

# Key Stage 4 Revision Checklists

# **ENGLISH LANGUAGE**

		$\odot$	(:)	(35)
1	PAPER 1 ONLY Analysing structure of a text – beginning/middle/end/flashbacks/voltas			
2	PAPER 1 and 2 Analysing language - analysis of effect/one word analysis/identifying techniques/explaining WHY writers have used phrases			
3	PAPER 1 and 2 Analytical paragraphs - how to structure them/what they need to include/using quotes			
4	PAPER 1 ONLY Evaluation skills – both sides of the argument/use of modal verbs/structure of answer – both parts of the statement			
5	PAPER 1 and 2 Paragraphing			
6	PAPER 1 ONLY Ingredients of a narrative – structure/focus shifts/dialogue			
7	PAPER 1 ONLY Descriptive writing techniques – use of linguistic devices for effect			
8	PAPER 2 ONLY Writing an article – structure/developing points/use of topic sentences			
9	PAPER 2 ONLY Persuasive devices – rhetorical questions/triple/emotive language etc			
10	PAPER 1 and 2 Discourse markers - used to link articles together/how and where used/showing similarity or difference			

	The best way to revise in this subject area is to				
1	Read through past exam practices we have done in class				
2	Practice writing shorter answers and give them to your teacher – EG write two paragraphs				
	analysing a fiction text.				
3	Write down as many persuasive/descriptive features you can remember – then write sentences				
	that use them.				
4	Watch revision videos (see below) and make notes as you watch				

Revision Resources				
Books	Websites	Apps		
CGP English Language GCSE Workbook	Mr Bruff - YouTube			
CGP English Language GCSE Revision Guide	GCSE English Language - AQA - BBC Bitesize			

# **ENGLISH LITERATURE**

		<u>(i)</u>	<u>(i)</u>	(55)
1	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three).  Ozymandias			
2	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>London</b>			
3	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three).  My Last Duchess			
4	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>The Prelude</b>			
5	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Remains</b>			
6	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Exposure</b>			
7	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). Charge of the Light Brigade			
8	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Bayonet Charge</b>			
9	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Checkin Out Me History</b>			
10	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three).  The Emigree			
11	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Tissue</b>			
12	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Poppies</b>			
13	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Kamikaze</b>			
14	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three).			

	War Photographer		
15	Anthology poems. For each poem you need to know: What the poem is about; poet's key message about power and/or conflict; key themes; other poems to compare to; key quotations (at least three). <b>Storm On The Island</b>		
16	Macbeth: Key Characters: Macbeth, Lady Macbeth, Banquo, Duncan, Macduff, The Witches		
17	Macbeth: Key Themes: Ambition, Loyalty and Betrayal, Power, Appearances Vs Reality, Duality, Violence		
18	AIC: Key characters: Mr Birling, Mrs Birling, Sheila, Eric, Gerald, The Inspector, Eva Smith		
19	AIC: Key Themes: Class, Gender, Poverty, Inequality, Political ideologies (Socialism/Capitalism), Responsibility		
20	Unseen Poetry: How to approach – four step approach		
21	Structuring an answer: Thesis, development paragraphs, ingredients for analytical paragraphs		
22	Comparing texts – discourse markers, structure, comparing ideas and themes NOT techniques		

	The best way to revise in this subject area is to				
1	Read through past exam practices we have done in class				
2	Write this question: How does Shakespeare present ideas about KEY THEME? or How does				
	Shakespeare present the character of KEY CHARACTER NAME – plan an answer and then write				
	the thesis and first paragraph – show your teacher				
3	Write down everything you can remember about one of the anthology poems, then watch a				
	revision video and add to your notes. Name two poems you could compare to it and write down				
	what comparisons you would make – focus on ideas/themes, not techniques.				
4	Watch revision videos (see below) and make notes as you watch				

Revision Resources					
Books	Websites	Apps			
CGP Macbeth Revision Book	Mr Bruff - YouTube				
CGP Macbeth Workbook					
CGP AIC Revision Book	GCSE English Literature - AQA -				
CGP AIC Workbook	BBC Bitesize				
Collins English Poetry					
Anthology: Power and Conflict					
Revision Guide					

# **MATHS - FOUNDATION**

Topic & Skill		I can do Videos	Questions
	Money	Numbers salsulation problems	Grade 2
Arithmetic	-	<u>calculation problems</u>	calculation problems
	Four Operations		
	Negative number	<u>negative numbers</u>	<u>Grade 1 negative</u> <u>numbers</u>
	Order fractions, decimals, percentages	<u>FDP</u>	Grade 2 fractions decimals and percentages
	Fraction of an	fraction of amount	Grade 2 fractions
	amount	Traction of amount	of an amount
	One amount as a fraction of another	writing fractions	Grade 2 writing simplifying and ordering fractions
	Fraction arithmetic	fractions	Grade 3 fractions
	Equivalent fractions	writing fractions	Grade 2 writing simplifying and ordering fractions
	Order fractions		
	Place value	<u>place-value</u>	<u>Grade 1 place</u> <u>value</u>
Properties of Number	Order integers	corbettmaths ordering- numbers	corbettmaths ordering numbers
	Multiples	<u>factors-multiples-and-</u> <u>primes</u>	Grade 1 factors multiples and primes
	Factors		
	Lowest Common Multiple	HCF & LCM	Grade 4 HCF and LCM
	Product of prime factors		
Powers and Roots	Square roots	squares-cubes-and-roots	Grade 1 powers and roots
Standard Form	Conversion	standard-form.	Grade 5 standard form
	Calculation		
Approximation	Rounding	rounding	Grade 1 rounding
and Estimation	Estimation	<u>estimating</u>	Grade 3 estimation
	Error interval	<u>error-intervals</u>	<u>Grade 3 error</u> <u>intervals</u>
Other	Mathematical Symbols		
	Calculator use	<u>use-of-calculator</u>	Grade 2 using a calculator
		Algebra	
	Simplification	simplifying algebra	Grade 2 simplifying algebra
Manipulation	Expansion of bracket	expanding-and- factorising	Grade 4 expanding and factorising
	Factorisation		
	Substitute values	substitution	<u>Grade 3</u>

