# 100% book - Year 9 Mainstream

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



# Term 4

Swindon	<b>Academy 2022-23</b>
Name:	
Tutor Group:	
Tutor & Room:	

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

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







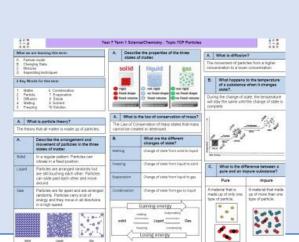




## Using your Knowledge Organiser and Quizzable Knowledge Organiser

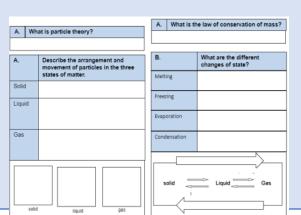
## **Knowledge Organisers**

## **Quizzable Knowledge Organisers**



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

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



nese 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.

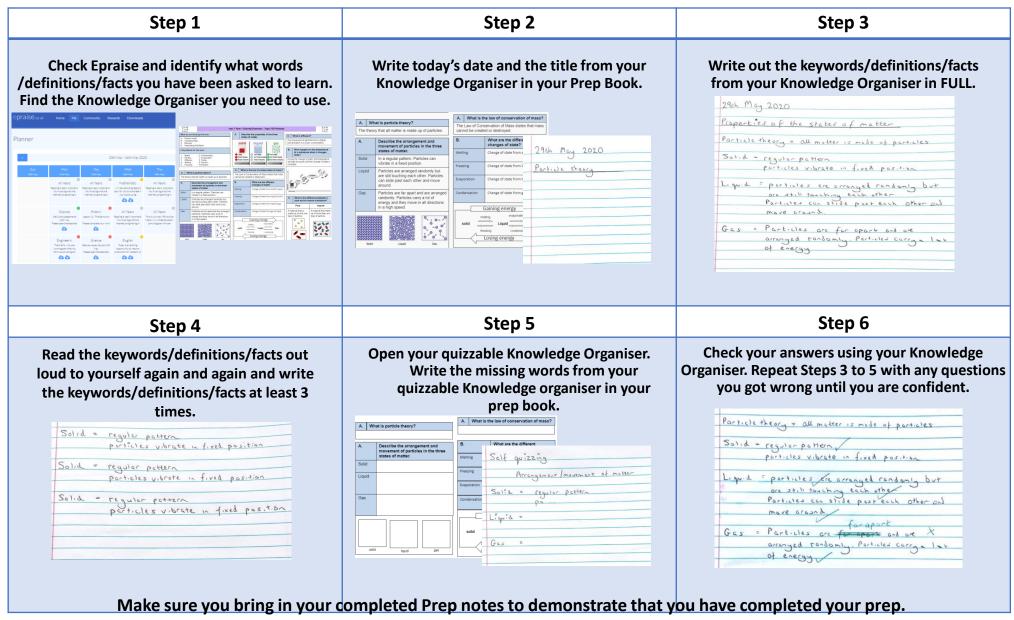
#### Top Tip

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.
- 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?



## <u>'Romeo and Juliet': T Knowledge Organiser</u>

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

## <u>'Romeo and Juliet': T Knowledge Organiser</u>

Plo	breakdown	Characters	Vocabulary: Key words				
Р	The Prologue outlines the mainin the play and the of the of and	Romeo (Montague)	tragic –				
١,,	The and in the of  Prince Escales swears that any further fighting will be	Young Falls in love with at the end of the "Did	submissive -				
'.'	by	my heart love till now? forswear it, sight! For I ne'er saw true beauty till this night"; "Thus with a kiss I	narcistic –				
1.2	asks Lordabout marring hisJuliet. Capulet tells Paris to wait as she is too young.	die"	feud –				
1.3	Lady advises to agree to	<b>Juliet (Capulet)</b> 13-y girl. Falls in	shrine –				
1.5	At the Capulet's ball, Romeo sees Juliet and in love with her. They,, and fall in As they depart, they learn	with Kills at the end of the "Wherefore art thou Romeo? Deny	status quo –				
	they are from families.  In thescene, Romeo and Juliet fall in love. They	thy father and refuse thy name"; "O happy dagger, This is thy sheath; there rust, and let me	obstacle –				
2.2	In thescene, komeo and Juliet tallin love. Theyto get	die"	vindictive –				
	Romeo askstohim and	1101.1(01.1)	patriarchy -				
2.3	Lawrence, thinking it will the	Lord Capulet (Capulet) Head of thefamily.	belligerent - warlike				
2.6	Friar Romeo and	Juliet's Orders her to marry his friend,	exile (vb.) –				
	and fight in the streets. kills;	Paris. "She will be ruled In all respects by me"	tenacious –				
3.1	kills Prince Escales decides to from	Paris (no family)	catastrophe –				
	Verona.	of Verona. Wants to	stoicism –				
3.4	Lordtellsthat he can marry Juliet in three days' time.	Killed byat the end of the play.	Terminology: Key words				
3.5	After theirnight, Romeo leaves Juliet for the last time. They have aof the other's After Romeo leaves, Lord CapuletJuliet to marry, threatening to her if	Friar Lawrence (no family) in Verona to	Tragedy –				
	she	Romeo and Juliet, thinking it will bring	prologue –				
4.1	Friar Lawrence comes up with a: Juliet must to be	to the city. "For this alliance may prove To turn your households' rancour to pure love"	sonnet –				
	and thenVerona with Romeo. Sheto the plan.  Romeolearn of Friar Lawrence's He sneaks back into	Mercutio (Montague)	dramatic irony –				
5.3	Verona and visits Juliet's He thinks she is, and kills himself	Romeo's Killed by "A plague a'both your houses!"	Tragic hero –				
	and killswith his dagger. The twoagree to end their	Prince Escales (no family) of Verona. Wants to bringto	soliloquy –				
The	Big Ideas:	the city. "If ever you disturb our streets again, Your	hyperbole –				
Role	of women: Juliet isto make her own decisions. isby her father who eventually decides toher	lives shall pay the forfeit of the peace"	tragic flaw -				
	man. She breaks the when she her father and makes her own decisions.	Structure of Shakespearean tragedy (Bradley)	foreshadow –				
Evol	ution of Juliet's character: Juliet is a stereotypical	Exposition	thesis –				
dau	ghter at the, she is loyal and She becomes	_					
	and independent through her romance with Romeo. She		Features of Shakespearean tragedy (Bradley)				
pec	omes a tragic hero by in pursuit of her own desires.		The characters are '' – they are important				
Trac	edy: A Shakespearean tragedy is the story of one or two heroes of	Development/Rising Action:	people. The tragic hero: they <b>try to do</b> They don't				
<u>'</u>	,' such as Kings or Lords. They act in pursuit						
of o the	ne, The story leads up to and includes theof nero as a result of their	Catastrophe:	Whatever they try to do, it always puts them in a worse situation.				
Fate	and destiny: Fate is the idea that theof a life are not		They are – there is something that makes				
for	eir control. Thecrossed lovers suggests they were fated This leads to many questions: Is the tragic ending inevitable? Do		them				
they	act?						



#### Year 9 Term 4 Science - Chemistry: Topic C1.2 The Periodic Table



#### What we are learning this term:

- A. Arrangement of the Periodic table
- B. Development of the periodic table
- C. Metals and non metals
- D. Group 1
- E. Group 7
- F. Group 0

#### 6 Key Words for this term

1. Halogens

2.Intermolecular

#### C. How many elements are metals?

Most elements in the periodic table are metal

#### What are ions?

lons are formed when elements gain or lose electrons

#### What are positive ions?

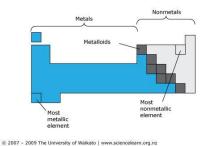
When an element loses an electron it forms a positive ion

#### What type of ions do metals form?

Metals react to form positive ions

## Where are metals and non-metals found on the periodic table?

Metals are found to the left, towards the bottom. Non-metals are found towards the top right of the periodic table



## A. How are the elements in the periodic table arranged?

Elements are arranged in order of increasing atomic number.

#### What are Groups?

The vertical columns are groups.

## What similarities do elements in groups have?

- · Similar properties
- · Same no of electrons on outer shell

#### What are periods?

The horizontal rows in a periodic table

## B. Before the discovery of protons, how did scientists try to arrange elements?

Scientists tried to group elements in order of their atomic weights

## What problems were often found with early periodic tables?

- Not all elements had been discovered
- Some elements placed in the wrong position when atomic weight was used

## C, What are negative ions?

lons formed when atoms gain electrons

#### What type of ions do non-metals form?

Non-metals do not form positive ions – they form negative ions

## B. How did Mendeleev overcome some of the problems of grouping elements?

 He left gaps for possible elements that had not been discovered

Periodic Table of Elements

Ca Sc Ti V Cr Mn Fe Co Ni Cu Zn Ga Ge As Se Br Kr

 Fib
 Sr
 Y
 Zr
 Nb
 Mo
 To
 Ru
 Rh
 Pd
 Ag
 Cd
 In
 Sn
 Sb
 Te
 I
 Xe

 Cs
 Ba
 Lu
 Hf
 Ta
 W
 Re
 Os
 Ir
 Pt
 Au
 Hg
 TI
 Pb
 Bi
 Po
 At
 Rn

 Fr
 Ra
 Lr
 Rf
 Db
 Ss
 Bh
 Hs
 Mt
 Ds
 Rg
 Cn
 Nh
 Fi
 Mc
 Lv
 Ts
 Og

La Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb

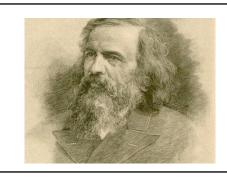
Ac Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No

 He sometimes changed the order based on atomic weights

## What was discovered that helped explain why using atomic weights didn't always work?

Knowledge of isotopes

Li





#### Year 9 Term 4 Science - Chemistry: Topic C1.2 The Periodic Table



#### What we are learning this term: A. How are the elements in the periodic table arranged? A. Arrangement of the Periodic table Periodic Table of Elements - Groups -B. Development of the periodic table 3 4 5 6 7 C. Metals and non metals D. Group 1 Group 7 What are Groups? F. Group 0 Ca Sc Ti V Cr Mn Fe Co Ni Cu Zn Ga Ge As Se Br Kr | Rb | Sr | Y | Zr | Nb | Mo | Tc | Ru | Rh | Pd | Ag | Cd | In | Sn | Sb | Te | I | Xe | | Cs | Ba | Lu | Hf | Ta | W | Re | Os | Ir | Pt | Au | Hg | Ti | Pb | Bi | Po | At | Rn | | Fr | Ra | Lr | Rf | Db | So | Bh | Hs | Mt | Ds | Rg | Cn | Nh | Fi | Mc | Lv | Ts | Og | 6 Key Words for this term What similarities do elements in groups have? 1. Halogens 2. Intermolecular La Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb Ac Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No What are periods? C. How many elements are metals? What are ions? В. Before the discovery of protons, how did B. How did Mendeleev overcome some of the scientists try to arrange elements? problems of grouping elements? What are positive ions? What problems were often found with early periodic tables? What type of ions do metals form? What was discovered that helped explain why Where are metals and non-metals found on the using atomic weights didn't always work? periodic table? What are negative ions? What type of ions do non-metals form?



