
How can you calculate Moles from masses?	
<ul style="list-style-type: none"><li>Use a periodic table to obtain A<sub>r</sub></li><li>Use the calculation below</li></ul> $\text{Number of moles} = \frac{\text{mass}(g)}{A_r}$	
How can you calculate Masses from Moles?	
<ul style="list-style-type: none"><li>Use a periodic table to obtain A<sub>r</sub></li><li>Use the calculation below</li></ul> $\text{mass}(g) = \text{number of moles} \times A_r$	

C.	What are limiting reactants?
The reactant that gets used up first in a reaction	
What does excess mean?	
If a reagent is in excess, it won't all get used up in a reaction.	

C.	What is Conservation of Mass?
No atoms are created or destroyed in a chemical reaction.	
How does this work for balancing equations?	
You must have the same number of atoms on each side	

D.	What is the concentration of a solution?
How much of a substance is dissolved in a solution	
How do you calculate concentration?	
$\text{concentration} = \frac{\text{amount of solute}}{\text{Volume of solution}}$	



<b>B.</b>	<b>What is a Mole?</b>
<b>How many particles are in a mole?</b>	
<b>What is this number called?</b>	
<b>How can you calculate Moles from masses?</b>	
<b>How can you calculate Masses from Moles?</b>	

C.	What are limiting reactants?
What does excess mean?	

C.	What is Conservation of Mass?
How does this work for balancing equations?	

D.	What is the concentration of a solution?
How do you calculate concentration?	





<b>E.</b>	<b>What is chemical yield?</b>
The yield of a chemical reaction is how much product is made.	
<b>What is percentage yield?</b>	
The percentage yield of a chemical reaction tells you how much product is made compared with the maximum amount that could be made.	
<b>What is theoretical yield?</b>	
The theoretical yield of a chemical reaction is the maximum amount of product that can be made.	
<b>What factors affect the yield of a chemical reaction?</b>	
<ol style="list-style-type: none"><li>1. Product being left behind in the apparatus.</li><li>2. Reversible reactions not going to completion.</li><li>3. Some reactants may produce unexpected reactions.</li><li>4. Some product may be lost as it is separated from the reaction mixture</li></ol>	
<b>How do you calculate percentage yield?</b>	
$\text{Percent yield} = \frac{\text{Actual Yield}}{\text{Theoretical Yield}} \times 100\%$	
<b>H.</b>	<b>What is molar gas volume?</b>
The volume of 1 mole of any gas at room temperature and pressure is 24dm <sup>3</sup> (24000cm <sup>3</sup> )	
<b>What is the molar gas volume used for?</b>	
To calculate the volume of gaseous reactants or products. (A balanced symbol equation is needed to do this).	
<b>F.</b>	<b>What is atom economy?</b>
A measure of the amount of starting materials that end up as useful products.	
<b>How do you calculate atom economy?</b>	
$\% \text{ ATOM ECONOMY} = \frac{\text{Mr OF DESIRED PRODUCT}}{\text{Mr OF TOTAL PRODUCTS}} \times 100$	
<b>Why is it important to maximise atom economy in industrial processes?</b>	
To conserve the Earth's resources and minimise pollution.	
<b>G.</b>	<b>What is a titration used for?</b>
To find the unknown concentration of a solution.	
<b>What are concordant results?</b>	
The volume of two or more <b>titres</b> that are similar in quantity (less than a 0.10 cm <sup>3</sup> difference).	
<b>What is the end point of a reaction?</b>	
The point at which the reaction between an acid and alkali is complete.	
<b>What is a pipette used for in a titration?</b>	
To measure a fixed volume of solution.	
<b>What is a burette used for in a titration?</b>	
To measure the volume of solution added.	
<b>G.</b>	<b>What do you need in order to work out the concentration of an unknown solution by titration?</b>
<ul style="list-style-type: none"><li>• The accurate concentration of one solution.</li><li>• The volume of unknown solution needed to react with a known volume of the accurate known solution.</li><li>• The balanced equation for the reaction.</li></ul>	

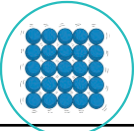

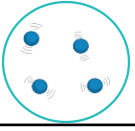


E.	What is chemical yield?
What is percentage yield?	
What is theoretical yield?	
What factors affect the yield of a chemical reaction?	
1. 2. 3. 4.	
How do you calculate percentage yield?	
H.	What is molar gas volume?
What is the molar gas volume used for?	

F.	What is atom economy?
How do you calculate atom economy?	
Why is it important to maximise atom economy in industrial processes?	
.	
G.	What is a titration used for?
What are concordant results?	
What is the end point of a reaction?	
What is a pipette used for in a titration?	
What is a burette used for in a titration?	

G.	What do you need in order to work out the concentration of an unknown solution by titration?
. . .	

# Particle model of matter

State	Pattern	Energy and movement	Forces between particles
<b>Solid</b> 	Ordered and all touching	Vibrate around fixed positions	Strong forces between particles
<b>Liquid</b> 	Random and touching	Move around randomly	Weaker than in a solid
<b>Gas</b> 	Random and far apart	Move around randomly	Weak forces of attraction

Models	+	-
<b>Particle diagrams</b>	Easy to see/draw arrangement	<ul style="list-style-type: none"> <li>Can't see the forces between particles</li> <li>Particles look like flat circles rather than 3D spheres</li> <li>Movement isn't shown</li> </ul>
<b>Kinetic models (eg marbles or animations)</b>	Easy to see particle arrangement  Can see the movement of particles	Can't see forces between particles

## Density

Density is mass per cm<sup>3</sup>  
It can be calculated using:

$$\text{Density} = \text{mass} \div \text{volume}$$

$$\rho = m \div V$$

**Required practical – measuring the density of different materials.**

### For regular solids :

Mass measured by **top pan balance**

Volume measured by measuring **length x breadth x height**

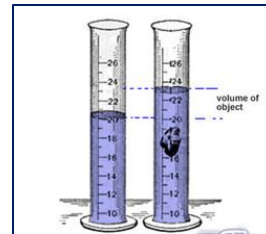
### For irregular solids:

Mass measured by **top pan balance**

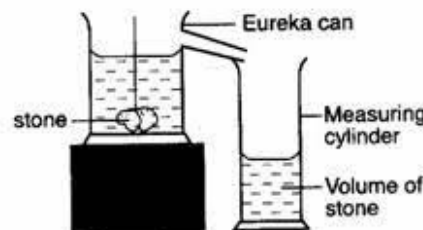
Volume measured by **displacement of water**

**This means putting the object into water and measuring the volume of water 'pushed out'**

Measure the volume of small objects by putting them into a measuring cylinder with 100cm<sup>3</sup> water in



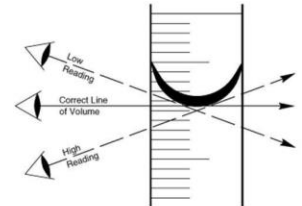
Measure the volume of larger objects by putting them into a full eureka can and catching and measuring the water that is displaced



Zero error



Read the meniscus!



## Required practical continued : Density of liquids

- Find the mass of an empty measuring cylinder using a top pan balance.
- Pour a known volume (100ml) of liquid into the measuring cylinder.
- Use the meniscus to measure the volume of the liquid accurately. This is the volume.
- Now measure the mass of the measuring cylinder + the liquid combined.
- Subtract the mass of the empty measuring cylinder and this is the mass of the liquid.

$$\text{Density} = \text{mass} \div \text{volume.}$$

### Particle model

1. Describe the arrangement of the particles in a solid, a liquid and a gas
2. Describe the movement of the particles in a solid, a liquid and a gas
3. In which state of matter are the forces between the particles the weakest?
4. In which state of matter are the forces between the particles the strongest?
5. Give one advantage of using particle diagrams to show the different states of matter
6. Give three disadvantages of using particle diagrams to show the different states of matter
7. Give two advantages of using kinetic models to show the different states of matter
8. Give one disadvantages of using kinetic models to show the different states of matter

### Density

1. Give the formula that links density, mass and volume?
2. Give a unit for density
3. Which piece of equipment is used to measure mass of an object?
4. What type of error is it if a balance reads 0.03g when nothing is resting on it?
5. What term is used to describe when water is pushed out of the way by a solid object?
6. Name two pieces of equipment that could be used to measure the volume of an irregular object
7. What three measurements do you need to calculate the volume of a regular object?