			substitution
	Change subject of a	changing-the-subject 1	Grade 5
	formula		changing the
			subject
	Forming an	writing-an-expression	Grade 2 writing
	expression		an expression
	Laws of indices	indices	Grade 4 indices
	Linear equation	solving-one-step-	Grade 3 solving
	·	equations solving-	one step
		equations	equations Grade
			3 solving
			<u>equations</u>
	Linear inequality	inequalities	Grade 4
Equations and			<u>inequalities</u>
inequalities		Algobasia	Algebraic
'		Algebraic Method:	Method:
	Linear simultaneous	simultaneous	Grade 5
	equations		simultaneous
		equations Using Graphs:	equations Using
		simultaneous equations	Graphs:
			Grade 5 solving
		graphically	<u>simultaneous</u>
			<u>equations</u>
			<u>graphically</u>
	Form an equation	forming-and-solving-	Grade 4 forming
		equations	and solving
			<u>equations</u>
		Factorising	
		Double	<u>Grade 5 solving</u>
	Quadratic equation	Brackets:	<u>quadratics by</u>
		expanding-and-	<u>factorising</u>
		<u>factorising-</u>	
		quadratics	
		Solving Quadratic	
		Equations: solving-	
		quadratics	
	Coordinates	<u>coordinates</u>	<u>Grade 1</u> coordinates
Graphs	Straight line graph	1:	
	Straight line graph	<u>linear graphs</u>	<u>Grade 3 linear</u>
	Quadratic graph	avadastia assaba	graphs Grade 5
	Quadratic graph	<u>quadratic-graphs</u>	quadratic graphs
Functions	Number machines	function-machines	Grade 2 function
i uncuons	Number machines	runction-machines	machines
Sequences	Linear sequence	sequences	Grade 4
Sequences	Linear sequence	<u>sequences</u>	sequences
	Ratio, proportio	on and rates of change	
	Length	conversions-and-units	Grade 3
	_		conversions and
Conversion			units
	Mass		
	Time	<u>time</u>	Grade 1 time
	Агеа	conversions-and-units	Grade 3
			conversions and
			<u>units</u>
	Compound units		
	Scale drawing	scale-drawing	grade 3 scale
			<u>drawings</u>
Percentages	Percentage to	<u>FDP</u>	Grade 2
	fraction		<u>fractions,</u>
			decimals and

			percentages
	Decimal to		
	percentage		
	Percentage of an	<u>percentages</u>	Grade 3
	amount Percentage		<u>percentages</u>
	increase/decrease		
	Percentage profit	percentage-change	Grade 3
			percentage
			<u>change</u>
	One quantity as a	corbettmaths	<u>corbettmaths</u>
	percentage of another	<u>expressing-one- quantity-</u> as-a-percentage-of-	<u>expressing-as-a-</u> percentage
		another	percentage
	Depreciation	<u>compound-interest</u>	Grade 4
			compound
			<u>interest</u>
	Reverse percentage	<u>reverse-percentages</u>	Grade 5 reverse
	Write as a ratio	writing-simplifying-ratio.	<u>percentages</u> Grade 3 writing
Ratio	Write as a racio	writing-simplifying-ratio.	and simplifying
racio			ratio
	Share in a ratio	<u>ratio</u>	Grade 3 sharing
			<u>ratio</u>
	Use of ratio		Carda 2itia a
	1: n form	writing-simplifying-ratio.	Grade 3 writing and simplifying
			ratio
		Proportion: Recipes	Grade 3
Proportion	Direct proportion	proportion	proportion:
			<u>ingredients</u>
			Grade 5 direct
			and inverse proportion
	Currency conversion	exchange-rates	Grade 3
		<u>exchange races</u>	exchange rates
Compound	Speed		
Measures		speed-and-density	Grade 5
			compound
	Geometry	y and Measures	<u>measures</u>
	Triangle properties	dila medadi es	
	Quadrilaterals	corbettmaths names-of-	corbettmaths
		<u>quadrilaterals</u>	<u>quadrilaterals</u>
	Polygons	corbettmaths names-of-	corbettmaths
	Triangular arism	<u>2d-shapes</u>	<u>2d-shapes</u>
Shape	Triangular prism Circles	corbettmaths parts-of-	corbettmaths
	Circles	the-circle	parts of the
		<u>cric cricic</u>	<u>circle</u>
	Parallel and	corbettmaths parallel-	corbettmaths
	perpendicular lines	<u>lines-definition</u>	parallel and
			<u>perpendicular</u>
		<u>corbettmaths</u> perpendicular-lines	lines
	Reflection	perpendicular-tilles	Grade 3
		transformations	reflections
			Grade 3 rotations
	Transformations		<u>Grade 3</u>
I			enlargements