## Year 9 Term 4 Science - Chemistry : Topic C1.2 The Periodic Table



D	Group 1 of the Periodic Table -							
Wha	at are group 1 elements known	Alkali Metals						
Meta	al or non-metal	Metal						
How she	v many electrons are in the outer II?	1 electron in the outer shell						
How	v reactive are they?	<ul> <li>Group 1 metals easily lose the electron on the outer shell.</li> <li>This makes group 1 elements very reactive</li> <li>Vigorous reactions with water</li> </ul>						
Wha	at ions do they form?	Group 1 elements readily lose electrons to form positive ions     This is so they can have a filled outer shell						
	v does reactivity change down group?	Reactivity increases down the group						

F.	Group 0 of the Periodic Table – Helium, Neon, Argon, Krypton, Xenon, Radon								
Wha	at are group 0 elements known	The Noble Gases							
Meta	al or non-metal	Non-metal							
How shel	many electrons are in the outer	8 - Filled outer shell (except Helium that has 2)							
How	reactive are they?	Filled outer shell so not very reactive							
	do boiling points change down group?	Boiling point increases down the group as the atomic weight increases							

E.	What is a Halogen Displacement reaction?
soluti	re reactive halogen can displace a less reactive halogen from an aqueous on from its salt $2KBr \rightarrow 2KCl + Br_2$

	Group 1	Group 2									Group 3	Group 4	Group 5	Group 6	Group 7	Group 0
Period 1						Н										He
Period 2	Li	Be									В	C	N	0	F	Ne
Period 3	Na	Mg									AI	Si	P	S	CI	Ar
Period 4	K	Ca	Ti	Cr	Mn	Fe	Co	Ni	Cu	Zn				Se	Br	Kr
Period 5	Rb	Sr							Ag			Sn	Sb		ä	Хe
Period 6	Cs	Ba						Pt	Au	Hg		Pb			At	Rn
Period 7	Fr	Ra						Ds	Rg							

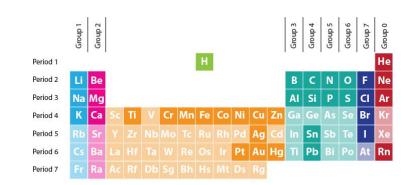
E. Group 7 of the Periodic Table	Group 7 of the Periodic Table								
What are group 7 elements known as?	Halogens								
How are they found	Halogens travel in pairs – diatomic molecules (Cl <sub>2</sub> , Br <sub>2</sub> )								
Metal or non-metal	Non-metal								
How many electrons are in the outer shell?	7 electrons in the outer shell								
How reactive are they?	<ul> <li>Group 7 elements easily gain electrons</li> <li>This makes group 7 elements very reactive</li> </ul>								
What ions do they form?	<ul> <li>Group 7 elements readily gain electrons to form negative ions.</li> <li>This is so they can have a filled outer shell</li> </ul>								
How does reactivity change down the group	Reactivity decreases down the group								
How do boiling points change down the group?	As you go down the group, the boiling point increases as the atomic weigh increases								



#### Year 9 Term 4 Science - Chemistry : Topic C1.2 The Periodic Table



D	Group 1 of the Periodic Table -									
Wha	at are group 1 elements known									
Meta	al or non-metal									
How shel	many electrons are in the outer II?									
How	reactive are they?									
Wha	at ions do they form?									
	does reactivity change down group?									
F.	Group 0 of the Periodic Table – H	Helium, Neon, Argon, Krypton, Xenon,								
Wha	at are group 0 elements known									
Meta	al or non-metal									
How shel	many electrons are in the outer									
How	reactive are they?									
How do boiling points change down the group?										
E.	What is a Halogen Displacemen	t reaction?								
	Time to a realogent propiacement reaction:									



E.	Group 7 of the Periodic Table	
Wha	t are group 7 elements known	
How	are they found	
Meta	ıl or non-metal	
How shel	many electrons are in the outer !?	
How	reactive are they?	
Wha	t ions do they form?	
	does reactivity change down group	
	do boiling points change down group?	





■ EMC <b>5</b>		Year 9 Term 4 Science / Physics : Topic P1.1 Energy										
What we	are learning	this term:		A.	What are the	changes in energy stores for the following objects?						
C. Gravitational potential energy into					An arrow being thrown directly up into the air  From kinetic to gr down, the opposite				onal potential. As it comes back ue.			
D. Kinetic energy and elastic energy stores  E. Wasted energy and Dissipation  F. Energy efficiency				A toy car (with battery) hitting a wall head on			Energy is transfe sound and heat.	Energy is transferred from chemical to kinetic to vibrational in sound and heat.				
	6. Key Words for this term						· · · · · · · · · · · · · · · · · · ·	Energy is transferred from the chemical energy from the petrol/diesel to kinetic energy.				
	rgy stores k done			A bike slowing down			Energy is transfe	Energy is transferred from kinetic to heat.				
4. Joule				Water	Water boiling in an electric kettle Energy			Energy is transferred from electrical to heat.				
A.	What is a s	ystem?	A.	Wha	at is the law of c	onservation (	of energy?	A.	Theoretically, if a roller-coaster has 20000 J of GPE at the top of the			
It is an	object or gr	oup of objects	Energy ca	annot be	be created or destroyed, just changed in form.				slope, how much KE will it have gained when it reaches the bottom?			
A.	What are th	ne 8 energy stores?		A	A. What is the energy store of a person on a bungee jump?  Whilst the rope is slack, energy is transferred form			20000 J, assuming non is lost by air				
1. Chen	nical	5. Gravitational p	otential (GF					resis	stance/friction			
2. Kine	tic (KE)	6. Thermal (intern	al)	G	PE to KE. As the I	rope tightens,	the jumpers KE	В.	What is work?			
3. Magr	netic	7. Elastic potentia	al		tore decrease but nergy store increa			Whe	n energy is transferred, work is done.			
4. Nucl	ear	8. Electrostatic			tore is stored as e			What is the link between work and energ				
A. V	Vhat is the en	ergy transfer from th	e sun. to sol	ar panel t	to light bulb?	B. If a p	B. If a person uses 300 J of Work done = energy transferred					
	Sun → solar panel → lightbulb.					energ	energy pushing a bike, what is the work done?  If the units for energy are –jou					
			eferred	0.5.	mu tuanafannad t-	300 J -joules (J)						
energy transferred energy transferred to												

store of nuclear to light bulb by surroundings by heating energy in \_ sun electric current and light waves

> 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.

B.

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

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

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?

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

В.



## Year 9 Term 4 Science / Physics : Topic P1.1 Energy



What we are learning this term:  A. What are the continuous contin						hange	s in ene	ergy stores for the	follow	ring objects?
C. Gravitational potential energy into the a				n arrow being thrown directly up to the air						
E. Wa	estic energy and ested energy an ergy efficiency				A toy car (with battery) hitting a wall head on					
	Words for this	term		A car a	accelerating					
	ergy stores ork done			A bike slowing down						
4. Joi				Water	boiling in an ele	ctric k	ettle			
A. What is a system? A. W				Wha	What is the law of conservation of energy?			A.	Theoretically, if a roller-coaster has 20000 J of GPE at the top of the slope, how much KE will it have	
A.	What are th	What are the 8 energy stores?  A. What is the e bungee jump					ore of a	person on a		gained when it reaches the bottom?
1.		5.								
2.		6.			В.				What is work?	
3.		7.								
4.		8.							What	t is the link between work and energy?
A.	What is the en	ergy transfer from th	e sun, to sol	ar panel t	o light bulb?	В.		son uses 300 J of		
Sun →	solar panel →	lightbulb.						pushing a bike, the work done?		e units for energy are –joules, what are units for work done?
		energy trar	nsferred	ener	gy transferred to	300 .			-joul	es (J)
	ore of nuclear	→ to	by	<b>→</b>	by heating	B.	What	is the equation for	work d	one?
energy in electric current				ar	d light waves		-	is measured in _		
B								is measures in _ is measured in _		
Б.	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 crane lifts 400 N crate full of coca cola 15 m. How much work was done by the crane?			
					l	I				



## B. Who is doing the most work in these images and why?



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.

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?