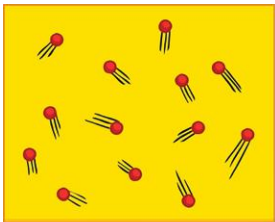
### Internal energy

The temperature of any substance is related to the average speed of its particles.

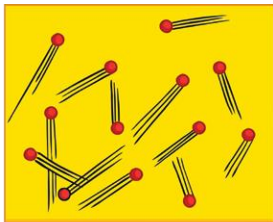
The internal energy of a system is the total kinetic energy and the potential energy of the particles

The particles in a system vibrate or move around because they have energy in their kinetic energy stores

The faster a particle moves, the greater its kinetic energy store



Low Temperature



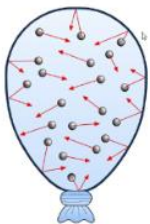
High Temperature

The particles also have energy in their potential energy stores due to their position.

As particles move further apart, their potential energy stores increase

### Gas pressure

The particles in a gas are in constant random motion. They collide with the walls of their container. This exerts a force **on the container**.



The more energy the particles have, the higher the temperature.

An increase in temperature of a gas causes the particles to move further apart.

If this is not possible, because of the container, then there is an increase in pressure.

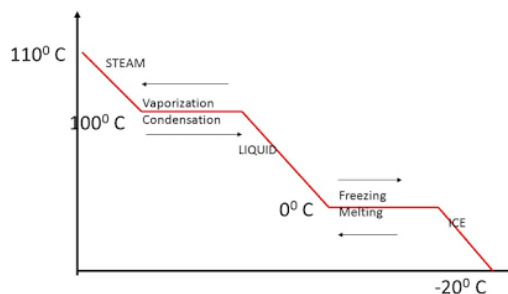
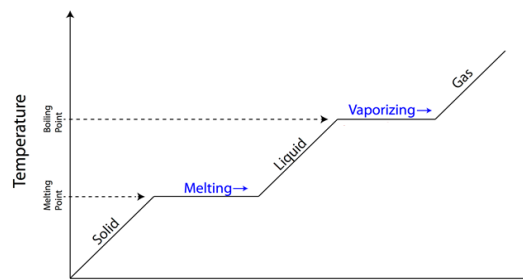
### Heating and cooling

When the internal energy of a substance changes, then either :

- The **temperature** of the substance changes
- The **state** of the substance changes

This can be seen by plotting the temperature change during **heating** or **cooling**.

Heating a solid would give us a graph that looks like this:



- The **temperature stays the same**.
- This is when a change of state is happening – for example melting.
- The energy transferred is not increasing the mean particle speed – it is increasing the potential energy of the particles.

When the line is increasing (heating) or decreasing (cooling)

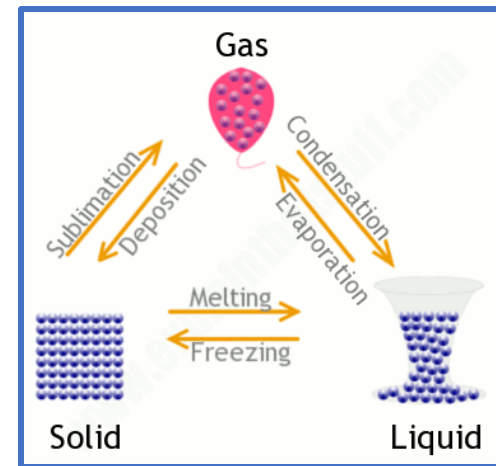
- The temperature is increasing / decreasing
- The kinetic energy store is increasing / decreasing
- Average particle speed is increasing / decreasing

### Specific latent heat

Specific latent heat is the amount of energy needed to **change 1kg of a substance from one state to another** without changing the temperature.

Specific latent heat will be different for different materials.

- Energy needed to change 1kg of Solid → liquid - **specific latent heat of fusion**
- Energy needed to change 1kg of Liquid → gas - **specific latent heat of vaporisation**



The amount of energy needed to change 1Kg of a material is found by the equation:

$$\text{Energy} = \text{mass (kg)} \times \text{specific latent heat (L)}$$
$$E = m L$$

### Specific heat capacity

This is the amount of energy needed to change the temperature of 1Kg of a substance by 1°C. It is calculated by:

$$E = \text{specific heat capacity} \times \text{mass} \times \text{temp change}$$
$$E = \text{SHC} \times m \times \theta$$



## Internal energy

1. What two stores of energy make up internal energy?
2. Which energy store is linked with particle movement?
3. Which energy store increases if the particles in a substance move further apart?
4. What happens to the temperature when the kinetic store of the particles increases?

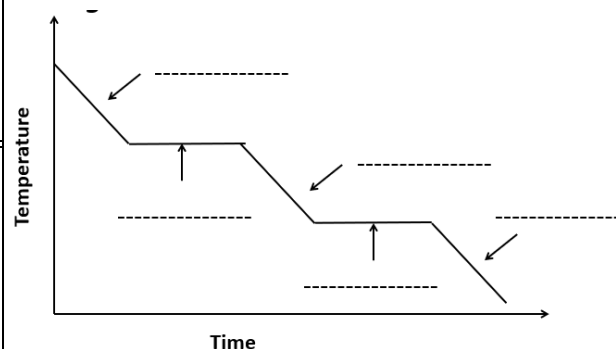
## Gas pressure

1. What causes gas pressure?
2. What happens to the temperature of a gas if the kinetic energy store of the particles increases?
3. What happens to the space between particles in a gas as it heats up?
4. If the volume of the gas is kept constant, what happens to the pressure?

## Heating and cooling

1. What two things can happen to a substance when the internal energy changes?
2. Label the graph below using the words given:

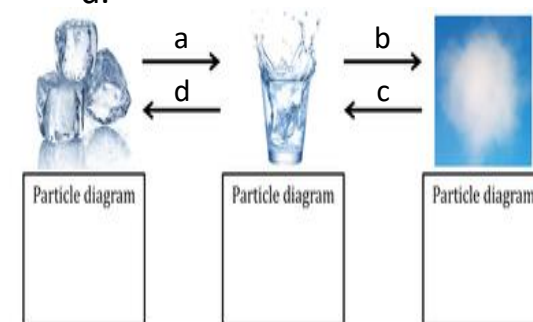
liquid, gas, solid, condensing, freezing



3. What is happening to temperature when the line is flat on a heating or cooling curve?
4. What is happening to the substance when the line is flat?

## Specific latent heat

1. What is specific latent heat?
2. What is the term given to the amount of energy needed to change 1kg of a liquid into a solid?
3. What is the specific latent heat of vaporisation?
4. Label the changes of state below
  - a.
  - b.
  - c.
  - d.



5. Draw the particle diagrams in the boxes

Y9- T2 -

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

B.	What happens at plate margins?
Destructive plate margin	At <u>destructive plate boundaries</u> , two plates move towards each other, the denser oceanic plate is forced under the less dense continental plate in a process called subduction
Constructive plate margin	At <u>constructive plate boundaries</u> , two plates are moving away from each other..
Conservative plate margin	At conservative plate margins, two plates are <u>moving past each other</u> . The plates get stuck which builds up pressure. The sudden release of this <u>pressure</u> causes <u>violent</u> earthquakes.
Subduction/ Subduction Zone	To go underneath. / the point at which the oceanic plate sinks beneath the continental one at a destructive/ subductive plate margin.

