100% book - Year 9 Grammar

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



Term 1

Swindon Academy 2022-23				
Name:				
Tutor Group:				
Tutor & Room:				

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

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











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

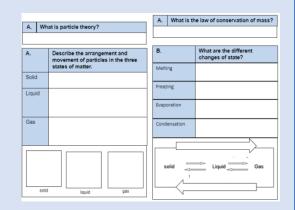
Knowledge Organisers

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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.

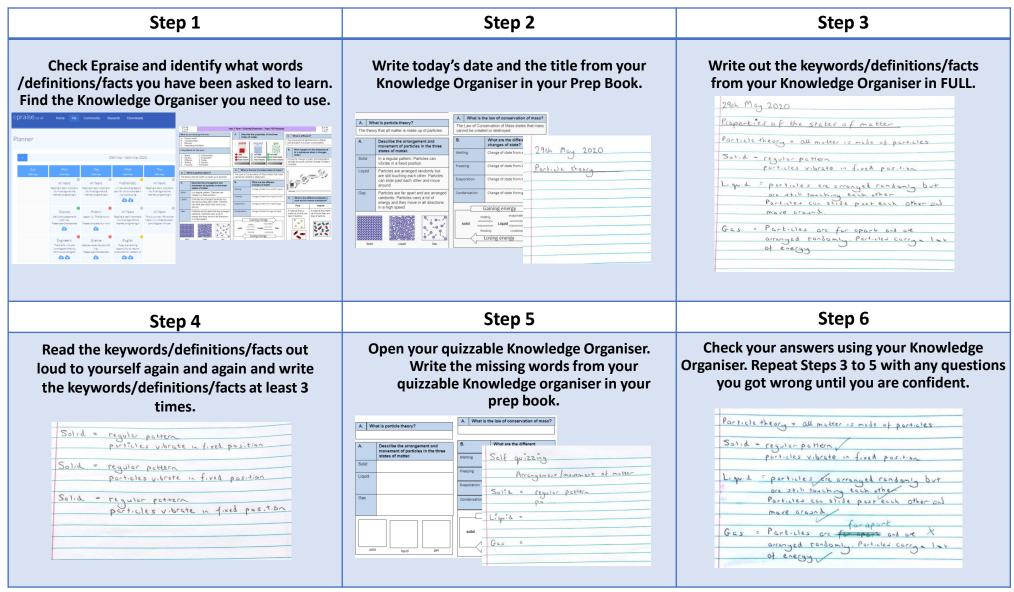
Top Tip

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!

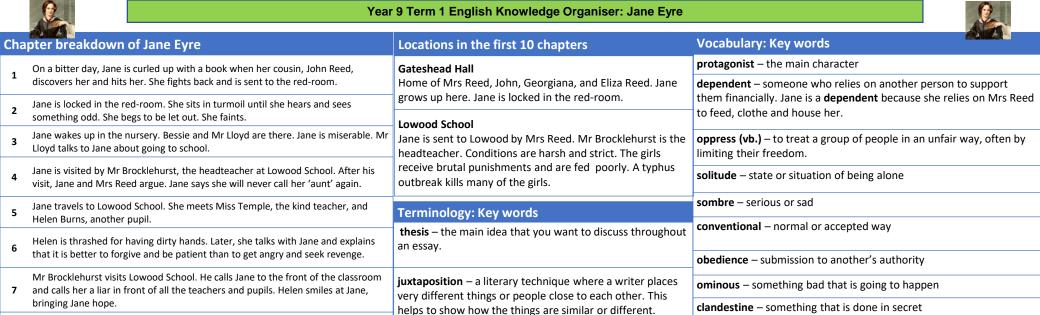
Expectations for Prep and for using your Knowledge Organisers

- 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.
- 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.



Jane Eyre The main character. A young, intelligent, and

passionate orphan. "You think I have no feelings, and that I

can do without one bit of love or kindness; but I cannot live

Mrs Reed - Jane's aunt She neglects and abuses Jane and

is glad to send her away to Lowood School. "Guard against

Mr Brocklehurst - The governor of Lowood school A cruel

and hypocritical Christian. He believes in driving evil from

children through harsh discipline. "Punish her body to save

Helen Burns - Jane's friend A kind and forgiving Christian.

dies of tuberculosis at 14. "Love your enemies; bless them that curse you; do good to them that hate you and

She inspires Jane to be more patient and accepting. She

Miss Temple The kind and understanding teacher at Lowood. Offers care and affection to Jane and Helen. "You

shall be publicly cleared from every imputation: to me,

Characters in Jane Eyre

her soul"

despitefully use you."

Jane, vou are clear now."

her worst fault, a tendency to deceit"

humiliate (vb.) - to make someone feel stupid or ashamed. If

as humiliating.

another time.

what they did.

rational being

Biographical information

school and as a young woman.

Victorian attitudes to childhood

something makes you feel stupid or ashamed, you could describe it

hypocrite – someone who says one thing but does the opposite at

comeuppance – when a villain receives some form of punishment for

A child is a blank slate and can be trained to develop into a

A child is born completely innocent and pure. They are only

The child is born evil and must therefore be controlled and

punished in order to submit to the rules of God and society.

Parts of 'Jane Eyre' were influenced by Brontë's experiences at

'Jane Eyre' was unusual when it was published because it is

written in the first-person from a female perspective.

contaminated by contact with corrupt forces.

1 'Jane Eyre' written in 1847 by Charlotte Brontë.

Afterwards, Jane and Helen visit Miss Temple. Miss Temple says she believes that

conversations. Miss Temple hears from Mr Lloyd that Jane is not a liar and tells

Jane enjoys the area around Lowood in the spring. Typhus breaks out at Lowood

Eight years pass. Jane has become a teacher at Lowood School. Mr Brocklehurst

had his power removed when his treatment at the school was discovered. Jane

Jane is not a liar. Jane listens to Miss Temple and Helen's fascinating

School. Lots of girls get sick. Many die. Helen Burns dies of tuberculosis.

Social Class: Jane is an orphan and dependent on the charity of her

extended family. Jane is poor and of low class – powerless. She suffers

2 back on her childhood in the novel. She learns to manage her emotions.

Growth: Jane is constantly growing and maturing. She is an adult reflecting

Oppression: Oppression of women. Jane's abusive childhood is a form of

Role of women in society: Jane is angry at her place in society. Lowood is

4 an all-girls' school. Women as governesses, teachers, servants. Low class

3 oppression. Adults oppressing children in a huge theme in the novel.

applies to be a governess for a family at Milcote.

Lowood is harsh and corrupt – religious hypocrisy.

Her relationships with others help her grow.

Religion as a form of oppression. In the novel.

abuse by John Reed, her 'master'

women are powerless.

the school.

The Big Ideas:

Year 9 Term 1 English Knowledge Organiser: Jane Eyre Chapter breakdown of Jane Eyre **Locations in the first 10 chapters Vocabulary: Key words** On a bitter day, Jane is curled up with a book when her cousin, John_____ protagonist -**Gateshead Hall** 1 discovers her and hits her. She ______back and is sent to the _____-dependent and ______ grows up here. Jane is locked in the ______. She sits in turmoil until she hears and sees is locked in the something odd. She begs to be let out. She____ Lowood School Jane wakes up in the nursery. and Mr are there. Jane _____ is sent to ______ by Mrs ______. Mr oppress (vb.) – is______. Mr _____talks to Jane about going to school. is the_____. Conditions are Jane is visited by Mr______ the _____at _____ and . The girls receive brutal ______. After his visit, _____and Mrs _______. Jane says she will ______call her '_____' again. solitude – and are fed______. A _____ outbreak _____ many of the girls.

Terminology: Key words

Characters in Jane Eyre

Mrs Reed - Jane's aunt

Helen Burns - Jane's friend

Miss Temple

Mr Brocklehurst – The governor of Lowood school

thesis -.

Jane Eyre

juxtaposition -

sombre –

conventional -

obedience -

ominous -

clandestine -

hypocrite –

comeuppance -

Victorian attitudes to childhood

2 A child is born completely innocent and pure...

1 'Jane Eyre' written in by Charlotte

and as a young______.