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 =  $3 \text{ kg} \times 10 \text{N/kg} \times 150 \text{ m} = 4500 \text{ J or}$ 4.5 kJ

#### D. What is the equation for kinetic energy?

KE =  $\frac{1}{2}$  × mass × velocity<sup>2</sup> =  $\frac{1}{2}$ mv<sup>2</sup>

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 extension<sup>2</sup>

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

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

#### 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



## Year 9 Term 4 Science / Physics : Topic P1.1 Energy



В.	Who is doing the most work in these ima and why?	ages	В.	Why, when work is do the energy transferred		C	C What is the equation to calculate gravitational 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				
						a	bo	ird with a mass of 3 kg out the ground, how mu e?	flies at a height if 150 m uch GPE store does it		
						D	Э.	What happens to energ	y that is not usefully used?		
D. What is the equation for kinetic energy?			What is the equation for elastic potential energy?								
						H	lea		asteful; energy transfers: er: light, television: light, car: und, television: heat?		
						U	Jse	<u>ful</u>	Wasteful		
	with a mass of 1750 kg is travelling at a of 30 m/s, what is the KE of the car?		spring has a spring constant of 25 N/m the extension is 0.2 m, what is the EPE?								
F.	What is energy efficiency?				C. H	ow is p	pov	ver calculated?			
Why is energy efficiency so important?											
				If a student did 2000 J of work walking up the stairs and I took 10 seconds, what is the power?				he stairs and I took 10			
How do you calculate energy efficiency?											



#### Year 9 Term 4 Science / Physics : Topic P1.2 Energy Transfer by Heating



#### What we are learning this term:

- A. Conduction
- B. Insulators
- C. Specific heat capacity
- D. Heating and insulating buildings

#### 6. Key Words for this term

- A. What are the factors that affect conduction?
- Material
- 2. Cross-sectional area
- 3. Surface contact
- 4. Temperature difference

# B. Why do insulators not conduct heat?

They do not have any free electrons to move through the material and transfer the energy.

#### A. What is a good conductor?

A material that allows heat and electricity to pass through.

What are examples of good and bad conductors (insulators)?

Good

Metals: silver, copper, gold, aluminium

Bad (insulators)

Glass, air, plastic, rubber and wood.

- A. What are the three main processes that heat can be transferred by?
- 1. Conduction 2. Convection 3. Radiation

In what direction does heat energy flow?

From HOT to COLD
From a warmer to cooler area

In what state (s, I, g) does conduction happen?

Solids

#### How do metals conduct heat?

The outer electrons are not attached, are free to move (delocalised). When the metal is heated they gain electrons and transfer the energy through the metal.

B. What materials make good insulators?

Rubber, wood, air, glass, plastic

B. Why is air a good insulator?

Because its a gas. Therefore its spread-out molecular configure resists heat transfer to some degree 3. Why are cotton sheets good insulators?

Because the cotton does not conduct any heat as there are no free electrons.

There is also air trapped in the cotton and air is not a good conductor.

C. What can the heat energy stored in a material be thought of as?

The total kinetic energy of all the particles.

C. Which has more heat energy, a bath of hot water or a spark from a sparkler? And why?

The particles in a spark from a fire move around very quickly, so it has a high temperature. However, there are only a few particles, so it has very little stored heat energy

Compared to a spark, the particles in a bath of water move slowly, so it has a relatively low temperature, but there is a large amount of energy stored since there are many particles.

C. Why do copper and water require a different amount of energy to get to increase their temperature to the same amount?

Because they have a different specific heat capacity.

What is specific heat capacity?

SHC is the amount of energy required to increase the temperature of 1 kg of a material by 1  $^{\circ}\text{C}$ 

C. Do the following factors affect the temperature change of a material when it is heated?



material volume

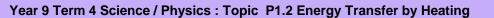
starting temperature



## Year 9 Term 4 Science / Physics : Topic P1.2 Energy Transfer by Heating



								717 -0- 4
What we a	re learning this te	rm:	A.		t are the factors that	l	В.	Why are cotton sheets good insulators?
A. Condu B. Insulat C. Specifi			1. 2. 3.	allec	e conduction:	L		
			4. <b>B.</b>	4.			C.	What can the heat energy stored in a material be thought of as?
6. Key Wo	rds for this term		Б.		y do insulators not nduct heat?			
								nich has more heat energy, a bath of hot water or a spark m a sparkler? And why?
A.	What is a good	d conductor?			What materials make good insulators?			
What are examples of good and bad conductors (insulators)?			B. Why is air a good insulator?		C.		Why do copper and water require a different amount of energy to get to increase their temperature to the same amount?	
Good		Bad (insulators)			ilisulator :	ļГ		
							What is	specific heat capacity?
A.	What are the the theat can be tra	hree main processes tha ansferred by?	t					
1.	2. irection does he	3.		C.				the temperature change of a material when it is heated?
III Wilat u	nection does ne	at energy now:			ye			no
					<b>,</b>			
In what s	tate (s, l, g) does	s conduction happen?						
How do metals conduct heat?								
How do n	iletais conduct n	icai :						







C. What are the factors which affect the amount f energy required to increase the temperature of an object?

Energy supplies Material Mass of material

Why would a material with a high specific heat capacity be beneficial?

It can store a large amount of heat energy for a minimal temperature change.

For example, radiators have water in the because it as a high SHC.

C. What is the equation for energy, in which you use specific heat capacity?

Energy = mass x specific heat x temperature capacity change

Energy is measured in joules (J).

Mass is measured in kilograms (kg).

Temperature change is measured in °C.

Specific heat capacity is measured in J/kg°C.

How much energy is needed to increase the temperature of 0.5 kg of water by 80 °C in a kettle? SHC of water = 4,200 J/kg°C

Energy =  $0.5 \text{ kg x } 4200 \text{ J/kg}^{\circ}\text{C x } 80^{\circ}\text{C} = 168,000 \text{ J}$ 

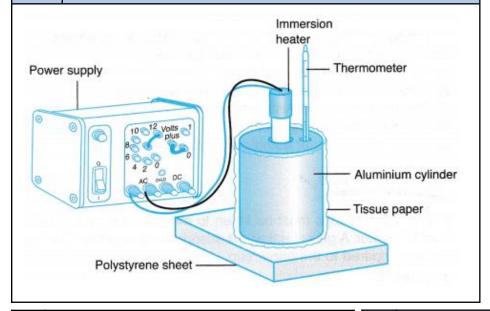
How can we rearrange this equation to calculate SHC?

$$SHC = \frac{energy}{mass \times temp. change}$$

What is the SHC of copper if 11500 J raises the temperature of 1.5 kg by 10°C

$$SHC = \frac{11,500 J}{1.5 kg \times 10^{\circ} C} = 766.66 J/kg^{\circ} C$$

C. This is the apparatus used to measure the SHC of an aluminium block.



D. If the white, yellow and red areas show the warmest and the blue and green areas show the coolest parts of the house, which [arts are the best insulated?



the walls are the best insulated as they are the coolest. The roof and windows are the least insulated as they appear the warmest, they are letting lots of heat out. F. How else can heat loss from homes be reduced?

All draughts should be eliminated. Use curtains for this, as well as draught excluders over gaps in doors and window. Carpets also trap air. How can heat loss from homes be reduced from the windows?

Double glazing. It is two panes of glass with trapped air between them which is an insulator.

How can heat loss from homes be reduced from the roof?

Roof insulation. Stops the warm air that has risen escaping.

How can heat loss from homes be reduced from the walls?

Outside walls have an empty space between them called a cavity this had air trapped in it (an insulator) and stops any conduction from the bricks.

How can heat loss from homes be reduced from the radiators?

A shiny foil can be put between the wall and radiator to prevent radiation by reflecting it back into the room.

D. What is payback time and how is it calculated?

Payback time is the time it takes for the cost of installing insulation to be equalled by the savings made from reduced energy costs.

 $payback\ time\ (years) = \frac{cost\ of\ insulation}{saving\ each\ year}$ 





С.	What are the factors which affect the amount f energy required to increase the temperature of an object?	C.	This is the apparatus used to measure the SHC of an aluminium block. Label this.
	would a material with a high specific heat acity be beneficial?	(a)	10 12 Volts of plus of a contract of a contr

How can heat loss from homes be reduced from the windows?

How can heat loss from homes be reduced from the roof?

How can heat loss from homes be reduced from the walls?

If the white, yellow and red areas show the warmest and the blue and green areas show the coolest parts of the house, which [arts are the best insulated?



heat loss from homes be reduced?

> How can heat loss from homes be reduced from the radiators?

What is the SHC of copper if 11500 J raises the temperature of 1.5 kg by 10°C

is measured in \_\_\_\_\_

How much energy is needed to increase the temperature of 0.5 kg of water by 80 °C in a kettle? SHC of water = 4,200 J/kg°C

How can we rearrange this equation to

calculate SHC?

D. What is payback time and how is it calculated?



#### Geography Knowledge Organiser: Year 9 Term 4 Climate Change



#### Background:

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

A.	Changes in clim	Changes in climate (3)						
Clima	ate change	The process of the Earth's climate changing over time.						
Glac	ial periods	Cold periods.						
Inter	-glacial periods	Warm periods.						

В.	B. Measuring climate change (3)						
Ice cores		Each layer of ice in a core represents a different year. $CO_2$ can be measured in each layer, and therefore the temperature.					
Tree rings		Each ring represents a different year. Thicker rings show a warmer climate.					
Historical evidence		Paintings and diaries e.g. paintings of ice fairs on the frozen Thames 500 years ago.					

	. Natural climate change (3)						
C.	Natura	ıı cıımate	cnange (3)				
			n volcanic eruptions can block , making it colder.				
Sun	spots		n can give out more energy due to ease in sun spots.				
Orbit chan			oit of the sun changes from oval ) to circular approx. 98,000 yrs.				
E.	Effect	s on peo	ple (6)				
Tropi	ical storn	ns	Increase in frequency and intensity so more damage.				
Sea-	level rise	)	Increased risk of floods, damaging property and businesses.				
Melti	ng Arctic	ice	Affects trading routes in the Arctic Circle.				
More flood	drought s	s/	Crop failure, could lead to starvation and famine.				
Cost	of defen	ce	Governments have to spend more money on disasters instead of developing.				
Envir Refu	onmenta gees	al	Pressure on countries to accept refugees.				
G.	Strate	egies to r	esolve climate change (4)				
Adap	otation		dapting to climate change to make fe easier.				
examples (3) 2 n 3		2 n 3	. Building flood defences.  2. Growing new crops to suit the new climate.  3. Irrigation channels, sending water from areas of surplus to deficit.				
Mitig	ation		rying to stop climate change from appening by reducing greenhouse				

gases.