D.	Example of Tectonic Hazard HIC: Chile
Date	27 February 2010
Magnitude	8.8
No. Dead	521
Epicentre	Off the coast of Chile
Causes	Destructive plate: South American (continental) & Nazca Plate (oceanic)
Primary effects	<ul style="list-style-type: none"><li>- 500 dead</li><li>- 12,000 injured</li><li>- 500,000 homes damaged</li><li>- Santiago airport slightly damaged</li><li>- Several bridges and roads damaged and a hospital</li></ul>
Secondary effects	<ul style="list-style-type: none"><li>- Much of Chile lost power, water supplies and communication cut off</li><li>- Tsunami warning</li><li>- A fire in a chemical plant &gt; evacuation</li><li>- Copper mines suffered damage (Copper crucial to economy)</li></ul>
Short term responses	<ul style="list-style-type: none"><li>- After day Ten 90% houses had power back, roads quickly fixed</li><li>- Temporary repairs to main roads</li></ul>
Long-term responses	<ul style="list-style-type: none"><li>- One month later houses rebuilding plan, due to the strong economy, it recovered and rebuilt without aid.</li></ul>

C	What happens at plate margins?
Hazard risk	How likely you are to be harmed
Hazardous	Dangerous or a risk to life.

E.	Example of Tectonic Hazard LIC: Nepal
Date	25 April 2015
Magnitude	7.9
No. Dead	521
Epicentre	80km from the capital city Kathmandu
Causes	Destructive plate: Indo-Australian plate colliding with the Eurasian plate
Primary effects	<ul style="list-style-type: none"><li>- 9000 dead</li><li>- 20,000 injured</li><li>- 3 million made homeless</li><li>- Electricity, water supplies and communications affected</li><li>- 7000 schools destroyed, 50% of shops destroyed</li></ul>
Secondary effects	<ul style="list-style-type: none"><li>- Landslides and avalanches that blocked roads</li><li>- Avalanches on Mount Everest killed at least 19 people</li><li>- Landslides blocked the Kali Gandaki River causing flooding North of Kathmandu</li></ul>
Short term responses	<ul style="list-style-type: none"><li>- Search and rescue teams</li><li>- Emergency food and water/ aid from the UK</li></ul>
Long-term responses	<ul style="list-style-type: none"><li>- 7000 schools to be rebuilt or repaired</li><li>- Stricter controls on building codes</li></ul>
F.	How do we manage tectonic hazards?
Monitoring	Warning signs: gases, sides of volcanoes swell, change shape and size, heat melts snow, rocks fracture, earthquakes. Monitored through seismographs, and tiltmeters (shape).
Prediction	Based on scientific monitoring as above.
Protection	Little can be done. However, you can create earth embankments or explosives to divert lava away from property.
Planning	When machines begin to do the work which humans once completed.
Preparedness	How ready you are for a situation

Y9- T2 -

A.	Background:
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B.	What happens at plate margins?
Destructive plate margin	
Constructive plate margin	
Conservative plate margin	
Subduction/ Subduction Zone	

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



## Year 9 History : Medicine in Medieval England c1250-1500



What we are learning this term:		B. Key People			
1.1 Ideas about the cause of disease and illness 1.2 Approaches to treatment and prevention 1.3 Dealing with the Black Death 1348-49		<b>Hippocrates</b>	<b>Galen</b>	<b>Physicians, apothecaries and surgeons</b>	<b>Hospitals</b>
<b>A.</b>	<b>Can you define these key words?</b>	‘Father of Medicine’ – 4 humours, clinical observation (watch and record details, use this to help with future cases), importance of exercise, Hippocratic Oath for doctors (to preserve life)	Built on Hippocrates’ ideas – theory of opposites (if cold, give something hot), also dissected animals to find out about anatomy (structure of body). Proved brain, not the heart, controls the body	<ul style="list-style-type: none"><li>• <b>Physicians</b> – diagnosed + recommended treatment, trained at university for around 7 years. Did not get to see dissections so new little about body. Learned everything from Galen’s books. Only for super rich</li><li>• <b>Apothecaries</b> – mixed herbal remedies (joined a guild, worked for master to train).</li><li>• <b>Surgeons</b> – least qualified, also cut hair. Learned on job and only performed minor, on-invasive surgeries</li><li>• <b>Monks and nuns</b> – worked in hospitals mostly prayed for patients and gave comfort. Not allowed to cut or bleed patients so could not do surgery</li><li>• <b>Housewives and mothers</b> – treated most people. Mixed herbal remedies and treated minor wounds</li></ul>	<ul style="list-style-type: none"><li>• Ran by monks and nuns</li><li>• Offered patients shelter, beds, food and very limited treatment.</li><li>• Treatments mostly religious based – praying</li><li>• Patients would offer share beds which led to allot of diseases spreading around the hospitals</li></ul>
Miasma	Bad air that was believed to be filled with harmful fumes.				
Quarantine	Separating the sick from the healthy to stop the spread of a disease.				
Humours	The humours were four fluids that were thought to spread throughout the body and influence its health.				
Purging	To get rid of anything unwanted.				
Phlebotomey	The drawing of blood by opening a vein.				
Leprosy	a painful skin disease				
Prevention	To stop something from happening	<b>C. What were the causes of disease in Medieval England?</b>			
Treatment	giving medicine or using other means to help a person get better when sick or hurt	<u>Causes</u>		<u>Prevention</u>	<u>Treatments</u>
Apothecary	A person who mixes herbal remedies and treated patients as an alternative to a doctor as they were cheaper.	<b>Religious – Punishment from God</b> God has sent an illness as punishment for sins. Especially true at times of panic such as the Black Death.		<b>Religious - Church</b> – Lead a life free of sin.  Regular prayers and confessions.  Offering tithes to the church to make sure sins were forgiven quickly.	<b>Religious – Healing prayers and incantations</b>  Paying for a special mass to be said  Fasting  Pilgrimages
Barber surgeon	barbers and surgeons who also performed minor operations such as removal of warts .	<b>Rational - Miasma</b> – You had breathed in bad air. This was thought to come from swamps or rubbish. During this period there was allot of animal much in towns and often open sewers in the streets meaning the whole place stank. In these filthy places disease was more common seemingly proving this theory		<b>Rational and religious - Regimen Sanitatis</b> – A set of instructions provided by physicians to maintain good health.  Bathing was also used to prevent miasma.	<b>Supernatural - Astrology</b> – Treatments varied according the the horoscope of the patient. The alignment of the planets was checked at every stage of the treatment prescribed eg herb gathering.
<b>D.</b>	<b>Dealing with the Black Death</b>	<b>Rational - The Theory of the Four Humors</b> – The 4 liquids in your body (blood, yellow bile, black bile, phlegm) were seen to be out of balance making you ill. Recovery came from getting them back in to balance through the theory of opposites Created in ancient Greece by Hippocrates.		<b>Rational - Diet</b> – Eating to much was strongly discouraged. What and when you ate were considered to be important in preventing a humoural imbalance.	<b>Rational - Humoral</b> Treatments – Blood letting – Bad humours could be removed from the body by removing some of the blood. Purging – Purging the digestive system to remove any leftover food. Eg using a laxative.
What is the Black Death?	<ul style="list-style-type: none"><li>• Bubonic plague – outbreak in 1348-9 – 1/3<sup>rd</sup> to 1/ 2 of the population died in England. Caused by bacteria Yersinia pestis that was thought to have originated in China and came to Britain on fleas, on rats on ships.</li></ul>	<b>Supernatural - Astrology</b> – Impact of the stars and planets on health. Physicians would use star charts to examine a patient and work out what was wrong with them.		<b>Rational - Purifying the air</b> –This was achieved by spreading sweet herbs.	<b>Rational - Herbal remedies</b> – Using herbal infusions to drink, sniff or bathe in.
Causes	Miasma – bad air from the filthy conditions making you ill. Astrology – there was a weird alinement of Jupiter, mars and Satum the previous year which was blamed for the plague Punishment from God- = People thought that society had become wicked so God had sent the plague to punish them.				
Treatments	Confesses sins and pray, bleeding and purging (but seemed to make worse), sweet herbs or fire to dean air.				
Prevention	Pray and fast, leave the area, carry sweet herbs, quarantine (new people stay away for 40 days), clean streets (or don’t, maybe bad smell will drive out miasma)				



