enjoylearnsucceed Half-Term

Beckfoot School

And Expert Learners

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Knowledgeable

Name:....

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Tutor Group:.....

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What should you be working on each week?

Homework:

- Your teacher will set you specific tasks, with a deadline, on Class Charts
- Instructions for your homework, and how to access it, are in this booklet
- ٠ You must complete and hand in the work by the deadline

Independent Learning:

- You should spend at least 20 minutes doing independent learning, using 'Quiz It, Link It, Map It, Shrink It' each day
- Your teacher will remind you of the topics and the tasks to do

Homework Instructions

You should check Class Charts every day to make sure you are up to date, and All of your Homework will be set by your teachers using the Class Charts system.

•

- In the next few pages, you will find instructions for how to access Class Charts that you meet all your deadlines.
- and how to complete your homework assignments in each of your subjects



Create a poster o French food

9

Mrs A Abell

> 8F/Gg 8y/En2 7YEL/Fr

Monday 09/11/2020 Tuesday 10/11/2020 Friday 06/11/2020

Thursday 19/11/2020

> 30 45

Submitted: These are homework tasks that have been handed in on time.

Submitted

Write a soliloquy

Mr J Kato

Tuesday 17/11/2020 rch GDP

Mr A Blacker

vveuriesuay 11/11/2020

Blended Learning >

To do

œ

© Teacher [↑]⊥

+* Eso

Issued \uparrow_{\downarrow}

[™].⊐

() Estimated time [↑]↓

ø

[] Feedback [†]⊥

Not submitted: These are homework tasks that were not handed in on time.

Not submitted

ω

rork t

Homework Instructions: Maths

		4. To acces hand co topics a	Trabanonetry .	The Very War	3. Your ass complet	2. Login: y Passwor	🚫 Wonde Lo			Login	1. Follow t	Ma Na	
3	A Matrix Matter	ss revision material, cli rner. Here you can use nd try extra questions i	HW HIG	Showing All Tiges - Trype Autopo	ignment will be on the ie:	our full Beckfoot email rd: beckfoot (you can c	igin 🔓 Google Login	Password	Username		he link: <u>http://new.ma</u>	aths Watch	
		ck on the videos secti the search function t for revision.	kan 11/11/2021 15/11/2021	el Dr. Assgred Due	login page! Select ar	address hange this)	4				thswatch.co.uk/vle/	HOW TC	
the state of the s	and these	ion in the top <u>right</u> to look at different	1 00 30 4 3/9 100%	NalAcripo	n assignment to		lew Demo	Forgot Password?		×) GUIDE	

- each week Homework in Maths is set on maths watch
- week complete the assignment set for you every You should log in to maths watch and

Homework Instructions: Science

Science Home Learning Instructions

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Please follow the instructions below to access your science home learning.

Remember you are expected to complete at least one quiz per week.

- ω N -Log into Microsoft Teams using your school log in Go to assignments and click on the Carousel Learning quiz set by your teacher A window like the one below will pop up (if it doesn't, copy and paste the link into your internet bro vser

Organisation so far...



4 r0 Type your first name and last name as it is written on the register to log into the quiz Click on 'revise' and use 'look, cover, write and check' to go through the flash cards like the one below. Use your knowledge organiser to help you.



6.

All the resources you need will be here

3. Select the relevant half

Term.

Homework Instructions: English

- scheme. booklet will be provided for each Every half term, a home learning
- each task in them. They will have the instructions for
- deadline your teacher gives. Please follow them and complete the tasks for the

How to access My Learning Resources

My Learning Resources is an online space where you can find all your lesson PowerPoints, knowledge organisers, quizzes and more. This will help you to learn independently and catch up any missed work.



Independent Learning: How to <u>_</u> 1 Quiz It



- LOOK:
- Read through 3-5 items from you Knowledge Re-read if you need to Organiser (bullet points, equations, facts etc



WRITE:

- 3-5 items exactly. In your blank Knowledge Organiser, write out the
- Use a blue or black pen

August Street

COVER:

can only see the blank version (no cheating!) Turn your Knowledge Organiser over so that you



CHECK:

- Uncover your Knowledge Organiser
- word by word Using green pen, check your writing/drawing
- this is the most important part of the process Tick every correct item and correct any mistakes

Independent Learning: How to Ν - Link It

- Choose 3-6 items from your knowledge organiser
- Write 3 sentences to show how these things link together

You could:

Compare and contrast:

- < x is similar to/different from because...
- × is more/less ... than y
- because...

Cause and effect: x and y work together to x happens because of y

produce z...

a particular

• Support/refute: because x supports the ideas of y

because. x refutes the ideas of y









Independent Learning: How to - 3 Map It



Mind-maps are useful if you want to chunk information or organise it into categories. In this example, the central idea is the 'The Three Pigs' and each branch is a theme within the story



Double-sprays are useful if you want to show similarities and differences of information. In this example, the black boxes show what 'Jack & the Beanstalk has in common wit 'Pinocchio'. The white boxes show what is different about the two stories.



Flow-sprays are useful if you want to show the events that happen in a particular sequence. In this example, the red boxes show the main event in the lifecycle of bullfrogs, and the order they happen in. The black and white boxes show what factors contribute to these main



Fishbone diagrams are useful if you want to show causes and effect. In this example, the white boxes are causes of the Prince and Cinderella getting married; the black boxes show how the causes have been categorised; and the red box shows the effect itself









1. Skim over the Knowledge Organiser



12 12 13 14 15 15



3. Rank your chosen points in order of

importance

		ຼຼີຢ່ັວ Beckfoot	Subject	t: Maths	Term: H	Half Term 2 - Septe	mber		Yea	r Group:10F		enjov learn succeed		
Alg	Algebra - Equations					Geometry and Measure – Area and				Key Vocabulary				
1	Solve an equation	Use inverse operation both sides of the	tions on equation	Solve $2x - 3 = 7$	Per	imeter	_	1		Equation		A statement showing that two expressions are equal i.e 2y-17=15		
		(balancing metho you find the value letter.	d) until e for the	Add 3 on both sides 2x = 10 Divide by 2 on both	1	Area of a rectangle/square Length x Width	4 cm	2		Percentage multiplie	rs	The number you multiply a quantity by to increase or decrease it by a percentage .		
				sides $x = 5$	2	Area of a Triangle	A = 36cm ⁻	3		Reverse percentage		Find the correct percentage given in the question, then work		
2	Solve a quadratic	Make sure the ec	$ax^2 + bx + bx + bx$	c = 0	┨ <u>│</u>	Base x Height ÷ 2	$4 + 5$ $12 = 24cm^2$					backwards to find 100% Look out for words like ' before' or ' original '		
	factorisin g	Use the p	roducts of a	ac that sum to b	3	Area of a parallelogram Base x Perpendicular	4cm 3cm	4		Perimeter		The total distance around the outside of a shape.		
						Height	$7 \text{ on } A = 21 \text{ cm}^*$	5		Area		The amount of space inside a shape.		
Νι	ımber - Pe	ercentages			4	Area of a Circle	$A = \pi r^2$ which means 'nix radius					'		
1	Percentage	e The multiplie	er for increa	ising by 12% is 1.12			squared'.	S	tatis	tics – Scatter Gra	phs			
	multipliers	7 The multiplie (100% - 12%)	er for decre)	asing by 12% is 0.88	5	Circumference of a Circle	C = π d which means 'pi x	1	Ca	ausality	Wł	nen one variable influences		
2	Percentage change	e <u>(new value - o</u> origina	riginal valu I value	<u>e)</u> x 100%			diameter'				and	other variable		
3	Reverse Percentage	A jumper was reduction. Fin	s priced at and its origin	£48.60 after a 10% nal price.	Rat Rat	io, Proportion and io	rates of change –	2	Li	ne of best fit	A s rep	traight line that best presents the data on a scatter		
4	Simplifying	100% - 10% = 90% = £48.60 1% = £0.54 100% = £54 Divide all part	s of the rat	io by a common factor	1	Unitary Method	Find the value of a single unit first, and then the value of the required	4	Po	ositive, Negative or o Correlation	Po	psilive correlation Negative correlation No correlation		
	Ratios	5 : 10 = 1 : 2 (14 : 21 = 2 : 3	divide both (divide bot	by 5) h by 7)			multiplying	L						