Plans and elevations  Angles in a triangle Vertically opposite angles	plans-and-elevations	Grade 3 translations Grade 4 plans
Angles in a triangle Vertically opposite angles		
Vertically opposite angles	angles .	
Vertically opposite angles		and elevations
angles	<u>angles</u>	Grade 2 angles
Angle properties of parallel lines	angles-parallel	Grade 4 angles in parallel lines
Angles in a polygon	angles-polygons	Grade 4 angles in polygons
Bearings	<u>bearings</u>	Grade 4 bearings
Area of a rectangle	area-perimeter compound-shapes	Grade 2 area and perimeter Grade 3 area of compound shapes
Area of a triangle		
Area of a trapezium		
Volume of a cube	<u>volume</u>	<u>grade 4 volume</u> <u>of a prism</u>
Volume of a cylinder	<u>cylinders</u>	Grade 4 cylinders
Pythagoras's Theorem	<u>pythagoras</u>	<u>Grade 4-</u> pythagoras
Exact trigonometric values	exact-trig-values	Grade 5 exact trig values
Prob	ability	
Probability scale	probability	Grade 2 writing probability and the probability scale
Probability		
Frequency tree	<u>frequency-trees</u>	Grade 3 frequency trees
Tree diagram	probability-trees	Grade 5 probability trees
Combined events		
•		
		Grade 1 pictograms
Bar chart	<u>bar-charts</u>	<u>Grade 2 bar</u> <u>charts</u>
Interpret graph		
	<u>two-way-tables</u>	Grade 3 two way tables
Frequency table		
Stem and leaf diagram	stem-and-leaf	Grade 2 stem and leaf diagrams
3		
Frequency polygon	frequency-polygons	grade 2 frequency polygons
	frequency-polygons  averages mean-tables	grade 2 frequency
	Area of a triangle Area of a triangle Area of a trapezium Volume of a cube Volume of a cylinder Pythagoras's Theorem Exact trigonometric Values Probability Frequency tree  Tree diagram Combined events Pictogram Bar chart Interpret graph Two-way table	Area of a rectangle  Area of a triangle Area of a triangle Area of a trapezium Volume of a cube  Volume of a cylinder Pythagoras's Theorem Exact trigonometric Values  Probability

	Mean		
	Range		
Population	Comparison of distributions		

### Formulae Sheet

### Perimeter, area and volume

Where a and b are the lengths of the parallel sides and h is their perpendicular separation:

Area of a trapezium = 
$$\frac{1}{2} (a + b) h$$

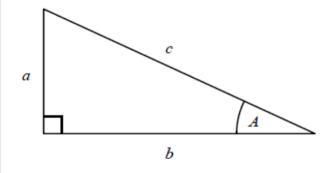
Volume of a prism = area of cross section × length

Where r is the radius and d is the diameter:

Circumference of a circle =  $2\pi r = \pi d$ 

Area of a circle =  $\pi r^2$ 

## Pythagoras' Theorem and Trigonometry



In any right-angled triangle where a, b and c are the length of the sides and c is the hypotenuse:

$$a^2 + b^2 = c^2$$

In any right-angled triangle ABC where a, b and c are the length of the sides and c is the hypotenuse:

$$\sin A = \frac{a}{c} \quad \cos A = \frac{b}{c} \quad \tan A = \frac{a}{b}$$

### Compound Interest

Where P is the principal amount, r is the interest rate over a given period and n is number of times that the interest is compounded:

Total accrued = 
$$P\left(1 + \frac{r}{100}\right)^n$$

### Probability

Where P(A) is the probability of outcome A and P(B) is the probability of outcome B:

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

# **MATHS - HIGHER**

Topic & Skill		I can do	Videos	Questions
Numbers				
Arithmetic	Negative number		negative numbers	Grade 1 negative numbers
Fractions	Fraction of an amount		<u>fraction of amount</u>	Grade 2 fractions of an amount
	Fraction arithmetic		fractions	Grade 3 fractions
	Recurring decimal to fraction		recurring decimals	Grade 6 recurring decimals
Properties	Product of prime factors		HCF & LCM	Grade 4 HCF and LCM
	Laws of Indices		indices	Grade 4 indices
	Negative and		indices2	Grade 6 fractional
	fractional indices			and negative indices
Powers and Roots	Simplification of surds		surds	Grade 7 surds
Standard Form	Conversion		standard-form	Grade 5 standard form
	Calculation			
Approximation and Estimation	Error interval		<u>error-intervals</u>	Grade 3 error intervals
	Bounds		<u>bounds</u>	Grade 7 bounds
Other	Calculator use		use of calculator	Grade 2 using a calculator
	Product rule for counting		product-rule-for-counting	Grade 6 product rule
Algebra				
Manipulation	Simplification		simplifying algebra	Grade 2 simplifying algebra
	Expansion of bracket		expanding-and- factorising	Grade 4 expanding and factorising
	Factorisation			
	Substitute values		substitution	Grade 3 substitution
	Change subject of a formula		changing-the-subject 1 changing-the-subject 2	Grade 5 changing the subject Grade 7 rearranging harder formula
	Forming an expression		writing-an-expression	Grade 2 writing an expression
	Laws of indices		indices	Grade 4 indices
	Expansion of brackets		expanding-and- factorising- quadratics	Grade 5 expanding and factorising quadratics
	Difference of two squares			
	Algebraic fractions		algebraic-fractions	Grade 7 algebraic fractions