What we are learning this term:		B. Key People			
1.1 Ideas about the cause of disease and illness 1.2 Approaches to treatment and prevention 1.3 Dealing with the Black Death 1348-49		Hippocrates	Galen	Physicians, apothecaries and surgeons	Hospitals
A.	Can you define these key words?				
Miasma					
Quarantine					
Humours					
Purging					
Phlebotmey					
Leprosy					
Prevention					
Treatment		<u>Causes</u>		<u>Prevention</u>	<u>Treatments</u>
Apothecary					
Barber surgeon					
D.	Dealing with the Black Death				
What is the Black Death?					
Causes					
Treatments					
Prevention					



Year 9 Religious Education: Buddhism		B.	<u><b>The Buddha and Enlightenment</b></u>		
A.	<i>Can you define these key words?</i>		Religion in India	Hinduism was the most common religion – Hinduism and Buddhism have common origins and have lots of similarities. Hinduism, Buddhism and Sikhism are known as Dharmic religions	
Key word	Key definition		Caste system	Determined at birth and channels them into the caste's occupation, their place in society, who they can marry People don't do jobs which don't fit their caste and the lowest caste is treated badly by others	
Ascetic	Characterized by severe self-discipline and avoiding all forms of indulgence, typically for religious reasons		The Buddha's early childhood	Born as a prince and lived in a palace - family belonged o the Kshatriya caste which was associated with rulers and leaders He was expected to follow his father as a local ruler but a seer predicted he would become a great ruler	
Enlightenment	Understanding and accepting the truth about life and suffering and entering the state of pure happiness		Religious quest	Siddhartha saw 4 things which changed his perspective - old man, a sick person, a corpse, a holy man He realised that he no longer needed to live a luxury life but wanted to live a life on "The Middle Way"	
Caste	A Hindu social order of higher and lower class		The middle way	The Buddha experienced wealth and poverty but didn't get satisfaction so he meditated until he achieved enlightenment	
Impermanence	The state of fact of lasting for only a limited period of time		C.		<u><b>Three Marks of Existence (Universal Truths)</b></u>
Craving	A powerful desire for something		Anicca (Impermanence)	All things are constantly changing – nothing is fixed & Everything depends on conditions which can also change - Even stars and galaxies are changing	
Karma	The force produced by a person's actions in one life that influences what happens to them in future lives		Anatta (No soul)	No permanent identity/no separate self As conditions change, people change too e.g. our personality and the way that we act - Nothing has a fixed or permanent nature so there is no soul which is eternal	
Samsara	The cycle of birth, death and rebirth to which life in the material world is bound		Dukkha (dissatisfaction)	If life is always changing, all that we know will eventually stop existing -Even if we escape illness, we will one day face death The world is unsatisfactory because every time you gain happiness, things change again	
Cessation	Ending something or being brought to an end		D.	<u><b>Karma and rebirth</b></u>	
Puja	Ceremonies that involve meditation, prayer and offerings		Karma	If someone does a good action, they will get good karma - You can be free from the negative effects of negative karma if you forgive what happened in the past, accept it and understand it	
Meditation	Thinking quietly as a way to calm the mind		Samsara	When someone dies, their energy passes into another form which depends on their actions in their past life The cycle ends when they achieve enlightenment	
			F.		<u><b>Puja and meditation</b></u>
E.	<u><b>Four noble truths</b></u>		Samatha meditation	Used to try and focus the mind by concentrating on breathing and to concentrate at a deeper level Might use visual objects to aid meditation e.g. a coloured desk	
Dukkha	There is suffering as a part of life because of sickness or frustration and unhappiness with life		Vipassana meditation	Helps Buddhists to seek truth about reality and develop wisdom so they can reach enlightenment Gaining insight j to true reality by reflecting on the teachings of the Buddha Usually practised in a sitting position with legs crossed	
Tanha	Craving for more because everything is constantly changing		G.		<u><b>Ethical way of living</b></u>
Niroda	Cessation – to stop suffering you need to stop craving more and more things		Abstain from taking life (don't harm or kill living things)	Abstain from misusing senses (no over indulgence)	Abstain from taking drugs and alcohol which cloud the mind and could also include not playing video games or forms of work which numb the mind
Magga	The Middle Way – set out in the form of a path of eight steps – these are 8 features of Buddhist life		Abstain from taking what is not freely given (against stealing and exploiting people)	Abstain from wrong speech (lying, slander, gossip, harsh speech and idle chatter)	

Year 9 Religious Education: Buddhism			B.	<u>The Buddha and Enlightenment</u>		
A.	Can you define these key words?		Religion in India			
Key word	Key definition		Caste system			
Ascetic			The Buddha's early childhood			
Enlightenment			Religious quest			
Caste			The middle way			
Impermanence						
Craving						
Karma			C.	<u>Three Marks of Existence (Universal Truths)</u>		
Samsara			Annica (Impermanence)			
Cessation			Anatta (No soul)			
Puja			Dukkha (dissatisfaction)			
Meditation			D.	<u>Karma and rebirth</u>		
			Karma			
			Samsara			
E.	<u>Four noble truths</u>		F.	<u>Puja and meditation</u>		
Dukkha			Samatha meditation			
Tanha			Vipassana meditation			
Niroda			G.	<u>Ethical way of living</u>		
Magga			Abstain from taking life (don't harm or kill living things)			
			Abstain from taking what is not freely given (against stealing and exploiting people)			



# GCSE Unit 4 SPANISH Knowledge organiser.

## Topic Customs and Festivals



What we are learning this term:	
A. Learning about Spanish life and routines B. Learning about local customs C. Talking about a Spanish festival D. Learning about Latin American culture E. Skim reading for key information F. Using past expressions of time	
6 Key Words for this term	
1. divertirse	4. el desfile
2. hispánico	5. celebrarse
3. el turismo	6. los antepasados

4.1G La vida en familia	
a media mañana	at mid-morning
acostarse	to go to bed
el bollo	bun
la cena	evening meal
coger	to catch
la comida	food, meal, lunch
el desayuno	breakfast
la dieta	diet
la leche	milk
levantarse	to get up
ligero/a	light
participar	to participate, to take part
probar	to try, to try out
el recreo	break
saludable	healthy
la sobremesa	sitting chatting at the table
after a meal	
el trabajador	worker
la tradición	tradition
traer	to bring
tranquilamente	calmly
el vaso	glass

4.1H ¿Cambian las costumbres?	
acostarse	to go to bed
cerrarse	to close
coger	to catch
corto/a	short
empezar	to start
hace calor	it is hot
levantarse	to get up
el marido	husband
la mayoría	majority
el ordenador	computer

4.1F Algunas costumbres regionales	
la actuación	performance
agradable	pleasant
el ambiente	atmosphere
antiguo/a	old
la batalla	battle
el caballo	horse
la camisa	shirt
el concurso	competition
conmemorar	to commemorate
correr	to run
la costumbre	custom
demasiado	too much, too many
el desfile	parade, procession
el diablo	devil
divertirse	to enjoy oneself
emocionante	exciting
el encierro	bull run
encontrar	to find
enorme	enormous
entender	to understand
entrenarse	to train
el espectáculo	show, display
extraño/a	strange
fatal	awful
formar	to form
histórico	historic
humano	human
impresionante	impressive
incómodo/a	uncomfortable
llevar	to wear, take, carry
el Mediterráneo	Mediterranean
el/la moro/a	Moor (historically a person from North Africa)
nadie	no one
natural	natural
el origen	origin
pasarlo bien	to have a good time
el peligro	danger
peligroso/a	dangerous
por encima de	over
precioso/a	beautiful
el producto	product
saltar	to jump
la seguridad	safety, security
la suerte	luck
el toro	bull
la torre	tower
el traje	suit, costume
único/a	only, unique
varios/as	several
vestirse (de)	to dress (in)