		ຼຼີຢ່ັວ Beckfoot	Subject	t: Maths	Term: H	Half Term 2 - Septe	mber		Yea	r Group:10F		enjov learn succeed		
Alg	Algebra - Equations					Geometry and Measure – Area and				Key Vocabulary				
1	Solve an equation	Use inverse operation both sides of the	tions on equation	Solve $2x - 3 = 7$	Per	imeter	_	1		Equation		A statement showing that two expressions are equal i.e 2y-17=15		
		(balancing metho you find the value letter.	d) until e for the	Add 3 on both sides 2x = 10 Divide by 2 on both	1	Area of a rectangle/square Length x Width	4 cm	2		Percentage multiplie	rs	The number you multiply a quantity by to increase or decrease it by a percentage .		
				sides $x = 5$	2	Area of a Triangle	$A = 36 cm^{-1}$	3		Reverse percentage		Find the correct percentage given in the question, then work		
2	Solve a quadratic	Make sure the ec	$ax^2 + bx + b$	c = 0	┨ <u>│</u>	Base x Height ÷ 2	$4 + 5$ $12 = 24cm^2$					backwards to find 100% Look out for words like ' before' or ' original '		
	factorisin g	Use the p	roducts of a	ac that sum to b	3	Area of a parallelogram Base x Perpendicular	4cm 3cm	4		Perimeter		The total distance around the outside of a shape.		
						Height	$7 \text{ on } A = 21 \text{ cm}^*$	5		Area		The amount of space inside a shape.		
Νι	ımber - Pe	ercentages			4	Area of a Circle	$A = \pi r^2$ which means 'nix radius					'		
1	Percentage	e The multiplie	er for increa	ising by 12% is 1.12			squared'.	S	tatis	tics – Scatter Gra	phs			
	multipliers	7 The multiplie (100% - 12%)	er for decre	asing by 12% is 0.88	5	Circumference of a Circle	C = π d which means 'pi x	1	Ca	ausality	Wł	nen one variable influences		
2	Percentage change	e <u>(new value - o</u> origina	riginal valu I value	<u>e)</u> x 100%			diameter'				and	other variable		
3	Reverse Percentage	A jumper was reduction. Fin	s priced at and its origin	£48.60 after a 10% nal price.	Rat Rat	io, Proportion and io	rates of change –	2	Li	ne of best fit	A s rep	traight line that best presents the data on a scatter		
4	Simplifying	100% - 10% = 90% = £48.60 1% = £0.54 100% = £54 Divide all part	s of the rat	io by a common factor	1	Unitary Method	Find the value of a single unit first, and then the value of the required	4	Po	ositive, Negative or o Correlation	Po	psilive correlation Negative correlation No correlation		
	Ratios	5 : 10 = 1 : 2 (14 : 21 = 2 : 3	divide both (divide bot	by 5) h by 7)			multiplying	L						



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It





3. Map it

	r Be	_ŪD eckfoot	Subject: Maths	Т	erm: Half Terr	n 2 – September Part I	Yea	r Group: I0H	enjoy jeoin succeed	
G	eometry & M	1easure - P	ythagoras	N	umber - Per	centages	Key Vocabulary			
1	Finding the	Find <i>c</i>		I	Percentage multipliers	The multiplier for increasing by 12% is 1.12	I	Hypotenuse	The longest side on a right angled triangle	
	hypotenuse	$a^{2} + b^{2} = c^{2}$ $4^{2} + 6^{2} = c^{2}$ $c^{2} = 52$	4 6	3	Percentage	The multiplier for decreasing by 12% is 0.88 (100% - 12%) (new value - original value) original value x 100%	2	Unit Ratio	Used to compare ratios, one of the parts is 1. The only time it is permissible to have a decimal in a ratio.	
2	Finding the	$c = \sqrt{52}$ $c = 7.21$ Find the Value	of a: $c^2 = a^2 + b^2$	2	Reverse Percentage	A jumper was priced at £48.60 after a 10% reduction. Find its original price. 100% - 10% = 90%	3	Unitary method	Find the value of 1 item, before multiplying to find the value of more. Used to work out which products give the better value for money	
	side	rter $a^{2} = c^{2} - b^{2}$ $a = \sqrt{c^{2} - b^{2}}$ $a = \sqrt{13^{2} - 12^{2}}$ $a = \sqrt{169 - 144}$ $a = \sqrt{25}$	2	2 Compound	90% = £48.60 1% = £0.54 100% = £54 A bank pays 5% compound interest a	4	Simple Interest	Interest calculated as a percentage of the original amount.		
			$a = \sqrt{159 - 12}$ $a = \sqrt{169 - 144}$ $a = \sqrt{25}$	3	Interest	year. Bob invests £3000. How much will he have after 7 years? $3000 \times 105^7 = £4221.30$	5	Compound Interest	Interest paid on the original amount and the accumulated interest.	
3	Find the distance between two points	$\sqrt{(x_{ m A}-x_{ m B})}$	$a = 5$ $y + (x_{B}, y_{B}) = y_{A} - y_{B}$ $(x_{B}, y_{B}) = y_{A} - y_{B}$ $(y_{A} - y_{B})^{2}$	4	Exponential Graph	The equation is of the form $y = a^x$, where a is a number called the base . If $a > 1$ the graph increases . If 0 The increases .	6	Exponential growth Exponential decay	When we multiply a number repeatedly by the same number (\neq 1), resulting in the number increasing by the same proportion each time. e.g. 1, 2, 4, 8, 16, 32, 64, 128 When we multiply a number repeatedly by the same number (0 < x < 1), resulting in the number decreasing by the same proportion each time.	
									eg. 1000, 200, 40, 8	

	B	eckfoot	Subject: Maths	Т	erm: Half Terr	n 2 – September Part I	Year	Group: 10H	enjoy learn succeed
G	ieometry & M	1easure -	Pythagoras	Ν	umber - Per	centages		Key \	/ocabulary
Γ	Finding the			1 '	Percentage multipliers		I	Hypotenuse	
	hypotenuse						2	Unit Ratio	
				3	Percentage change		3	Unitary method	
2	Finding the shorter						4	Simple Interest	
	side		Percentage		5	Compound Interest			
				3	Compound Interest		6	Exponential growth	
3	Find the				Exponential				
	between two points				Graph		7	Exponential decay	
		<u> </u>							



2. Link It



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



3. Map it



Subject: Maths

Term: Half Term 2 – September Part 2

Year Group: 10H

enjoy léain succeed



	Algebra – Equations & Formulae					
I	Expression	A mathematical statement written using symbols , numbers or letters , 3x + 2 or 5y ²				
2	Equation	A statement showing that two expressions are equal 2y – 17 = 15				
3	Identity	An equation that is true for all values of the variables An identity uses the symbol: \equiv $2x \equiv x+x$				
4	Formula	Shows the relationship between two or more variables Area of a rectangle = length x width or A= LxW				
5	Solving inequalities	Inequalities are solved using the same steps as equations. If you multiply or divide an inequality by a negative number, then the inequality sign is reversed. Eg. $-5x > 10$ x < -2				

Ra —	atio, Propo Ratio	ortion and rates of change
I	Divide in a given ratio	eg Divide £350 in the ratio 3:4 between Amy and Bob. 3+4 = 7 (There are 7 parts.) 350 ÷ 7 = 50 (Each part is worth 50) 3 x 50 = £150 for Amy 4 x 50 = £200 for Bob

Key Vocabulary								
I	Prism	A 3D shape that has a constant cross-						
		section through its length, eg cylinder,						
		triangular prism						