International agreements.
 Alternative energies.

3. Carbon capture.

Mitigation

examples (3)

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

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

H.	Place spe	Place specific examples (2)						
Adaptio	n	The Thames Barrier. Positive: Stops flooding due to rising sea levels. Negative: Expensive						
Mitigati	on	The Paris Agreement.  Positive: Countries are trying to lower CO <sub>2</sub> emissions.  Negative: The USA pulled out and China did not sign up.						



## Geography Knowledge Organiser: Year 9 Term 4 Climate Change

Background:	C. Natural climate change (3)	D. Human-induced climate change (5)			
<ol> <li>Since the 1860s the global climate has been recorded.</li> <li>Since then the climate globally has increased by 0.8°         Celsius.     </li> </ol>	Volcanic eruptions	Greenhouse effect			
3. Climate scientists can use methods to find out about the global climate before we started recording it. (B)	Sun spots	Greenhouse			
4. From this evidence we can see that the planet has always gone through periods of warming and cooling. (A)	Orbital .	gases			
5. However, the rapid increase of carbon dioxide in the atmosphere from burning fossil fuels, is causing the enhanced greenhouse effect. (D)	E. Effects on people (6)	Transport			
6. The enhanced greenhouse effect is causing changes to the planet, such as the melting of Artic sea ice, rising temperatures, and an increase in extreme weather events such as tropical storms. ( <i>E, F</i> )	Tropical storms	Farming .			
7. Countries are trying to resolve the climate change issue by limiting the amount of carbon dioxide released into the atmosphere, this is known as mitigation. ( <i>G</i> , <i>H</i> )	Sea-level rise  Melting Arctic ice	Energy			
8. Some countries are trying to adapt to climate change by	Welling / Welle lee				
building flood barriers and growing drought resistant crops. (G, H)	More droughts/ floods	F. Effects on the environment (4)			
A. Changes in climate (3)		Sea temperature rises			
	Cost of defence	11000			
Climate change	Environmental Refugees	More droughts			
Glacial periods		Melting glaciers			
Giadiai perious	G. Strategies to resolve climate change (4)	(ice rivers)			
Inter-glacial periods	Adaptation	Melting Arctic ice			
B. Measuring climate change (3)	Adaptation examples (3)	H. Place specific examples (2)			
Ice cores	Mitigation	_			
	Mitigation	Adaption			
Tree rings	examples (3)	Mitigation			
Historical evidence		Mitigation			

Н.	Can you define these key words?	What we are covering whilst working from home: The Holocaust				Voor 0 Torm 4 History, The Helegaust					
Anti-Semitism	Hostility or prejudice against Jewish people		We will be looking at:  The history of anti-Semitism in Europe (I)					Year 9 Term 4 History: The Holocaust			
Genocide	the deliberate killing of a large group of people, especially those of a particular nation or ethnic group		ersecution of the Jews		in Nazi Germany and the consequences of this	s for	- 1		ctors show about anti-Semitic		
Holocaust	destruction or slaughter on a mass scale		sh persecution in Germ	many escalated from 1933-1939 eventually resulting in The Final					in Medieval Europe?		
Persecution	hostility and ill-treatment, especially because of race or political or religious beliefs; oppression		eed to remember the F	lolocaust (L)	olocaust (L). e consequences of the Nuremburg Laws for Jews in Nazi Germany?				ban II appealed to European the Holy Land from the Muslims,		
Discrimination	The unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex	J.	What were th	ne consequ				beginning what we  The religious pass	as to be known as the Crusades. sion that drove men, and later even crusades was to have direct		
Lebensraum	Living space in the East (g.g. Poland) where Hitler was planning to build his 1000 year Reich for the master/	What they were		These laws redefined what it meant to be a Jew - being Jewish was now a race rather than a religion (you were considered a Jew if you had 3 or 4 Jewish grandparents).				consequences for			
Minorities	superior race (Herenvolk)  Anyone considered non-Aryan. Disabled people, homosexuals, Roma	Nuremburg	ptember 1935 the g Laws were passed e a new set of laws						ng, raping and massacring Jews as		
Nuremberg Laws	A series of laws reducing German Jews human Rights such as their ability to marry Germans, to vote, and to	persecute		Gran	ndparents born into a Jewish religious commur sidered 'racially' Jewish and their 'racial' status	nity were	The Crusades		y, the Bubonic Plague spread		
Pogrom	be recognised at citizens  A violent attack on Jewish communities these had been occurring all over Eastern Europe and Russia since	stripped Je	Law on Citizenship ews of their (and all rights of it	• This	sed onto their children and grandchildren legal definition of a Jews covered tens of thou ole who did not think of themselves as a Jews			the population	e, killing an estimated one-third of and ignorance prompted the need		
Roma	1900, Known as Gypsies, they were persecuted	governmer	nting, working for the	Jew	eligious or cultural ties to the Jewish communits who hadn't practiced Judaism for years found	d	lague	to find someone to	o blame, and the Jews were a		
SA	especially when the Nazi's moved East	to wear a y	ects'. Jews now had vellow star shaped	with	nselves caught in the grip of Nazi terror. Even Jewish grandparents who had converted to C		jë P	convenient scapegoat because of the myths a stereotypes that were already believed about			
SS	Known as Hitler's bullyboys in the early Hitler's elite part of the army, also responsible	The Reich	entify themselves. Law for the	For the first time in history, Jews faced persecution not for what they believed, but for who they were by birth. In Nazi			The Bubonic Plague	Though Jews were also dying from the plague, the were accused of poisoning wells and spreading the disease – in Germany and Austria approx. 100,0 Jews were burned alive for this.			
	for concentration camps network under Himler		of German Blood ir made it so that								
SS Einsatzgruppe	SS murder squads that went around Eastern Europe looking for Jews, capturing them and then murdering them	marry or h	not allowed to ave intimate	<ul> <li>The</li> </ul>	German.     The Nuremburg Laws were a crucial step in Nazi racial laws that led to the ostracism of German Jews and ultimately to their segregation, confinement, and extermination.			The founder of the 16th century Reformation and			
Sterilisation	Preventing men and women from breeding by an operation	Racial infa	ith German citizens. my (as it became is a criminal offense.	ultin				Protestantism wro	ote a pamphlet in 1545 entitled The lies, claiming that Jews thirsted for		
Genocide	Killing of an entire race of people					Martin Luther	•	nd urging the slaying of the Jews			
Synagogue	A Jewish place of worship	_			K. How did Jewish persecution increase f						
Anti-Semitism	Discrimination against Jews as a religious group or race		f Jewish Businesses					Inacht 1938	Ghettos 1939		
The Final Solution	The Nazi government official policy which authorised the murder of all Jews within the Nazi Reich (Empire)	announce	d that from 10am on 1	that from 10am on 1st April an out would behind of all Jewish, doctors and lawyers.  (b) (a) (a) (b) (a) (b) (a) (b) (c) (c) (c) (d) (d) (d) (e) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e				outburst of anti-Semitism med gangs ran amok	brutally separating, persecuting and destroying Europe's Jews 1s gheto established in Poland in October 1939		
Aryan	Meaning pure German blood. Hitler believed that they would make Germany great again	<ul><li>businesse</li><li>SA memb</li></ul>	es, doctors and lawyers ers (paramilitary unit a					communities, destroying nes, shops, businesses,			
Concentration Camps	Prison camps set up by the Nazis in 1933, firstly for political opponents (communists), then minorities form criminals, homosexuals, gypsies, Jews. Some later became extermination camps	word <i>Jud</i> e Jewish bu	ord Jude (German word for Jew) outside (and all rights of it such as voting, ewish businesses. cer			neteries. me gangs we	d desecrated Jewish re in Nazi uniforms. ch as the SA and Hitler	Jews who owned any businesses/property were forced to hand them over as they were placed in ghettos.			
Extermination Camps	A concentration camp designed for the systematic murder of prisoners eg. Treblinka or Sobibor	people fro	y from Jews') discoura om going inside. ott was not very succe:	iscouraging to wear a yellow star shaped patch You to identify themselves.				not to wear uniforms so would seem to be by the	Some ghettos were shut in by walls, fences or barbed wire     Temporary– some only lasted a		
Eugenics	The study of races. The Nazis' distorted science such as Darwin's survival of the fittest	many ped	pple just ignored the sign of still entered the shop	gns and	German Blood and Honour made it so that Jews were not allowed to	• Soi	me Germans	were horrified, others easure or joined in.	few days or weeks, others for years		
Euthanasia	The killing of those disabilities or diseases	lasted jus	t a day, but it marked t of a nationwide camp	he	marry or have intimate relations with German citizens. Racial infamy (as it	• 100	) Jews killed,	814 shop, 171, homes	The majority of ghetto inhabitants died from disease, starvation.		
Gestapo	Hitler's spy network, which relied on informants	the Nazi F	Party against the entire		became known) was a criminal	<ul> <li>Jev</li> </ul>		gues destroyed ed and made to pay for	shooting or deportation to		
Holocaust	The Holocaust took place in Europe between 1933 and 1945. Six million Jews were systematically and brutally murdered by the Nazis and their collaborators. Millions of non-jews, including Roma and Sinti (Gyptsies), Serbs, political dissidents, people with disabilities, homosexuals and Jehovah's Witnesses, were also	Jewish po	ppulation		offense. the			nt to camps.	extermination camps.		
	persecuted by the Nazis.	L. Why is it i	mportant to remer	nber the H	lolocaust?						
Ghettos	Parts of cities reserved for Jews from 1939, they were unhygienic places to live, had a lack of water and healthcare. They acted as prisoners as they had large walls and curfews.	The Holo	caust demonstrates	the atmos	e. It cannot, and should not, be an event sphere in which genocide can take place aust because it is an example of how the	e.	•	lve into something far m	ore threatening		
Kristallnacht	The Night of Broken Glass, people encouraged by the SS burned down synagogues, humiliated Jewish people and many were killed	Rememb     Discussion	ering the Holocaust on about the Holoca	is an impo lust is parti	ortant act in itself and honouring its viction cularly important when we remember it	ms, partic is not an	cularly those isolated eve	e with no family left to relent e.g. Bosnia 1995, Rv	member them, is so important vanda 1994 etc.		
Untermensch	Anyone considered an undesirable in Hitler's Germany: disabled, Roma, homosexuals and Jews		does not learn from n so that it remains	•	doomed to repeat it". – it is not enough ssue	to just lea	arn from his	story we must tackle, cha	allenge, debate, discuss, expose		