Parts of 'Jane Eyre' were influenced by Brontë's experiences at

'Jane Eyre' was unusual when it was published because it is

1 A child is a blank slate...

3 The child is born evil...

Biographical information

3 written in the

humiliate (vb.) -

Jane travels to ______, the

is thrashed for having hands. Later, she talks with Jane and

6 explains that it is better to _____and be ____than to get ____and

Mr Brocklehurst visits Lowood School. He calls Jane to the front of the classroom and

Afterwards, _______ and ______visit Miss Temple. Miss Temple says she believes

______. Mr_____ had his ______ when his at the school was . Jane applies to be a governess for a

 Social Class: Jane is an _______ and ______ on the ______ of her extended family. Jane is _____ and of ______ class - ______ . She

suffers by John Reed, her 'master'. Lowood is harsh and –

Growth: Jane is constantly _____ and _____. She is an adult

back on her in the novel. She learns to manage her . Her with help her

Oppression: Oppression of _______. Jane's ______ childhood is a form of oppression. Adults oppressing in a huge theme in the novel.

Role of women in society: Jane is at her place in .

4 Lowood is an all-girls' school. Women as governesses, teachers, servants. Low

as a form of oppression in the novel.

. Miss Temple hears from Mr that Jane is not a

7 calls her a _____ in front of all the _____ and _____. Helen smiles at

that Jane is a . Jane listens to Miss Temple and Helen's

Jane ______ in the _____.

______ breaks out at Lowood School. Lots of girls get_____.

Many_____ . Helen Burns _____ of_____.

____ pass. Jane has become a _____ at ____.

kind_____, and Helen____, another____.

Jane, bringing Jane____.

and tells the

family at Milcote.

religious_____.

class women as _____

The Big Ideas:

Year 9 Grammar Term 1 Biology: Topic B1.1 Cell Structure & Transport

.

A. Eukaryotic cells

What we are learning this term:

- B. Cell Specialisation
- C. Microscopy
- D. Transport

C.

Xylem cell

What is the equation to calculate magnification?

$$Magnification = \frac{Size \ of \ image}{Actual \ size \ of \ object}$$

6 Key Words for this term

1. Transport

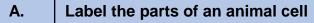
4. Mitochondria

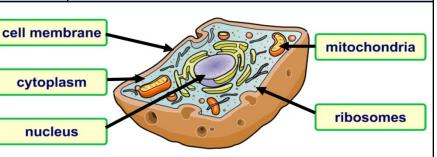
2. Osmosis

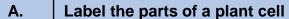
5. Eukaryotic

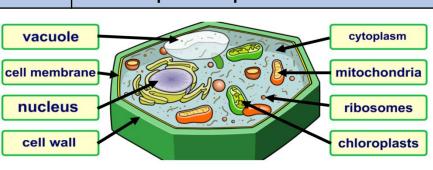
3. Specialised

6. Prokaryotic









B. Match the specialised plant cell to its function

Root hair cell increases the surface area of the roots

transports water up the plant

Sieve cell transports carbohydrates around the plant

Palisade cell site of photosynthesis in the leaves

form the top layer of cells in leaves

B. Match the specialised animal cell to its function

White blood cell able to change shape and engulf microbes

contains haemoglobin to transport oxygen
cell

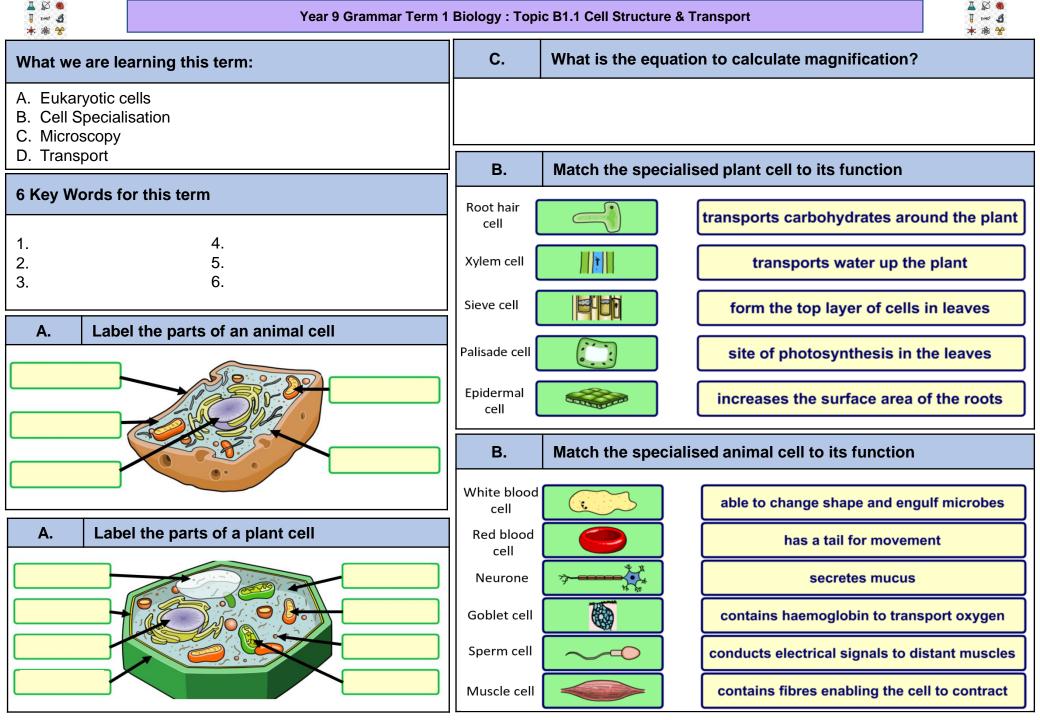
Neurone

conducts electrical signals to distant muscles

Goblet cell secretes mucus

Sperm cell has a tail for movement

Muscle cell contains fibres enabling the cell to contract



	Year 9 Grammar Term 1 Biology : Topic B1.1 Cell Structure & Transport * * * *							
				D.	What 3	factors affect the rate of diffusion	n?	
C.	Which micro	scope is whic	h?	Surface area Membrane thickness				
	Electron Micro	oscope	Light Microscope	3. C	oncentra	ation gradi	lent	
Great	ter resolution		Lower resolution	D.	Name	the type	of solution	
Great	ter magnificatior	1	Lower magnification		sotonic		e solute concentration outside the me as the internal concentration.	cell is the
More	expensive		Less expensive	H	ypertoni	C	e solute concentration outside the gher than the internal concentration	
Many are vi	more sub-cellu sible	lar structures	Very few sub-cellular structures are visible	н	ypotoni	<u>. </u>	e solute concentration outside the wer than the internal concentration	
D.	D. Define each transport method and draw the arrow on the concentration gradients							
1	The net movement of particles from a concentration to an area of lower concentration gradient.				-	·	Down co	ncentration gradient
Osmosis The diffusion of water through a partially pe from a dilute solution (high concentration concentrated solution (low concentration concentration gradient.				of w	ater) to) a	Down co	oncentration gradient
Active transport The movement of substances from a dilute concentrated solution against a concentration energy from respiration.						Against	concentration gradient	

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	a La		Year 9 Grammar Term 1 Biology : Topic B1.1 Cell Structure & Transport ↓ ← ₫ ★ ※ 全					
C.	Which r	nicroscope is whic	cope is which?			What	3 factors affect the rate of diffusi	on?
				2. 3.				
Great	er resoluti	ion	Lower resolution	D. Name the type of solution				
Great	er magnif	ication	Lower magnification			I .	The solute concentration outside the same as the internal concentration.	ell is the
More	expensive	9	Less expensive				The solute concentration outside the higher than the internal concentration	
Many more sub-cellular structures are visible Very few sub-cellular structures are visible				I .	The solute concentration outside the lower than the internal concentration			
D.	D. Define each transport method and draw the arrow on the concentration gradients							
Diffusion								
Osmosis								
Active transport								



Year 9 Grammar Term 1 Chemistry: Topic C1.1 Atomic Structure



What we are learning this term:

- A. Atoms, elements and compounds
- B. Mixtures and separation
- C. Development of the atomic model
- D. Structure of the atom
- E. Electronic structure

6 Key Words for this term

- Isotopes
- 2. Protons
- 3. Ionisation
- 4. Aqueous
- 5. Residue

B. What is a mixture?

A mixture consists of two or more elements or compounds not chemically combined.

What properties do mixtures have?

Each substance in the mixture will have the same chemical properties

How are mixtures separated?

By physical methods:	Filtration
Crystallisation	Simple Distillation
Fractional Distillation	Chromatography

Are new substances made?

