100% book - Year 9 Grammar

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



Term 4

Swindon	Academy 2024-25
Name:	
Tutor Group:	
Tutor & Room:	

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

If you are determined to learn, no one can stop you."











Using your Knowledge Organiser and Quizzable Knowledge Organiser



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?



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

<u>'Romeo and Juliet': GS Knowledge Organiser</u>

_		Characters	Vocabulary: Key words		
Plo	breakdown	Romeo (Montague)	tragic – describes something as being very sad, or as part of a tragedy.		
Р	The Prologue outlines the main conflict in the play and warns the audience of the tragic fate of Romeo and Juliet.	Young man. Falls in love with Juliet. Kills himself at the end of the play. "Did my	submissive - ready to obey or conform to the authority or will of others		
1 1 1	The Montagues and Capulets fight in the streets of Verona. Prince	heart love till now? forswear it, sight! For I	narcistic – self-obsessed		
1.1	Escales swears that any further fighting will be punished by death.	ne'er saw true beauty till this night"; "Thus with a kiss I die"	feud – a serious argument and sometimes violent argument between two people or groups that continues for a long time.		
1.2	tells Paris to wait as she is too vouna.		shrine – a holy place that people go to pray.		
1.3	Lady Capulet advises Juliet to agree to marry Paris.	Juliet (Capulet)	status quo – the situation that exists now, without any changes.		
	At the Capulet's masked ball, Romeo sees Juliet and falls in love	herself at the end of the play. "Wherefore	obstacle – a problem that must be overcome.		
1.5	with her. They talk, kiss, and fall in love. As they depart, they learn	art thou Romeo? Deny thy father and refuse	vindictive – vengeful		
	they are from feuding families.	thy name"; "O happy dagger, This is thy	patriarchy - a society in which power lies with men		
2.2	In the balcony scene, Romeo and Juliet fall deeper in love. They	sneath; there rust, and let me die"	belligerent - warlike		
	Bemoe asks Frigr Lawrence to many him and Juliet Lawrence	Lord Capulet (Capulet)	exile (vb.) – to force them from their home and live in another place.		
2.3	agrees, thinking it will unite the warring families.	Head of the Capulet family. Juliet's father.	tenacious – very determined		
2.6	Friar Lawrence marries Romeo and Juliet.	Orders her to marry his friend, Paris. "She will	catastrophe – a terrible accident.		
	Montagues and Capulets fight in the streets. Tybalt kills Mercutio:	be ruled In all respects by me"	stoicism – calm self control		
3.1	Romeo kills Tybalt. Prince Escales decides to banish Romeo from	Paris (no family)	Terminology: Key words		
3.4	Lord Capulet tells Paris that he can marry Juliet in three days' time.	Killed by Romeo at the end of the play.	Tragedy – a play in which the main character brings about their own downfall.		
	After their wedding night, Romeo leaves Juliet for the last time. They	Friar Lawrence (no family)	prologue – the introduction to a book, film, or play.		
3.5	5 have a vision of the other's death. After Romeo leaves, Lord Capulet orders Juliet to marry Paris, threatening to disown her if she	Religious leader in Verona. Agrees to marry Romeo and Juliet thinking it will bring	sonnet – a type of love poem. It has 14 lines, a strict rhyme scheme and 10 svillables per line		
4.1	disobeys. Friar Lawrence comes up with a plan: Juliet must pretend to be	peace to the city. "For this alliance may prove To turn your households' rancour to	dramatic irony – when the audience knows something that the character on stage does not		
	Romeo does not learn of Friar Lawrence's plan. He sneaks back inter plan.	pure love" Mercutio (Montaque)	Tragic hero – the main character in a Tragedy that makes an error of judgement that leads to their downfall.		
5.3	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	Romeo's friend. Killed by Tybalt. "A plague a'both your houses!"	soliloquy – a speech in a play where the character speaks to himself or herself.		
	feud.	Prince Escales (no family)	hyperbole – exaggeration.		
Th	e Big Ideas:	Ruler of Verona. Wants to bring peace to the city. "If ever you disturb our streets	tragic flaw - a character has a tragic flaw when what makes them so specie also brings about their downfall.		
She	is ruled by her father who eventually decides to marry her off to overful man. She breaks the status auo when she defies her	pgain, Your lives shall pay the forfeit of the peace"	foreshadow – to show or warn that something bigger, worse, or more important is coming.		
fat	ner and makes her own decisions.		thesis – the main idea that you want to discuss throughout an essay.		
Fv	lution of Juliet's character: Juliet is a stereotypical Renaissance	Structure of Shakespearean	peripeteia – a sudden reversal of fortune.		
da	ughter at the outset, she is loyal and submissive. She becomes	fragedy (Bradley)	hubris – excessive pride or self-confidence		
en She	powered and independent through her romance with Romeo. becomes a tragic hero by acting in pursuit of her own desires.	Exposition Introduces the main characters	anagnorisis – the moment when the character realises the true state of their affairs or the reality of their situation		
Tra	redu: A Shakashaaraan traandy is the story of one or two	and the obstacles they will overcome in the	Features of Shakespearean tragedy (Bradley)		
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 heroe as a result of their actions.		pidy.	The characters are ' high-status ' – they are important people.		
		Rising tension The heroes try to overcome	The tragic hero acts : they try to do things . They don't just let things happen to them.		
Fo	e and destiny: Fate and destiny: Fate is the idea that the events of	ine obsidcles mey lace. mey suller.	Whatever they try to do, it always puts them in a worse situation .		
son	e fated for tragedy. This leads to many questions: Is the tragic	Catastrophe The play ends with the deaths	They are exceptional – there is something that makes them special.		
ending inevitable? Do they act independently?]		

'Romeo and Juliet': GS Knowledge Organiser

Plo	breakdown	Characters	Vocabulary: Key words
Р	The Prologue		tragic –
1.1		Pomoo (Montaguo)	submissive -
1.1		komeo (montague)	narcistic –
1.2			feud –
1.3			
1.5			shrine –
		Juliet (Capulet)	
2.2			obstacle –
2.3			vindictive –
2.6			patriarcny -
		l ord Capulet (Capulet)	
3.1			exile (vb.) -
3.4			tenacious –
		Paris (no family)	catastrophe –
3.5		rans (no family)	stoicism –
			Terminology: Key words
4.1			Tragedy –
		Friar Lawrence (no family)	prologue –
			sonnet –
5.3			dramatic irony –
The	Big Ideas:	Mercutio (Montague)	Tragic hero –
Role	of women:		soliloquy –
			hyperbole –
		Prince Escales (no family)	tragic flaw -
Evol	ution of Juliet's character:		foreshadow –
		Structure of Shakespearean	peripeteia -
		tragedy (Bradley)	anagnorisis -
Trag	edy:	Exposition	hubris -
			thesis –
Fate	and destiny.		Features of Shakespearean tragedy (Bradley)
		Catastrophe:	







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What we are learning this term:A.What is the function of each tissue?						issue?			
Α. Τ	Tissues		Epithelia	al tissue	Form	ns a pro	otective c	covering for different parts of the body.	
B. C C. E	Digestive or Biological m	gans nolecules	Glandul	ar tissue	Secr	etes im	portant s	substances, such as hormones.	
D. E	Enzymes		Muscula	ar tissue	Cont	racts to	control	movement.	
В.	What is the system?	ne function of each pa	art of the o	digestive		В.	How an	re the small intestines adapted?	
	Liver	Where bile is made.				The	walls of t	he small intestine are covered with villi , which	
		Where feed is shown				incre	ased abs	sorption due to:	
N	Mouth	from salivary glands.	u anu mixe	eu with Saliv	a,	• La	rge surf a	ace area.	
Oes	Oesophagus Connects the mouth and stomach.				prane.				
	Large	Water is absorbed fro	m undiaes	sted food. to	,	Good blood supply.			
in	itestine	form faeces.				C. Where is starch stored in plant cell?			
Gal	l bladder	Where bile is stored.				As st	arch gra	ins in plastids , including chloroplasts and	
	Small	Where soluble food is	absorbed	I.		amyloplasts.			
	itestine					C. Describe the test for sugars			
Ра	ancreas	Where neutralising su are produced.	Ibstances	and enzyme	es	Add Benedict's solution, to the food solution, and gently			,
St	tomach	Churns food and proc	luces hydr	ochloric aci	d.	 If a reducing solution (e.g: glucose) is present, the solution 			
C.	C. Describe and draw the structure of carbohydrates?			?	will turn green, orange or red , depending upon the concentration.				
Carb	bohydrates	are made of chains of	simple su	gars.			C.	Describe the test for starch	
					 Add iodine. If starch is present, colour will change to blue/black. 				