H.	Can you define these key words?	What we are covering whilst working from home: The Holocaust					Year 9 Term 4 History: The Holocaust		
Anti-Semitism		We will be looking	ng at: r of anti-Semitism in Eu	rone (I)			rear :	9 Terrii 4 mist	ory. The holocaust
Genocide			ersecution of the Jews		n Nazi Germany and the consequences of this f	or	1		ctors show about anti-Semitic
Holocaust			h persecution in Germ	any escalate	ed from 1933-1939 eventually resulting in The F	nal		attitudes	in Medieval Europe?
Persecution			ed to remember the H	olocaust (L)					
Discrimination		J.	What were th	e conseque	ences of the Nuremburg Laws for Jews in Naz Germany?	:i			
Lebensraum		What they were	:	Consequ			sades		
Minorities							The Crusades		
Nuremberg Laws							누		
Pogrom									
Roma							ague		
SA							c Pl		
SS							uboni		
SS Einsatzgruppe n							The Bubonic Plague		
Sterilisation		]					e.		
Genocide							Martin Luther		
Synagogue				•	K. How did Jewish persecution i			1939.	
Anti-Semitism		Boycott o	f Jewish Businesses	1933	Nuremburg Laws 1935		Kristall	nacht 1938	Ghettos 1939
The Final Solution									
Aryan									
Concentration Camps									
Extermination Camps									
Eugenics									
Euthanasia		1							
Gestapo									
Holocaust									
01 "		I Why is it in	nportant to remen	nher the H	lolocaust?				
Ghettos		L. my is it ii							
Kristallnacht									
Untermensch									

## Year 9 Religious Education: Matters of life and death

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

С	What does the theory of Natural Moral Law say about moral behaviour?	What are the 5 precepts of NML that we must be fulfilling for morally good behaviour?
	NML says absolute moral rules exist and are revealed to us through by God. Through the use of human reason we can look at the way things were created to know their God given design and functions. The way we are supposed to act according to the way we were created by God is morally good and any way that goes against it is morally wrong.	<ol> <li>Preserve innocent life</li> <li>Live in an ordered society</li> <li>Educate children</li> <li>Reproduce</li> <li>Worship God</li> </ol>

D	What are the strengths of NML theory about what is morally good?	What are the weaknesses of NML theory about what is morally good?				
	The theory is based on reason so everyone can work out for themselves what is morally good	If you do not believe in a God who has created absolute moral laws about right and wrong then NML cannot tell us anything about right or wrong.				
	It seems to be true that we do tend to follow the primary precepts- it is in our nature- and following them will generally bring about what we think of as good. For example, preserve life' means people will protect the innocent and also believe murder is wrong	It can lead to classifying actions as immoral which mainstream society would argue are not. For example, the use of contraception is immoral according to NML because it does not contribute to reproduction.				

Е	What does the theory of situation ethics say about moral behaviour?	What are the strengths of S.E theory about what is morally good?	What are the weakness of S.E theory about what is morally good?
	There are no absolute moral laws about right or wrong. The only guiding principle about what is morally right is 'do the most loving thing' in any situation.	It allows flexibility and can avoid acts we would deem to be immoral. For example, an absolute rule like 'do not lie' cannot always be followed without sometimes needing to be broken. For example if a mad axeman came in asking for your mother you would not want to tell the truth because it could lead to her death!	outcome of our actions will be

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

## Year 9 Religious Education: Matters of life and death

Morality   Morality		an you define these key words?	С	behaviour? we must be full		What are the 5 precepts of NML we must be fulfilling for morally	that good		
Ethics  Sanctity of Life  Quality of Life  Quality of Life  Natural Moral Law  Precept  Reason  Absolute  Situation Ethics  E What does the theory of situation ethics say about moral behaviour?  Relativism  Agape  Abortion  Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Capital Punish ment  Capital Punish ment  2  Dominion  Stewardship  What are the strengths of NML theory about what is morally good?  What are the weakness of S.E. theory about what is morally good?  Bible quotes relating to the sanctity of life  1  2  3  4	Key word	Key definition						behaviour?	
Sanctity of Life  Quality of Life  Quality of Life  D What are the strengths of NML theory about what is morally good?  Precept  Reason  Absolute  Situation Ethics  E What does the theory of situation ethics say about moral behaviour?  Relativism  Agape  Abortion  Pro-Life  E What does the theory of situation ethics say about moral behaviour?  B Bible quotes relating to the sanctity of life  Capital Punish ment  Capital Punish ment  Dominion  Stewardship  Again  Again  Again  Again  Again  Again  Again  B Bible quotes relating to the sanctity of life  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Morality								
Quality of Life  D What are the strengths of NML theory about what is morally good?    Natural Moral Law   Precept	Ethics								
Natural Moral Law   Frecept   Reason   Absolute	Sanctity of Life								
Natural Moral Law  Precept  Reason  Absolute  Situation Ethics  E What does the theory of situation ethics say about moral behaviour?  Relativism  Agape  Abortion  Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship  B Bible quotes relating to the sanctity of life  1 2 3 4	Quality of Life		D	)	What are the strengths of NML the is morally good?	eory about what	What are the	e weaknesses of NML theory is morally good?	
Reason  Absolute  Situation Ethics  E What does the theory of situation ethics say about moral behaviour?  Relativism  Agape  Abortion  Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship									
Absolute  Situation Ethics  E What does the theory of situation ethics say about moral behaviour? S.E theory about what is morally good?  Relativism  Agape  Abortion  Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship	Precept								
Situation Ethics  E What does the theory of situation ethics say about moral behaviour?  Relativism  Agape  Abortion  Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship  E What does the theory of situation ethics say about moral behaviour?  What are the strengths of S.E theory about what is morally good?  What are the strengths of S.E theory about what is morally good?  What are the strengths of S.E theory about what is morally good?  B Bible quotes relating to the sanctity of life  1 2 3 4	Reason								
Relativism  Agape  Abortion  Pro-Life  Euthanasia  Capital Punish ment  Dominion  S.E theory about what is morally good?	Absolute								
Agape Abortion Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship  B Bible quotes relating to the sanctity of life  1 2 4	Situation Ethics		E	<u>W</u>	hat does the theory of situation hics say about moral behaviour?	S.E theory about	engths of what is	theory about what is morally	
Abortion  Pro-Life  Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship  Bible quotes relating to the sanctity of life  1 2 3 4	Relativism								
Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship	Agape								
Pro-Choice  Euthanasia  Capital Punish ment  Dominion  Stewardship	Abortion								
Euthanasia  Capital Punish ment  Dominion  Stewardship  B Bible quotes relating to the sanctity of life  1  3  4	Pro-Life								
Euthanasia  Capital Punish ment  Dominion  Stewardship									
Capital Punish ment  2  Dominion  Stewardship	Pro-Choice		В	l p:	ible suctor veleting to the constitue	A life			
Stewardship 4			B .	Bi	ible quotes relating to the sanctity o	of life			
Stewardship	Euthanasia  Capital Punish		1	Bi	ible quotes relating to the sanctity o	of life			
	Euthanasia  Capital Punish ment		1 2 3	Bi	ible quotes relating to the sanctity o	of life			



#### SPANISH Year 9 GCSE Term 4 Knowledge Organiser: Topic = Festivals & Relationships



#### What we are learning this term:

- Talking about festivals and customs
- Describing relationships with people
- C. Learning about Spanish customs
- Talking about future plans D.
- Translation Practice E.
- Key words across topics

#### 6 Key Words for this term

Las relaciones

3.

- 4. celebrar
- 2. La fiesta El costumbre
- 5. Las tradiciones 6. La celebración

#### A. ¿Cómo es tu familia?

Alegre Happy Amable Friendly Old Anciano/a Beard La barba Cariñoso/a Affectionate Castaño Chestnut (hair) Delgado/a Thin Glasses Las gafas Gracioso/a Funny Son / daughter El / la hijo/a Joven Young Straight (hair) Liso/a Las pecas Freckles Pelirrojo Ginger / red hair Rizado Curly Old Vieio/a Often A menudo Comprensivo/a Understanding Conocer To get to know El consejo Advice Cuidar To look after La disputa Argument Egoísta Selfish Fastidiar To annoy Strong / loud Fuerte Talkative Hablador(a) Honrado/a Honourable Mismo/a Same Peligroso/a Dangerous Reírse To laugh Seguro/a Sure / certain Travieso/a Naughty Triste Sad El verano Summer La vida Life

#### B. Hablando de Parejas

Kiss el beso Cada vez más More and more Cocinar To cook Comprar To buy Echar de menos To miss Enamorado/a To be in love Ya no No longer Las vacaciones Holidays Sonreírse To smile Relatives Los familiares Нарру Feliz People La gente EI / la invitado/a Guest Maleducado/a Rude El marido Husband El matrimonio Marriage Woman / wife La mujer El novio Boyfriend Parecer To seem La pareia Partner

#### C. Planes para el futuro y las fiestas del mundo

Weddina La boda To find Buscar Cambiar To change El casamiento The wedding To get married Casarse El / la compañero/a Colleague / friend Decepcionado/a Disappointed Encontrar To find La felicidad Happiness Próximo/a Next Solo/a Alone Soltero/a Sinale Tener suerte To be lucky Ancestors Los antepasados La calavera Skull Celebrarse To be held El comentario Cemetery Disfrazado/a Disguised Muerto/a Dead Proteger To protect El pueblo Town El regalo Present La tumba Grave La vela Candle Vender To sell