No new substances are made

A. What is Conservation of Mass

Atoms are not created or destroyed in a reaction

A. What are atoms?

All substances are made of atoms. An atom is the smallest part of an element that can exist

·				
What are elements?		What are compounds?		
An element is a substance ma	ade of one type of atom	Compounds contain two or more elements chemically combined		
How are elements represen	ted?	How are compounds represented?		
By a chemical symbol.		By the symbols of the atoms that formed them		
Example: Sodium	Na	Example: Sodium Chloride	NaCl	
How many elements are the	ere?	How can compounds be separated?		
There are about 100, all show	n on the periodic table	By chemical reactions only		

A. What are word equations?

These show the names of each substance that is involved in a chemical reaction. The reactants are shown on the left. The products are shown on the right.

Reactants → <u>Products</u>

Copper Oxide + Sulphuric Acid → Copper Sulphate + Water

What are symbol equations?

The chemical formulae (symbols) of the reactants and products show what happens in a chemical reaction

 $CuO + H_2SO_4 \rightarrow CuSO_4 + H_2O$

D.	What are subatomic particles?	Where are each subatomic particles found?
The particles that make up atoms		nucleus containing protons and
Name the 3 subatomic particles		neutron
Proto	ns, neutrons and electrons	electrons moving

<u>™</u> &	Year	r 9 Grammar Term 1 Chemistry : Topic C1.1 Atomic Structure					
What v	we are learning this term:	A.	What are atoms?				
A. Atoms, elements and compounds B. Mixtures and separation							
D. St	evelopment of the atomic model tructure of the atom	What	are elements?	What are compounds?			
E. Electronic structure							
6 Key Words for this term		How are elements represented?		How are compounds represented?			
	sotopes rotons						
3. Ionisation4. Aqueous5. Residue		Exam	ple: Sodium	Example: Sodium Chloride			
		How many elements are there?		How can compounds be separated?			
B.	What is a mixture?						
		A. What are word equations?					
What	properties do mixtures have?						
			<i></i>				

D. Structure of the atom	What are elements?	What are compounds?			
E. Electronic structure					
6 Key Words for this term	How are elements represented?	How are compounds represented?			
 Isotopes Protons 					
3. Ionisation4. Aqueous	Example: Sodium	Example: Sodium Chloride			
5. Residue	How many elements are there?	How can compounds be separated?			
B. What is a mixture?					
	A. What are word equations?				
What properties do mixtures have?					
	→				
	Copper Oxide + Sulphuric Acid → Copper Sulphate + Water				
How are mixtures separated?	What are symbol equations?				
	D. What are subatomic particles?	Where are each subatomic particles found?			
Are new substances made?					
	Name the 3 subatomic particles				
A. What is Conservation of Mass		4			



Year 9 Grammar Term 1 Chemistry: Topic C1.1 Atomic Structure



T -0 4					
C. Developm	oment of the Atomic Model – How was our current atomic model developed?				
Person/Time	Demicritus (400BC) Dalton (1803)	JJ Thomson (1898)	Ernest Rutherford (1909)	Niels Bohr (1913)	James Chadwick (1932)
Ideas/model	Small indivisible matterTiny hard spheres.	Plum Pudding model	Alpha particle scattering experiment Proved that mass of atoms found in the	Electrons are restricted to certain orbits like planets round the sun	Discovered the neutron
	, ,	Sphere of positive charge with negative charged particles spread throughout (like plums in a pudding)	centre – nucleus Negative electrons surround the positive nucleus		
Diagram				0	
Contribution to current model:	Everything is made of atoms	Negative electrons	Positive mass in the centre surrounded by negative electrons	Electrons orbit in shells/orbitals at specific distances	Neutrons found in nucleus along with protons

Mass

D.	How big	are	atoms?
υ.	1 1000 515	j ui c	atoms.

0.1nm (1 x 10⁻¹⁰m)

How big is the radius of an atom?

1/10000 the size of the atom $-1x10^{-14}$ m

D.	What is relative mass and charges of the subatomic particles?		
Subatomic particle		Relative Mass	Relative Charge
Proton		1	+1
Neutron		1	0
Elect	ron	1/2000	-1

D. What is the overall charge of an atom?

Atoms have no charge

No of protons = no of electrons

How do we know how many subatomic particles are in each element?



D.

What is Mass number?

Number of protons and neutrons

What is atomic number?

Number of protons – same for each individual element

D. How can we know what element we have?

Each element has a unique number of protons

What is an isotope?

An isotope is a substance with the same number of protons but different number of neutrons

D. What is relative atomic mass of an element?

An average value that takes account of the abundance of the isotopes of an element

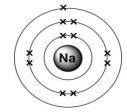
E. Which energy level do electrons fill first?

Electrons in an atom occupy lowest energy level first

How many electrons does each orbital hold?

First	Up to 2
Second	Up to 8
Third	Up to 8

Electronic structure of Sodium:



2,8,1



Year 9 Grammar Term 1 Chemistry : Topic C1.1 Atomic Structure



* *	*												* * *
C.	Developme	nt of the Atomic Mo	del – How was our c	urrent at	omic model de	eveloped?							
Person/Time Demicritus (400BC) JJ Thomson (1803)		on (1898)		Ernest Rutherford (1909)			Niels Bohr (1913)			James Chadwick (1932)			
Ideas/model													
Diagram					• •		0						
Contribution to current model:													
D.	D. How big are atoms?				D. How do we know how many subatomic particles are each element?			in	E.		nergy level do s fill first?		
How	How big is the radius of an atom?			12 Mass Number			What is	Mass n	umber?				
D.	D. What is relative mass and charges of the				ر 6 ←	Atomic Number	What is	What is atomic number?			How many electoristal hold?		ctrons does each
<u> </u>	subatomic		arges of the			Number					Firs	st	
Suba parti	atomic cle	Relative Mass	Relative Charge				<u> </u>				Sec	cond	
Proto			o mange	D.	How can we we have?	know what element		D.	What is re		Thi	rd	
Neut	ron								an eleme	nt?	Elec	tronic structi	ure of Sodium:
Elect	Electron												
D.	D. What is the overall charge of an atom?			What	What is an isotope?								

Year 9 Grammar Term 1 Physics: Topic P1.1 Energy

What we are learning this term:	A.	What are the changes in energy stores for the following objects?			
A. Energy stores and transfer between energy stores B. Work done C. Gravitational potential energy	An arro	ow being thrown directly up e air	From kinetic to gravitational potential. As it comes back down, the opposite is true.		
D. Kinetic energy and elastic energy storesE. Wasted energy and DissipationF. Energy efficiency	A toy c head o	ar (with battery) hitting a wall n	Energy is transferred from chemical to kinetic to vibrational in sound and heat.		
6. Key Words for this term		car accelerating Energy is transferred from the chemical energy from the petrol/diesel to kinetic energy.			
 Energy stores Work done Force 	A bike slowing down		Energy is transferred from kinetic to heat.		
4. Joules	Water b	poiling in an electric kettle	Energy is transferred from electrical to heat.		

What is the energy store of a person on a bungee

B.

В.

A.	What is a system?	A.	What is the law of conservation of energy?				
It is an	object or group of objects	Energy cannot be created or destroyed, just changed in form.					
A.	What are the 8 energy stores?		A.	What is the energy store of a person on a bungee			

1. Chemical	5. Gravitational potential (GPE)	Jump:				
2. Kinetic (KE)	6. Thermal (internal)	Whilst the rope is slack, energy is transferred form GPE to KE. As the rope tightens, the jumpers KE store				
3. Magnetic	7. Elastic potential	decrease but the ropes elastic potential energy store increases. They stop when all the KE store is stored as				
4. Nuclear	8. Electrostatic	elastic potential energy.				

When energy is transferred, work is done. What is the link between work and energy? Work done = energy transferred B. If a person uses 300 J of energy pushing a bike, If the units for energy are -joules, what are the what is the work done? units for work done? 300 J -joules (J)

resistance/friction

Theoretically, if a roller-coaster has 20000 J of GPE at the top of the slope, how much KE will it have gained when it

reaches the bottom?

What is work?

20000 J, assuming non is lost by air

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A.	What is the energy transfer from the sun, to solar panel to light bulb?							
Sun -	Sun → solar panel → lightbulb.							
	store of nuclear energy insun		energy transferred to <u>light bulb</u> by electric current	→	energy transferred to surroundings by heating and light waves			

Work done = $800 \times 50 = 4000 \text{ J or } 4 \text{ kJ}$

Work done = force x distance moved
Force is measured in newtons (N)
Distance is measures in meters (m)
Work done is measured in joules (J)

What is the equation for work done?