Key Verbs				
<u>Celebrar</u> To celebrate	<u>Ir</u> To go	<u>Disfrutar</u> To enjoy	<u>Hacer –</u> to do/make	<u>Disfrazar</u> To dress up
Celebro I celebrate	Voy I go	Disfruto I enjoy	Hago I do	Disfrazo I dress up
Celebras You celebrate	Vas You go	Disfrutas You enjoy	Haces You do	Disfrazas You dress up
Celebra – he/she celebrates	Va s/he goes	Disfruta He/she enjoys	Hace s/he does	Disfraza He/she dresses up
Celebramos We celebrate	Vamos They go	Disfrutamos We enjoy	Hacemos We do	Disfrizamos We dress up
Celebran They celebrate	Van They go	Disfrutan They enjoy	Hacen They do	Disfrazan They dress up

4.2G Las fiestas de España – la Tomatina	
al final	at the end
americano/a	American
australiano/a	Australian
británico/a	British
el camión	lorry
la camiseta	T-shirt
el camaval	carnival
divertirse	to enjoy oneself
duchar	to shower
empezar	to start
la entrada	(entry) ticket
la foto	photo
la gente	people
hace (+ tiempo)	(time) ago
japonés/esa	Japanese
limitar	to limit
limpiar	to clean
llegar	to arrive
la manguera	hose, hosepipe
mojado/a	wet, soaked
el montón	heap, pile
la plaza mayor	the main square
primero/a	first
pronto	soon
rojo/a	red
sucio/a	dirty
típico/a	typical
tirar	to throw
todo el mundo	everyone, everybody
el tomate	tomato
el turismo	tourism
varios/as	several
el/la visitante	visitor
el/la voluntario/a	volunteer
volver	to return, to go back

4.2F Las fiestas del mundo hispano	
el altar	altar, shrine
los antepasados	ancestors
aparecer	to appear
el azúcar	sugar
la calavera	skull
celebrarse	to be held
el cementerio	cemetery
cerca de	close to, near to
la ciudad	city, town
comenzar	to start
completamente	completely
describir	to describe
el desfile	parade
el diablo	devil
disfrazado	dressed up, disguised
en honor a	in honour of
encendido/a	lit
el esqueleto	skeleton
el estaño	tin
los familiares	family members
famoso/a	famous
la flor	flower
hispánico	Hispanic (i.e. of the Spanish speaking world)
la mina	mine
el/la minero/a	miner
el mole	'mole' sauce / Mexican chocolate sauce
la montaña	mountain
muerto	dead
la normalidad	normality
el número	number
la plata	silver
proteger	to protect
el pueblo	village, (small) town



## What we are learning this term:

- A. Learning about Spanish life and routines
- B. Learning about local customs
- C. Talking about a Spanish festival
- D. Learning about Latin American culture
- E. Skim reading for key information
- F. Using past expressions of time

## 6 Key Words for this term

- |               |                    |
|---------------|--------------------|
| 1. divertirse | 4. el desfile      |
| 2. hispánico  | 5. celebrarse      |
| 3. el turismo | 6. los antepasados |

## 4.1G La vida en familia

a media mañana	_____
acostarse	_____
el bollo	_____
la cena	_____
_____	to catch
_____	food, meal, lunch
_____	breakfast
la dieta	_____
la leche	_____
_____	to get up
_____	light
_____	to participate, to take part
_____	to try, to try out
el recreo	_____
saludable	_____
la sobremesa	sitting chatting at the table
after a meal	_____
el trabajador	_____
la tradición	_____
_____	to bring
_____	calmly
_____	glass

## 4.1H ¿Cambian las costumbres?

_____	to go to bed
_____	to close
coger	_____
corto/a	_____
empezar	_____
_____	it is hot
_____	to get up
el marido	_____
la mayoría	_____
_____	computer

## 4.1F Algunas costumbres regionales

_____	performance
_____	pleasant
el ambiente	_____
antiguo/a	_____
_____	battle
el _____	horse
la camisa	_____
el _____	competition
conmemorar	to _____
correr	_____
la _____	custom
_____	too much, too many
_____	parade, procession
el diablo	_____
divertirse	to _____
emocionante	_____
el encierro	_____
_____	to find
_____	enormous
_____	to understand
entrenarse	_____
el espectáculo	_____
extraño/a	_____
_____	awful
_____	to form
histórico	_____
humano	_____
_____	impressive
_____	uncomfortable
_____	to _____
llevar	_____
el Mediterráneo	_____
el/la moro/a	Moor (historically a
person from North Africa)	_____
nadie	_____
_____	natural
_____	origin
pasarlo bien	_____
el peligro	_____
peligroso/a	_____
_____	over
_____	beautiful
_____	product
_____	to jump
la _____	safety, security
la suerte	_____
el toro	_____
la torre	_____
_____	suit, costume
_____	only, unique
varios/as	_____
vestirse (de)	_____

## Key Verbs

To celebrate	To go	To enjoy	Hacer – to do/make	Disfrazar To dress up
I celebrate	Voy I go	Disfruto	Hago	Disfrazo
Celebras You _____	You go	You enjoy	You do	You dress up
Celebra – he/she celebrates	s/he goes	Disfruta He/she enjoys	Hace	Disfraza He/she dresses up
We celebrate	Vamos	Disfrutamos We enjoy	We do	Disfrazamos
Celebran	They go	They enjoy	They do	They dress up

## 4.2G Las fiestas de España – la Tomatina

al final	_____
_____	American
australiano/a	_____
_____	British
_____	lorry
la camiseta	_____
el camaval	_____
_____	to enjoy oneself
_____	to shower
empezar	to _____
_____	(entry) ticket
la _____	photo
la gente	_____
hace (+ tiempo)	_____
_____	Japanese
_____	to limit
_____	to clean
llegar	_____
la manguera	_____
mojado/a	_____
_____	heap, pile
_____	the main square
_____	first
pronto	_____
rojo/a	_____
sucio/a	_____
_____	typical
_____	to throw
todo el mundo	_____
el tomate	_____
el turismo	_____
_____	several
el/la visitante	_____
_____	volunteer
_____	to return, to go back, to
come back	_____

## 4.2F Las fiestas del mundo hispano

_____	altar, shrine
los antepasados	_____
aparecer	_____
el azúcar	_____
la _____	skull
_____	to be held
el _____	cemetery
_____	close to, near to
la ciudad	_____
comenzar	_____
completamente	_____
_____	to describe
el _____	parade
el _____	devil
_____	dressed up, disguised
en honor a	_____
encendido/a	_____
el esqueleto	_____
el estaño	_____
los familiares	_____
_____	famous
la flor	_____
_____	Hispanic (i.e. of the
Spanish speaking world)	_____
la mina	_____
el/la minero/a	_____
_____	'mole' sauce /
Mexican chocolate sauce	_____
la montaña	_____
muerto	_____
la normalidad	_____
el _____	number
la _____	silver
_____	to protect
el pueblo	_____



Translation Practice. G – blue F – orange H - Green	
Normalmente _____ cereals	Normally <b>for breakfast we have...</b>
Ayer _____ una manzana	Yesterday <b>I ate</b> an apple
Carmen _____ de casa a las ocho	Carmen <b>leaves</b> the house at 8.00
Esta tarde _____ con la familia de mi amigo	This afternoon <b>I chatted</b> with my friend's family
Muchas veces no _____ nada	Many times <b>they don't drink</b> anything
No hablamos _____	We don't speak <b>a lot</b>
El año pasado _____ Pamplona	Last year <b>I visited</b> Pamplona
El _____ es una tradición extraña	The <b>bull run</b> is a strange tradition
Fue muy _____	It was very <b>exciting</b>
_____ dos años fuimos a Burgos	2 years <b>ago</b> we went to Burgos
Ayer fuimos a ver el _____	Yesterday we went to see the <b>procession</b>
El pueblo _____ interesante	The town <b>was</b> interesting
Vimos un _____ muy interesante	We saw a very interesting <b>competition</b>
¿Qué _____?	What <b>did you do?</b>
Hoy me _____ muy temprano	Today <b>I got up</b> very early
Compré _____ para mi familia.	I bought <b>presents</b> for my family
La _____ fue que..	The <b>disadvantage</b> was that...
_____ mucha basura.	<b>There was</b> a lot of rubbish.