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C.	C. Describe and draw the			C	C. Wh	at are the fund proteins?	tions	C.	Describe the test for proteins?	
Prot mac of a	structure of proteins? Proteins are made of chains of amino acids.			1 2 3 4	 Structural Catalytic Signalling Immunological 		• A fo • If pi	dd Biuret's solution and mix gently into the ood solution. protein is present, the solution will turn ink/purple .		
D.	Describe of enzym	the function es	C .	Desc of tri	ribe an	d draw the stru	icture	C.	Describe the test for lipids?	
To lowe	To catalyse reactions and Triglyceride made of on the activation energy.		les are ycerol	s are serol		 Add Sudan III stain to the food solution. If a lipid is present. red-stained oil laver y 				
D.	What fact enzyme r	tors affect eaction rate?	and f	atty a	cids.	\$ 000	• •	separate and float to the surface.		
1. ⁻	Гетрегаtur оН	е	D.	What enzy	What happens when an D.		Draw	/ the lock and key model		
3. E 4. S 5. S 6. F	 2. pH 3. Enzyme concentration 4. Substrate concentration 5. Surface area 6. Pressure 		enzy er fits e reac	zyme active site no s the substrate/reactant, action is not catalysed.		+				
C.	Des	scribe the enzym	ne				e	nzyme enzyme_reactant enzyme		
Pro	Protein Broken down by peps		in	Into amino acids		+	\leftrightarrow complex \leftrightarrow +			
Sta	rch	Broken down by	y amyl	ase	Into m	altose	r (r	eactan	t products	
Triglyceride sBroken down by lip		y lipas	е	Into fatty a	glycerol and acids					







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LØ I⊶d ★≋Ƴ	rm 4 Sc	ience - Chemistry : Topic	C2 St	ructure	and Bonding		⊥ Ø ∰ ↓ ⊶ £ ★ % 8
What we are learning this term:	Α.	What is ionic bonding?			When do ye	ou get ionic bonding?	
A. Ionic Bonding B. Covalent Bonding							
C. Metallic Bonding D. States of matter	What	are dot and cross diagram?					
E. Properties							
F. Carbon and Nanoparticles	How	is an ionic bond formed in Sodi	um Chle	oride? Dr	aw a dot and cross dia	gram to show this	
6 Key Words for this term							
 Delocalised Electrostatic Ionic Covalent 							
A. What is an ionic compound?							
How can we represent Sodium Chloride?							
	А.	What is covalent bonding?			Sketch a dot a Methane (CH ₄	nd cross diagram to sho) and Ammonia (NH ₃)	w the bonding in
	Whe	n do you get Covalent bonding?					
3D diagram Ball and stick model	What	covalent structures are there?					
C. What is Metallic Bonding?	Draw a	sketch of metallic bonding	D.	What a	are the three states o	f matter?	
			Stat	e			

	_	-					
	•		St	ate			
What doe	es delocalised mean?		Di	iagram			
When do	you get Metallic bonding?	-					<u> </u>
			required to change state is dependent on what?				



D.	What are state symbols?								
These are used in chemical equations to show what state of matter things are in a reaction									
Solid		(s)							
Liquid	(I)								
Gas	(g)								
Aqueous	(in solution)	(aq)							

Ε.	What properties do Giant ionic structures have?						
Melting points/boiling points High							
Does it conduct electricity?							
Ionic solid No							
Molten	onic soild	Yes					
lonic co	mpound in solution	Yes					

Е.	What are polymers?					
Largo	e long chain mo					
Are t cova	he ionic or lent?	Covalent	$ \begin{array}{c} - c - c - \frac{1}{n} \\ H \end{array} $			

Е.	What propertie	rties do simple small covalent		What differen	t forms of carbon are t	here?		
	molecules hav	e?			Graphite	Diamond	Graphene	Fullerenes
Melti	ng point	Lower melting points – because of weak	Struc	ture	Hexagonal rings	Giant covalent	1 sheet of graphite	Giant covalent
		intermolecular forces (not the covalent bonds)	Melting point		high	Very high	Very High	Very High
Conduct electricity?		No – no overall charge	Conducts electricity?		Yes	No	Yes	No
			Prop	erties	soft	Very hard	hard	hard
E.	What propertie structures hav	es do giant covalent re?	Uses		Pencils, electrodes	Cutters, jewellery	Electronics, composites	Nanotechnology, electronics, medicine
Melting point Solubility		High	Diagi	am				
		Insoluble due to strong covalent bonds			9-9-9-9-9 9-9-9-9-9-9 9-9-9-9-9-9		1993818389	



F.	What are nanoparticles?					
Structures that are 1-100nm in size						
Why a	Why are they useful?					
Large	Large surface area to volume ratio					
What uses?						
Medici	Medicine, electronics, sun cream, catalysts, cosmetics					



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D.	What are state symbols?		E. What properties do Giant ionic structures			Ε.	What are poly	mers?		
These are used in chemical equations to show what state of matter things are in a reaction			Melting points/boiling points							
Solid			Does it conduct electricity?							
Liquid			lonic so	Ionic solid			Are t	he ionic or		
Gas			Molten	Molten ionic soild				lent?		
Aqueous	s (in solution)		Ionic co	Ionic compound in solution						

E.	What propertie	es do simple small covalent	F.	What different	t forms of carbon are t	here?		
	molecules have?				Graphite	Diamond	Graphene	Fullerenes
Melting point			Struc	ture				
			Melting point					
Conduct electricity?			Conducts electricity?					
			Properties					
E.	What properties do giant covalent structures have?		Uses					
Melting point			Diagi	am			£5888888	
Solubility					20-0-0-0 0-0-0-0-0 0-0-0-0-0		12222	

E.	What are alloys?
Whatp	properties do they have

F.	What are nanoparticles?		
Why are they useful?			
What uses?			
What u	uses?		

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Year 9GS Term 4 Science - Chemistry : Topic = C 3 Chemical Calculations

T 40° 4		_			4 4 4 A		
What we are learning this term:	Α.	What is re	elative atom	ic mass?	What is relative formula mass?		
 A. Relative atomic Mass B. Moles C. Chemical Equations D. Concentrations 		average mas bared with Ca ust take isoto	ss of the aton arbon-12. opes into acc	ns of an element ount)	The total of the relative atomic masses, added up in the ratio shown in the chemical formula		
E. Yield F. Atom economy	Wha	t symbol is	used?		What symbol is used?		
G. Titration H. Volume of gases	A _r				M _r		
6 Key Words for this term	How	do you calo	culate it?		How do you calculate it?		
Key words for this term 1 Moles 4 Equation 2 Atomic Mass 5 Volume 3 Concentration Find out 1 • Find out 1 • The fract isotope is		ind out the a he fraction o otope is add	bundance of f the mass co ed together	each isotope ontributed by each	Add the A _r of each element in the compound together		
B. What is a Mole?	<u> </u>		C	What are limiting road	stante?		
The amount of substance in the relative atomic or formula mass of a			The react	The reactant that gets used up first in a reaction			
			What does excess mean?				
How many particles are in a mole?			If a reagent is in excess, it won't all get used up in a reaction.				
6 x 10 ²³ particles in 1 mole							
What is this number called?							
Avogadros number			C. 1	What is Conservation of Ma	ass?		
How can you calculate Moles from masses?			No atoms are created or destroyed in a chemical reaction.				
Use a periodic table to obtain A _r			How does this work for balancing equations?				
• Use the calculation below $Number of moles = \frac{mass(g)}{mass(g)}$			You must	have the same number of a	toms on each side		
Number of moles = $\frac{1}{Ar}$							
How can you calculate Masses from Moles?			D. What is the concentration of a solution?				
Use a periodic table to obtain A _r			How much of a substance is dissolved in a solution				
Ose the calculation below			amount of solute				
mass(g) = number of moles x Ar			$concentration = \frac{amount of solution}{Volume of solution}$				