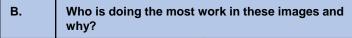
В. If a person pushes a trolley with force of 800 N and moves it down a 50 m isle, how much work has been done by the person?

A crane lifts 400 N crate full of coca cola 15 m. How much work was done by the crane?

Work done = $400 \times 15 = 6000 \text{ J or } 6 \text{ kJ}$

T A Year 9 Grammar Term 1 Physics : Topic P1.1 Energy										
What we are learning th	nis term:		A.	What are the cl	changes in energy stores for the following objects?					
C. Gravitational potential energy				An arrow being thrown directly up into the air						
D. Kinetic energy and e E. Wasted energy and F. Energy efficiency			A toy car (with battery) hitting a wall head on							
6. Key Words for this to	erm		A car	accelerating						
 Energy stores Work done Force Joules 			A bike slowing down Water boiling in an electric kettle							
A. What is a sy	What is a system? A.			What is the law of conservation of energy?			A.	Theoretically, if a roller-coa 20000 J of GPE at the top of how much KE will it have go	f the slope,	
A. What are th	at are the 8 energy stores?			A. What is the energy store of a person on a bungee jump?				reaches the bottom?		
2.	6.		В				В.	What is work?		
3.	7.							_		
4.	8.						Wha	at is the link between work and	l energy?	
	rgy transfer from the s	sun, to solar p	anel to liલ્	ght bulb?	energ	erson uses 300 J of gy pushing a bike, is the work done?		e units for energy are –joules, s for work done?	what are the	
Sun → solar panel →	energy tra	neferred		nove transferred to	300 J		-joul	les (J)		
store of nuclear	to		→ ene	rgy transferred to by heating	B. Wh	at is the equation for w	ork dor	ne?		
energy in	electric c			and light waves		is measured in is measures in is measured in				
B. If a person pushes a trolley with force of 800 N and moves it down a 50 m isle, how much work has been done by the person?					B. A crar	ne lifts 400 N crate full o		cola 15 m. How much work wa	as done by	

Year 9 Grammar Term 1 Physics : Topic P1.1 Energy





E-MC2 &

The bodybuilder on the right is doing the most work. This is because work done depends on force and the on the right is lifting a larger force.



The fireman on the left is doing the most work. This is because work done depends on distance and the foreman on the left has travelled a longer distance.

B. Why, when work is done, isn't all the energy transferred?

Some is lost in heat and sound.

Which is more work done?

Compare a glass block being pushed 1 m across a polished floor with a wooden block being pushed 1 m across a rubber floor.
Which needs more force and why?

For the glass block, most of the energy will be transferred into kinetic energy, so only a small force is needed. For the wooden block, most of the energy will be transferred into heat, so a large force is needed. More work is done on the wooden block as more energy is transferred to heat rather than KE.

What is the equation to calculate gravitational potential energy (GPE)?

GPE = mass × gravitational field strength × height Mass, m is measured in kilograms (kg)
Gravitational field strength, g, is measured in newtons per kilogram (N/kg), usually taken as 10 N/kg on Earth.
Height, h, is measured in metres (m).
GPE is measured in joules (J).

A bird with a mass of 3 kg flies at a height if 150 m about the ground, how much GPE store does it have?

GPE = 3 kg x 10N/kg x 150 m = 4500 J or 4.5 kJ

D. What is the equation for kinetic energy?

KE = $\frac{1}{2}$ × mass × velocity² = $\frac{1}{2}$ mv²

Mass is measured in kilograms (kg). Velocity is measured in metres per second (m/s). KE is measured in joules (J).

If a car with a mass of 1750 kg is travelling at a velocity of 30 m/s, what is the KE of the car?

 $KE = \frac{1}{2} \times 1750 \text{ kg} \times 30^2 = 787,500 \text{ J or } 787.5 \text{ kJ}$

D. What is the equation for elastic potential energy?

EPE = $\frac{1}{2}$ spring constant x extension²

EPE is measured in joules (J)
Spring contact is measured in Newtons per metre (N/m)

Extension is measured in Meters (m)

If a spring has a spring constant of 25 N/m and the extension is 0.2 m, what is the EPE?

 $EPE = \frac{1}{2} 25 \text{ N/m x } 0.2^2 = 0.5 \text{ J}$

D. What happens to energy that is not usefully used?

It spreads out to the surrounding in many forms, this is called dissipated energy.

Are the following useful or wasteful; energy transfers: Heater: heat, car: sound, heater: light, television: light, car: heat, car: kinetic, television: sound, television: heat?

Useful Heater: heat heater: light car: kinetic

television: sound

car: sound television: light car: heat television: heat

Wasteful

F. What is energy efficiency?

All devices waste energy, so no device is perfectly efficient. The more efficient a device is, the less energy is wasted.

Why is energy efficiency so important?

It saves money and the planet as it uses less energy, so uses less fossil fuels.

How do you calculate energy efficiency?

energy efficiency =

useful output energy total input energy

C. How is power calculated?

Power (Watts, W) = energy transferred (Joules, J)/time taken (seconds, s)

If a student did 2000 J of work walking up the stairs and I took 10 seconds, what is the power?

P = 2000 J / 10 s = 200 W

A	Ø	
I	E:MC ²	5
*	200	80

Year 9 Grammar Term 1 Physics : Topic P1.1 Energy

Ø	
E+MC ²	2
200	8
	E:MC ²

- 190 △								- Φ Ωξο Δ	
В.	Who is doing the most work in these images why?	B. Why, when work is done, isn't all the energy transferred?			C	What is the equation to potential energy (GPE)?			
			Compare a glass block being pushed 1 m across a polished floor with a wooden block being pushed 1 m across a rubber floor. Which needs more force and why? Which is more work done?			is measured in is measured in, usually taken as 10 N/kg on Earth is measured in is measured in			
						ird with a mass of 3 kg fli ground, how much GPE			
_						Triat happone to energy	indicio not aborany about.		
D. V	Vhat is the equation for kinetic energy?	D. What is the equation for elastic potential energy?			al				
			one grant and a second a second and a second a second and			Are the following useful or wasteful; energy transfers: Heater: heat, car: sound, heater: light, television: light, car: heat, car: kinetic, television: sound, television: heat?			
						Use	<u>ful</u>	Wasteful	
			a spring has a spring constant of 25 N/m and he extension is 0.2 m, what is the EPE?						
F. What is energy efficiency?				C.	How	is pow	ver calculated?		
Why is energy efficiency so important?									
How do you calculate energy efficiency?				If a student did 2000 J of work walking up the stairs and I took 10 seconds, what is the power?					



Y9- T1 - Life in an Emerging Country

located e.g. a developed country.



			1					
Backg	ground:		В.	Develo	pment i	ndicators (3)		
1. 2.	things better.	means positive change that makes evelops it usually means that the		GDP per capita The total value of goods and services country in a year divided by the popular				
3.	people's stand (B)	ard of living and quality of life improve.	HDI			elopment measure which combines GD pita, life expectancy and literacy rate.		
4.	economic, soc Emerging cour	ial and political factors. (A) ntries have begun to experience higher pment, with a rapid growth in	Life expec	tancy	The av	verage age you are expected to live to intry.		
5.	secondary indu Emerging cour	ustries. (A, C) htries have some of the fastest rates of	D.	Rural t	o urbai	n migration <i>(4)</i>		
6.	populated, this and challenges	urban areas (cities) to become highly process can have both opportunities s. One such challenge is the growth of	Rural migra	to urban ition		The movement of people from rura areas (countryside) to urban areas (cities).		
7.	transnational c	ments. (E) htries often host the factories of many companies. They provide wages and promote development. However, they	Push	factor		Things that make people want to leave an area e.g. a lack of jobs.		
	can also cause	Pull factor			Things that attract people to live in an area e.g. good health care.			
A.	Characteris	stics of emerging countries (7)						
BRIC countries Brazil, Russia, India, China.		Mech	anisation		When machines begin to do the work which humans once completed.			
MINT	countries	Mexico, Indonesia, Nigeria, Turkey.	F.	·				
Indus	trialisation	The process of a country moving from mostly agriculture (farming) to manufacturing (making)		national ration		Those that operate across more than one country.		
	pyment	goods. How the workforce is divided up	Footlo	Footloose Globalisation		Industries which are not tied to a location due to natural resources or transport links.		
struct	ure	between primary, secondary, tertiary and quaternary employment.	Globa			The increased connectivity of countries around the world e.g.		
Secor indust		An industry which manufactures goods.	1,7			through trade.		
Expor	<u> </u>	Sending goods to another country for sale.	Host	Host country		country		The country where the TNC places it's factories e.g. in an emerging or developing country.
Urbanisation		The growth in the number/ proportion of people living in	Source country		/	The country where the headquarters for the TNC is located e.g. a developed country.		

towns and cities.