Equations and inequalities	Linear equation	solving-equations	Grade 3 solving equations
	Form an equation	<u>forming-and-solving-</u> <u>equations</u>	Grade 4 forming and solving equations
	Set up and solve equation		
	Linear inequality	<u>inequalities</u>	<u>Grade 4</u> <u>inequalities</u>
	Quadratic equation	Factorising Quadratics: expanding- and- factorising- quadratics factorising-harder- quadratics Solving Quadratic Equations: solving-quadratics	Grade 5 solving quadratics by factorising Grade 7 factorising harder quadratics
	Quadratic Inequality	<u>quadratic-inequalities</u>	Grade 8/9 quadratic inequalities
	Equations of parallel lines	parallel-and- perpendicular-lines	Grade 6 parallel and perpendicular lines
	Equation of a tangent to a circle	equation-of-tangent	Grade 8/9 equation of tangent
	Simultaneous equations linear/quadratic	simultaneous-quadratic	Grade 9 quadratic simultaneous equations
	Coordinates	coordinates	Grade 1 coordinates
Graphs			
	Quadratic graph	<u>quadratic-graphs</u>	Grade 5 quadratic graphs
	Gradient of a straight line graph	gradient-of-a-line	Grade 5 gradient of a line
	Gradients of parallel and perpendicular lines	parallel-and- perpendicular-lines	Grade 6 parallel and perpendicular lines
	Speed-time graph	<u>real-graphs</u>	Grade 4 real life graphs
	Gradient of a curve	corbettmaths instantaneous-rates- of- change	corbettmaths rates-of-change
	Transformations of	transforming-graphs	Grade 8/9

	functions		transforming
	Turicuons		<u>transforming</u> graphs
	Graphs of	harder-graphs	Grade 7 trig and
	trigonometric	narder graphs	exponential
	functions		graphs
Functions	Inverse and	functions	Grade 7
	composite functions		functions
		tion and rates of change	
Conversions	Time	<u>time</u>	<u>Grade 1 time</u>
	Area	conversions-and-units	<u>Grade 3</u>
			conversions and
			units
December	Percentage of an	<u>percentages</u>	Grade 3
Percentages	amount Percentage decrease		percentages
	Depreciation	someound interest	Grade 4
	Depreciación	<u>compound-interest</u>	compound
			interest
	Reverse percentage	reverse-percentages	Grade 5 reverse
		<u>reverse percentages</u>	percentages
	Write as a ratio	writing-simplifying-ratio.	Grade 3 writing
			and simplifying
Ratio			<u>ratio</u>
	1 : n form		
	Use of ratio		
	Share in a ratio	<u>ratio</u>	Grade 3 sharing
	Ratio to fraction	antio to Grantina de lingue	<u>ratio</u> Grade 5 ratio
	Ratio to Haction	ratio to fraction or linear function	fraction
		<u>runction</u>	problems
		Proportion: Recipes	Grade 3
	Direct proportion	proportion	proportion:
		<u> </u>	ingredients
Proportion			Grade 5 direct
•			and inverse
			proportion
	Inverse proportion	proportion	Grade 5 direct
			and inverse
	Cussonsy sonyession		<u>proportion</u>
	Currency conversion	<u>exchange-rates</u>	<u>Grade 3</u> exchange rates
	Equations of	direct-and-inverse-	Grade 7 direct
	proportion	proportion	and inverse
		p. sportion	proportion
Compound	Average speed	speed-and-density	Grade 5
Measures			compound
	- "		measures
	Density		1
	Pressure	<u>corbettmaths pressure</u>	corbettmaths
Growth and Decay	General iterative	iteration	<u>pressure</u> Grade 7 iteration
diowilialia Decay	processes	<u>iceracion</u>	Grade / Iteration
		try and Measures	
		ery and Medsales	
			Grade 3
Shape	Transformations	transformations	rotations Grade
'			3 reflections
			Grade 3
			<u>enlargements</u>
			Grade 3
			<u>translations</u>