Year 9GS Term 4 Science - Chemistry : Topic = C 3 Chemical Calculations

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What we are learning this term:	A. WI	hat 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	What sym	nbol is used?	What symbol is used?
6 Key Words for this term	How do y	ou calculate it?	How do you calculate it?
1Moles4Equation2Atomic Mass5Volume3Concentration			

В.	What is a Mole?		
		С.	What are limiting reactants?
		What	at does excess mean?
How ma	iny particles are in a mole?		
What is	this number called?		
		C.	What is Conservation of Mass?
How ca	n you calculate Moles from masses?		
		How	v does this work for balancing equations?
How ca	n you calculate Masses from Moles?	D.	What is the concentration of a solution?
		How	do you calculate concentration?





E. What is chemical yield?	F. What is atom economy?		
The yield of a chemical reaction is how much product is made.	A measure of the amount of starting materials that end up as useful products.		
What is percentage yield?			
The percentage yield of a chemical reaction tells you how much product is	How do you calculate atom economy?		
made compared with the maximum amount that could be made.	χ atom economy = $\frac{Mr}{Mr}$ of desired product \times 100		
What is theoretical yield?			
The theoretical yield of a chemical reaction is the maximum amount of product that can be made.	Why is it important to maximise atom economy in industrial processes?		
What factors affect the yield of a chemical reaction?	To conserve the Earth's resources and minimise pollution		
 Product being left behind in the apparatus. Reversible reactions not going to completion. Some reactants may produce unexpected reactions 	G. What is a titration used for?		
 Some reactions may be lost as it is separated from the reaction mixture 	To find the unknown concentration of a solution.		
How do you calculate percentage yield?	What are concordant results?		
Percent yield = $\frac{\text{Actual Yield}}{\text{Theoretical Yield}} \times 100\%$	The volume of two or more titres that are similar in quantity (less than a 0.10 cm^3 difference).		
Theoretical Yield	What is the end point of a reaction?		
H. What is molar gas volume?	The point at which the reaction between an acid and alkali is complete.		
The volume of 1 mole of any gas iat room temperature and pressure is 24 dm^3 (24000 cm ³)	What is a pipette used for in a titration?		
What is the molar gas volume used for?	To measure a fixed volume of solution.		
To calculate the volume of gaseous reactants or products. (A balanced	What is a burette used for in a titration?		
symbol equation is needed to do this).	To measure the volume of solution added.		

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

- The accurate concentration of one solution.
- The volume of unknown solution needed to react with a known volume of the accurate known solution.
- The balanced equation for the reaction.

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E.	What is chemical yield?	F.	What is atom economy?
What is	s percentage yield?		
		How	do you calculate atom economy?
What is	s theoretical yield?		
What fa	actors affect the yield of a chemical reaction?	Why i indus	s it important to maximise atom economy in trial processes?
1.			
2. 3.		G.	What is a titration used for?
4.			
How do	o you calculate percentage yield?	What	are concordant results?
		What	is the end point of a reaction?
Н.	What is molar gas volume?		
		What	is a pipette used for in a titration?
What is	the molar gas volume used for?	What	is a burette used for in a titration?

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

charge per second.

Current, resistance and potential difference

Electrical current is the flow of electrical charge.

Current is measured in amps (A), charge is measured in Coulombs (C).

The size of the current depends on the rate of the flow of charge – ie how many coulombs of

Q=lt		
Charge =	Current	x time
(C)	(A)	(s)
flow of electro	ns	wire
	T (at	
ions (in a fixed latti	ice)	
moving		
cicciona		

Ohms Law

The current through a component depends on the potential difference and the resistance of the component.

If a component has high resistance, the current will be smaller for a given potential difference

potential difference = current x resistance V = I R

pd is measured in volts (V), resistance in Ohms (Ω)

Hypothesis 'the length of the wire affects resistance'

Independent variable - length of wire Dependent variable – resistance Control variables – type of wire, temperature of the wire, diameter of the wire

- 1. Set up the circuit as shown, with an ammeter in the circuit and a voltmeter connected across the wire
- 2. Use crocodile clips to change the length of the wire in the circuit
- 3. Make the wire 10cm long and read the current and pd. Switch off the current between readings or the wire will got hot, increasing the resistance.
- 4. Repeat for 20, 30, 40, 50 cm. (5 minimum)
- 5. Calculate resistance using Ohms Law R = V/I

Plot length of wire (IV) against resistance (DV)



Series and parallel circuits

Series circuits:

A series circuit is one single loop



In a series circuit:

- the current is the same at all points in the circuit.
- potential difference is shared between • components (equally if components are identical resistance)
- total resistance = sum of all resistors

Parallel circuits

A parallel circuit consists of more than one loop from the battery/cell.



In a parallel circuit:

- The current is shared amongst the branches
- The potential difference is the same across all components
- Resistance in the whole circuit is LESS ٠ than that of the smallest resistor



Current, resistance and potential difference

- 1. What is current?
- 2. What is the unit for charge?
- 3. What is the unit for current?
- 4. What is the equation linking charge, current and time?
- 5. What is the equation linking current, potential difference and voltage?
- 6. If a component's resistance increases, what happens to current through that component?
- 7. What is the unit for resistance?

Hypothesis 'the length of the wire affects resistance'

- 1. What is the independent variable in this investigation?
- 2. What is the dependent variable?
- 3. What is the minimum number of readings needed for a line graph?
- 4. What two readings are taken?
- 5. How is resistance calculated?
- 6. What sort of relationship is seen?
- 7. Why is it important to turn off the power in between readings?

Series and parallel circuits

- 1. What is a series circuit?
- 2. In a series circuit, the current is.....
- 3. How do you find total resistance in a series circuit?
- 4. The potential difference is shared equally among components as long as......
- 5. What is a parallel circuit?
- 6. What is true about potential difference across all of the components in a parallel circuit?
- 7. How is total current calculated in parallel?
- 8. What is true for total resistance in a parallel circuit?

Components

variable resistor

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- A **diode** only allows current to flow one way in a circuit
- A **resistor** is a component that provides a fixed resistance in the circuit e.g a 5 Ω resistor
- A variable resistor is a component whose resistance can be changed (e.g a dimmer switch)
- A **thermistor** is a resistor whose resistance changes with temperature – the higher the temperature the lower the resistance
- An LDR (light dependent resistor) has resistance that changes
- An LED (light emitting diode) is a light that only allows the flow of current one way

Current, potential difference and resistance for different components

Current

(A)

A diode very high

resistance in one

Only when the

is positive does

current flow

potential difference

direction.



A fixed (ohmic) resistor has fixed resistance current is directly proportional to potential difference Resistance remains constant (at constant temp)



A filament bulb contains a thin wire that glows as current flows. As the pd increases, the current initially increases.

However, at higher pd, the wire gets hot

The ions in the wire move faster and collide with the moving charges Resistance increases, so current stops increasing



A light dependent resistor has varying resistance.

As the light intensity increases, the resistance decreases



LDRs can be used to switch on lights at



In this circuit, when it is day time, the resistance in the LDR is low, so all current flows through the LDR.

As light levels fall, resistance increases, until eventually there is less resistance in the bulb than the LDR, so current flows through the bulb – switching it on.

Thermistor



As the temperature increases, the resistance in a thermistor decreases.