C.	Encou	raging development (4)				
Subsidy		Money given by a government to help an industry keep down the cost of exports.				
Tax br	eaks	This reduces the amount of tax a company must pay (normally for a fixed period), therefore increasing profit.				
Minimum wage		The lowest wage permitted by law in a country.				
Trade unions		An organisation of workers who work to protect the rights of those employed.				
E.	Squatt	er settlements (5)				

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

ı		
	G.	Impact of TNCs
	Positive: (5)	 More jobs. More taxes. Invest in infrastructure projects. GDP increases. Develop workers skills.
1	Negative: (3)	Can exploit workers e.g. long hours. Most of the profits from TNCs leave the country where production takes place. Increased levels of pollution e.g. air and water (from industrial waste).



Y9- T1 - Life in an Emerging Country - Quizzable



Background:		В	Davalanm	ent indicators (2)	C.	Encoura	couraging development (4)		
	Development means	B .		ent indicators (3)	Subsid	y			
2.	As a country develops it usually means	capit			Tax bre	eaks			
3.	Different factors can affect development such as	HDI			Minimu	ım wage			
4.	(A) Emerging countries have begun to experience higher rates ofwith a rapid growth	Life expe	ectancy		Trade (unions			
	in <i>(A, C)</i>	D.	Rural to urba	an migration <i>(4)</i>	E.	Squate	ter settlements (5)		
	Emerging countries have some of the in the world. (D) This is causing urban areas (cities) to become, this process can have both		Rural to urban migration						
	opportunities and challenges. One such challenge is the growth of (E)	Push	factor		Inequa	ality			
	Emerging countries often host the factories of many transnational companies. They provide wages and taxes, and can promote	Pull fa	actor		Sanita	ation			
	development. However, they can also cause negatives. (F, G)	Mecha	anisation		Inform				
A.	Characteristics of emerging countries (7)	F.	Transnation	nal corporations (TNCs) (5)	Qualit	y of life			
	countries		national						
MINT	countries	corpo	ration		G.	Imp	act of TNCs		
Indust	rialisation	Footlo	oose		Positi	ve:	1. 2.		
Emplo	pyment ure	Globa	alisation				3. 4.		
Secon		Host	country				5.		
indust Expor		11051	Southly .		Nega (3)	tive:	1.		
		Source	e country		(3)		2.		
Urban	isation						3.		



Mark.				
What we are learning this term:	B.	Describe	two features of the trench system during the Western Front	
A. The main battles on the British Sector of the Western Front during	<u>Feature</u>		<u>Description</u>	

Western Front which had been heavily farmed using fertiliser.

The RAMC and the FANY were the

main groups in the army who treated

Part of the RAMC who recovered the

dead or wounded from No-mans' land

Based in the reserve trenches -

medical officer could only do first aid

Located in dugouts or abandoned

officers. Provided treatments for minor

Large unit that could treat over 200

care and surgery could be found

to 400 casualties and focused on

specialist treatment

wounded men. First time that nursing

Located near the coast. Could hold up

buildings. Staffed by 10 medical

Who treated the wounded and how were

the wounded

iniuries

they evacuated?

soldiers experienced nightmares, loss of speech and a complete mental breakdown.

4 Trench fever – flu-like condition that was spread by lice in the trenches

This was an area where soldiers could be protected from light fire

This would make it more difficult for the enemy to get into the trench

This is where soldiers would prop their guns to shoot out of the trench

This was a way of protecting soldiers as they shout out of the trench

5 Trench foot - painful swelling of the feet caused by standing in cold mud and water, which could lead to gangrene.

2 Blood Transfusions

3 Brain Surgery

5 Thomas Splint

6 Aseptic Surgery

7 Treatment of

Infections

F.

1 X-rays

These could absorb the shock of the bullets and help the trench maintain its shape

What health problems were caused by conditions in the trenches?

1 Gangrene – a condition where a loss of blood supply causes body tissue to die and usually occurred as a result of an injury. Treated by

amputation of the affected area. Gas Gangrene - infection that produces gas in the gangrenous area. Caused by bacteria in the soil on the

2 Shellshock – a condition that was not really understood during the war. Caused by the constant noise and shell fire in the trenches, many

source it useful/is limited for the enquiry topic?

3 Shrapnel wounds – when shells exploded, shrapnel travelled at fast speeds over wide areas, causing injuries to anyone in their way

This is what soldiers stepped on when they wanted to climb over the top. Between fighting it was often used as a bench or bed

How did WWI lead to improvements in medicine in the 20th century?

survival rate for fractures from 20% to 82%

Carrel-Dakin method and amputation

need to make sure that you quote the source or say what you can see in your answer

war due to dirty conditions of the CCS's and ADS's

1 Content – What does the source tell you or show you? And how is this useful to the enquiry topic? You

2 NOP - Nature - What is the source?; Origin - When and who produced the source?; Purpose - Why was

3 Contextual Knowledge - What do you know about the topic and how does your knowledge explain why the

the source produced? Make sure you explain why this makes the source useful to the enquiry topic

X-rays were used in the war to identify shrapnel and bullets in wounds. Mobile

Doctors and scientists during the war worked on ways to store blood and deliver

Head wounds were fatal during the war. Those that survived were disfigured, which

Created to stop joints from moving. Introduction on the Western Front increased

Surgery performed in sterile conditions achieved by medical staff washing hands and face, wearing masks and gloves and sterilising equipment. Harder during the

New methods developed during the war to treat infected wounds; wound excision,

How useful are primary sources for an historical enquiry into the Western Front?

units developed during the war that could be taken to the CCS's

led to the development of plastic surgery to reconstruct men's faces

transfusions on the frontline to save many men's lives

Wooden boards that were placed on the floor of the trench to provide a flatter and dryer ground for the soldiers to walk over

- WWI The trench system - structure and features
- Health problems caused by the conditions in the trenches How the war led to improvements in medicine

as driving ambulances and emergency first aid

Shrapnel - Fragments of metal from exploded shells

advancing towards the Belgium coast.

6 Key Words for this term

responsible for medical care

they are attacked by other countries

territory on 3 sides

A.

Battle

1st Battle of

Ypres

(1914)

2nd Battle

of Ypres

Battle of

Somme

Battle of

Arras

(1917)

Ypres

(1917)

Battle of

Cambrai

(1917)

3rd Battle of

(1916)

the

(1915)

How the wounded were evacuated and who treated them E. Usefulness of primary sources for historical enquiries

First Aid Nursing Yeomanry (FANY) - A women's voluntary

Royal Army Medical Corps (RAMC) - The branch of the army

Salient - An area of a battlefield that is surrounded by enemy

No-man's land - The area between two opposing trenches during

Alliances - An agreement countries make to support each other if

Describe two features of the key battles during WWI

Features

This battle was aimed at stopping the German army from

This battle was the first time that the Germans used

Bloodiest battle in the whole of the war - total of 57.000

not prepared for the amount of casualties and hospitals

This British used tunnels to dig near to the German

was made and there were 160,000 casualties.

trenches and surprise them with the attack. No progress

During this battle the weather turned to heavy rain. The

ground became waterlogged and many men fell into the

This battle saw the first large-scale use of tank to break

through the enemies barbed wire. Also the first time that

a vital medical service to those soldiers who had lost too

there was a blood bank, which meant doctors could deliver

men were killed during the first day alone. The RAMC were

chlorine gas as a weapon against the British.

and casualty stations were overwhelmed.

mud and drowned.

much blood.

organisation which provided medical services on the frontlines such

- 2 Barbed wire 3 - Sandbags 4 - Fire step

5 - Duckboards

6 - Elbow rest

7 - Parapet

C.

D.

1 RAMC

and FANY

2 Stretcher

Regimental

4 Advanced

Dressing

5 Casualty

Clearing

Station

6 Base

Hospital

Station

Aid Post

Bearers

1 - Dugout



Royal Army Medical Corps (RAMC) -

Describe two features of the key battles during WWI

<u>Features</u>

No-man's land -

Shrapnel -

Alliances -

Salient -

A.