Key Questions: Answer the following in your own words. Use these model answers	
Describe una fiesta popular en España	Una fiesta muy popular en España es la Tomatina. La gente celebra la Tomatina en Agosto en Buñol cerca de Valencia. Durante la fiesta, la gente tira tomates, hay desfiles y bailes, se puede comer comida tradicional, la gente lleva disfraces. Después de la fiesta las calles están llenas de tomates. Es mi fiesta española favorita porque es muy entretenida y cómica.
Describe una fiesta popular en tu país	En Inglaterra celebramos la fiesta de Fuegos artificiales. Cada 5 de noviembre, celebramos el día de Guy Fawkes. Durante la noche, la gente va a parques o el centro de la ciudad y hay muchos fuegos artificiales. Celebra la noche cuando Guy Fawkes intentó poner fuego al gobierno de Inglaterra. Es muy entretenida y cómica.
Describe tu experiencia la última vez que fuiste a una fiesta en tu país	La última vez que fui a una fiesta en Inglaterra fue muy entretenida y cómica. Fue en Noviembre cuando celebramos la fiesta de Guy Fawkes. Fuimos en el centro de la ciudad o el parque para ver muchos fuegos artificiales. Fue muy entretenido, porque comí algodón de azúcar y pasé la noche con mis amigos.
¿Qué diferencias notas entre la vida española y la vida de tu propio país?	La vida en España y en Inglaterra es un poco diferente. En España se come una dieta mediterránea, la gente come muchas frutas, verduras, mucho pescado y aceite de oliva. En Inglaterra comemos más patatas fritas y más carne y menos frutas y verduras. En Inglaterra los jóvenes suelen llevar uniforme para ir al colegio pero en España los jóvenes no llevan uniforme. ¡Qué bueno! También, en España los jóvenes de 17 o 18 años no suelen emborracharse durante el fin de semana pero en Inglaterra hay más problemas con los jóvenes y el alcohol.

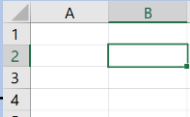
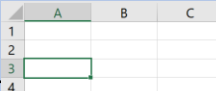
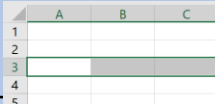
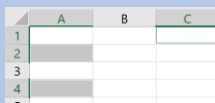
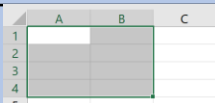
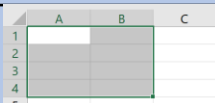
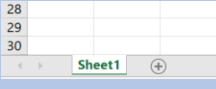
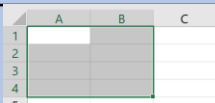
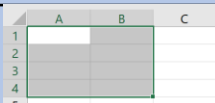
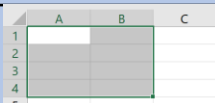






Key Grammar	
Forming the preterite (past tense). Always remove the –AR, –ER, –IR endings first	Remember the preterite (past) tense endings for –AR, –ER, –IR verbs. They are:  -AR: -é, -aste, -ó, -amos, -astéis, -aron -ER: -í, -iste, -ió, -imos, -istéis, -ieron -IR : -í, -iste, -ió, -imos, -istéis, -ieron
<b>Imperfect Tense</b> ( <i>Past, ongoing actions, descriptions, 'used to' or 'was doing'</i> )	-ar    -aba, -abas, -aba, -ábamos, -abais, -aban  -er and -ir    -ía, -ías, -ía, -íamos, -íais, -ían
Using the immediate future tense IR + A + INFINITIVE	Voy a casarme = I'm going to get married Va a discutir con su padre = He / She is going to argue with his/her father





## Year 9 COMPUTER SCIENCE Term 5 – Digital Literacy



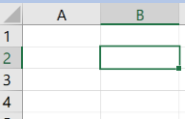
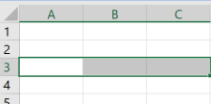
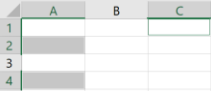
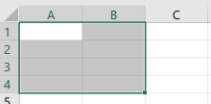
A		B		C		D		E	
Passwords and Shortcuts		Excel Cell References		Excel Formulae		Excel Absolute Cell References		Excel Tools	
A feature of a strong password has...		What is the cell reference for the following...		What is the Excel formula for...		What do the following buttons in Excel do?			
1	10 to 15 characters			B2				Why are absolute cell references used?	
2	Special characters			A3:C3				To stop a cell reference from being modified automatically	
3	Upper- and lower-case letters								
4	Numbers								
5	NO patterns or sequences			A2,A4,C1		How do you duplicate an existing sheet?			
6	Only been used for one website/account								
7	NO obvious letter substitutions (for example, 'E' replaced by 3)								
8	NO personal information			A1:B4					
9	To be memorable			=Sheet Name!Cell Reference  For example, cell H3 in Sheet5 Would be referenced as  =Sheet5!H3					
What do the following shortcuts do?									
Ctrl-C	Copy								
Ctrl-V	Paste	C							
Ctrl-X	Cut			Adding cells B1 and C2 =B1+C2					
Ctrl-Z	Undo			Subtracting cell A1 from cell A3 =A3-A1					
Ctrl-A	Select all	Finding the mean of cells: A1, A2, A3, B1, B2 and B3 =AVERAGE(A1: B3)		Multiplying cells B3 and C1 =B3*C1				Accounting Number Format (format the cell in a currency, £, \$, and so on)	
Ctrl-S	Save	Finding the maximum of cells: A1, A2, A3, B1, B2, B3, C1, C2 and C3 =MAX(A1:C3)		Dividing cell A2 by cell B2 =A2*B2				Bold (make text bold)	
F2	Rename (file/folder)	Finding the product of cells: A1, A2, A3, C1, C2 and C3 =PRODUCT(A1: A3,C1:C3)		Raising A1 to the power of 7 =A1^7				Fill Colour (change the colour of selected cells)	
Ctlr-Shift-N	Create a new folder							Borders (put an outline around selected cells)	
Ctrl-P	Print							Merge & Center (combine multiple cells into one)	
Ctrl-B	Bold text							Wrap Text (make the selected text fit in one cell)	
Ctrl-U	Underline text								

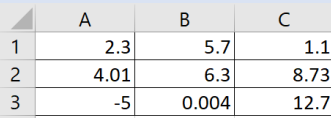


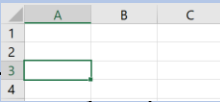

## Year 9 COMPUTER SCIENCE Term 5 – Digital Literacy








A		Passwords and Shortcuts	
A feature of a strong password has...			
1			
2			
3			
4			
5			
6			
7			
8			
9			
What do the following shortcuts do?			
Ctrl-C			
Ctrl-V			
Ctrl-X			
Ctrl-Z			
Ctrl-A			
Ctrl-S			
F2			
Ctlr-Shift-N			
Ctrl-P			
Ctrl-B			
Ctrl-U			

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

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

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

E	Excel Tools		
What do the following buttons in Excel do?			
			
B			
			
			
			
			



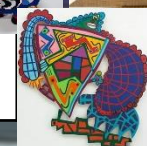
### What we are learning this term:

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



### B Answer the questions about Frank Stella

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



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

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

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

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

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



Example

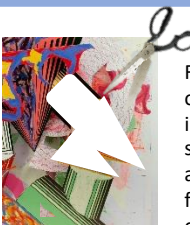
Your response

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

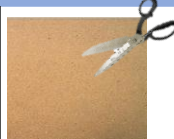


To create a relief sculpture you will need Cardboard or a strong yet easily cut material. Start by having an image to create from. The image on the left has been created by many layers of cut Cardboard. As more layers are added they create a 3-dimensional illusion.