Subject: Maths



Geometry & Measure – Area & Volume

	Area units	
2	Volume units	
3	Volume of a Prism = Area of cross section x length	
4	Volume of a Cylinder $V = \pi r^2 h$	
5	Surface Area of Cylinder	

Algebra – Equations & Formulae				
I	Expression			
2	Equation			
3	Identity			
4	Formula			
5	Solving inequalities			

Ra	Ratio, Proportion and rates of change					
—	– Ratio					
I	Divide in a given ratio					

	Key Vocabulary										
I	Prism										



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







ر آلاً Beckfoot		English Literature			A Ch	ristmas Carol			Yea	r Gr	oup: 10 & 11	enjoy learn succeed		
		Plot Summary				Ch	acte	cters						
. 1	<u> </u>	Server is interesting to the set of the set	a va fan Dah	I	Scrooge	The protagonist, a mean old loner who hates Christmas.	otagonist, a mean old loner who hates Christmas.		Bob Cratchit	Scroog	Scrooge's hardworking and unpaid clerk.			
'	Stave I	Cratchit; he refuses to make a charity donation; refu Christmas dinner with Fred; is irritated by Christma	uses to eat s as it is	2	2 Marley Scrooge's deceased business partner who appears as a ghost to warn Scrooge to change his ways. 7			7 Tiny Tim		Bob Cratchit's ill and vulnerable son.				
		interrupting his business; sees Marley's ghost who w visited by three spirits to make him change his miser	ness; sees Marley's ghost who warns him he will be its to make him change his miserly ways.		Ghost of Christmas Past	A shape changing spirit that represents memory and has light/ flame at the top of its head.	/a	8	Fred	Scroog	re's patient, jovial nephew. The son of h	nis beloved sister, Fan.		
2	Stave 2	The Ghost of Christmas Past takes Scrooge back in	time to show him:	4	Ghost of Christmas Present	A jolly spirit (resembles Father Christmas) that represents generosity and Christmas spirit.		9	Fezziwig	Scroog	e's generous former employer.			
		his village; him alone at school; his sister collecting him from school; a party at Fezziwig's; Belle breaking off their engagement and Belle with her husband. Unable to take any more, Scrooge begs the spirit to take him back home. When he is back home, he falls asleep almost instantly.		5	Ghost of Christmas Yet to Come	A silent, sinister spirit in a black, hooded cloak who represendeath.	its	10	Belle	Scrooge's former fiancée who breaks off their engagement be he valued money more than their relationship.				
				Themes			Key Vocabulary							
3	Stave 3	The Ghost of Christmas Present shows Scrooge how the Cratchit		1	Greed and selfishness	Characters such as Scrooge represent the middle classes who sought to hoard rather than share their wealth.	╏┣	I	Simile		Comparing two things using 'li ''hard and sharp as a flint''	ike' or 'as', e.g.		
		family celebrate Christmas; Scrooge becomes worried about Tiny Tim not surviving in the future. The spirit then takes Scrooge to see how others celebrate Christmas including Fred's Christmas party. The spirit	2	Poverty	Scrooge despises the poor and thinks they are lazy at first. At the end, he realizes he can share his wealth with the poor	╢	2	Motif		Repeated image or symbol, e.g	g. light being used			
		begins to age and under its robe Scrooge sees two children: Ignorance and Want.		3	Transformation	The spirits show Scrooge scenes that prompt his transformation. At the end of the novella, Scrooge's transformation into a kinder human being is complete.					several times in the novella			
4	Stave 4	The Ghost of Christmas Yet to Come arrives and Si	crooge is terrified	4	Christmas	Scrooge learns the true meaning of Christmas is to spend time with your family and loved ones.	╎┝	4	Allegory		Characters/events represent in	deas about		
		of him. It shows Scrooge a group of businessmen dis death. He is taken to a pawn shop where the posses	scussing someone's ssions of the dead	5 Social responsibility		I Ignorance and Watt remind Scrooge that turning a blind eye to the plight of the poor creates desperate		т		,	religion, morals or politics.			
		the family are grieving for Tiny Tim. Scrooge is then graveyard and sees his name on a gravestone. He he	taken to a			Context	١ŀ	5	Novella		A short novel or long short st	ory.		
		says he will change his ways.		I	Charles Dickens	Born in 1812 to a middle class family. His dad was imprisoned for debt leading to poverty for the family. Dickens began working difficult jobs at a young age.								
5	Stave 5	Scrooge wakes up in his own bed and is now transfor prize Turkey to the Cratchit family and even promis charity donation to the poor. Scrooge then goes to party and is welcomed in. He also gives Bob Cratchi	ormed! He sends a ses to give a huge Fred's to attend the it a raise and	2	Poverty	in 1834, the Poor Amendment reduced the amount of help available to the poor, forcing them to seek help from workhouses. Conditions were incredibly harsh in the Victorian era.		6	Resoluti	on	The Point where conflict is sol redemption.	lved, e.g. Scrooge's		
		becomes a second father to Tiny Tim who does not	: die.	3	Christmas	the Victorian era. Christmas was fairly a low key celebration. During Queen Victoria's reign, workers were given two days holiday for Christmas. Turkey was only eaten by the rich, goose was a cheaper option.		7	Redemp n	otio	Being saved from sin, error or realising he needs to change h then does in stave 5.	• evil, e.g. Scrooge is miserly ways and		

Bee	ຼື English Literature Beckfoot			A Christmas Carol					Year Group: 10 & 11				
		Plot Summary		Characters									
1	Stave I		I	Scrooge			6	Bob Cratchit					
-			2	Marley			7	Tiny Tim					
			3	Ghost of Christmas Past			8	Fred					
2	Stave 2		4	Ghost of Christmas Present			9	Fezziwig					
_			5	Ghost of Christmas Yet to Come			10	Belle					
					Themes		-		Key Vocabulary				
			'	Greed and selfishness			1	Simile					
3	Stave 3		2	Poverty			1						
			3	Transformatio			2	Motif					
			4	Christmas									
			5	Social responsibility			4	A.U					
4	Stave 4			,			4	Allegory					
					Context	┓┝	5	Novella					
			I	Charles Dickens									
5	Stave 5		2	Poverty			6	Resolutio	on				
			3	Christmas			7	Redempt n	tio				
								1					



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Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