Components

•	
Symbol	Name
	Cell
	fuse
	Voltmeter

- 1. Complete the table opposite
- 2. Which component has a resistance that decreases as light intensity increases?
- 3. Which component only allows current to flow one way?
- 4. What is a fixed resistor?

Current, potential difference and resistance for different components

1. What readings would you need to take from a circuit to calculate resistance?

Current

(A)



- 2. Describe the relationship shown
- 3. Why is there no current on one side of the graph?



- 4. What happens to current when the pd rises at first ?
- 5. What happens to the current as the pd gets higher?
- 6. Why does the resistance increase at higher pd?

LDR

- 1. Draw the symbol for an LDR
- 2. Draw the pattern you would expect for resistance as the light intensity increases.

 The circuit below is for a night light. What is resistance in the LDR like during the day time? (high light levels)



- 4. Why does the light switch on when it goes dark?
- 5. Draw the symbol for a thermistor
- 6. Describe the relationship between temperature and resistance in a thermistor

Domestic use of electricity

There are two types of electrical supply – direct (DC) and alternating current (AC) **AC**



A direct pd produces current that flows in one direction **Batteries** supply DC





Electrical appliances are connected using 3 core cable

- Brown live wire, with pd of 230V
- Blue neutral, OV, completes the circuit
- Yellow and green Earth wire, is at 0V unless there is a fault, when it will become live

Appliances in the home and power

Power is measured in Watts (W) or kW Power can be calculated by using:

Power = Voltage x current P = IV

Power = current² x resistance $P = I^2 R$

Appliances transfer energy.

Energy is measured in Joules (J) or kJ The energy transferred can be calculated by using:

Energy = charge flow x potential difference E = Q V

Energy = power x time E = p t

For example

A kettle transfers energy from the thermal store of the filament in the kettle to the thermal store of the water inside.

Some energy is transferred to the thermal store of the surroundings.

The National Grid

The National Grid is a system of cables and transformers connecting power stations to homes and businesses



The National Grid uses very high pd and low current.

High current causes heating in the wires and would result in large energy losses.

Step up transformers increase the pd from the power station (to around 400000V) so that low current can be used to transmit power.

This means the wires don't get hot, so less energy is lost.

Near homes and businesses, step down transformers reduce the pd to 230V for safety.

Domestic use of electricity

- 1. What are the two types of current?
- 2. What type of power supply produces DC current?
- 3. What are the two differences between AC and DC current?
- 4. What is the pd of the UK mains supply?
- 5. What is the frequency of UK mains supply?
- 6. What colour is the live wire in UK plugs?
- 7. What is the purpose of the blue wire in UK plugs?
- 8. When does the yellow and green wire carry a current?

The National Grid

- 1. What is the National Grid?
- 2. What sort of pd does the National Grid use to transmit electrical power?
- 3. What is used to increase the pd from the power station?
- 4. What is used to reduce the pd near homes and businesses?
- 5. Why is such a high pd used?

Appliances in the home and power

- 1. What is the equation linking current, potential difference and power?
- 2. What is the equation linking current, resistance and power?
- 3. What two factors affect how much energy an appliance transfers?
- 4. What is the equation linking energy, power and time?
- 5. What are the units for power?
- 6. What is the equation linking charge, energy and potential difference?
- 7. What are the units for energy?





Α.	Background:	с.	Social	Economic	
•	 Urban = Towns and cities Rural = countryside Urbanisation is the growth in the proportion of a country's population living in urban areas. The rate of urbanisation differs between countries that are richer than those that are poorer. HIC have very slow rates of urbanisation: In richer 	Opportunities	 Better access to services e.g.health care and education Better access to resources such as clean water supply and electricity 	 Increase economic development As industry develops (industrialisation), more people move to urban areas to work in factories – there are more jobs and better wages than rural areas Industries create and sell goods on the international market. Manufactured goods make greater profits than unprocessed goods so industrialised countries get wealthier. 	
parts of the world, urbanisation happened historically and most of the population now already live in urban		Social and economic (HEWE)	Environmental (WART)		
•	s of the world, urbanisation happened historically most of the population now already live in urban is. Many people in urban areas in HICs desire a er quality of life and are moving to rural area. e they can commute to cities (because of better sport) or work from home (better imunication). are less economically developed e.g. Ethiopia. many of the population live in urban areas . vever, people are starting to move away from jobs irming (rural areas) to urban areas. They are eriencing rapid urban growth. are those where economic development is easing rapidly e.g. Brazil, India, Nigeria - They are eriencing rapid urban growth.	most of the population now already live in urban s. Many people in urban areas in HICs desire a er quality of life and are moving to rural area. e they can commute to cities (because of better sport) or work from home (better munication). ure less economically developed e.g. Ethiopia. many of the population live in urban areas . eever, people are starting to move away from jobs rming (rural areas) to urban areas. They are eriencing rapid urban growth. are those where economic development is easing rapidly e.g. Brazil, India, Nigeria - They are eriencing rapid urban growth.	Challenges	 Badly built houses and over crowded No access to basic services (running water, sanitation, electricity) Unclean conditions and lack of access to medical services mean people often have poor health No access to education High levels of unemployment and crime 	 Rubbish isn't collected so it leaves toxic rubbish heaps, which damage the environment Air pollution comes from burning fossil fuel from vehicles and factories Sewage and toxic chemicals can get into rivers, causing health problems and harming wildlife Infrastructure like road systems may not be able to cope with the growing number of vehicles. Congestion causes an increase in greenhouse gas emissions which cause global problems. Locally, problems with health and acid rain also occur.

В.	Factors at	ffecting the rate of urbanisation	D.	Rio			Е	Favela Bairro		
Rural migra	-urban ation	the movement of people from rural to urban area. The rate is affected by push-	Sanita	ation	Conditions relating to public health, especially the			Successes	Failures	
pull theory.		pull theory.	provision of clean drinking water and adequate sewage disposal.		-	-The quality of life in the favelas -\$1 billion budget insufficie		-\$1 billion budget insufficient to		
Push	Push factors things that encourage people to leave					- 90%		noved. cover all of Rio's fa nousing in Rocinha is now winners and loser	winners and losers so hardly	
Pull factors things that encourage people to move to an area (Pull them to an area)		Quality of		General well-being of individuals and societies	brick b		uilt and connected	equable and a "favela lottery"		
		things that encourage people to move to	life			-Pa	Paved,	I, named roads	-ASH properties- still in areas of	
		an area (Full them to an area)		a	Brazilian shack or shanty town; a slum	forma	ormali	ise addresses allowing for severe hazard ri	severe hazard risk via landslide -	
Natur increa	al ase	birth rate is higher than death rate so population growth	Favela Brazilian shack or shanty town; a slum			fi -S	-Sanitation improvements		properties lost	



Natural increase



Α.	Background:	D.		Social		Econ	omic
 Urban = Towns and cities Rural = countryside Urbanisation is the growth in the proportion of a country's population living in urban areas. The rate of urbanisation differs between countries that are richer than those that are poorer. 		Орро	ortunitie s				
	 HIC have very slow rates of urbanisation: In richer parts of the world, urbanisation happened historically and most of the population now already live in urban areas. Many people in urban areas in HICs desire a better quality of life and are moving to rural area. Here they can commute to cities (because of better transport) or work from home (better communication). LIC are less economically developed e.g. Ethiopia. Not many of the population live in urban areas . However, people are starting to move away from jobs in farming (rural areas) to urban areas. They are experiencing rapid urban growth. NEE are those where economic development is increasing rapidly e.g. Brazil, India, Nigeria - They are experiencing rapid urban growth. 			Social and economic (HEWE)		Environmen	tal (WART)
•			llenges				
В.	Factors affecting the rate of urbanisation	D.	Rio		E	Favela Bairro	
Rural	Rural-urban migration Push factors					Successes	Failures
migra			Sanitation				
Push							
			ity of				
r ui là				1	1		