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



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



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



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



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



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

#### Slab



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

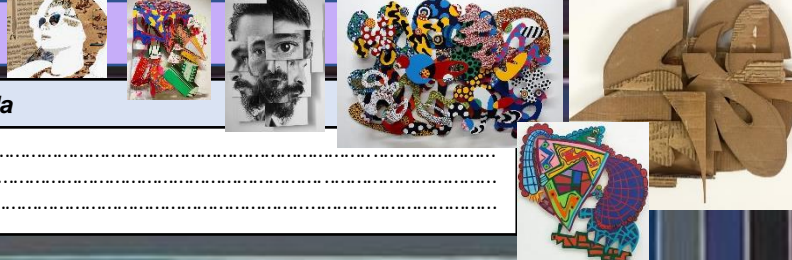
#### Score& Slip



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

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





**What we are learning this term:**

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



**B Answer the questions about Frank Stella**

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



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

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

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

- 1.
- 2.
- 3.

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



Example

Your response

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



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



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

**Slab**



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**Score & Slip**



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	Keywords
Abstract	
Geometric	
Sculpture	
Formal Elements	
Ines Kouidis	
Collage	









# 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.	
<b>Computer-aided design (CAD)</b> is the process of using computer software to create 2D or 3D designs.	
Advantages	Disadvantages
Designs can be <b>created, saved</b> and <b>edited</b> quickly, saving time	CAD takes a <b>long time</b> to learn
Designs or parts of design can be easily viewed from <b>different angles, 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>
<p><b>Hazards</b> – these are something that could potentially harm you. There are many such as:</p> <ul style="list-style-type: none"> <li>Bags and chairs acting as a trip hazard</li> <li>Untucked shirts, baggy clothes and untied hair are common things to get caught on tools and machines.</li> <li>Drinks and liquids, if spilled can become slip hazards</li> </ul>	
<p><b>Preventative measures</b> – rules put in place to minimize the likelihood of a hazard occurring.</p> <ul style="list-style-type: none"> <li>No food and drink in workshops</li> <li>Bags and chairs stored neatly in designated areas</li> <li>Long hair must be tied up and correct uniform worn.</li> </ul>	
<p><b>Personal protective equipment (PPE)</b></p> <p>The three used most often are aprons, safety goggles and ear defenders.</p>	

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>Positives – what works well</li> <li>Negatives – what doesn't work well</li> <li>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>	






# 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					
						

B.	Materials
Timbers come from _____	
	<p><b>Scots pine</b> – which you used for your box walls – is a <b>softwood</b></p> <p><b>Softwoods</b> come in _____</p>
Manufactured Boards come _____	
	<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 _____</p>
Polymers come from _____	
	<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 _____</p>

C.	Key concepts
Designers research and investigate _____	
_____ (CAD) is the process of using computer _____.	
Advantages	Disadvantages
<p><b>Hazards</b> – these are something that could potentially harm you. There are many such as:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p><b>Preventative measures</b> – rules put in place to minimize the likelihood of a hazard occurring.</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p><b>Personal protective equipment (PPE)</b></p> <p>The three used most often are _____</p> <p>_____</p>	

C.	Key Words
Prototype	
Tolerance	
Depth stop	
Assemble	
E.	Evaluation of Products
Evaluate	
<p>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.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p><b>Possible sentence starters:</b></p> <ul style="list-style-type: none"><li>- One thing that was successful.....</li><li>- One thing that I had issues with was.....</li><li>- If I had more time, I could improve this by.....</li></ul>	



## Year 9 – High Skills

### What we are learning this term:

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

### 6 Key Words for this term

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

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

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

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

- 1 A diet high in carbohydrate as a teenager is normally an energetic person.
- 2 A diet with 2-3 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 cooker. It also known to be unhealthy.

### 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.




# Year 9 – High Skills

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

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

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

# YEAR 9 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?

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?

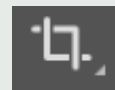
Ctrl + V

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
------------	-----------------	----------------------	----------------	-----------------

### 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

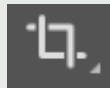
What is the shortcut for copy?

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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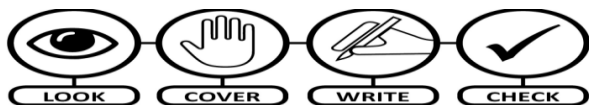
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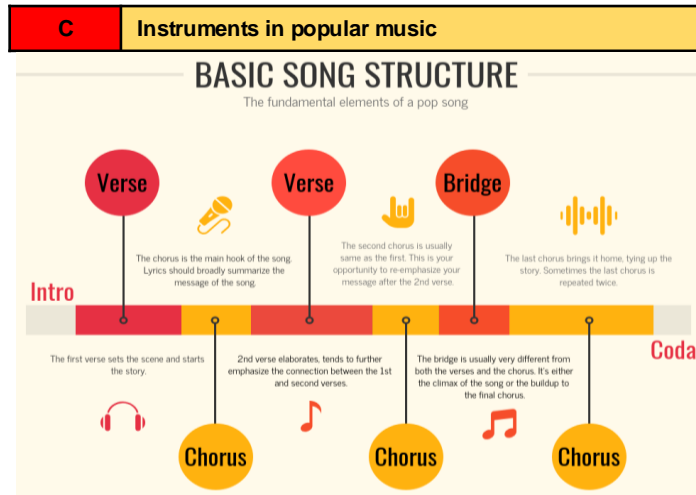
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













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



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



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

Basic Note Values - Recap							
Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Semibreve, Whole Note	4 beats			Dotted Semibreve, Dotted Whole Note	6 beats	
	Minim, Half Note	2 beats			Dotted Minim, Dotted Half Note	3 beats	
	Crotchet, Quarter Note	1 beat			Dotted Crotchet, Dotted Quarter Note	1½ beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	¾ beat	

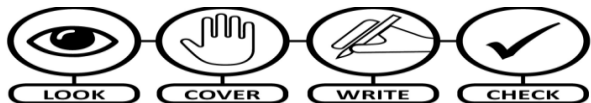
F	How to read music – treble clef and Bass Clef			
TREBLE LINES: E G B D F				TREBLE SPACES: F A C E
BASS LINES: G B D F A				BASS SPACES: A C E G

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

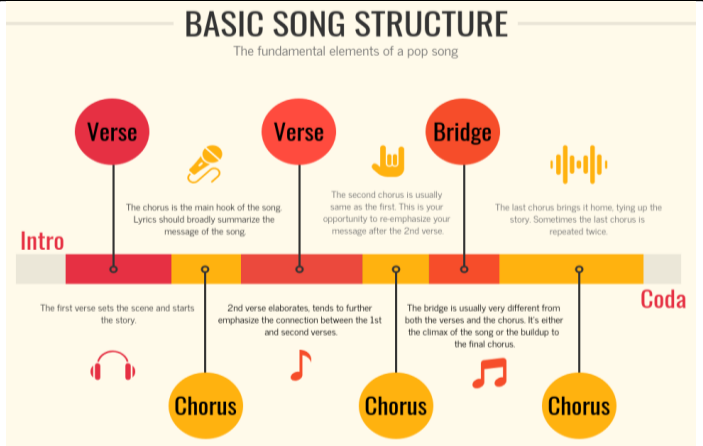


A	What we are learning about this term...
1	
2	
3	
4	
5	
6	



B	Keywords
Instrumental break	
Lyrics	
Verse	
Chorus	
Bridge / Middle 8	
Outro / Coda	
Album	
Arrangement	
Genre	
Cover Song	

### C Instruments in popular music



### D How to write a perfect Evaluation?

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

### E Basic Note Values – Recap

Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Whole Note	4			Half Note	2	
	Quarter Note	1			Dotted Half Note	3	
	Eighth Note	1/2			Dotted Quarter Note	1.5	
	Sixteenth Note	1/4			Dotted Eighth Note	0.75	

### F How to read music – treble clef and Bass Clef

**TREBLE LINES:**

**TREBLE SPACES:**

**BASS LINES:**

**BASS SPACES:**

### G Describing music – MAD T SHIRT

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

### Improvisation

improvising is inventing and creating content spontaneously. It's a great way to generate new ideas and for creating and developing characters, using a variety of useful techniques.