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English Literature

Year Group: 10 & 11



			Plot Summary		Characters						
ľ	I Lett I-4	ters	The novel begins with a series of letters from Walton to his sister, Margaret. He is captain of the ship in a voyage to the north Pole. Walton and his men rescue Victor and help him recuperate on the ship. He evenue with relik Walton his story.	I	Robert Walton	A young, ambitious English man leading an expedition to the North Pole.	6	Justine Moritz	Franken by the c	nstein family servant, who is more like family. She was framed creature and executed for William's murder.	
	Walt POV	ton's /		2	Victor Frankenstei	Protagonist. Driven by ambition and Science. His quest for power leads him to his own downfall.	7	De Laceys	Parisian' good.	arisian's turned rural farmers. They are poor, but kind, loving and bod.	
	2 Ch. Victo POV	1-2 or's /	Victor begins his narration and tells of his childhood growing up in Geneva with his doting parents. He also shares that Elizabeth was adopted. As a teenager, Victor was fascinated by the mysteries of Science.	3	n Alphonse	Victor's father. An example of kindness and selflessness.	8	The Creature	A produ	uct of Victor's scientific experiment that went wrong. He is	
	3 Ch. Victo POV	3-5 or's /	Victor's mother dies from Scarlet fever after catching it whilst nursing Elizabeth. Victor leaves to attend university in Ingolstadt and becomes obsessed with anatomy. He decides to animate a creature and is horrified when it is brought to life. He abandons the creature and falls ill.	4	n Caroline Frankenstei	Victor's loving mother. A paradigm of motherly concern and senerosity. Her death provides the catalyst for Victor to transcend	9	Henry Clerval	Victor's	s best friend. He is an idealised character. Henry takes care of	
ŀ	4 Ch.	6-8	Victor is nursed back to health by his friend, Henry Clerval. He receives a letter from his father informing him that William has been murdered. Returning to Geneva, Victor sees the monster and	m his father		death.	<u> </u>	Flizabeth	Victor's	s adopted cietar and bride. She is a passive and idealized	
╞	POV 5 Ch.	/ 9-10	knows who is to blame, however Justine is executed for William's murder. Victor contemplates suicide but a trip to Belrive, planned by his father, cheers him up slightly. When			Themes			K	Key Vocabulary	
	Victo	or's /	he feels negative again, he decides to climb Montonvert to clear his head and sees the monster who shares his story.	I	Ambition/ obsession	Both Victor and Walton aim for major discoveries/achievements. Victor's tale is a warning to not be overly ambitious.	I	Epistolary	,	Novel written in the form of letters which allow	
	6 Ch. 12 Crea	II-	The monster describes the confusion in its first moments of life. He then describes people fleeing whenever he tried to approach them, so he decided to stay away from them. He developed skills and began observing the De Lacey family to educate himself.	2	Family/Love	Family is important to Victor and the Creature. The Creature longs for family/love but is always rejected.		Nover		the writer to establish the harrauver ov clearly.	
$\left \right $	7 Ch.	/	Winter turns into Spring and the creature has now learnt language. He notices that the family seem	3	Death	Several people die in the novel and Victor's mother's death is what spurred Victor on to transgress the boundaries of life and death.	2	Frame Narrative	l	A narrative within a narrative. This allows us to see events from different perspectives.	
	14 Crea POV	ature's /	unhappy, until Safie arrives. He learns that the people are called Feix, Agatha and De Lacey and they used to be affluent.	4	Revenge	Both Victor and the creature feel wronged and seek revenge even at the cost of their own safety, health and happiness.	4	Allegory	Characters/events represent ideas above		
	8 Ch. 17 Crea	15- ature's	The creature finds books and learns to read and also learns how he was created. He hopes to befriend the cottagers, starting with the old, blind De Lacey, however Felix drives him away. When the family have left, the creature burns down their cottage and leaves for Geneva. He confesses that he killed	5	Man vs God	Both Victor and Walton talk of conquering nature with science which emphasizes there risk-taking and ambitious natures.			l	morals or politics.	
	POV	/	William and framed Justine. He then implores Victor to make him a mate and Victor agrees.			Context	5	Foreshado	owing	When something gives the reader a hint about	
	9 Cn. 20 Victo POV	018- 0r's /	creature alone in the Orkney Islands. Milway, he destructives in information so that he can work on the remaine promises revenge on Victor's wedding night. Victor then gets rid of the remains in the sea. When he lands in a town, he is suspected of a murder.	I	Mary Shelley	Born in 1797, most famous for <i>Frankenstein</i> . Shelley experienced a great deal of death in her own life: her mother, her 3 children and her hutband (Percy Bysche		-		what will take place in the future.	
ľ	10 Ch.	21-	Victor is taken to the body, which is Clerval's . He collapses and falls ill. When he awakens, he is found innocent. Elizabeth and Victor marry, however, he remembers the creature's threat and plans to battle			Shelley).	6	Transgres	sion	An act that goes against a law, rule or code of conduct; an offence.	
	Victo POV	or's /	him. On the wedding night, Elizabeth is killed by the creature and Alphonse dies from shock. Victor vows revenge on the creature.	2	Science	Many advancements in science had been made, biologists were finding out a great deal about the human body and					
	Ch. 24 POV- V in	Ch. 24 Victor's POV- Walton in Continuation Walton's POV Walton's POV Walton's POV			Religion	Parts of Europe were heavily religious. Therefore	7	Age of Enlightenment		An intellectual and philosophical movement that dominated the world of ideas in Europe during	
	Walton			3	Religion	n Parts of Europe were heavily religious. I herefore, occurrences that could not be explained were viewed as an act of God or from another supernatural force.		0		the 17 th -19 th Century.	

Po		English Literature			Frankenstein		Year	Group: 10 & 11	enjoy learn succeed				
De	CRIOOL												
		Plot Summary			Char	acte	cters						
I	Letters I-4 Walton's		I	Robert Walton		6	Justine Moritz						
2	POV Ch. 1-2		 2	Victor Frankenstei n		7	De Laceys						
-	Victor's POV		3	Alphonse Frankenstei		8	The Creature						
3	Ch. 3-5 Victor's POV		4	n Caroline Frankenstei		9	Henry Clerval						
4	Ch. 6-8		-	William		1.0	Elizabeth						
5	POV			winam	Themes			Key Vocabulary					
5	Victor's POV		I	Ambition/ obsession		1	Epistolary						
6	Ch. 11- 12 Creature's		2	Family/Love									
7	POV Ch. 13-		 3	Death		2	Frame Narrative						
	14 Creature's POV		4	Revenge		4	Allegory						
8	Ch. 15- 17		 5	Man vs God									
	Creature's POV				Comtant								
9	Ch. 18-				Context	5	Foreshado	wing					
	20 Victor's POV		1	Mary Shelley									
10	Ch. 2I- 23 Victor's POV		2	Science		6	Transgress	ion					
11	Ch. 24 Victor's POV- Walton in Continuation Walton's POV		3	Religion		7	Age of Enlightenn	nent					



2. Link It



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



3. Map it

	جرفاً Beckfoot	ubject: Scien	ce (Chemistry)	Topic: Rate of o	chemical change	Year Gi	roup: 10	en	ov icceed
Equ	ations		F: T	actors affecting th he rate of chemical cl	e rate of reaction hange will be increased	if there are more frequen	t	Key V	ocabulary	
I	Rate of reaction = quantity of reactant u taken	used / time	su I	Temperature	When the temperatur increased, the reactan	s e of the reaction mixture t particles gain kinetic ene	is ergy and	1	Reversable reaction	A reversible reaction is one in which the reactants form products. The products are then
2 Rate of reaction = quantity of product formed / time taken Required Practical				Concentration	move much more quic successful collisions in	nove much more quickly. This results is more frequent uccessful collisions increasing the rate of reaction. If the number of reactant particles in a given space is loubled , there will be more frequent successful collisions between reactant particles, therefore increasing the rate of reaction.				able to react together to reform the reactants. The symbol for a
				and pressure	doubled , there will be between reactant part of reaction.				Catalyst	A substance that speeds up a chemical reaction without getting used up.
From this practical you should be able to describe 2 ways in which the rate of reaction can be measured.		ld be able the rate of	3	Surface area	Only reactant particles on the surface of a solid are able to collide and react. The greater the surface area the more reactant particles are exposed, leading to more frequent collisions					A catalyst lowers the activation energy. Biological catalysts are called enzymes.
1. Me 2. Me	easuring the productior easuring the changes in	n of gas the colour	4	Catalyst	When a catalyst is used in a chemical reaction the frequency of collisions is unchanged. More particles are able to react. The particles have energy greater than that			3	Dynamic equilibrium	A point where the forward and reverse reactions are occurring at the same rate.
	volume of carbon dioxide collected gas syringe		of the activation energy. Consequently there is an increase in the rate of reaction.				an			
	hiral flack	Measuring	a re	eaction mixture						
calcium car and hydroc acid	klorie	I	Μ	leasuring the change	in mass	The reaction mixture is product is given off the (g/s) = change in mass (g	placed on a mass of the f g) / time take	mass balar lask will de en.(s)	ce. As the reaction ecrease. The rate fo	n proceeds and the gaseous or the reaction is : Rate
2			٢	leasuring the volume	of gas produced	The reaction mixture is connected to a gas syringe. As the reaction proceed collected. The rate for the reaction is: Rate $(cm^3/s) = volume of gas productaken (s)$.				n proceeds the gas is as produced (cm³) / time