Battle

1st Battle of

Ypres

(1914)

2nd Battle

of Ypres

Battle of

Somme

Battle of

Arras

(1917)

Ypres

(1917)

Battle of

Cambrai

(1917)

3rd Battle of

(1916)

the

(1915)

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

4	1
Ja.	lab

What we are learning this term:	B.	Describ	e two features of the trench system during the Western Front
A. The main battles on the British Sector of the Western Front during WWI B. The trench system – structure and features C. Health problems caused by the conditions in the trenches D. How the wounded were evacuated and who treated them E. How the war led to improvements in medicine	Feature 1 – Dugout 2 – Barbed wire 3 – Sandbags		<u>Description</u>
. Usefulness of primary sources for historical enquiries	4 – Fire step		
6 Key Words for this term	5 - Duckboards		
1 First Aid Nursing Yeomanry (FANY) -	6 – Elbow rest		

What health problems were caused by conditions in the trenches?

E.

1 X-rays

2 Blood Transfusions

3 Brain Surgery

5 Thomas Splint

6 Aseptic Surgery

7 Treatment of

source it useful/is limited for the enquiry topic?

Infections

F.

How did WWI lead to improvements in medicine in the 20th century?

How useful are primary sources for an historical enquiry into the Western Front?

1 Content – What does the source tell you or show you? And how is this useful to the enquiry topic? You

2 NOP - Nature - What is the source?: Origin - When and who produced the source?: Purpose - Why was

3 Contextual Knowledge - What do you know about the topic and how does your knowledge explain why the

the source produced? Make sure you explain why this makes the source useful to the enquiry topic

need to make sure that you quote the source or say what you can see in your answer

7 - Parapet

1 Gangrene -

Gas Gangrene – 2 Shellshock –

5 Trench foot -

3 Shrapnel wounds – 4 Trench fever –

they evacuated?

Who treated the wounded and how were

C.

D.

1 RAMC

and FANY

2 Stretcher

Regimental

4 Advanced

Dressing

5 Casualty

Clearing

Station

6 Base

Hospital

Station

Aid Post

Bearers

B. How has Biblical criticism influenced the rise of atheism? 1 Biblical criticism is the study of the Bible using scientific criteria (historical and literary) and human reason to understand and explain the meaning intended by the biblical

the 'truths' that are found in the book.

A.	Can you define these key words?	C.	C. Explain 4 reasons people are atheist or reject religion		Explain Neitzche's ideas about religion and morality								
Key word	Key definition	1	Problem of evil which is the inconsistent triad. All loving, all knowing, all powerful God + the existence of evil			, ,			God is a psychological fabrication created to soothe distress, ease trauma, and provide companionship in the face of suffering and also to make rule we must stick to in order to be safe. We can however				
Dogma	Beliefs or principles laid down by authority as unquestioningly true .	all powerful God + the existence of evil and suffering is illogical. 2 Abrahamic religions are strongly based on miracles. Miracles are not logical		inconsistent triad. All loving, all knowing, all powerful God + the existence of evil		instead of needing religion, set our own moral rules and goals and concentrate on human flourishing without religion.							
Doctorine				Abrahamic religions are strongly based on miracles. Miracles are not logical therefore the religious stories are not		Abrahamic religions are strongly based on miracles. Miracles are not logical therefore the religious stories are not			Explain how Freud challenges religious truth				
	Beliefs and teachings given by a religion. Frequently used to mean Christian teaching as given by an organised Church/ denomination							therefore the religious stories are not		therefore the religious stories are not		therefore the religious stories are not	
Epistemology	Epistemology is a branch of philosophy which seeks to answer questions about what we can actually <i>know</i>				force of nature" and "the urge to rectify the shortcomings of civilization". We don't want to die so follow religion to sooth this fear. People cope with unhappy lives by pretending it is God's plan for them.								
Theist	a person who believes in the existence of a god or gods,				Explain how Feuerbach challenges religious truth								
Atheist	specifically of a creator who intervenes in the universe. a person who disbelieves or lacks belief in the existence of God or gods because they believe there is proof against the existence of God	4	The design (teleological) and the 1st cause (cosmological) arguments fail to prove the existence of God since the		God does not exist. Humans have made up the idea of a 'God'. They have done this in order to give human life a reason to live and strive. It is something for humans to aim towards to give meaning to our lives. We have projected ourselves out into the cosmos and anthropomorphised God- making him in our likeness!! We have given God the perfect qualities that we should aim for, eg forgiving and loving.								

world could just as possibly be a random existence/coincidence. If we are happy

to say God doesn't need a creator, why

Explain Hume's main arguments against

If there are millions of bits of evidence to

suggest a law of nature, it is not rational to

believe one bit of evidence to say the law is

wrong. Eg if people can't travel from mecca to Jerusalem by foot or by camel overnight,

then why believe the tale that Muhammed

Miracles have mainly been proclaimed by

scientifically uneducated peoples so why

understanding shows the events to be

impossible eg walking on water

believe their stories when advanced modern

Humans are natural believers, love surprise

and wonder .He argues that this tendency in

our nature leads to the 'end of common

can't we just say that about the

universe?

miracles

did?

sense'

D

2

Year 9 Religious Education: Atheism

writers." People question what the Bible means, rather than looking at it as a literal word of God that cannot be interpreted. Therefore, people have been able to challenge

Explain how Marx challenges religious truth

Abrahamic faiths.

truth.

F.

2

2

It is a form of social oppression. The powerful and rich use it as a way to control the masses into

powerful who are oppressing them. Religion has stupified people just like drugs do.

Explain 2 reasons why science is a challenge to religion

Explain 2 religious responses to the challenge of science

generates sight. This structure suggests design eg God.

and religious truths can be true at the same time.

particular behaviour eg 'do not kill' and also to pacify them so they do not rise up against the rich and

The theory of evolution shoes that the creatures took million sof year sto evolove to what

The big bang theory says that the universe took billions of years to form to the point it is in

today. This means that the genesis story of a 6 day creation is technically not a scientific

Science glorifies god by showing the complexity and awesome nature of creation. For

The creation stories do not need to be taken as a literal truth, it is the messages which are

important. For example, God is all powerful as He created a universe. This means science

example it has revealed that the human eye is perfectly structured in a way which

we see now, therefore there was no created species in one day as recorded in the

specifically of a creator who intervenes in the universe.
a person who disbelieves or lacks belief in the existence of God or gods because they believe there is proof against the existence of God .
A person who believes that nothing is known about the existence or nature of God; a person who claims neither faith nor disbelief i God because there is not enough proof for either claim.
being saved from the sins of Adam and Eve and suffering through access to heaven. Being rescued by God from the consequences o our wrongdoing

The free and undeserved favour of God, as manifested in the

attitudes, activities, or other things that have no religious or

Knowledge is based on what is seen or experienced rather than

the power of the mind to think, understand and form judgements

The use of critical analysis/ context/ knowledge of history to

a person who believes in the strict, literal interpretation of

(an argument/statement which is supposed to be true because it

is true by definition eg all bachelors are unmarried males, or God

understand and explain meaning in the Bible.

s perfect therefore he exists)

scripture in a religion.

salvation of sinners and the blessings God gives us.

spiritual basis.

theory or pure logic.

by a process of logic

What we are learning this term:

Agnostic

Salvation

Grace

Secular

Reason

A priori

st

Emirical/empirici

Biblical criticism

Fundamentalist

The development of Atheism and worldviews

Year 9 Religious Education:Atheism

What we are lea	rning this term:	В.	How has	Bibl	ical criticism influenced the rise of atheism	?				
The development	of Atheism and worldviews	1								
A.	Can you define these key words? Key definition		C) .	Explain 4 reasons people are atheist or reject religion	E.	Explain Neitzche's ideas about religion and morality			
Key word			1							
Dogma							Explain how Freud challenges religious truth			
Doctorine			2							
Epistemology			3				Explain how Feuerbach challenges religious truth			
			_ •							
Theist							Explain how Marx challenges religious truth			
Atheist			4							
Agnostic										
	n			E	Explain Hume's main arguments against	F.	Explain 2 reasons why science is a challenge to religion			
Salvation					miracles		Explain 2 reasons why science is a chanenge to religion			
Grace						1				
Secular			1							
Emirical/empirici st						2				
Reason	ason		2							
	priori						Explain 2 religious responses to the challenge of science			
Biblical criticism										
			3	H		1				
A priori										
						2				
Fundamentalist										