Spontaneous improvisation which is completely unplanned can generate dialogue or scenarios that you feel work for the piece you are creating. This can then be refined, rehearsed and included in your finished **devised** piece.

A **constraint** is a condition that you must apply to a scene, so that you're improvising within a set of rules. Here are some ideas for working with constraints when improvising.

#### **Space**

A very small space, such as a lift. Characters must behave as they would normally but within a tiny playing area.

A vast space, such as across a giant mountain range.

Consider how changing **proximity** affects body language, vocal tone and volume and interaction, between characters. There may be something that works and could be included in your devised piece.



This improvisational exercise is excellent for creating entirely new and unplanned characters and scenarios.

#### **Where, who, what?**

Choose a location, eg a supermarket or a roller coaster.

Select characters, eg an astronaut or an I.T. manager.

Finally, choose a motivation for the character, eg they are looking for a partner or want to be famous at any cost.

Each piece of information should be randomly selected, so that they don't necessarily match up. This can make for interesting and very humorous drama.

- **Improvisational Theater (improv):** is a form of theater where most or all of what is performed is created at the moment it is performed.
- In its purest form, the dialogue, the action, the story and the characters are created collaboratively by the players as the improvisation unfolds.
- Improv exists in performance as a range of styles of improvisational comedy as well as some non-comedic theatrical performances.
- It is sometimes used in film and television, both to develop characters and scripts and occasionally as part of the final product.

### Tips for success

#### **-Listen to your partner.**

A scene will often 'go stale' if the people involved are not responding genuinely to each other. Improv is all about **teamwork** and the relationship you have with each other. The better the relationship, the better the scene will be to the audience.

#### **-Use 'yes, and...'**

When your partner tells you something in an improv scene, accept it and then add something to the conversation. If your partner starts by asking you why you've come to a party dressed as a pineapple, don't tell them that you think they're seeing things. Ask them why they're the only one who hasn't come dressed as a giant piece of fruit and that you have a spare costume in your car if they need it. Scenes where actors deny what their partners are saying often go dry very quickly and offer nothing for the audience. It's also a good way to annoy your partners.

#### **- Don't necessarily try to be funny.**

Sure, comedy is great, but one person trying to make the audience laugh often alienates the others on stage.

#### **-Accept your mistakes.**

Like any learning process, you will make mistakes. It's how you learn. Don't beat yourself up if you forgot a key rule of improv or your scene wasn't particularly good. Make some general notes for yourself and put it behind you. Next time you get up to improvise, treat it like a fresh start and be positive.

**Examples – Mock the Week, Whose Line Is it Anyway? Outnumbered. The Office.**





## Drama – Year 9 Improvisation

### Improvisation

improvising is and content spontaneously. It's a great way to generate and for creating and developing , using a variety of useful techniques.

Links to  
Comp 1  
and 2

Spontaneous improvisation-

A \_\_\_\_\_ is a condition that you must apply to a scene, so that you're improvising within a set of rules. Here are some ideas for working with constraints when improvising.

S \_\_\_\_\_

A very small s \_\_\_\_\_, such as a lift. Characters must behave as they would normally but within a tiny playing area.

A vast space, such as across a giant mountain range.

Consider how changing p \_\_\_\_\_ affects body language, vocal tone and volume and interaction, between characters. There may be something that works and could be included in your devised piece.



### Create your own

Where, who, what?

Location-

Character-

Motivation-

- **Improvisational Theater (improv):** is a form of theater where most or all of what is performed is created at the moment it is performed.
- In its purest form, the dialogue, the action, the story and the characters are created collaboratively by the players as the improvisation unfolds.
- Improv exists in performance as a range of styles of improvisational comedy as well as some non-comedic theatrical performances.
- It is sometimes used in film and television, both to develop characters and scripts and occasionally as part of the final product.

### Tips for success

**Examples – Can you name any tv shows that are improvised?**



What are the 5 tips for successful improvisation and why are these important?



## YR9 Page to Stage script Knowledge Organiser

Key words		What is your intention for performance? (You need to be able to answer these!)
Accent Acting style Articulation Aside Blocking Body language Breathing Characterisation Clarity Dialect Dialogue Diction Emotion Emphasis Facial expression Focus Gesture Improvisation	Inflection Interaction Intonation Mime Mirroring Motivation Movement Pace Performance skills Pitch Posture Proxemics Rhythm Stance Timbre Vocal expression Voice Volume	<ul style="list-style-type: none"> <li>- What is your role?</li> <li>- What is happening to your character in the key extract?</li> <li>- What are your character's objectives/motivations/feelings at this point?</li> <li>- How are you interpreting this character in the performance?</li> </ul>
		<b>How to approach the script:</b> <ul style="list-style-type: none"> <li>- Highlight your lines.</li> <li>- Consider your motivation of your character (it might change! Why are they saying this? What is their objective at this point?)</li> <li>- Annotate the scripts with ideas/thoughts/interpretations you may be able to use.</li> <li>- Why is this monologue/duologue a key moment in the play?</li> <li>- What do you learn about your character from the extracts?</li> <li>- If you can, read the play. Ask your teacher for a copy to borrow.</li> <li>- Rehearse! With a partner, with a parent/guardian, in front of the mirror, with your teacher!</li> </ul>
		<b>Assessment Objective – In this component, you will be assessed on your ability to...</b>  AO2 – Apply theatrical skills to realise artistic intentions in live performance.
		<b>Key rehearsal techniques:</b>
<b>Explorative Strategies for characterisation..</b>		
Thought track   Hot seating   Marking the moment   Narration   Conscious alley   Role on the Wall		

# SWINDON ACADEMY READING CANON

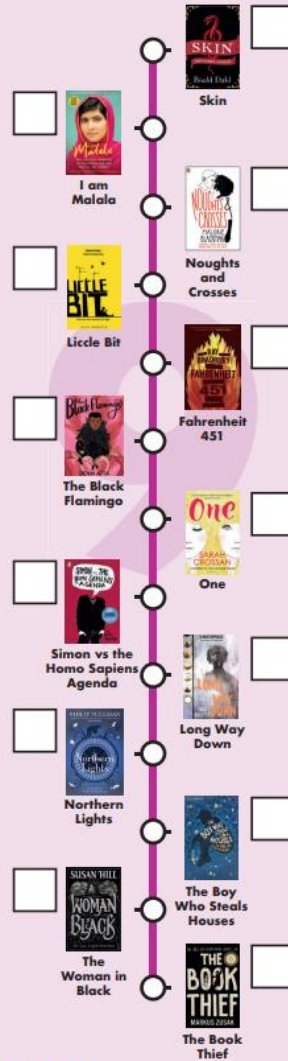
## Year 7



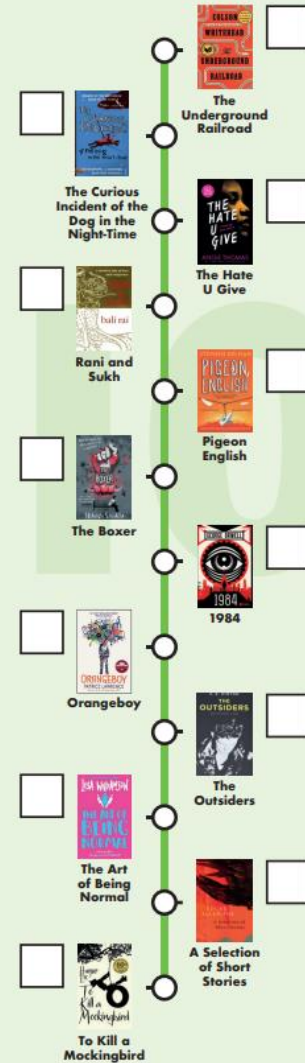
## Year 8



## Year 9



## Year 10



#ReadingisPower