Beckfoot	ubject: Scienc	e (Chemistry)	Topic: Rate of c	hemical change	Year Gr	oup: 10	enjo lec suc	ceed
Equations		Fa Tł	ectors affecting the r	ate of reaction ge will be increased i	f there are more frequent	:	Key Vo	cabulary	
1		su I	Temperature	en reactant particles				Reversable reaction	
2		2	Concentration						
Required Practical		2	and pressure				2	Catalyst	
From this practical you shou to describe 2 ways in which reaction can be measured.	ld be able the rate of	3	Surface area						
 Measuring the production Measuring the changes in 	n of gas the colour	4	Catalyst				3	Dynamic equilibrium	
volume of carbon dioxide collected gas syringe									
	Measuring a	a re	action mixture						
calcium carbonate and hydrochoic acid	I	M	easuring the change in n	nass					
	2	M	easuring the volume of	gas produced					



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







	Subject: Science (Chemistry	НТ) Торіс	: Rate of chemical change	Year Group: 10	enjoy Jecteed
Becktoot Calculating gradient	(Higher Tier)		Changing conditions and the effect At equilibrium the amounts of reac reactants and products at equilibriu Le Chatelier's Principle	on the position of equilibrium (Higher ctants and products are the same. In orc um the conditions of the reaction must	Fier) ler to change the amount of be changed. This is known as
1		Gradient = y/x	Change	Effect	Explanation
		On the graph, draw construction lines	Decrease concentration of product	Favours the forward reaction	Opposes the change by making less reactant and more product
nunt of Product		graph that has straight lines. Measure the values	Increase concentration of product	Favours the reverse reaction	Opposes the change by making more reactant and less product
Ami	01	of x and y.	Decrease concentration of reactant	Favours the reverse reaction	Opposes the change by making more reactant and less product
2 min	Firme of Reaction		Increase concentration of reactant	Favours the forward reaction	Opposes the change by making less reactant and more product
			Increasing temperature of surroundings	Favours the endothermic reaction	Opposes the change by decreasing the temperature of the surroundings
			Decreasing the temperature of surroundings	Favours the exothermic reaction	Opposes the change by increasing the surroundings
			Increase the pressure	Favours the reaction that results in fewer molecules	Decreasing the number of molecules within the vessel opposes the change because it decreases the pressure
			Decrease the pressure	Favours the direction that results in more molecules	Increasing the number of molecules within the vessel opposes the change because

it increases the pressure

-0D-	Subject: Science (Chemistry	HT) To	pic: Rate of chemical change	Year Group: 10	enjoy learned
Beckfoot	t (Higher Tier)		Changing conditions and the effect of At equilibrium the amounts of react reactants and products at equilibriu Le Chatelier's Principle	on the position of equilibrium (Hi tants and products are the same. m the conditions of the reaction	gher Tier) In order to change the amount of must be changed. This is known as
^		Gradient = y/x	Change	Effect	Explanation
		On the graph, draw construction lines	Decrease concentration of product		
ount of Product		graph that has straight lines. Measure the values	Increase concentration of product		
And the second s	6¥0	of x and y.	Decrease concentration of reactant		
2 min	Time of Reaction		Increase concentration of reactant		
			Increasing temperature of surroundings		
			Decreasing the temperature of surroundings		
			Increase the pressure		
			Decrease the pressure		



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It





3. Map it

ୁ ସିହି Beckf	Subject oot (Biology	:Trilogy Science y)	Topic: Ir	nfection and	Response	Year	G	iroup: I	0	enjoy learn succeed
Knowle	dge: Human Defence	System	Knowledge: Vira	al diseases	h	a an al an al	Ke	y Vocabulary		
Skin		Acts as a barrier and produces antimicrobial secretions		Fever and red skin ras sneezes Human Immunodefici Flu-like illness. Virus a	n – can be fatal. Spread by coughs ency Virus ttacks immune system. Spread by s	exual	- 1	Communi cable Disease	A disease on to oth	that can be passed ers
Nose		Traps particles that contain pathogens	ТМV	contact or exchange of bodily fluids Tobacco Mosaic Virus Plant pathogen causes discolouration (mosaic) in leaves and affects growth			. 2	Non Communi cable Disease	A disease that cannot be passed on to others.	
Trachea		Secretes mucus which traps pathogens	Knowledge: Bac Salmonella food	terial Diseases I poisoning	Spread by bacteria on food. Causes	fever,	3	Pathogen	Microorga infectious	nisms that cause diseases.
Stomack	1	Produces acid which kills pathogens	Gonorrhoea		Sexually transmitted disease (STD).	Causes	4	Bacteria	Reproduce rapidly in body and may produce poisons (toxins).	
White b	White blood cells Help defend against pathogens by: phagocytosis, making		Knowledge: Fur	Knowledge: Fungal diseases			5	Virus	causing ce	Il damage.
			Example	Rose black spot						
			Symptoms Purple or black spots on leaves				Kno	owledge: Vacc	ination	
			Effect	Leaves turn yellow	yellow and drop off – no photosynthesis or growth			Sma path	all quantity of dead or inactive hogen is injected into the body	
Knowled	lge : Antibiotics and p	ainkillers	How it spreads	Water or wind			2	Whit	te blood celle	s produce antibodies
Antibi	Treat disease		Prevention	Fungicides and rem	nove affected leaves		-	lf th		- gon ro ontors the
otics	Specific antibiotics t	reat specific diseases	Knowledge :P	rotist diseases				body	e same pathogen re-enters the y white blood cells can produce bodies quickly	
	Reduced deaths from	m infectious bacterial		Fever and dea	th		4	Anti	bodies preve	nt infection
	diseases		How it spread	s Mosquito spre	eads malaria protist by biting humar	ıs	5	If a lis im	arge proport	ion of the population pread of the pathogen
	Cannot treat viral pa	athogens	Prevention	Mosquito nets	s and mosquito repellents			is re	duced greatly	y.
Penici	An antibiotic that he	elps cure bacterial diseases	Knowledge : Histor	y of drugs		4				
llin	by killing ineffective	bacteria inside the body	Older drugs were e	extracted from plants and	microorganisms					
	-		Disitalia	Drug		Extra	<u>cted</u>	from		
Painki	Treat symptoms of c	disease but do not kill		(neart drug)		F07		ves		
liers	pathogens		Pe	enicillin		Penicill	lium	mould		
Probl ems	Greater use of antib emergence of strain resistant to antibioti	iotics has led to the s of bacteria that are ics (superbugs)	Clinical trials use h • Very low doses o • If the drug is fou • In double blind t	ealthy volunteers and par of the drug are given at th nd to be safe, further clin rials, some patients are g	Penicillin Penicillium mould linical trials use healthy volunteers and patients. Penicillium mould Very low doses of the drug are given at the start of the clinical trial. Penicillium mould If the drug is found to be safe, further clinical trials are carried out to find the optimum dose for the drug. Penicillium mould In double blind trials, some patients are given a placebo. Penicillium mould					

Subject: Trilogy Science Beckfoot (Biology)	Topic: Infection and Response	Year C	Group: I() enjoy learn succeed
Knowledge: Human Defence System	Knowledge: Viral diseases	к	ey Vocabulary	
Skin	Measies	.		
	HIV		Communi cable Disease	
		2	Non	
Nose			Communi cable Disease	
Trachea	Knowledge: Bacterial Diseases		Deskara	
	Salmonella food poisoning	,	Pathogen	
Stomach .	Gonorrhoea	4	Bacteria	
	Gonormoea		Vigue	
White blood cells	Knowledge: Fungal diseases		VILUS	
	Example	Щ.,		
	Symptoms	Kr	nowledge: Vaccin	ation
	Effect	1		
Knowledge : Antibiotics and painkillers	How it spreads	2		
Antibi	Prevention			
otics	Knowledge :Protist diseases			
	Example			
	Symptoms	4		
	How it spreads	5		
	Prevention			
Donici	Knowledge : History of drugs			
	Older drugs were extracted from plants and microorganisms			
	Drug	Extracte	d from	
Painki	Digitalis (heart drug)			
llers	Aspirin			
	Clinical trials use healthy volunteers and nat			
ems				