<u>Ser</u>	To be	<u>Tener</u>	To have	Infinitive	Present	Past	<u>Future</u>
Soy	I am	Tengo	I have	Hablar To speak	Hablo I speak	Hablé I spoke	Voy a Hablar I am going to speak
Eres	You are	Tienes	You have	Comer To eat	Como I eat	Comí I ate	Voy a comer I am going to eat
Es	s/he is	Tiene	s/he has	Ir To go	Voy I go	Fui/fue I am/it was	Voy a ir I am going to go
Somos	We are	Tenem os	We have	Ser To be	Soy I am	Fui I was	Voy a ser I am going to be
son	They are	tienen	They have	Tener To have	Tengo I have	Tuve I had	Voy a tener I am going to have

La actuación	Performance
El ambiente	Atmosphere
La batalla	Battle
El concurso	Competition
Conmemorar	To commemorate
Correr	To run
La costumbre	Custom
Demasiado	Too much
El desfile	Procession
El diablo	Devil
El encierro	Running of the bulls
Encontrar	To find
El espectáculo	Show / display
Extraño/a	Strange
Impresionante	Impressive
Incómodo/a	Uncomfortable
Llevar	To wear / carry
Pasarlo bien	To have a good time
El peligro	Danger
Precioso/a	Beautiful
Saltar	To jump
La suerte	Luck
El toro	Bull
La torre	Tower
El traje	Suit / costume
Vestirse de	To dress up as

Entrance

People

Soon

Dirty

To clear

To throw

La entrada

La gente

Limpiar

Pronto

Sucio/a

tirar

D. Algunas costumbres regionales

to have - tener
to be - ser
to go - ir
to do / make -
hacer
to play - jugar
to see / watch - ve
to listen - escucha
to buy - comprar
to live - vivir
to speak - hablar
to have to - deber
to want to - quere
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

Me gusta – I like Me encanta – I love Odio - I hate Porque – because Divertido - fun Aburrido – borina Util - useful Inutil – useless Comodo - comfy Interestanteinteresting Entretenido entertaining Emocionante exciting Guay - cool Genial - great Soso - dull Asqueroso disgusting Malo- bad Bueno - good

F. Key Words across Topics?



## SPANISH Year 9 GCSE Term 4 Knowledge Organiser: Topic = Festivals & Relationships-QUIZABLE

|--|

Wh	What we are learning this term:									
A. B. C. D. E. F.	Talking about festivals and customs Describing relationships with people Learning about Spanish customs Talking about future plans Translation Practice Key words across topics									
6 k	6 Key Words for this term									
1. 2. 3.	Las relaciones La fiesta El costumbre	4. celebrar 5. Las tradiciones 6. La celebración								

5. Li costamble	o. La celebración				
A. ¿Cómo es tu familia?					
Alegre					
Amable					
Anciano/a					
La barba	Beard				
	Affectionate				
	Chestnut (hair)				
	Thin				
	Glasses				
	Funny				
	Son / daughter				
<del></del>	Young				
<del></del>	Straight (hair)				
<del></del>	Freckles				
<del></del>	Ginger / red hair				
<del></del>	Curly				
	Old				
	Often				
Comprensivo/a					
Conocer					
El consejo	To look after				
Lo diaputo	10 look alter				
La disputa	Selfish				
	To annoy				
	Strong / loud				
	Talkative				
	Honourable				
	Same				
	Dangerous				
Reírse	Dangolodo				
Seguro/a					
	Naughty				
	Sad				
	Summer				
	Life				

B. Habland	do de Parejas	Key Verbs					
el beso		Ser To be	Tener To have	Present	<u>Past</u>	<u>Future</u>	
Cada vez más	To cook To buy	= I am	 = I have	 I speak	 I spoke	I am going to speak	
Echar de menos Enamorado/a Ya no		= You are	Tienes = You have	 I eat	 I ate	I am going to eat	
	Holidays To smile Relatives	= s/he is	 = s/he has	l go	 I am/it was	I am going to go	
	Happy People Guest	= We are	= We have	I am	l was	I am going to be	
	Rude Husband Marriage	= They are	Tienen = They have	I have	I had	I am going to have	
	Woman / wife	D. Algunas	s costumbres r	egionales	F. Key	F. Key Words across Topics?	
Parecer La pareja	Boyfriend	La actuación El ambiente La batalla	Compet	- - ition	to have = to be = to go = to do =	I love I hate	
•	ituro y las fiestas del indo	Conmemorar	To run		to play =	because	
La boda  El casamiento  El / la compañero/a  Tener suerte Los antepasados La calavera Celebrarse El comentario Disfrazado/a	To find To change To get married Disappointed To find Happiness Next Alone Single Dead To protect	La suerte La torre El traje Vestirse de	To find Show / 6 Strange Impress Uncomf	ch sion  g of the bulls  display sive ortable / carry a a good time	to see = to listen= to buy = to live = to speak=_ to have to = to want to= to visit = to drink = to go out = to read = to work = to think = to write =		
La tumba La vela	To protect Town Present To sell	La entrada	People To clear Soon Dirty				



#### SPANISH Year 9 FCSE Term 4 Knowledge Organiser: Topic = Town



#### What we are learning this term:

- Places
- Transport
- C. Weather
- Adjectives
- Sports
- Countries
- G. Key words
- Astivities Н.
- Food opinions

#### 6 Key Words for this term

- El viaje
- 2. El avión

El hotel El viaje

Vacaciones

Aire libre 5. Llueve 6. Querer

4.

Ruidoso

#### A. Places

church
pool
castle
stadium
town
city
the countryside
the mountains
on the coast
near the beach
Abroad
ice rink
teh restaurant
the pub

#### **B.Transport**

the hotel

holidays

trip

En coche En autocar En tren En avión En bicicleta	by car by coach by train by plane by bike
En barco	on boat

#### C. The weather

it's good weather Hace buen tiempo it's bad weather Hace mal tiempo -Hace sol it's sunny Llueve it's raining Hace viento it's windy Hace calor it's hot Hace frio it's cold Nieva it's snowing

#### **D.Adjectives**

Pintoresco picturesque Elegante Smart Bonito pretty Hermoso pretty Rapido fast Comodo comfy Caro expensive Barato cheap Practico practical Que Me da miedo scary Agradable Nice clean Limpio Sucio dirty Interesante interesting Delicioso delicious Genial great Ruidoso noisy Simpatico nice Estupdenda fantastic Lo pasé genial I had a great time

F. Sports				
Jugar	to play			
Tocar	to play instrument			
La equitación	horseriding			
La musculación	exericse in gym			
Relajar	to relax			
Piscina	pool			
Deporte	sport			
Aire libre	outside/fresh air			
Caminar	to walk			
Dar un paseo	to walk			
El polideportivo -	sports centre			
Esquí acuático	water skiing			
Dormir	to sleep			
Monopatín	skateboarding			

#### **Key Verbs** Present Future Ser Tener Past To be To have Voy a Hablar Soy Tengo Hablo Hablé I spoke = I am = I have I speak I am going to speak Eres Tienes Como Comí Voy a comer = You have I am going to eat = You are I eat I ate Es Tiene Voy Fui/fue Voy a ir = s/he is = s/he has I go I am/it was I am going to go Voy a ser Somos Tenemos Soy Fui = We are = We have I am I was I am going to be

Tuve

I had

Tengo

I have

#### **G.** Countries France Francia

Tienen

= They have

Son = They

are

Swiss Suiza Escocia Scotland España Spain

#### H. Key verbs

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

#### I. Activities

Voy a tener

I am going to have

Se puede you can Ir de pesca ao fishina Ir de compras go shopping Comer to eat Cenar to eat dinner Tomar el sol to sunbathe Mantenerse en forma to keep fit to go for a walk Ir de paseo Hacer equitación to go horseriding Dormir to sleep

#### J.Food opinions



## SPANISH Year 9 FCSE Term 4 Knowledge Organiser: Topic = Town-QUIZABLE

What we are learning t	his term:	C. The	weather			Key Vo	erbs	
A. Places B. Transport C. Weather			it's good weather it's bad weather it's sunny	Ser To be	Tener To have	<u>Present</u>	<u>Past</u>	<u>Future</u>
D. Adjectives E. Sports			it's raining it's windy	= I am	 = I have	I speak	I spoke	 I am going to speak
F. Countries G. Key words H. Astivities I. Food opinions			it's hot it's cold it's snowing	= You are	Tienes = You have	l eat	I ate	I am going to eat
Food opinions     Key Words for this t	erm	D.Ad	jectives	= s/he is	= s/he has	l go	I am/it was	I am going to go
1. El viaje 2. El avión 3. Llueve	4. Ruidoso 5. Aire libre 6. Querer		picturesque Smart pretty pretty	= We are	= We have	l am	l was	I am going to be
A. PI	aces		fast comfy	are	= They have	I have	l had	I am going to have
	church		expensive cheap	G. Co	ountries		I. A	ctivities
Cerca de la playa Al extranjero Pista de hielo	pool castle stadium town city the countryside the mountains		practical scary Nice clean dirty interesting delicious great noisy nice fantastic	Francia Suiza Escocia España  H. Ke	France Swiss Scotland Spain  ey verbs  to have to be	Manteners Ir de pase Hacer equi	_ _ _ e en forma o	you can  go shopping to eat to eat dinner to sunbathe  to go for a walk  to sleep
	the pub the hotel		I had a great time		to go to do		J.Foo	d opinions
	trip holidays	F. \$	Sports to play		to play to see to listen to buy to live		_ _ _ _	I like I love I hate because
B.Tran	-		to play instrument horseriding		to speak to have to		_ _	fun boring
	by car by coach by train by plane by bike on boat	La musculación  Aire libre Caminar Dar un paseo  Esquí acuático Dormir Monopatín	to relax pool sport  to walk sports centre to sleep		to want to to visit to eat to drink to go out to read to work to think to write			useful useless comfy interesting entertaining exciting cool great dull disgusting bad good
							_	relaxing