Favela

History Year 9 Term 4 KO

Н.	Can you define these key words?	What we are covering whilst working from home: The Holocaust		1	J. What were the consequences of the Nuremburg Laws for Jews in Nazi Germany?					
Anti-					What they were:			Consequences:		
Genocide	hostility or prejudice against Jewish people the deliberate killing of a large group of people, especially those of a particular nation or ethnic group	We will be • The hi (I)	looking at: istory of anti-Semitism in Europe	On 15 th September 1935 the Nuremburg Laws were passed which were a new set of laws which made it exercise to persecute laws						
Holocaust Persecution	destruction or slaughter on a mass scale hostility and ill-treatment, especially because of	The start of the persecution of Jews in Nazi Germany and the consequences for German Jews (J)		 easier to persecute Jews. The Reich Law on Citizenship stripped Jews of their citizenship (and all rights of it such as upting 		nip	 community were considered 'racially' Jewish and their 'racial' status was passed onto their children and grandchildren This legal definition of a Jews covered tens of thousands of people who discussed in the data set in			
Discriminatio n	race or political or religious beliefs; oppression The unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex	 How J escala The F Why v 	How Jewish persecution in Germany escalated from 1933-1939 resulting in The Final Solution (K) Why we need to remember the			c) and ow had patch to	ig, did not trink of themselves as a Jews and had no religious of cultural i and ties to the Jewish community - many Jews who hadn't practiced Judaism v had for years found themselves caught in the grip of Nazi terror. Even people ttch to with Jewish grandparents who had converted to Christianity were			
Lebensraum	Living space in the East (eg.Poland) where Hitler planned to take land fopr his 1000 year Reich for the superior German (Aryan) race	Holoc	aust (L).		 identify themselves. The Reich Law for the Protection of German Blood and Honour made it 			 Getined as Jews. For the first time in history, Jews faced persecution not for what they believed, but for who they were by birth. In Nazi German no profession 		
Nuremberg Laws	A series of laws reducing German Jews human rights, such as their ability to marry Germans, vote, and citizenship	H. Can you define these key words?		ey so that Jews were not allo marry or have intimate rel German citizens. Racial in alled off to		not anowed hate relation lacial infam	 of to of belief could convert a Jew into ons with The Nuremburg Laws were a crum the ostracism of German Jews and confinement and extermination 		al step in Nazi racial laws that led to I ultimately to their segregation,	
Pogrom	A violent attack on Jewish Communities, these had been occurring in Europe since 1900		contain Jews. They lacked water a healthcare and food. They were v		d water and ey were very offense.					
Roma	Known as Gypsies, they were persecuted by the Nazis	overcrowded and many Jews die there.		overcrowded and many Jews died there.			What do	these factors show about anti-Semitic attitudes in Medieval Europe?		
SA	Brownshirts Nazi thugs that attacked Nazi enemies	Kristalln acht Means ` The Night of Broken Glas Attacks on Jewish, synagogues homes and businesses in 1938 b the SS and SA Unterm ensche n Means ` under person' refers to anyone seen as undesirable in Hitler's Germany e.g. Roma,		s'.	Adolf Hitler	Adolf Hitler Nazi dictator of Germany 1933-45				
SS	Hitler's Elite solders(Blackshirts) , led by Himmler. They fought in the army and ran the concentration and death camps.			у	Heinrich Himmler	Lea	der of the	SS. It was that carried out the mass exterr	nination of the Jewish people	
SS Einsatzgruppe n	SS murder squads in Eastern Europe, capturing				Adolf Eichman	Ado orga	If Eichmar anisers of	inn was a German-Austrian high ranking SS officer and one of the major the Holocaust		
Sterilisation	Preventing men and women form breeding through	Minorities	Anyone considered non-Aryan, disabled people, homosexuals,		Josef Goebbels	osef Goebbels Nazi minister of propaganda			witz	
Genocide	surgery		Roma			1100				
Svnagogue	Killing if an entire race of people				K How did Jewish	h persecut	tion incre	ase from 1933 to 1939		
The Final	A Jewish place of Worship	Bovcott	of Jewish Businesses 1933		Nuremburg Laws 193	35		Kristallnacht 1938	Ghettos 1939	
Solution	The Nazi plan to murder all Jews in Europe	• On 30	th March 1933, the Nazi Party	•	On 15 th September 1935	the	• The	e first violent outburst of anti-Semitism	Key step in the process of	
Aryam	German superior race as believed by the Nazis	annou April a	inced that from 10am on 1 st an official boycott would behind		Nuremburg Laws were pa which were a new set of la	assed laws	in (• Gro	in Germany Groups of uniformed gangs ran amok and destroying Europe's		
Concentration Camp Prison camps set up by the Nazis from 1933. They held political prisoners and minority groups in terrible conditions		of all lawyer • SA me	Jewish businesses, doctors and rs. embers (paramilitary unit	•	which made it easier to pe Jews. The Reich Law on Citizen	oersecute nship	am and syr	Iongst Jewish communities, destroying d burning homes, shops, businesses, nagogues and desecrated JewishIst ghetto established i in October 1939• Jews who owned any	 1st ghetto established in Poland in October 1939 Jews who owned any 	
Exterminatio n `Death' Camp	A concentration camp designed for murdering huge numbers of people such as Jews in gas chambers	assoc Jewisl (Germ Jewisl	associated with the Nazis) painted Jewish stars or the word <i>Jude</i> (German word for Jew) outside Jewish businesses.		stripped Jews of their citizenship (and all rights of it such as voting, working for the government etc) and made them 'subjects' Jours		cer Sol Oth You	cometeries. Some gangs were in Nazi uniforms. Other gangs such as the SA and Hitler	businesses/property were forced to hand them over as they were placed in ghettos.	
Eugenics	The study of races. Nazis' distorted view on science such as Darwin's survival of the fittest	They ('Don'	then stood outside with banners t buy from Jews') discouraging		now had to wear a yellow shaped patch to identify	v star	tha ger	t the violence would seem to be by the neral public.	 walls, fences or barbed wire Temporary – some only lasted a 	
Euthanasia	"Mercifully" killing of people with disabilities or disease	people	e from going inside.		themselves.		few days or week		few days or weeks, others for years	
Gestapo	Hitler's secret police that spied on people								,	

History Year 9 Term 4 KO

H. Can you define these key words?		What we are covering whilst working from		J. What were the consequences of the Nuremburg Laws for Jews in Nazi Germany?			
Anti-		home: The	e Holocaust	What they were:		Consequences:	
Conocido		We will be	looking at:				
Genocide		The hi (I)	story of anti-Semitism in Europe				
Holocaust		The st	art of the persecution of Jews in				
Persecution		Nazi Germa	Sermany and the consequences for an Jews (J)				
Discriminatio		 How J escala 	ewish persecution in Germany ated from 1933-1939 resulting in				
n		The Fi	inal Solution (K)				
Lebensraum		Holoca	aust (L).				
Nuremberg Laws				1		-	
_		H.	Can you define these key words?	1	Wh	at do these factors show about anti-Semitic att	titudes in Medieval Europe?
Pogrom		Ghettos		Ad ler ler			
Roma		Chicker		nler Tein			
SA				a ch do			
SS		Kristalln		I ¥ ≝ ü £			
		acht		Josef Goebbels			
SS Einsatzgruppe		Unterm					
n		ensche n					
Sterilisation		Minorities		4			
Canasida							
Genocide				_			
Synagogue							
The Final Solution				K. How did	Jewish persecutio	on increase from 1933 to 1939.	
Aryam		Воусо	tt of Jewish Businesses 1933	Nuremburg La	ws 1935	Kristallnacht 1938	Ghettos 1939
Concentration							
Camp							
Exterminatio							
n Death Camp							
Eugenics							
Euthanasia							
Gestapo							