Angles	Angles in a polygon	angles-polygons	Grade 4 angles in polygons
	Circle theorems	<u>circle-theorems</u>	Grade 6 circle theorems
Area and Volume	Area of a rectangle	area-perimeter compound-shapes	Grade 2 area and perimeter Grade 3 area of compound shapes
	Area of a triangle		
	Area of a trapezium		
	Area of a sector	sectors-and-arcs	Grade 5 sector area and arc length
	Surface area of a cuboid	surface area	<u>Grade 4 surface</u> <u>area</u>
	Volume of a cuboid	volume	<u>Grade 4 volume</u> <u>of a prism</u>
	Volume of composite solid	<u>cylinders</u> <u>spheres and cones</u>	Grade 4 cylinders Grade 5 spheres and cones
Similarity	Similar triangles	similar shapes length	<u>Grade 5 similar</u> <u>shapes</u>
	Pythagoras's Theorem	pythagoras	<u>Grade 4</u> <u>pythagoras</u>
Pythagoras's Theorem and	Trigonometry	<u>sohcahtoa</u>	<u>Grade 5</u> <u>SOHCAHTOA</u>
Trigonometry	Exact trigonometric values	<u>exact-trig-values</u>	<u>Grade 5 exact</u> <u>trig values</u>
	Sine rule	sine-rule	Grade 7 sine rule
	Cosine rule	<u>cosine-rule</u>	<u>Grade 7 cosine</u> <u>rule</u>
	Trigonometry in 3-D	3d-pythagoras	Grade 7 3d pythagoras and trigonometry
Vectors	Column vectors	<u>column-vectors</u>	Grade 5 vectors
	Vector geometry	<u>vectors</u>	<u>Grade 8/9</u> <u>vectors</u>
		bability	
	Probability	probability	Grade 2 writing probability and the probability scale
Probability	Tree diagram	probability-trees	<u>Grade 5</u> <u>probability trees</u>
	Independent combined events		
	Dependent combined events	conditional probability-equation- questions	Grade 7 conditional probability Grade 9 probability equation
	Venn diagram	venn-diagrams	Grade 5 venn diagrams
	<u></u>	atistics	
Diagrams	Frequency polygon	<u>frequency-polygons</u>	grade 2 frequency polygons
	Cumulative	<u>cumulative frequency</u>	<u>Grade 6</u>

	frequency diagram		<u>cumulative</u> <u>frequency</u>
	Box plot	box-plots	<u>Grade 6 box</u> <u>plots</u>
	Histogram	<u>histograms</u>	<u>Grade 7</u> <u>histograms</u>
Measures	Mean	<u>averages</u> <u>mean-tabl</u>	Grade 2 averages Grade 4 averages from frequency tables
	Lower and upper quartiles & Inter- quartile range	box-plots	Grade 6 box plots
Population	Comparison of distributions	box-plots	<u>Grade 6 box</u> <u>plots</u>
	Capture-recapture method	corbettmaths capture	<u>corbettmaths</u> <u>Capture</u> <u>Recapture</u>

### Formulae Sheet

### Perimeter, area and volume

Where a and b are the lengths of the parallel sides and h is their perpendicular separation:

Area of a trapezium = 
$$\frac{1}{2}$$
 (a + b) h

Volume of a prism = area of cross section × length

Where r is the radius and d is the diameter:

Circumference of a circle =  $2\pi r = \pi d$ 

Area of a circle =  $\pi r^2$ 

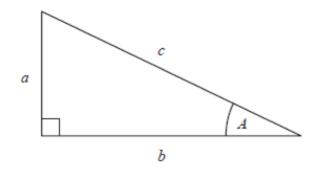
### Quadratic formula

The solution of  $ax^2 + bx + c = 0$ 

where  $a \neq 0$ 

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

### Pythagoras' Theorem and Trigonometry

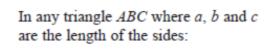


In any right-angled triangle where a, b and c are the length of the sides and c is the hypotenuse:

$$a^2 + b^2 = c^2$$

In any right-angled triangle ABC where a, b and c are the length of the sides and c is the hypotenuse:

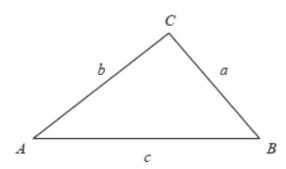
$$\sin A = \frac{a}{c} \quad \cos A = \frac{b}{c} \quad \tan A = \frac{a}{b}$$



sine rule: 
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

cosine rule: 
$$a^2 = b^2 + c^2 - 2bc \cos A$$

Area of triangle = 
$$\frac{1}{2} a b \sin C$$



### Compound Interest

Where P is the principal amount, r is the interest rate over a given period and n is number of times that the interest is compounded:

Total accrued = 
$$P\left(1 + \frac{r}{100}\right)^n$$

### Probability

Where P(A) is the probability of outcome A and P(B) is the probability of outcome B:

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

$$P(A \text{ and } B) = P(A \text{ given } B) P(B)$$

### SCIENCE

		Understand the content	Know the content (quizzes)	Apply the content (exam questions)
	Biology Paper 1			
1	4.1 Cell biology			
2	4.2 Organisation			
3	4.3 Infection and response			
4	4.4 Bioenergetics			
	The following will also be assessed on paper 1: Meiosis,			
	sexual and asexual reproduction (4.6 Inheritance), How			
	materials are cycled (4.7 Ecology)			
	Chemistry Paper 1			
1	5.1 Atomic structure and the periodic table			
2	5.2 Bonding, structure and the properties of matter			
3	5.3 Quantitative chemistry			
4	5.4 Chemical change			
5	5.5 Energy change			
	Physics Paper 1			
1	6.1 Energy			
2	6.2 Electricity			
3	6.3 Particle model of matter			
4	6.4 Atomic structure			
	Biology paper 2			
1	4.5 Homeostasis and response			
2	4.6 Inheritance, variation and evolution			
3	4.7 Ecology			
	The following will also be assessed on paper 2: 4.1 Cell			
	biology, 4.4 Bioenergetics			
	Chemistry paper 2			
1	5.6 The rate and extent of chemical change			
2	5.7 Organic chemistry			
3	5.8 Chemical analysis			
4	5.9 Chemistry of the atmosphere			
5	5.10 Using resources			
	The following will also be assessed on paper4 2: 5.1 (Atomic			
	Structure and the period table), 5.2 (Bonding, structure and			
	the properties of matter), 5.3 (Quantitative chemistry)			
	Physics paper 2			
1	6.5 Forces			
2	6.6 Waves			
3	6.7 Magnetism and electromagnetism			
	In addition you will be assessed on energy changes and			
	transfers due to heating, mechanical and electrical work,			
	the concept of energy conservation from 6.1 Energy and			
	6.2 Electricity			