SPANISH Year 9 GCSE Term 1 Knowledge Organiser: Topic = Health and Hobbies



What we are learning this term:

- Foods/drinks В. Healthy living
- C. Smoking
- Free time activities
- E. Free time activities x 2
- Key words across topics

6 Key Words for this term

- Almuerzo
- 2. Ceno

el almuerzo

las verduras

- 3. Desavuno
- 4. Peligroso 5. evitar

green vegetables

6. cambiar

Lunch

A. ¿Qué te gusta comer?

el azúcar Sugar barato/a Cheap Steak el bistec la carne Meat Expensive caro/a evening meal la cena Food la comida la comida basura junk food el desayuno **Breakfast** la ensalada Salad la fruta Fruit la galleta **Biscuit** la grasa Fat el helado ice-cream

la leche Milk las legumbres Vegetables Seafood los mariscos el pastel Cake hot doa el perrito caliente picante Spicy el plato Dish el pollo Chicken rico/a Tasty saludable healthy sano/a Healthy la tortilla Omelette la tostada Toast

acostarse Cambiar cansado/a el cuerpo deportista dormir el ejercicio la energía el esfuerzo estar en forma evitar fumar ioven

to go to bed to change Tired Body Sporty to sleep Exercise Energy Effort to be fit to avoid to smoke Young to lead a(healthy)life llevar una vida (sana) mantenerse en forma to keep fit to die morir necesario/a Necessary to relax relajarse la salud health

B ¿Llevas una vida sana?

C. ¿Qué es tu opinion de fumar?

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

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

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

Key Verbs									
Tener To have		Past	<u>Future</u>						
Tengo = I have			Voy a Hablar I am going to speak						
Tienes = You have	Como I eat	Comí I ate	Voy a comer I am going to eat						
Tiene = s/he has	Voy I go	Fui/fue I am/it was	Voy a ir I am going to go						
Tenemos = We have	Soy I am	Fui I was	Voy a ser I am going to be						
- 0-		Tuve I had	Voy a tener I am going to have						
	To have Tengo = I have Tienes = You have Tiene = s/he has Tenemos	Tener To have Tengo Hablo I speak Tienes Como I eat Tiene Voy I go = s/he has I go Tenemos Soy = We have I am Tienen Tengo	Tener To have Tengo Hablo I speak I spoke Tienes Como Comí I ate Tiene Voy Fui/fue I am/it was Tenemos Soy Fui E We have I am I was Tiene Tengo Tuve						

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

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

F. Key Words across Topics?

to have = tener to be = ser = ir to go to do = hacer to play =jugar to see = ver to listen=escuchar to buy =comprar to live =vivir to speak= hablar to have to = deber to want to=querer to visit = visitar to eat - =comer to drink = beber to go out = salir to read = leer to work = trabajar to think = pensar to write =escribir

Divertido - fun Aburrido – boring Util – useful Inutil - useless Comodo – comfv Interestanteinteresting Entretenido entertaining Emocionante exciting Guay - cool Genial - great Soso - dull Asqueroso disgusting Malo-bad Bueno - good Arriesgado- risky Educativoeducational Estimulatestimulating Peligrosodangerous

Š:

SPANISH Year 9 GCSE Term 1 Knowledge Organiser: Topic = Health and Hobbies-QUIZABLE



What we are learning th	is term:	B ¿Llevas ur	na vida sana?			Key Ve	erbs		
A. Foods/drinks B. Healthy living C. Smoking D. Free time activities E. Free time activities F. Key words across to	(2		to go to bed to change Tired Body Sporty to sleep	Ser To be = I am	Tener To have = I have	Present I speak	Past I spoke	Future I am going	g to speak
6 Key Words for this te	rm		Exercise Energy	= You are	= You have	l eat	I ate	I am going	g to eat
 Almuerzo Ceno Desayuno 	4. Peligroso 5. evitar 6. cambiar	estar en forma	Effort to avoid to smoke Young	= s/he is = We are	= s/he has = We have	I go	I am/it was	I am going	
A. ¿Qué te g	usta comer?	llevar una vida (sana) mantenerse en forma		= They	Tienen				5 00 00
el almuerzo			to die Necessary	are	= They have	I have	I had	I am going	g to have
el azúcar ————	 Cheap		to relax health	E. 3.1F Que	te gusta hacer e libre?	n tu tiempo	F. Ke	∌y Words a	cross Topics?
el bistec la comida basura la grasa las legumbres el plato	Meat Expensive evening meal Food Breakfast Salad Fruit Biscuit ice-cream Milk Seafood Cake hot dog Spicy Chicken Tasty healthy Healthy Omelette Toast green vegetables	C. ¿Qué es tu op Afectar ————————————————————————————————————	disgusting / filthy to cause Cigarette to stop (smoking) Smoker Death Woman danger	cada las noticias policíaco/a por lo general el teatro la telenovela terminar el tiempo la vez	quite to have a to chat to cartoons documer weekend great never occupied to put always all, every silly, stup	ntary	to have = to be = to go = to do = to play = to listen= to live = to live = to have to = to want to=_ to visit = to go out = to work = to think = to write =		Divertido —

Year 9 Art Term 1 : Topic = Distorted Portraits

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

Similarities:

В.

- Surreal appearance
- Use of juxtaposition
- Sinister atmosphere created

- Use of everyday objects
- Painting vs photomontage Contrast colour scheme (black and white vs
- colour) List 3 words to describe the Surrealism style
- 1.) Strange, uncanny, abnormal
- 2.) Juxtaposition, contrast
- 3.) dream-like, unconscious

of artwork?





What is the definition for photomontage?

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

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

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



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

A.



What are 3 rules for successful continuous line

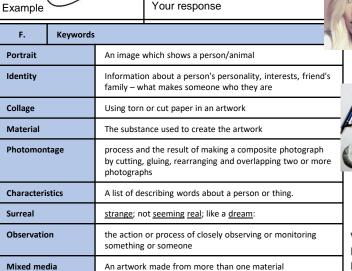
1. Using a sharp pencil

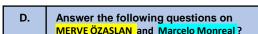
drawing?

- 2. Keeping your pencil on the page and not taking it off
- 3. Lighter areas have fewer pencil lines and darker areas have far more pencil lines.

Using continuous line drawing, recreate the face below.







Describe what is happening in each stage of the making?

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

What is the difference between lines?

Vertical Horizontal Diagonal







Year 9 Art Term 1 : Topic = Distorted Portraits

What we are learning this term:

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

A.

Surreal

Observation

Mixed media



What are 3 rules for successful continuous line drawing?

- 1. Using a sharp pencil
- 2. Keeping your pencil on the page and not taking it off
- 3. Lighter areas have fewer pencil lines and darker areas have far more pencil lines.

Using continuous line drawing, recreate the face below.



Your response



Describe what is happening in each stage of the making?



D.

В.



What subject matter does she use?

How does he create his work?

What is his subject matter?

Answer the following questions on MERVE ÖZASLAN and Marcelo Monreal?

What materials does she use to create her work?

What messages could she be portraying in her work?

What messages might he be presenting in his work?



Differences:

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



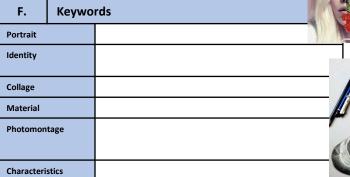
- 2.)
- 3.)





D. What is the definition for photomontage?

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



What is the difference between lines? Horizontal

Vertical

Diagonal



What are the techniques both artist use?



Year 9 - FOOD

What we are learning this term:

- Health, safety and hygiene in the kitchen
- The Eatwell guide and nutrients
- The Dietary requirements of a teenager

4 Healthy

do when you enter the kitchen area.

5 Teenager

6 Cross Contamination

and could fall off into the food.

Hair could fall into the food or

To remove any germs and

bacteria from your hands and

To protect you from the food and

touch equipment.

- Skills testing
- E. Healthy cooking

1 Hygiene

3 Skills Test

Chopping Board Colours

6 Key Words for this term

2 Dietary Requirements

Remove all of your

Tie back your hair

Wash your hands

Put on and apron

with hot soapy

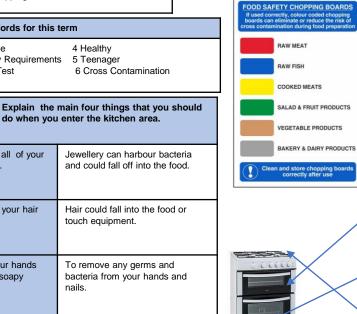
water.

jewellery.