TTTT	

Year 9 Religious Education: Equality and Diversity



What we are learning this term:		в	Equality and religion				
A. Key wordsE. LGBTQB. Religion and equalityF. DisabilityC. RacismD. Gender			 People experience prejudice due to sex, disability, race, sexual orientation Equality is important to make society fair The Equality Act 2010 prohibits employers, educators and service providers from discriminating against protected characteristics (race, disability, sex) Christianity – "you are all one in Christ" Hinduirm the Divise in prosent in all human beings 				
A. Ca	n you define these key words?		 Islam – the only way one human is better than another is through goodness 				
Key words	Key definition The state of being equal in status, rights or	С	Racism				
Discriminati	opportunities The unequal treatment of different groups of people based on race, age, sex etc.		 Islam – "There is no superiority except on the basis of righteousness" Christianity – "There is neither Jew nor Greek, male nor female, you are all one in Christ" Hinduism – "There is none high or low amongst you" 				
Prejudice A negative opinion about someone before knowing them based on their belonging to a certain group Privilege A special right or advantage given to a person or group			 There are some examples in scripture of slavery – in The Bible, it says "slaves obey your masters" and some use this to justify actions e.g. Ku Klux Klan. Quakers are Christians who called for the liberation of Slaves Martin Luther King was inspired by Christianity to campaign for civil rights using non-violent methods Malcolm X was important in the fight for equality 				
Racism Discriminating against or preferring someone based on their race							
Liberation	The act of setting someone free from slavery or imprisonment	D Gender Gender equality is equal access to resources and opportunities regardless of gender Women in worship Catholic church does not allow won					
Feminism	A movement fighting for women's rights			 Women in worship Catholic church does not allow women into 			
Status	A persons position in society		 Christianity – in Genesis it says God made men and women differently "Eve was created by God 	priesthoodMen and women worship in the Mosque			
Rights	A moral or legal entitlement to something		 by taking her from the rib of Adam" Traditional gender roles e.g. woman caring for 	 separately from men Some mosques are now female led only, and 			
Persecution	Systematic mistreatment of an individual or group by another individual or group due to race, religion, gender, sexuality, etc.		 home are found in many religions Islam – some people claim the Qur'an justifies violence "Make clear to them the matter" BLT 				
Disability	A physical or mental condition that limits a person's movements, senses or activities		"the Messenger of God never struck a woman, child or a servant"				
Diversity	range of different people						
Justice	is done	E.	LGBTQ				
F Disability			 Homosexuality was illegal in the UK until 1967 Members of the LGBTQ community have faced p 	persecution in the UK and abroad e.g. Russia and			
 UK – Disability discrimination is illegal (being treated badly or put at a disadvantage due to disability Bible – Jesus went out of his way to heal the sick and help disabled people Qur'an – encourages good treatment and giving help to those who are disabled Buddhism and Hinduism – disability is not a punishment from God, comes from bad karma 			 Cameroon have seen an increase in violence Christianity – "God created man in His image male and female He created them" Christianity – "You shall not lie with a male as with a woman; it is an abomination" Buddhism, Sikhism and Hinduism do not mention homosexuality Dalai Lama – "For a Buddhist, a relationship between two men is wrong" Catholic – Welcomes all those who are homosexual but invites them to live a life of celibacy 				

Year 9				eligious Education: Equality and Diversity
What we are learning this term:		В	Equality and religion	
A. Key words B. Religion a C. Racism D. Gender	s nd equality	E. LGBTQ F. Disability		
A. Ca	n you define these	e key words?		
Key words	Key definition			
Equality				Racism
Discriminati on				
Prejudice				
Privilege				
Racism				
Liberation			D	Gender
Feminism				
Status				
Rights				
Persecution				
Disability				
Diversity				
Justice			E.	. LGBTQ
F Disability				



GCSE Unit 3 SPANISH Knowledge organiser. Topic Free Time Activities

	What we are learning	this term:				
	 A. Talking about free B. Talking about yo C. Talking about ea D. Talking about sp E. Extending what y F. Talking about sp 	e time ur plans for the weekend ting out ecial occasion meals you can say about sport ort in the world				
6 Key Words for this term						
	 disfrutar jugar los deportes 	4. campeones 5. formentar 6. a selección				
Γ						
	3.1G ¿Qué té	e gusta hacer?				
	aburrido/a bailar cantar el cine de vez en cuando time,occasionally entretenido/a estimulante jugar leer libre odiar la película practicar salir la tarde el teclado tocar instrument) ver	boring to dance to sing cinema from time to entertaining challenging to play (game, sport) to read free to hate film to practise to go out afternoon, evening keyboard to touch, to play(an				

3.3G	2Haces	deporte?
------	--------	----------

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

3.1F ¿Qué haces	en tu tiempo libre?
a veces	sometimes
bastante	quite
cada	each, every
cenar	to have an
evening meal	
charlar	to chat
el coro	choir
descansar	to rest
los dibujos animado	s cartoons
el documental	documentary
el fin de semana	weekend
genial	great
las noticias	news
nunca	never
ocupado/a	occupied, busy
policíaco/a	police, detective,
crime (adj.)	
poner	to put
por lo general	in general
siempre	always
el teatro	theatre
la telenovela	soap opera
terminar	to finish
el tiempo	time
todo/a/os/as	all, every
tonto/a	silly, stupid
la vez	time, occasion
3.2G Con	ner y Beber
el (fem.) aqua (mine	eral) (mineral) water
beber	to drink
el bocadillo	sandwich
la carne	meat

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

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

3.2G Comer y Beber							
el perrito caliente	hot dog						
el pescado	fish						
el pollo	chicken						
el postre	dessert, pudding						
el queso	cheese						
la sopa	soup						
el té	tea						
tomar	to take, to have						
(food, drink)							
la tortilla	omelette						
la tostada	toast						
el vaso	glass						
las verduras	vegetables						

el atún el bacalao	tuna cod
la harra	loaf
el hister	steak
los calamares	squid
la cebolla	onion
al cerdo	nork
	boor
	mushroomo
	nusnioonis
	chonzo
la chuleta	chop
el cordero	lamb
el filete	fillet
la fresa	strawberry
las gambas	prawns
el gazpacho	chilled tomato
soup	
los guisantes	peas
el iamón serrano	cured ham
las judías verdes	green beans
,	<u>.</u>

3.1H Hablando d de los	del tiempo libre y planes					
aburrido/a	boring					
agradable	pleasant					
al aire libre	in the open air,					
outdoors						
la batería	drums					
la canción	song					
dar un paseo	to go for a walk					
de vez en cuando from time to time,						
occasionally						
desafiante	challenging					
divertido/a	fun					
emocionante	exciting					

3.3F ¿Qué depo	rtes harás?
el alpinismo	rock climbing
cansado/a	tired
la carrera	race
el concurso	competition
(contest)	
contestar	to answer
durante	during
el ejercicio	exercise
el entrenamiento	training
entrenar	to train
el equipo	team
el esquí	skiing
este, esta	this
ganar	to win
el jugador	player
mañana	tomorrow
el miembro	member
el partido	match
probar	to try, to test