# The best way to revise in this subject area is to: Remind yourself of the content using BBC bitesize or your revision guide Quiz yourself on the key facts using Carousel Learning or the knowledge booklet Complete past paper questions and self-mark

# HISTORY

		(i)	<u>.</u>	(35)
	The People's Health (Paper 1)			
1	Medieval England (1250 – 1500)  - Living conditions (housing, sanitation, diet)  - Black Death			
2	<ul> <li>Towns and monasteries</li> <li>Early Modern England (1500 – 1750)</li> <li>Living conditions (housing, sanitation, diet)</li> <li>Great Plague</li> <li>Gin Craze</li> </ul>			
3	Industrial England (1750 – 1900)  - Living conditions (housing, sanitation, diet)  - Cholera  - Government reforms			
4	Modern Britain (1900 – present)  - Living conditions (housing, sanitation, diet)  - Spanish Flu/AIDS  - Government responses			
	The Norman Conquest (Paper 1)			
5	Anglo Saxon England - Literature and Art - Government - Rights and freedoms			
6	Was William a 'lucky bastard'? - Succession crisis - Three battles - William's qualities			
7	Was William's conquest a 'brutal slaughter'? - Early responses to rebellion - Harrying of the North			
8	Was England under a 'Norman yoke'?  - Castles - Domesday Book - The Church - Society			
	History Around Us (Skipton Castle) (Paper 2)			
9	Wooden Motte and Bailey - Why was it built? - What were its main features?			
10	Conversion to stone - Why was it done? - What key changes occurred?			
12	Tudor Wing - Why was it built? - How did it change the use of the castle?			
13	Civil War  - What was the impact of the Slighting and reconstruction?  - How did its purpose change?			
14	Modern castle - What are the castle's main uses today? - What are its main features?			
	Life in Hitler's Germany (1933 – 45)(Paper 3)			
15	Democracy to Dictatorship - Reichstag Fire - Enabling Act - NOTLK			

16	Control and Opposition
	- Propaganda
	- The SS
	- Opposition groups
17	Changing lives
	- Workers
	- Women
	- Education
	- Antisemitism
18	Impact of war
	- Opposition to occupation
	- Total War
	- Holocaust
	The Viking Expansion (Paper 3)
19	Homelands
	- the Vikings in Scandinavia
	- Seafaring and trade
	- Beliefs and rituals
20	The Volga Vikings
	- Settlement in Russia
	- Trade with the Arab World
	- Relationships with the Byzantine Empire
21	Settlers
	- Settlement in the British Isles
	- Jorvik
	- Across the Atlantic
22	Kings
	- Bluetooth
	- Forkbeard
	- Cnut

	The best way to revise in this subject area is to
1	Mind mapping – Look at each section on the revision guide and generate a mind map using key
	words. Practice expanding out your main points to develop your 'this meant that' skill.
2	Practice question types – Ensure that you are comfortable with answering all of the different
	question types that will come up. If you don't want to write out full answers just practice
	planning them. I have past papers if you need them.
3	Flashcards for key words – Learn the key vocabulary for each topic. Practice spelling these words
	and using them in context.
4	Visit Skipton Castle – for Paper 3 another visit to Skipton Castle would be invaluable. I have
	some free tickets, just come and see me.
5	Watch and read around the topics. There are great (and interesting) videos to be found on all of
	the topics online.

	Revision Resources
Books	Websites
OCR GCSE (9-1) History B Revision Guide CGP GCSE History Revision Guide Exercise books	Norman Conquest: <a href="https://www.bbc.co.uk/bitesize/guides/zcmfk7h/revision/1">https://www.bbc.co.uk/bitesize/guides/zcmfk7h/revision/1</a> Nazi Germany:
Revision guide	https://www.bbc.co.uk/bitesize/topics/znk9q6f https://www.youtube.com/playlist?list=PLvsS9mRi0sXZUV5- cpbExkKJDMEEFUmyn
	People's Health: <a href="https://www.youtube.com/results?search">https://www.youtube.com/results?search</a> query=timelines+tv