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 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 health problems. 5 Drinking 2 litres of water a day.

Baking



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

Baking is a method of preparing

transferred from the surface of

an oven. Heat is gradually

food that uses dry heat, normally in

products.

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.

and tie it back. equipment and the food from touching you.

nails.

Rule

C.

- 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

Can you list 5 reasons for why we cook food and 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

riygiche
Research
Nutritious
Target Market
Carbohydrates
Protein
Fibre
Calcium
Design Idea
Organisation
Time keeping
Sensory analysis
Mood Board
Time Plan

A method of keeping yourself and equipment clean

Information that you find out to

Food that grow and repair your

hoping a project to turn out.

Having everything ready for a

Kevwords

Hygiene

help you with a project A meal that is healthy and contains vital nutrients.

The age or type of person you re creating a product for.

Foods that give you energy

Foods that keep your digestive system healthy and avoid constipation.

muscles

Foods that make your teeth and bones strong A sketch or plan of how you are

lesson and following instructions Using the time to remain

organised. Use your senses to taste and

describe a product

A collage of photos and key words based on a project

Instructions of wat you are going to do and how long it should

Skills Test Demonstrating your knowledge of a cooking term.

Someone between the age of 13 Teenager **- 19**.



Year 9 - FOOD

What we are learning this term:		Can you list 5 of the dietary requirements of a teenager?					E. Keywords	
 A. Health, safety and hygiene in the kitchen B. The Eatwell guide and nutrients C. The Dietary requirements of a teenager D. Skills testing 	1 2 3					Hygien	e	
E. Healthy cooking F. Chopping Board Colours	4 5					Resea	rch	
						Nutritic	ous	
6 Key Words for this term 1 Hygiene 4 Healthy 2 Dietary Requirements 5 Teenager		FOOD SAFETY CHOPPING BOARDS If used correctly, colour coded chopping boards can eliminate or reduce the risk of cross contamination during food preparation	A What is cross	contamination and how	can it be prevented?	Target	Market	
3 Skills Test 6 Cross Contamination						Carbol	nydrates	
A. Explain the main four things that you so do when you enter the kitchen area.	should	COOKED MEATS				Proteir	1	
		SALAD & FRUIT PRODUCTS VEGETABLE PRODUCTS	B. What do the follo	wing terms mean?		Fibre		
		BAKERY & DAIRY PRODUCTS Clean and store chopping boards correctly after use	Grilling			Calciur	m	
		Correctly after use				Design	ı Idea	
			Baking			Organi	sation	
			Frying			Time k	eeping	
	~					Sensor	ry analysis	
		C. Can you list 5 reas	sons for why we coo	k food and why it is impo	ortant?	Mood I	Board	
		Rule		Why it is important 1		Time F	Plan	
))	• 2		• 2		Skills T	Test	
		• 4		• 4		Teena	ger	



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



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

C Samba Rhythms



D Analysing Samba Music from Brazil

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

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

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

Listen here ->

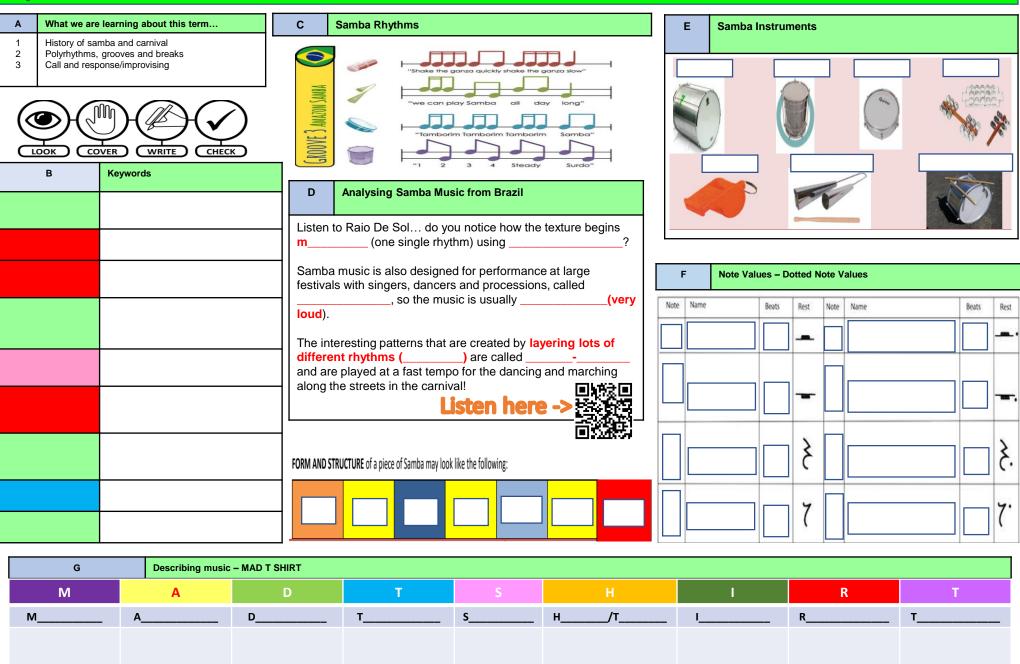
FORM AND STRUCTURE of a piece of Samba may look like the following:





Note	Name	Beats	Rest	Note	Name	Beats	Rest
0	Semibreve, Whole Note	4 beats	_	0.	Dotted Semibreve, Dotted Whole Note	6 beats	_
d	Minim, Half Note	2 beats	-	d.	Dotted Minim, Dotted Half Note	3 beats	-
J	Crotchet, Quarter Note	1 beat	ş	J.	Dotted Crotchet, Dotted Quarter Note	1% beats	ş
1	Quaver, Eighth Note	1/2 beat	7	1	Dotted Quaver, Dotted Eighth Note	3/4 beat	7

G	Describing music	Describing music – MAD T SHIRT						
M	Α	D	Т	S	Н	l l	R	Т
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









#AIMHIGH CHALLENGE TASKS Y9







<u>Subject</u>	<u>Reading</u>	<u>Watching</u>	Other Opportunities
English	Read: https://www.bl.uk/romantics-and-victorians/articles/charlotte-bronte-the-familiar-and-the-fantastical	Watch: https://www.youtube.com/watch?v=Mv0snnk0 kio	https://www.bronte.org.uk/
Maths	Read: Identifying features of a quadratic function – BBC Bitesize Worked examples - Identifying features of a quadratic function - National 5 Maths Revision - BBC Bitesize	Watch: Beautiful Trigonometry – Numberphile YouTube Beautiful Trigonometry - Numberphile - Bing video	Using your knowledge of patterns and sequences can you solve this famous ancient maths puzzle? Tower of Hanoi Tower Of Hanoi (transum.org)
Science	Read: Difference Between Endothermic and Exothermic Reactions https://byjus.com/chemistry/endothermic-exothermic-reactions-difference/	Watch: Hydrogen peroxide catalyst video- watch it expand! https://www.youtube.com/watch?v=3Tn-7JcZJuQ	Dissolving laundry detergent in water is an exothermic reaction. Simply dissolve powdered laundry detergent in your hand with a small amount of water. Feel the heat? WASH YOUR HANDS
Geography	Read Climate Change: Stopping Climate Change	Watch: BBC iPlayer - Climate Change - The Facts	Count how many days the weather in the UK reaches above 20 degrees. Compare this with previous years using Historic station data - Met Office to see how things have changed.
History	Read Wounded –by Emily Mayhew	Watch: World War One (ALL PARTS) (2021 Re-edit) - YouTube	Visit: The Blunsdon and Cricket Railway Village. SN25 2DA
Spanish	Read: the Spanish and English whilst watching this video of a tour of Barcelona: https://www.youtube.com/watch?v=I7bHX9 Wkr0E	Watch: this video about what Spanish people eat in their day to day lives: https://www.youtube.com/watch?v=n7Ma6Vu7COs	Check out how many Spanish destinations EasyJet Fly to. Find out a little bit about each destination: https://www.easyjet.com/en
Art	Read: How to develop your ideas in preparation for GCSE https://www.bbc.co.uk/bitesize/guides/zc7m ng8/revision/1	Watch: How to use a sketchbook to develop your ideas https://www.youtube.com/watch?v=Kha7-GPgWok	Try visiting an art gallery to see how an artist has created artwork in real life. The Tate website is an amazing tool to find 100's of established artists https://www.tate.org.uk/art