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







	Subject	:Triple	Science	Topic: Infec	ction and R	esponse	5	Y	'ear	Group: 10
Knowledge	: Monoclon	al Antibo	odies	Knowled	ige : Detectio	on and pi	revention of		Cul (Bl	turing microorganisms OLOGY ONLY)
Identical copie	es of one type of	f antibody p	produced in	plant dis	eases				I	Bacteria multiply by simple cell division (binary fission), approx 1x per 40mins.
laboratory				Detectior	ı	Identifica	ation			Bacteria can be grown in nutrient
1	A mouse is inje	cted with p	athogen.	I-Stunted	l growth	Referen	ce using			broth solution or as colonies on an agar plate gel.
2	_ymphocytes pr	roduce ant	ibodies.	2- Spots of	on leaves	gardenin website,	ıg manual or , laboratory		2	Aseptic techniques to prepare an uncontaminated culture:
3 L	_ymphocytes ar nouse and fuse	e removed d with rapi	I from the idly dividing	3- Area o	f decay	test for testing k	pathogens, kit using	He	at the wire	Streak the bacteria across the surface of the agar. Make a zig- zag.
4 ^r	nouse tumour The new cells a	cells . re called hy	ybridomas	4 -Growt	hs	monocic	Shai antidodies	То	kill any mic *Take (crobes an it. Care* Put the lid back on as quickly as possible - so microbes don't get in.
5 -	The hybridomas divide rapidly and release lots of antibodies which are then collected		5- Malformed stems/leaves					Xip the loo jacteria ya gro	pinto the bu want to w.	
Knowled	ge: Monoc	lonal Ar	ntibodies	6 - Discolouration7 - Presence of pests		-		l kil	s microbes	getting in. getting in.
			Ways		Plant Defer	nces				Heat the used wire again afterwards. To kill any microbes.
1) Diagnosis		2) Detec	ting Pathogens						2	Required practical: Antibiotics and
Pregnancy te	est –	Can dete	ect very small qu	antities of	Physical		Mechanical		5	antiseptics can be used to inhibit the growth of bacteria and zones of
measure the hormones	level of	chemical	s in the blood		Thick waxy la	ayers,	Thorns, curling u	up		inhibition can be calculated: Measure zone of inhibition with a ruler
3) Detecting	molecules		4) Treatment		pathogen ent	p :ry	being eaten	L		and use πr^2
Fluorescent	dye can be att	tached	Bound to radio	active		Che	mical			
so it can be tissues	seen inside ce	lls or	substance, toxic chemical Cance targeted to nor are unharmed	c drug or er cells are ™al body cells	Antibacterial	and toxin	s made by the plan	nt.		Following incubation, measure the diameter of each zone of inhibition with a millimeter ruler. HT ONLY: use standard form (see sheet 1)

ຼີ Beckfoot	Subject (Biology	:Triple	Science	Topic: Infe	ction and R	esponse	2	Year	[.] Group: 10	enjoy learn succeed
Knowledge	: Monoclon	al Antib	odies	Knowled plant dis	dge : Detectio seases	on and pr	revention of	Cu (Bl	lturing microor OLOGY ONLY	ganisms)
Identical copies laboratory	of one type of	f antibody p	produced in	Detectio	n	Identifica	ation			
1				I-Stunted	d growth	·				
2				2- Spots	on leaves			2		
3				3- Area o	of decay			I Heat the	stree accenter acceno	eak the bacteria oss the surface of agar. Make a zig-
4				4 -Growt	ths			To kill an	d allow to cool. Iy microbes on it. 'ake Care"	zag. he lid back on as kly as possible – so obes don't get in.
5				5- Malfor stems/lea	med ives			Dip the bacter	e loop into the ria you want to grow.	te lid of the petri dish, vant oxygen to get in e don't grow hormful erobic bacteria. But,
Knowledg	e: Monoc	lonal Ai	ntibodies	6 - Disco	louration			(Professi neck of kills micr	onals flame the the bottle – this robes there too)	getting in.
can be use	ed in a var	iety of	ways	7 - Prese	nce of pests]			Heat	the used wire again afterwards.
					Plant Defer	nces			То	kill any microbes.
1) Diagnosis		2) Detec	ting Pathogens		· Physical		Mechanical	3		
3) Detecting r	nolecules		4) Treatment							Zone of inhibition Confluent bacterial growth Millimeter ruler
						Chei	mical		Following zone of ir	incubation, measure the diameter of each hibtion with a millimeter ruler.



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







ہے۔ Beck	Chemistry eckfoot					Chem	ical Change	S		Year	· 10	enjoy learn succeed
		Ρ	н		Re	equire	d practical – T	itration		Half-e	quatio	ns (HT only)
I	Acids	Сог	ntain aqueous H+ ions	; pH < 7		(0	Chemistry onl	y)	Forr	nation	e.g. Cu ²	* + 2e [.] → Cu
2	Alkalis	Coi 7	ntain aqueous OH ⁻ ior	ns; pH >	1	Fill bure	ette with solution of kno tration	own	Forr	nation	e.g. 2Cl	\rightarrow Cl ₂ + 2e ⁻
3	Neutral	A so	olution with a pH of 7 al concentration of H	, has † and	2	Measur unknov	e out 25.0cm ³ of solution of solution of solution with a	on with pipette	of ha	alogen nation	2H⁺ + 2e	$r \rightarrow H_2$
	$\begin{array}{c} OH^{+} \text{ ions} \\ \\ \textbf{Neutralisation} & H^{+} (aq) + OH^{+} (aq) \rightarrow H_{2}O (l) \end{array}$			0 (1)	3 Add unknown solution into a conical flask and place on a white tile			Forr	nation	$\frac{1}{40H} \rightarrow O_2 + 2H_2O + 4e^{-1}$		
4	Neutralisation H^+ (aq) + OH^- (aq) $\rightarrow H_2O$ (l)How toUniversal Indicator with colour			O (I) colour	4 Add an indicator (usually phenolphthalein which is pink in alkali and colourless in				ofo	kygen		
5	5 measure pH chart or pH probe				acid/neutral) C Add known solution slowly to the unknown					L		a hula ma
St	rong and w	/eak	acids (HT o	nly)	solution					Flectro		Brocoss where electric
I	Concentratio	n	Measure of the amo substance per litre	ount of (dm ³) of	6 Swirl regularly and add dropwise close to the endpoint					Liectio	<i>יוי</i> אוג ייז	current is passed through an electrolyte to separate ions
2	Concentrated	1	Solution with a high	amount			Electrolysis		2	Anode		Positive electrode
2	Dilute		of substance per dn Solution with a low	n ³ amount			Formed at positive electrode	Formed at negative electrode	3	Cathoo	le	Negative electrode
4	Strong acid		of substance per dn An acid that comple	n ³	Molt	en	Non-metal	Metal	4	Anion		Negative ion (e.g. non- metal ions)
5	weak acid ionises in aqueous solution		olution	com Aque	eous	Halogen (if	Hydrogen	5	Cation		Positive ion (e.g. metal ions)	
6	pH scale		ionises in aqueous s As the pH decre	olution ases	com	pouna	electrolyte contains halide) or oxygen (if electrolyte		6	Electro	olyte	Molten or aqueous ionic compound.
	by one unit, the H ⁺ concentration increases by a factor of 10		(if electrolyte contains sulfate)		7 Cryolit		e	Substance added to aluminium oxide to lower melting point				