# What we are learning this term: A. Cubism B. Frank Stella C. Segments and Templates D. Relief Sculpture

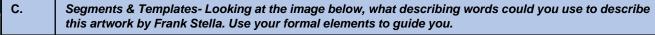
E. Clay, Score & Slip

#### B | Answer the questions about Frank Stella

Year 9 Art Term 2: Topic = 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
  - $How\ big\ are\ his\ sculptures?\ His\ sculptures\ can\ fill\ a\ whole\ room\ and\ usually\ fill\ up\ a\ whole\ wall.$

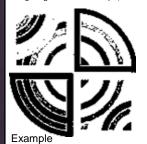


1. Organic, natural, colourful, curvy, bright, bold, pattern, skewed, misshaped, mixed, disconnected, random, thought provoking

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

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

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



Your response

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



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

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



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



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



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

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

Finally seal

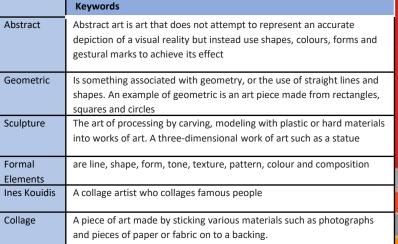


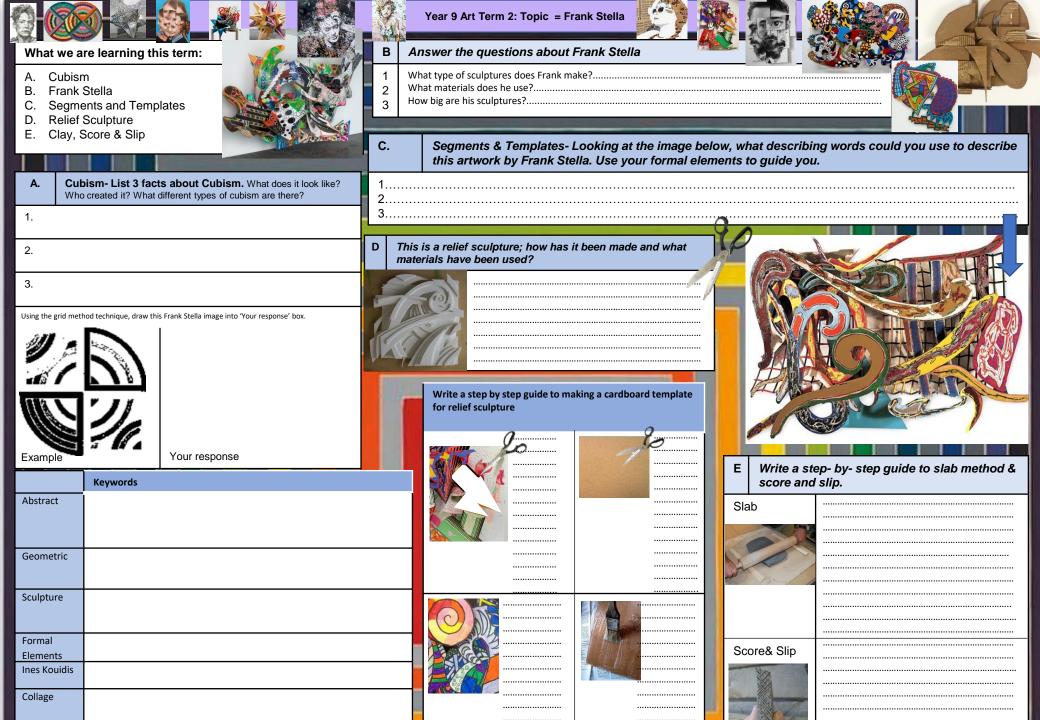


Firstly, start off by having your wooden board your wooden slats and your rolling pin With your ball of clay in the middle. Make sure the slats are the same thickness. Start off by gently rolling out your ball of clay in a rectangle, lifting up the clay every so often to rotate it so that you create 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 paste. Using the slip like glue, add





#### **Year 9 PRODUCT DESIGN**



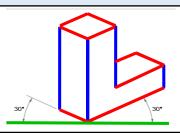


#### What we are learning this term:

- A. Drawing Skills 🔓
- B. Wood Theory 🗈 🚵
- C. Wooden Joints & Their Uses
- D. Tools & Machinery

A.	Drawing Skills	
lsom	etric Technical Drawing	

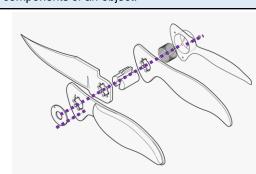
Made up of a series of par parallel vertical lines and parallel 30-degree lines. But no horizontal lines.



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

#### **Exploded Technical Drawing**

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



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

B. Wood	Wood Theory			
Natural	Advantages	Disadvantages		
Hardwood:	Stronger & durable     Weather resistant     Fire resistant	Harder to cut /     curve     More expensive     Longer to grow		
Softwood:	Easy to cut /     curve     Cheaper     Quicker to grow	Not weather resistant     Not fire resistant     Weaker & less durable		
Manufactured	Advantages	Disadvantages		
Manufactured MDF:	Advantages     Easy to cut and sand     Takes paint well     Comes in wide sheets	Not as aesthetically pleasing     Doesn't stain well		
	Easy to cut and sand     Takes paint well     Comes in wide	Not as     aesthetically     pleasing		



Manufactured boards are more sustainable than natural woods because made from wasted wood and offcuts.

Softwood is more sustainable than hardwood, because it grows a lot quicker.

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

D.	Tool	ols & Machinery							
· · · · · · · · · · · · · · · · · · ·		Mitre Square	Dowels	Quick Clamp	Wooden Vice	Tenon Saw	Bandfacer	Pillar Drill	
The state of the s					S		The Control of the Co		

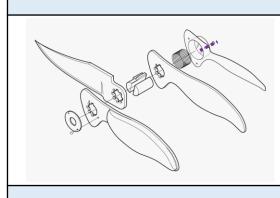




#### What we are learning this term:

- A. Drawing Skills ...
  B. Wood Theory ...
- C. Wooden Joints & Their Uses

	Tools & Machinery			
A.	Drawing Skills			
Isometric Technical Drawing				
	30*			
Expl	oded Technical Drawing			



B.	Wood Th	Wood Theory						
Natura	1	Advanta	ges	Disadvantages	3			
Hardwood:								
Softwood:								
Manufa	actured	Advantages		Disadvantages				
MDF: 🏐								
Plywood: (©)								
Sustai	nability = N	latural Wo	od Vs Manuf	actured Boards	23			

9	C.	W	ooden Joints & T	heir Uses
	Joint		Uses	Image
	Mitre Joint			
	Dowe Joint	_		
	Mortis and Tenor			
<u>\$</u>	Cross Halvir Joint			
				Ø/)



#### What we are learning this term:

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

#### 6 Key Words for this term

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

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

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



touching you.

#### Year 9 - High Skills

#### . 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.



#### A What is cross contamination and how can it be prevented?

Cross contamination happens when you use the wrong chopping board or equipment to prepare food which can therefore result in food poisoning. You must use the correct equipment for the correct ingredients. You must also ensure that you are always following good hygiene practices when cooking.

B. What do the following terms mean?	
Grilling	Using the top part of the oven. It involves a significant amount of direct, radiant heat, and tends to be used for cooking meat and vegetables quickly. It is also a healthier method of cooking meat products.
Baking	Baking is a method of preparing food that uses dry heat, normally in an oven. Heat is gradually transferred from the surface of cakes, cookies, and breads to their centre.
Frying	Frying is the cooking of food in oil or another fat. It is usually done in a frying pan using the hob of the cooker. It also known to be unhealthy.

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

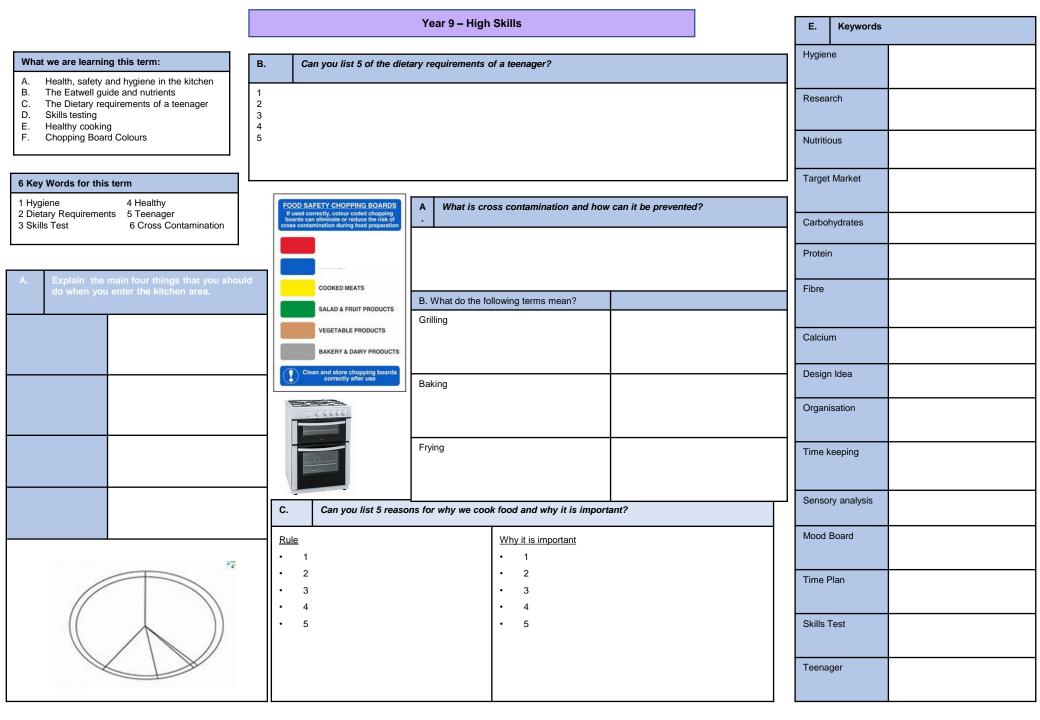
#### Rule

- 1 to get rid of bacteria on the food
- 2 to make the food taste better
- 3 to make food chewable
- 4 to ensure that food is not raw
- 5 to add colour to the food