GCSE Unit 3 SPANISH Knowledge organiser. Topic Free Time Activities

Translation Practice. G -	blue F – orange H - Green	Key Questions: Answer the following in your own words. Use these model answers					
No me gusta Me encanta con mis amgos Me escuchar música No me gusta	I don't like going shopping I love going out with my friends I love listening to music I don't like dancing	¿Qué haces en tu tiempo libre? Frecuencia? Opiniones?	-Normalmente juego al futbol todos los días después del colegio. Lo que me encanta es jugar al futbol con mis amigos porque es bueno para la salud y es emocionante y relajante jugar contra tus amigos. De vez en cuando juego con videojuegos pero ayer hice ciclismo, hice mis deberes y toque mi guitarra. Ayer, fui al colegio durante el día. Después del colegio fui al polideportivo con mis amigos y jugué/jugamos al baloncesto juntos. Ayer por la mañana fui de compras en el centro de la cuidad con mi madre y fuimos a las tiendas de ropa. Lo que me encantó/gustó fue que ví una película entretenido por la noche/ fue que jugué mi deporte favorito y podía entrenarme.Todos los días juego al futbol y al baloncesto, que son mis deportes favoritos. De vez en cuando hago ciclismo y practico el atletismo pero son muy estresantes, duros y no son relajantes. Lo que me encanta es jugar al fútbol en mi equipo los fines de semana.				
Si tengo Hago de música	If I have the time I do music classes	¿Te gusta ver la televisión? Qué has visto en la televisión recientemente?Tienes unprograma favorito?	Si, me gusta ver la televisión, me gustan los programas de horror, de tele-realidad, los documentales y de deporte. Lo que me encanta es ver los dibujos-animados porque son más entretenidos que las noticias. Ayer ví las noticias con mis padres. Mi programa favorito es porque es				
De vez en cuando una novela	From time to time, I read a novel I always play the guitar with the group	¿Qué es tu película favorita? Qué película has visto recientemente en el cine?	Mi película favorita es porque me encantan las películas de acción/tiene mucha violencia/tiene buenos actores/es muy romántica/me encanta la historia/tiene buenos efectos especiales.				
A veces a algún concierto	Sometimes I go to some concert	¿Cuando se cena en Inglaterra y en España? ¿Cuándo prefieres cenar o almorzar?	Normalmente se cena en Inglaterra a las seis, como mi almuerzo a las dos, como mi desayuno a las ocho.				
El fin de semana juego al fútbol Siempre muy preocupada	On the weekend I always play football	Describe una cena especial	Recientemente fui a un restaurante con mi familia para celebrar el cumpleaños de mi abuelo. Fuimos a un restaurante chino porque es la comida favorita de mi abuela. Primero, comí y bebí. Para el postre comí y bebí . Lo que me gustó fue la buena comida/ver a y hablar con toda mi familia. Fue muy emocionante.				
Generalmente música por las ardes	Generally I listen to music in the evenings		Key Grammar				
Me jugar a los videojuegos	Playing video games interests me	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				
al gimnasio	I will come to the gym		-ER: -í, -íste, -ió, -imos, -istéis, - ieron -IR : -í, -iste, -ió, -imos, -istéis, - ieron				
if there is a match?	Will you know if there's a match?	Forming the future tense ('will')	Future Tense ('will') All verb groups: -é, -ás, -á, -emos, -éis, -án				
el ciclismo	I will try cycling						
Fue una buena	It was a good party	Imperfect Tense (Past, ongoing actions, descriptions, 'used to' or 'was doing')	- ar -aba, -abas, -aba, -ábamos, - abais, -aban - er and –ir -ía, -ías, -ía, -íamos, - íais, -ían				
No quiero	I don't want to participate						

iš:

Year 9 COMPUTER SCIENCE Term 3 – Programming

What we are learning this term:

B. Definitions

A. Matching Operators

C. Python Code

D. Data Types

		B Definitions Computer Science Terms		C.	Pytho	on Code			
Multiply		Identifier			This is an example of:				
	>=			if use	rname == '	"Tim":			
Assignment	=	IF Statement - Selection		print("Hello World")					
				dogA	ge = 8				
ls greater	1								
than or equal to	!=	Loops - Iteration		while	userNum	< 3:			
Is equal to									
	<			D.	Data Types		Example		
		Operator							
ls not equal to	==			В	oolean				
				Cł	aracter				
Is less than	*	Relational Operator							
				lı	nteger				
					String				
		Variable							
				Re	al/Float				



Year 9 COMPUTER SCIENCE Term 3 – Programming

What we are learning this term:

A. Matching Operators B. Definitions

C. Python Code

D. Data Types

	В	Definitions	C.		Python C	ode			
	Compu	ter Science Terms							
	Identifier		A name, usually for part of the program such as a constant, variable, array etc.	This is an example of:					
Multiply				if use	ernam	ie == "Tim	ו":	Selection	
				print("Hell	o World"))	Output	
	IF Sta Selec	tement - tion	A statement that lets a program select an action depending on whether it is true or false.						
Assignment				dogA	.ge = 8	8		Assignment	
Is greater than or equal	Loops Iterati	s - on	Repeating an action, activity or section within a program.	while	user	Num < 3:		Iteration	
				D.	Data	Types			Example
Is equal to	Opera	itor	A character which determines what action is to be						
			considered or determined. Example: =	E	Boolear	n 🛛	TRUE/FA	LSE or 1/0	TRUE or 1
ls not equal				Character		ər	A single, alphanumeric		1 or A or !
	Relati	onal Operator	An operator which compares two values. Example: <						
Is less than				I	Integer		Whole	numbers	15
	Varial		A memory location within a computer where		String	(One or more	alphanumeric	1A!
			values are stored.				Ghare		
				R	eal/Floa	at	Decimal	numbers	15.5



Year 9 Art Term 4: Topic = Frank Stella

Answer the questions about Frank Stella

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

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

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

Write a step by step guide to making a cardboard template

Firstly cut out individual sections and shapes

have cut out onto Cardboard from your and glue it down. Using a chosen sharp pair of scissors cut this image. use out of Cardboard staying scissors 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

Lay your section that you



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

Slab



Score& Slip

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 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 naste Using the slin like glue add







What we are learning this term:								С.	Key Word	S		
A. Workshop Tools B. Materials C. Key concepts D. Key Words E. Evaluating Work								Prototy	pe ∳∰≱	An early model or sample of a product used to test a concept		
A. Worksho	Tri-Square	Laser Cutter	Mitre squa	re Tenon Saw Pillar Drill Bandfacer				Bandfacer	Tolerance +		The margin of error allowed for a dimension without negatively impacting a product	
		Ţ					Depth s	stop	A part on a tool which is used to help cut or drill a specific depth.			
B. Material	ls			C.	Key concepts	5			Assemble Creating a product by bringing several			
Timbers come	from trees			Designe material	ers research an Is to help inspir	d inves e ideas	stigate res s.	ources and		\$ =	components together.	
		Scots pine – which used for your box v a softwood	h you valls – is	Computer-aided design (CAD) is the process of using computer software to create 2D or 3D designs.				cess of using signs.	D.	Evaluation	n of Products	
		0-11		Advantages Disadvantages				tages	Evaluate	२	To judge and give an opinion.	
		and boards	n planks	Designs can be created , saved and edited quickly, saving time			Designers will evaluate their products to see what works well a what doesn't. This way they can make any improvements on th					
Manufactured Boards come from wood pulp				Designs or parts of design Software can be very			current designs to ensure a high-quality product.					
		Plywood – which you used as your base and Lid– is a		can be easily viewed from expensive different angles, copied or repeated			When writing an evaluation it is important to include the					
	Manufactured Board			CAD is very accurate CAD files can become corrupted or lost			following three things: 1. Positives – what works well					
		come in sheets		Hazards	s – these are sor	nething	that could	potentially	2. Negatives – what doesn't work well			
				 harm you Bags 	u. There are mains and chairs action	ny such ng as a	i as: trip hazaro	1	3. Possible improvements – how could you make it better?			
Polymers com	e from crude oil			Untu comi	icked shirts, bag mon things to ge	gy cloth et caugh	nes and un nt on tools	tied hair are and machines.				
		Acrylic – which yo your lid decoration trinket box – is a po Polymers come in graduals and filame	u used as for your olymer sheets, ent	 Drinks and liquids, if spilled can become slip hazards Preventative measures – rules put in place to minimize the likelihood of a hazard occurring. No food and drink in workshops Bags and chairs stored neatly in designated areas Long hair must be tied up and correct uniform worn. Personal protective equipment (PPE) The three used most often are aprons, safety goggles an ear defenders. 				ne slip nazards ce to minimize nated areas uniform worn. ety goggles and	Hor exa My trink appeali and ove by apply control	ample: set box is w ng. Howeve erlaps in so ying the pai and will ma	ell constructed and uses bright colours to look er, under closer inspection, the paint is messy me places. One improvement I could make is int with a smaller brush so that it is easier to ke it look neater.	