ہے۔ Beckf	foot	Chemistry		Chem	ical Change	S	Year 10			
		рН		Require	d practical – T	Fitration		Half-equati	ons (HT only)	
1	Acids			(0	Chemistry onl	y)	Forn of m	nation etal		
2	Alkalis			I			Forn	nation		
3	Neutral			2			Forn of hy	nation drogen		
4	Neutralisation How to			3 4			Form of ox	nation kygen		
St	measure pH	eak acids (HT o	nlv)	5				Key Vo	ocabulary	
	Concentration		,)	6				Electrolysis		
	Concentrated				Electrolysis		2	Anode		
2	Dilute		[Formed at positive electrode	Formed at negative electrode	3	Cathode		
4	Strong acid			Molten			4	Anion		
5	Weak acid			Aqueous			5	Cation		
6	pH scale						6	Electrolyte		
							7	Cryolite		



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







		-0D-	Subject	t: Scie	nce (Physics)	1	Topic: Energy	Year Group:	10		enjoy
Ene	ergy equati	Beckfoot ons		Ene	rgy stores a	nd syst	iems		Key	Vocabulary	succeed
I	$E_{k} = \frac{1}{2}$ mv^{2}	Kinetic energy = mass x speed ²	= ½ x	I	8 stores of energy	Kinetic reactio	(movement), internal (thermal), chemical (from ns), elastic potential (stretched/squashed objects	chemical s), gravitational	Ι	Conservation of energy	Energy can never be created or destroyed just transferred from one store to another.
2	E _p = mgh	Gravitational po	otential			potenti and nuc	al (raised objects), electrostatic (opposite charg clear (energy from an atom).	2	Dissipated	A term used to describe ways in which energy is wasted.	
		gravitational fiel	d	2	3 methods	Mechar	nically – when work is done (force is used).		3	System	An object or group of objects.
3	$Ee = \frac{1}{2}$	Elastic potential	energy		of energy Electrically – when moving charges are involved. transfer Heating – energy is transferred from a hotter object to a cooler object. Object.					Power	The rate of transfer of energy OR the amount of work done in a given time.
4	P = E/t	extension ² Power = energy	v ÷ time	3	Friction and Iubrication When solid objects move over a surface friction is created which leads to the transfer of thermal energy. Lubrication can be used to reduce friction and therefore heat loss.					Specific heat capacity (SHC)	The amount of energy required to raise the temperature of 1 kg of a
5	P = W/t	Power = work o	done ÷	4	Methods of	Thick v	valls, loft insulation (reduces convection) cavity	walls (reduced	5	Conduction	How thermal (heat) energy is
		time		Ene	ergy resourc	es					transferred in solids by particles colliding.
6	Efficiency = total energy	useful energy out input	tput ÷		4 types of no renewable en	n- iergy	Coal, oil and natural gas (fossil fuels) - all will ru out the most energy. Nuclear is also non-renew	n out, but give able.	6	Convection	How thermal energy is transferred in liquids or gases.
7	ΔE = mc∆∂	Energy change = specific heat cap	= mass x bacity x	2	7 types of		Solar (from sunlight), Geothermal (heat from ea	rth), Wind			and convection currents.
Reg	uired Practic	change in tempe	erature		renewable en	ergy	(turbines), Hydroelectric (water in dams), Wave barrages) and Biofuels (burning organic matter).	e, Tidal (river	7	Insulation	Methods to reduce heat loss from an object.
Inder Depe Cont	pendent variab endent variable rol variables –	e – material tested – SHC starting temperature	d re, time	3	Key advantages Renewable - (will not run out), less pollution produced. Non-renewable – meet higher energy demands				8	Efficiency	When energy is transferred, some is wasted. The less energy is wasted, the more efficient an object is.
taker Linkir store temp in the	n and insulation ng decrease in e to an increase perature and ar ermal energy.	nsulation. rease in one energy increase in re and an increase energy. 4 Key disadvantages 4 Key disadvantages 4 Key disadvantages 4 Key disadvantages 5 Renewable – Impact on environment to build plants, not very reliable, (can't always meet demands) costly so although less pollution not everyone willing to pay higher bills. Non-renewable – greenhouse gas emissions of carbon dioxide (cause global warming) and sulphur dioxide (acid rain).					ants, not very although less arbon dioxide d rain).	Requinvest invest therm therm bette temp	ired practical 2 (igate the effective nal insulators and the nal insulation property r the insulator, the erature to cool dov	(PHYSICS ONLY) - ness of different materials as he factors that may affect the erties of a material. The longer it takes the vn.	

		-UD-	Subject	: Scie	nce (Physics)		Topic: Energy	Year Group:	10			enjoy Jeocreed
Ene	ergy equati	ons		Ene	rgy stores and s	yste	ems		Key	Vocabi	ulary	5000
Ι	E _k =	Kinetic energy =	-	I	8 stores of energy				I	Conserv energy	ation of	
2	E _p = mgh								2	Dissipate	ed	
				2	3 methods of energy				3			An object or group of objects.
3		Elastic potential	energy		transfer				3			The rate of transfer of energy OR the amount of work done in a given time.
		extension ²		3	Friction and				4	Specific ł capacity	heat (SHC)	
4	P =	Power =									()	
5	P =	Power =		4	Methods of				5	Conduct	tion	
•				Ene	rgy resources	-						
6	Efficiency =			1		0	Coal, oil and natural gas (fossil fuels) - all will rur out the most energy. Nuclear is also non-renews	n out, but give able.	6			How thermal energy is transferred in liquids or gases.
7	ΔE =	Energy change =	:	2	7 types of							and convection currents.
Rea	uired Practic	-al 1 – SHC		2	renewable energy				7			Methods to reduce heat loss from an object.
Inder Depe Cont	oendent variab endent variable rol variables –	ele – e –		3	Key advantages	R N	Renewable - Non-renewable –		8	Efficiency	у	
Linkii store temp in the	ng decrease in to an increase perature and an ermal energy.	one energy		4	Key disadvantages	R	Renewable –		Requ inves thern thern bette	I iired pra tigate the nal insulat nal insulat r the insu	ectical 2 (effectiver tors and th tion prope llator,	PHYSICS ONLY) - ness of different materials as ne factors that may affect the rties of a material. The



3. Map It

Use the space on the next page to create a mind-map or diagram to illustrate the knowledge from this topic.



2. Link It







Read Like a Beckfooter

Vocabulary

Do you understand the words of the text?

Highlight any you're unsure of, then ask yourself these questions:

1.Can you work out the word from its context? What does it seem like it means?

2. Does it look like any other words you know? Could it mean something similar?

3. If you can't figure it out for yourself, look the word up in a dictionary or online

Comprehension

This means understanding a text. There are two things to think about:

1. Do you understand what it means literally?

2. Can you see what's implied?

To achieve these things:

1. Slow down your reading – many people miss key parts in texts because they go too fast

2. Look carefully at punctuation, which is designed to help you take pauses in the right places

3. Ask a trusted adult to read the text to/with you

Remember: not every text has implied meaning.

In English there will be lots, but there will be very little in many Science and Maths texts.

Summarising

A good summary expresses what really matters about a text as briefly as possible. If you can summarise a text, you must have understood it.

Follow these steps:

1.Summarise the text in five words

2.Summarise the text in twenty words

3.Summarise the text in fifty words

Each time you will have added more information, but you won't have included everything.

By following the process, you've decided what matters and what doesn't.

Revise Like a Beckfooter



Avoid using too much information: mind maps are designed to summarise key information and connect areas of a topic/subject. If you overcrowd the page, you lose the point of the mind map and will find it harder to visualise the information when trying to recall it



Ensure that you complete all subjects and all topics - not just the subjects you enjoy the most of find easiest. Practice makes perfect!

Brain dumps are a way of getting information out of your brain.

Summary: Self Quizzing

answer out loud or write it down before checking it against the card, so you are truly testing if you can explain the answer properly

Identify **Review** and Cover and knowledge create answer Spend around 5-10 Identify Cover up your knowledge/content minutes reviewing knowledge and you wish to cover. content (knowledge answer the questions organisers/class from memory.

> notes/text book) Take your time and Create x10 questions where possible on the content (If answer in full your teacher has not sentences. provided you with questions)

Self mark &

reflect

Go back to the

content and self

green pen.

mark your answers in

Revise Like a Beckfooter

Summary: Dual Coding

Dual coding is the process of blending both words and pictures while learning. Viewing those two formats aives us **two different representations** of the **same** piece of information.