# **GEOGRAPHY**

				(55)
Pap	er 1			
	challenges of natural hazards			
1	What is a natural hazard? (Definition, types of hazards and factors affecting hazard risk)			
2	Plate tectonics (plate tectonic theory, distribution of earthquakes			
	and volcanoes, processes which occur at each of the different types of plate boundaries)			
3	Effects and responses to an earthquake (Primary/secondary effects			
	of earthquakes and the immediate and long term responses to them)			
4	CASE STUDY: Nepal 2015 earthquake - Tectonic event in an LIC (Low income country)			
5	CASE STUDY: Japan 2011 earthquake - Tectonic event in a HIC (High income country)			
6	How can we reduce the impact of earthquakes? (4 Ps)			
7	THEORY: Global atmospheric circulation model (pressure, surface			
<u></u>	winds and conditions)			
8	Global distribution of tropical storms			
9	How do tropical storms relate to the global atmospheric circulation model			
10	Causes and formation of tropical storms			
12	Structure and features of a tropical storm			
13	How climate change might change the distribution, frequency and			
'	intensity of tropical storms			
14	Effects and responses to a tropical storm (Primary/secondary			
	effects of earthquakes and the immediate and long term responses			
	to them)			
15	ASE STUDY: Typhoon Haiyan (super-typhoon in the Philippines) How can we reduce the effects of tropical storms?			
16	Overview of the types of weather hazards experienced in the UK			
17	CASE STUDY: Beast from the East 2018 – causes, impacts and			
	management of weather hazards in the UK.			
18	Evidence that weather is becoming more extreme in the UK			
19	Evidence of climate change during the Quaternary period			
20	Possible causes of climate change (natural and human)			
21	Effects of climate change on people and the environment			
22	How can we manage the impacts of climate change (mitigation and			
	adaptation)			
	living world	1	T	1
23	Food chains and food webs			
24	CASE STUDY: Golden Acre Park – small scale UK ecosystem			
25	How does one small change have massive ripples on the rest of the ecosystem?			
26	Overview of the distribution of large-scale ecosystems			
27	Physical characteristics of tropical rainforests			
28	How important are climate, water, soil, plants, animals and people in a tropical rainforest?			
29	How do plants and animals adapt to the physical conditions?			
30	Is a tropical rainforest a biodiverse place?			
31	How are rates of deforestation changing?			
32	CASE STUDY: Amazon Rainforest – causes and impacts of deforestation			
33	Why are tropical rainforests so important to people and the environment?			
		•		

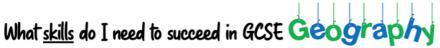
34 35	How can we manage rainforests sustainably?		
	Physical characteristics of a hot desert		
36	How important are climate, water, soil, plants, animals and people in		
	a hot desert?		
37	How do plants and animals adapt to the physical conditions?		
38	How diverse are hot deserts?		
39	CASE STUDY: Western Desert – development opportunities and		
	challenges of development in hot deserts		
40	What causes desertification to occur?		
41	How can we reduce the amount of desertification which is		
	occurring?		
UK P	hysical Landscapes	T	
42	Coastal processes (weathering processes, mass movement, erosion,		
	transportation and deposition)		
43	How does rock type influence coastal formations?		
44	Landforms resulting from erosion – headlands and bays, cliffs, wave		
	cut platforms, caves, arches and stacks.		
45	Landforms resulting from deposition – beaches, sand dunes, spits		
	and bars.		
46	CASE STUDY: Holderness Coastline – major landforms from erosion		
	and deposition		
47	How can we manage coastal erosion in the UK? (hard and soft		
	engineering)		
48	CASE STUDY: Holderness Coastline – why does erosion occur? How		
	is it managed? Is everyone happy with the outcomes?		
49	Long and cross profiles of a river and its valley		
50	Fluvial processes (erosion, transportation, deposition)		
51	Landforms resulting from erosion – interlocking spurs, waterfalls		
	and gorges		
52	Landforms resulting from erosion and deposition – meanders and		
	ox-bow lakes		
53	Landforms resulting from deposition – levees, flood plans and		
	estuaries		
54	CASE STUDY: River Tees – major landforms of erosion and		
	deposition		
55	How do physical and human factors affect flood risk?		
56	What is a hydrograph and how can we use it to show relationships?		
57	What are the costs and benefits of using hard and soft engineering		
	to reduce flood risk?		
58	CASE STUDY: York Floods – why is the scheme needed? What is		
	being done to protect? What are the issues caused by it?		

Pap	er 2		
	an issues and challenges		
59	Global patterns of urban change		
60	Urban trends in LICs and HICs		
61	Factors affecting the rate of urbanisation – migration (push and full		
	factors) and natural increase		
62	What are megacities? Where are they found?		
63	CASE STUDY: Lagos, Nigeria – location and importance of the city,		
	causes of growth, opportunities and challenges caused by urban		
	growth		
64	CASE STUDY: Favela Bairro, Rio de Janeiro – how is urban planning		
	improving the life of the urban poor?		
65	Overview of the distribution of population and the major cities in		
	the UK		
66	CASE STUDY: Leeds, United Kingdom – location and importance of		
	the city, how urban change has created opportunities and		
	challenges		
67	CASE STUDY: South Bank, Leeds – reasons for the regeneration and		
<b>CO</b>	main features of the project		
68	How can we live sustainably?		
69	How urban transport is used to reduce traffic congestion?  changing economic world		
70	Different ways of classifying parts of the world according to their		
70	level of development and quality of life		
71	How can we measure development?		
72	Limitations of economic and social measures		
73	THEORY: Demographic transition model		
74	How can we link the demographic transition model to the level of		
	development?		
75	What causes uneven development?		
76	What are the consequences of uneven development?		
77	How can we reduce the development gap?		
78	CASE STUDY: Tourism in Kenya, Africa – how can tourism reduce the		
	development gap?		
79	CASE STUDY: Nigeria, Africa – the location and importance of the		
	country, wider context of the country, changing industrial structure,		
	the role of TNCs in the country (e.g. Shell) relating to industrial		
	development, advantages and disadvantages of TNCs to the host		
	country, how is the country changing the ways it trades with		
	others?, where does this country get AID from?. Environmental		
	impacts of economic development and its impact on quality of life.		
80	Causes of economic change in the UK		
81	How is the UK changing as we move towards a post-industrial		
02	economy?	1	
82	How can modern industry be more sustainable in the UK?	1	
83	Social and economic changes in the rural landscape	1	
84	Improvements in rail, road, port and airport capacity	1	
85	THEORY: north-south divide in the UK	1	
86	The place of the UK in the wider world – how does trade, culture,		
	transport and electronic communication impact the UK.	1	