Year 9 PRODUCT DESIGN Rotation Knowledge Organiser



What we are learning this terr	m:	C. Key Words	
A. Workshop Tools B. M	laterials C. Key concepts	Prototype	
A. Workshop Tools			
			Tolerance
A			
		Í 🔪 🍹 🦊	Depth stop
B. Materials		C. Key concepts	Assemble
Timbers come from		Designers research and investigate	
	Scots pine – which you used for your box walls – is a softwood	(CAD) is the process of using computer	E. Evaluation of Products
		Advantages Disadvantages	Evaluate
			Think back to your completed Trinket box.
			and an improvement you would like to have made if you had
Manufactured Boards come			time.
	Plywood – which you used as your base and Lid– is a		
	manufactured board		
	Manufactured Boards	Hazards – these are something that could potentially harm you. There are many such as:	
Polymers come from			– – – – – – – – – – – – – – – – – – – –
	Acrylic – which you used as	Preventative measures – rules put in place to minimize	—
	your lid decoration for your trinket box – is a polymer	the likelihood of a hazard occurring.	 Possible sentence starters:
	Polymers come in		- One thing that was successful
	·	Personal protective equipment (PPE)	- One thing that I had issues with was
		The three used most often are	If I had more time, I could improve this by

	Year 9 – High Skills	E. Keywords	
	B. Can you list 5 of the dietary requirements of a teenager?	Hygiene	A method of keeping yourself and equipment clean
What we are learning this term: A. Health, safety and hygiene in the kitchen B. The Fatwell quide and nutrients	1 A diet high in carbohydrate as a teenager is normally an energetic person. 2 A diet with 2-3 potions of protein to maintain muscle growth and cell repair 3 A diet with 2 -3 sources of calcium to build developing teeth and bones. 4 A diet low in fat to avoid becoming obese or developing other bealth problems.	Research	Information that you find out to help you with a project
 C. The Dietary requirements of a teenager D. Skills testing E. Healthy cooking 	5 Drinking 2 litres of water a day.	Nutritious	A meal that is healthy and contains vital nutrients.
F. Chopping Board Colours	A What is cross contamination and how can it be prevented?	Target Market	The age or type of person you re creating a product for.
1 Hygiene 4 Healthy	FOOD SAFETY CHOPPING BOARDS If used correctly, colour coded chopping boards can eliminate or reduce the risk of cross contamination during tood preparies food which can therefore result in food poisoning. You	Carbohydrates	Foods that give you energy
3 Skills Test 6 Cross Contamination	RAW MEAT must use the correct equipment for the correct ingredients. You must also ensure that you are always following good hygiene practices when cooking.	Protein	Food that grow and repair your muscles
A. Explain the main four things that you should do when you enter the kitchen area.	B. What do the following terms mean? B. What do the following terms mean? COOKED MEATS Grilling Using the top part of the oven. It involves a significant amount of direct, radiant heat, and tends to be	Fibre	Foods that keep your digestive system healthy and avoid constipation.
jewellery. Jewellery can harbour bacteria and could fall off into the food.	VEGETABLE PRODUCTS	Calcium	Foods that make your teeth and bones strong
Tie back your hair Hair could fall into the food or touch equipment.	Bakery & Dairy PRODUCTS Products. Clean and store chopping boards Baking Baking is a method of preparing	Design Idea	A sketch or plan of how you are hoping a project to turn
wash your nands with hot soapy water. To remove any germs and bacteria from your hands and nails. Put on and apron To protect you from the food and	rood that uses dry heat, normally in an oven. Heat is gradually transferred from the surface of cakes, cookies, and breads to their centre.	Organisation	Having everything ready for a lesson and following instructions
and tie it back. equipment and the food from touching you.	Frying Frying is the cooking of food in oil or another fat. It is usually done in a frying non-wing the beh of the	Time keeping	Using the time to remain organised.
	cooker. It also known to be unhealthy.	Sensory analysis	Use your senses to taste and describe a product
	C. Can you list 5 reasons for why we cook food and why it is important? Rule Why it is important	Mood Board	A collage of photos and key words based on a project
	 1 to get rid of bacteria on the food 2 to make the food taste better 3 to make food chewable 3 it could be raw or a choking hazard 	Time Plan	Instructions of wat you are going to do and how long it should take.
Provide and the second se	 4 to ensure that food is not raw 5 to add colour to the food 4 to stop food poisoning 5 to make it look more appetising or change its use 	Skills Test	Demonstrating your knowledge of a cooking term.
		Teenager	Someone between the age of 13 – 19.

Year 9 – High Skills



YEAR 9 GRAPHIC COMMUNICATION

What are we learning this term?				D Key words		
A Logos	B Typography	C Computer skills	D Key words	E Evaluation	Merchandise	Branded products used to promote and sell a product
A Logos				Combined Logo	A logo that uses both images and text	
What is a logo?				Photoshop	Photoshop A software for editing photos and graphics. It is used for image editing,	
A graphic design element that includes words and images, shapes, symbols or colour.						making illustrations or web design.
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				Photo Editing	The act of image and enhancement and manipulation	
through typography.			E Evaluation			
B Typography C Computer skills		Evaluation: To judge or give an opinion				
Draw your initials in designer Alex Trock	n the typographic sty nut work	c style of What is the shortcut for copy? Ctrl + C What is the shortcut for paste? Ctrl + V What does this symbol stand for? What does this symbol mean? What does this symbol mean?			 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: Positives – what works well Negatives – what doesn't work well 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?				D Key words		
A Logos	B Typography	C Computer skills	D Key words	E Evaluation	Merchandise	
A Logos			Combined Logo			
What is a logo?					Photoshop	
How does Alex Tro	chut design logos?				Photo Editing	
					E Evaluation	
B Typography		C Co	C Computer skills		Evaluation: To judge or give an opinion	
Please use pencil for the drawing of your design		design What is what is what is what is a second sec	What is the shortcut for copy? What is the shortcut for paste? What does this symbol stand for? PS What does this symbol mean?		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?	







Year 9 Knowledge organiser Topic: Practitioners



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

A- Key Words for this term

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

Bertold Brecht 1898-1956

Verfremdungseffekt (Veffect) (Alienation **Techniques**)

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

This effect can be created through the use of:

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

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

Thinking questions.

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

Constantin Stanislavski 1863-1938

A Russian actor and theatre director, he created The System of 'method acting'. As a reaction to the melodramatic acting of the late 19th century, he developed methods to help actors create the illusion of reality on stage - Naturalism. **Objectives:** The actor needs to know what their character wants in each unit of the play – what are they trying to achieve? Super Objective: The character's ultimate goal over the whole play – each objective should 'link in' and help the character achieve this goal.

The Magic If: How would the actor react/behave

if they were in the same situation as the character?

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

Emotional Memory: Relating the actors own personal and emotional experience to that

of their character.



Antonin Artaud 1896-1948

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

Extremes – Artaud would portray the extremes and put his actors through extremes before performances. This was to access their "visceral" reactions and emotions. Attack the senses. He believed that performances should be seen, heard, felt, smelt and tasted. The audience were always made to feel uncomfortable.

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

2. What makes	3. In an Artaudian performance of Little Red Riding Hood, HOW
a successful,	would you play to all 5 senses?
naturalistic	

performance?



Year 9 Knowledge organiser Topic: Practitioners

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

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- 3. Theatre of - Style of theatre that aims to shock and confront the audience
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- 5. Μ - When an actor plays more than one character on stage
- 6. Placards-
- Actors interrogate a script for 7. Script a its intended meaning
- Given Circumstances- W , w , w , h 8. and w of a character in a play
- 9. - A technique or type of acting in which an actor aspires to encourage sincere and emotionally expressive performances by fully inhabiting the role of the character
- 10. Practitioners-

Bertold Brecht 1898-1956

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This effect can be created through the use of:

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Thinking que

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Super Objective:

The Magic If:

Units:

Emotional Memory:

Antonin Artaud 1896-1948



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

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Universal language:

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ang up their brains	naturalistic	
its in the	performance?	









Year 10