As well as knowing the most effective techniques for revision, it is really important that you consider the best times for you to revise each topic/subject. The two strategies below, (spacing and interleaving) will help you to put together a revision timetable that will help you to strengthen your memory and choose what you revise and when.

Summary: Spacing

- Spacing is regularly revisiting material so that you are doing little and often instead of all at once.
- · Doing a little amount regularly is more effective than doing a lot all at once. We do this so that we don't get swamped and overwhelmed

WHY? This is because the time in between allows you to forget and re-learn the information, which cements it in your longterm memory

To commit something to memory, it takes time and repetition.

Optimum Spacing

- Research suggests there is an 'optimal gap' between revision sessions so you can retain the information.
- If the test is in a month, you should review the information around once a week. If the test is in a week, create time once a day.

Why use Spacing?

- Doing something little and often spacing beats doing it at once, or cramming
- The time in between revision allows you to forget and re-learn the information, which cements it in your long-term memory
- It cements information into your long-term memory
- We can learn more information over time than in one longer session
- It helps you revise more efficiently

		_
Time to the test	Revision Gap	1.
1 Week	1-2 days	Switch
1 Month	1 week	Switch between topics during each session. It allows you to think about what you are doing with your time when you are revising.
3 Months	2 weeks	
6 Months	3 weeks	
1 Year	1 month	 Break units down into small chunks an Decide on the key topics you need to Croate a survivia time table to a gazzi

Summary: Interleaving

Interleaving is a theory that revising more than one topic in each session will help you make better links between them.

2.

Review in different orders

When reviewing make sure you do it in a different order that you learnt them, or previously revised them

By revisiting material from each topic several times, in short bursts, this increases the amount of information you can recall in your exams.

Make links to remember more.

Try to make links between ideas and review your revision notes.

This helps you make connections between topics and forces you to think harder about which strategies need to be applied to which problems.

Applying interleaving to your revision

Break units down into small chunks and split these over a few days rather than revising one whole topic all at once.

Decide on the key topics you need to learn for each subject.

Create a revision timetable to organise your time and space your learning.

Additional Revision Strategies



Brain Dump

Choose a topic and write down as much as you can remember, without referring to your notes. Check your notes and see what you missed then try fill the gaps without the notes. Check your notes a third time and add the missing information.

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Flash cards

Write flash cards for each topic, in all subjects, then mix them up for the most effective revision. Check out the Leitner System for effective spacing and interleaving. Keep your flash cards simple – one question, one answer per card.



Map it out

Take an essay question or writing question and map out your answer, without writing a full response. Look at the mark scheme and deicide if you plan meets the criteria. DO this for a number of questions, then choose one and write the full response.

Past papers

Ask your teacher for practice questions or exam papers. Complete them without notes in the exam conditions, then check you answers and identify the gaps in your knowledge, so you can target your revision.



Quizzes

Write a set of questions and answers and ask someone to test you. Its important to either write or say your answers loud. Reading through quizzes in your head can give you a false sense of security.



Thinking hard: Reduce

Read a section of your notes then put them aside and reduce what you need into 3 bullet points, each one no more than 10 words. Look back at the notes and decide if you missed anything important. Hide the notes and write a fourth bullet point.

Practice Introductions

For essay subjects, tale a past exam question and practice writing effective introductions and conclusion. Look back at your notes and remind yourself of the important things to remember. Practice for different topics, texts and papers.

Thinking hard: Transform

Read a paragraph from your notes or a text book, and transform it into a diagram, chart or sketch – no words allowed. OR Look a diagram in science, for example, and transform it into a paragraph of explanation.

Thinking hard: Connect

For each subject, consider the exam paper and group together questions that require the same technique to answer. Write down the requirements for each type. Find a previous example you have completed and identify where you've met the criteria.



Key vocabulary

For a particular topic, make a list of key vocabulary, then do the following: define each word; use each term in a sentence; create a question where the key word is the answer; identify other words which connect to each of the words in your list.

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8:30-9:30	LESSON	LESSON	LESSON	LESSON	LESSON	,	,	
9:30-10:30	LESSON	LESSON	LESSON	LESSON	LESSON			•
10:30-10:55	Tutor Time			•				
10:55-11:20	BREAK	BREAK	BREAK	BREAK	BREAK			•
11:20-12:20	LESSON	LESSON	LESSON	LESSON	LESSON			•
12:20-1:20	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH			•
1:20-1:50	LESSON	LESSON	LESSON	LESSON	LESSON			• •
1:50 – 2:45	LESSON	LESSON	LESSON	LESSON	LESSON			•
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Reflect Like a Beckfooter

As Knowledgeable and Expert Learners, we are great at being reflective. We ask ourselves lots of questions before, during and after a task, not just at the end! This helps us to make good choices about what we need to do, and the best way to do it. It also helps us to stay motivated, even when things get tough. Finally, it helps to make sure we always complete learning tasks to the very best of our ability.

Before a task, ask yourself:

Comprehension

What is this task about? What do I understand about it? What am I being asked to do?

Connection

What do I already know about this?

Have I seen anything like this before?

How is this similar or different to other tasks I have done?

Strategy

Do I know any strategies that would be appropriate for this task?

Which strategy would be most helpful to me now? Have I used this strategy before?

Was it successful?

How can I ensure I am successful this time?

During a task, ask yourself:

Reflection (during the task)

How is this going? What mistakes do I often make in this kind of task?

How can I avoid making those mistakes?

What am I finding difficult right now?

What am I doing well?

How do I know?

How do I feel about the work?

Am I motivated to complete this task to a high standard?

What can I do to improve my motivation level right now?

After a task, ask yourself:

Reflection (after the task)

Does my finished work look successful?

Does it make sense?

How do I know?

Could I have done this a different way?

Is this work better than I have done in the past?

How do I know?

How did my motivation level affect my performance in the task?

What emotions did I experience during the task?

Why?

How can I motivate myself in a different way in the future? Explain

Confident Communicators Oracy Passport for success Y10

H Skills and Topics

2 Money Talk (finance education) Reasoning Discussion



This Half Term to be a Confident Communicator in the Cognitive Strand I need to:

The Cognitive Strand: I can

- Give justified reasons for my arguments in discussions and class speaking
- Summarise points to provide clarity to myself and others
- Examine the views of others and actively respond

Confident Communicator Challenge: I can start a discussion at home on why it is important to be sensible with money

Confident Communicators

My reflection task is to: Explain what you should do in the money dilemmas

- You notice your friend is spending a considerable amount of time on their own playing free online gambling games. What should you do?
- 2. Your friend asks you if they could borrow £5. Should you lend them it?
- 3. Your friend mentioned that they are using their parents' credit card to pay for extra's on their favourite computer game. Should you tell someone?
- 4. Your friend says that they have managed to get past the age identification on a bingo website. Is this a good idea?
- 5. Your friend often seems distracted. When you ask him/her what's going on, he/she says they're just thinking about how they can get more money for computer games. Is this a problem?
- 6. Your friend says they play gambling-style computer games on a free roulette website because they're bored. Is this a safe idea?
- You notice your friend doesn't have any money for their lunch. When you ask why, they said they used that money betting at lunch time. What should you do?
- 8. Your friend recently turned 16 but looks a bit older, he says he's got a fake ID and wants to try and get into the bookies. What advice should you give them?
- 9. Your friend decides to buy a raffle ticket for a local fundraising event. Is this okay to do?
- 10. Your friend says they have spent most of the money they were meant to be saving for a new laptop on random trips to the shop. Theirs has now broken and their parents/carers are taking them shopping at the weekend to spend the money. How should they tell their parents/carers?

This Half Term I have spoken like a Beckfooter!!!







Communication Pages

			Date
			To
			From
			Message
			Please sign to acknowledge

Communication Pages

			Date
			To
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Communication Pages

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