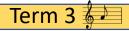
#### Why it is important

- 1 to stop food poisoning
- 2 to make the food more appealing
- 3 it could be raw or a choking hazard
- 4 to stop food poisoning
- 5 to make it look more appetising or change its use

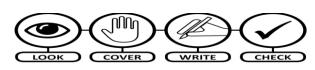
E.	Keywords				
Hygiei	ne	A method of keeping yourself and equipment clean			
Resea	ırch	Information that you find out to help you with a project			
Nutriti	ous	A meal that is healthy and contains vital nutrients.			
Targe	t Market	The age or type of person you re creating a product for.			
Carbo	hydrates	Foods that give you energy			
Protei	n	Food that grow and repair your muscles			
Fibre		Foods that keep your digestive system healthy and avoid constipation.			
Calciu	m	Foods that make your teeth and bones strong			
Desig	n Idea	A sketch or plan of how you are hoping a project to turn out.			
Organ	isation	Having everything ready for a lesson and following instructions			
Time I	keeping	Using the time to remain organised.			
Senso	ry analysis	Use your senses to taste and describe a product			
Mood	Board	A collage of photos and key words based on a project			
Time I	Plan	Instructions of wat you are going to do and how long it should take.			
Skills Test		Demonstrating your knowledge of a cooking term.			
Teenager		Someone between the age of 13 – 19.			



#### Year 9: You're in the band!

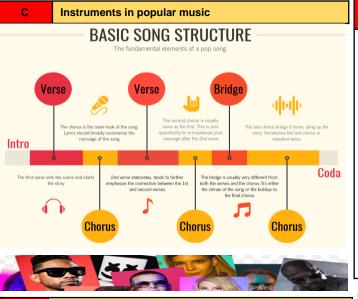


Α	What we are learning about this term
1	Basic Song Structure
2	How to write a perfect Evaluation
3	Playing an instrument / Chords / Melody
4	What are the music symbols – Note values
5	Keywords
6	How to read music - Treble clef and bass clef

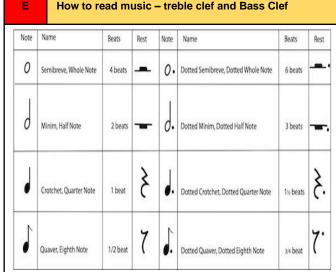


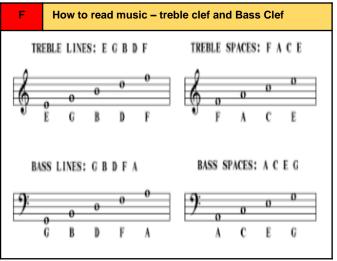
В	Keywords		
Instrumental Break	An <b>instrument section</b> during a song – no singing		
Lyrics	The words of a song		
Verse	A section of a song <b>telling the story</b> , followed by a chorus		
Chorus	Repeated idea within a song, lyrics and music usually remain the same		
Bridge / Middle 8	Passage of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

Describing music - MAD T SHIRT



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

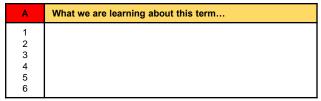


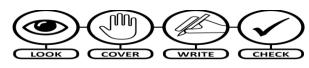


M	Α	D	Т	S	н	ı	R	Т
Melody	Articulation	Dynamics	Texture	Structure	Harmony/Tonality	Instruments	Rhythm	Tempo
The tune	How notes are played	Loud/quiet and any other volume changes	Layers of sound / how they fit together	The sections and organising	Chords used / the mood	Types of instruments heard	Pattern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

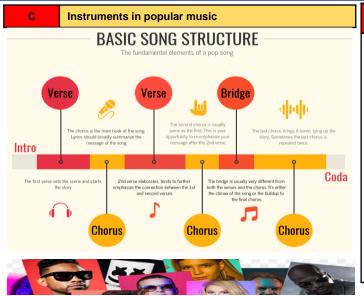


#### Year 9: You're in the band!

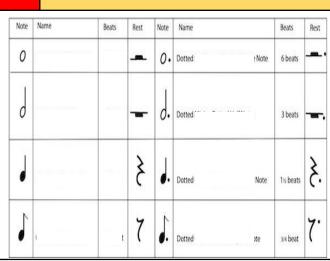




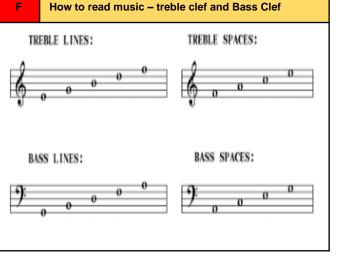
Keywords

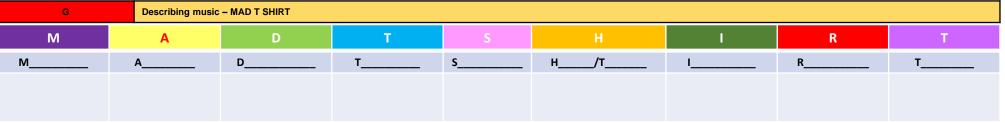


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How to read music - treble clef and Bass Clef







pitch

#### Year 9: Lit in Colour - Performing a Script



#### What we are learning this term:

- A. How to develop our vocal techniques.
- B. How to develop our physical techniques.
- How to interpret the director's creative intention for a group piece.
- D. How to reflect, analyse and evaluate our development.





Noughts and Crosses by Mallorie Blackman	Cape by Inua Allams,	Gone Too Far by ola Agbaje
A stage adaptation of Malorie Blackman's best selling novel, the world of the Crosses and the noughts is reminiscent of Shakespeare's Romeo and Iuliet. It's a modern-day tale of star-crossed lovers, race and violence. Noughts and Crosses is about a segregated society seetering on a volatile knife edge. As violence breaks out, Sephy and Callum draw closer, out this is a romance that will ead them into terrible danger.	Someone mugged Bruce's mum and he is not having it. The shock is still visible in her trembling fingers, rippling out across the calm waters of their lives. He grabs his hoodie, his uniform, his cape and goes out to find the culprit. Smithy wants everyone to stay inside, Uhuru wants everyone out. Tanya thinks it's boyish fun and games until, very suddenly, it isn't.	Nigeria, England, America, Jamaica; are you proud of where you're from? Dark skinned, light skinned, afro, weaves, who are your true brothers and sisters?  When two brothers from different continents go down the street to buy a pint of milk, they lift the lid on a disunited nation where everyone wants to be an individual but no one wants to stand out from the crowd.

KEY WORDS	
articulation	the clarity or distinction of speech
aside	Lines spoken by an performer to the audience and not supposed to be overheard by other characters on-stage.
business	a piece of unscripted or improvised action, often comic in intention, used to establish a character, fill a pause in dialogue, or to establish a scene. An author may simply suggest 'business' to indicate the need for some action at that point in the play.
characterisatio n	how a performer uses body, voice, and thought to develop and portray a character.
dialogue	spoken conversation used by two or more characters to express thoughts, feelings, and actions.
focus	in acting, the act of concentrating or staying in character.
gesture	any movement of the performer's head, shoulder, arm, hand, leg, or foot to convey meaning.
imaging	a technique which allows performers to slow down and focus individually on an issue. The performers, sitting quietly with eyes closed, allow pictures to form in their minds. These images may be motivated by bits of narration, music, sounds, smells, etc.
improvisation	the spontaneous use of movement and speech to create a character or object in a particular situation; acting done without a script.
inflection	change in pitch or loudness of the voice.
Interaction	the action or relationship among two or more characters
language	in drama, the particular manner of verbal expression, the diction or style of writing, or the speech or phrasing that suggests a class or profession or type of character.
mannerism	a peculiarity of speech or behaviour.
mime	acting without words.
mirroring	copying the movement and/or expression or look of someone else exactly.
monologue	a long speech made by one performer; a monologue may be delivered alone or in the presence of others.
motivation	the reason or reasons for a character's behaviour; an incentive or inducement for further action for a character.
movement	stage blocking or the movements of the performers onstage during performance; also refers to the action of the play as it moves from event to event.
pace	rate of movement or speed of action
performance elements	include acting (e.g., character motivation and analysis, empathy), speaking (breath control, vocal expression and inflection, projection, speaking style, diction), and nonverbal expression (gestures, body alignment, facial expression, character blocking, movement).

the particular level of a voice, instrument or tune.

	Tongu	e Twisters
	rongu	
Peter Piper		Peter Piper picked a peck of pickled peppers A peck of pickled peppers Peter Piper picked If Peter Piper picked a peck of pickled peppers Where's the peck of pickled peppers Peter Piper picked?
Betty Botter		Betty Botter bought some butter But she said the butter's bitter If I put it in my batter, it will make my batter bitter But a bit of better butter will make my batter better So 'twas better Betty Botter bought a bit of better butter



	Themes and Issues Explored
Diversity	Being composed of differing elements and variety. The inclusion of people of different races, cultures, etc. in a group or organization.
Racism	Behaviour or attitudes that reflect and foster this belief: racial discrimination or prejudice.
Relationshi ps	Connecting or binding people in either a family, friendship or work collaboration.
Responsibil ity	Moral, legal or mental accountability.
Society	A community, nation, or broad grouping of people having common traditions, institutions, and collective activities and interests

#### Script Work- Key focus

You will explore the different techniques needed to explore how to perform a character.

Through a series of workshops and rehearsals you will explore the different Stanislavski techniques used to perform a naturalistic scene. You will explore different physical and vocal exercises needed to perform a character. You will learn what it takes for an actor to memorise the words and movements of a character in a scene and then will perform your chosen scene to an audience in the final week.



**KEY WORDS** 

#### Year 9: Lit in Colour - Performing a Script



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# SWINDON ACADEMY READING CANON

Year 9

Long Way