The	challenges of resource management	
87	The significance food, water and energy to economic and social wellbeing	
88	An overview of global inequalities in the supply and consumption of resources	
89	Food – growing demand for high-value food exports from LICs and all year demand for seasonal food, impact of food miles on food carbon footprint and how shopping locally helps	
90	Water – changing demand for water, water quality and pollution management, matching supply and demand and the need for transfer to maintain supply.	
91	Energy – the changing energy mix, coping with reducing domestic supplies of fossil fuels, economic and environmental issues of using energy sources	
92	Areas of water surplus and deficit: global patterns, reasons for increasing water consumption, factors affecting water availability	
93	Impact of water insecurity	
94	How can we increase water supply	
95	CASE STUDY: Kielder Dam, Northumberland – how its development has both advantages and disadvantages	
96	Sustainable use of water	
97	CASE STUDY: Three Gorge Dam, China – sustainable supplies of water in an LIC/NEE	

Pape	er 3		
98	Identify factors that need to be considered when selecting suitable questions/hypotheses for geographical enquiry.		
99	Describe the geographical theory/concept underpinning the		
	enquiry.		
100	Identify appropriate sources of primary and secondary evidence, including locations for fieldwork.		
101	Describe potential risks of both human and physical fieldwork and how these risks might be reduced.		
102	What is the difference between primary and secondary data		
103	How to identify and select appropriate physical and human data		
104	How to measure and record data using different sampling methods		
105	Describe and justify data collection methods		
106	Appreciate that a range of visual, graphical and cartographic		
	methods are available.		
107	Select and accurately use appropriate presentation methods.		
108	Describe, explain and adapt data presentation methods		

	Please do NOT revise the following (these will not be on your exam)
1	All content relating to cold environments in the living world topic (Paper 1 Section B)
2	All of the glaciers topic in the UK physical landscapes section (Paper 1 Section C)







### Atlas Maps:

- Use coordinates latitude and longitude.
- Identify and describe distribution/patterns of human and physical features e.g. population distribution, relief, settlement layout, communications.
- Establish links between human and physical

### O' Photographs & Maps

- To compare maps with photographs
- To sketch from maps and photos, including drawing and labelling them and being able to interpret them.
- Use and interpret ground, aerial and satellite photographs
- To label and annotate sketches, photos and



### Statistical Skills

- Calculate percentage increase or decrease.
- ☐ Use measures of **central tendency** such as mean, median, and mode
- Use measures of spread such as range. quartiles and inter-quartile range
- Sketch trend lines / lines of best fit and describe relationships and make predictions.
- Identify weaknesses in statistical presentation of data

# Graphical Skills:

- ☐ To suggest which type of graph, chart or map to use for the data provided.
- To plot information on graphs where axes and scale have been provided.
- Select and construct appropriate graphs. from scratch, to present geographical data:
  - □ Line charts
  - Bar charts
  - Pie charts Pictograms
  - Histograms
  - Divided bars
  - Scatter graphs
  - Population pyramids
- To complete a variety of graphs and maps:
  - Choropleth maps
  - ☐ Isoline maps understand and use gradient, contour and value.

    Dot maps
  - ☐ Desire lines
  - Proportional symbols

  - ☐ Flow lines
- To extract and interpret information from different types of graphs, maps and charts including all the above AND dispersion

# ... at The Skipton Academy?



# Ordnance Survey (OS) Maps:

- ☐ Use 1:50,000 and 1:25,000 OS maps with confidence.
- Use four figure and six figure arid references.
- ☐ Use a scale to calculate distance including along straight and curved lines.
- Use contour, gradient and spot heights to interpret relief.
- Identify and describe relief features (such as mountains, valleys etc.) and landscape features (especially those linked to rivers and
- Use and interpret cross-sectional drawings.
- To interpret map evidence to infer aspects of physical and human landscapes (e.a. settlement, relief, land-use, drainage) and human activity (e.g. tourism).



### Numerical Skills

- To use and understand number and
- To use and understand area.
- Use and understand proportion and ratio
- To draw conclusions from numerical data

### The best way to revise in this subject area is to 1 Attempt practice questions on AQA or from white CGP books – use the PEE method on longer response questions, TEA (Trend, Example, Anomaly) on description questions. Mr Fryer is more than happy to mark these for you and provide feedback. Create mind maps which focus on making connections between topics/themes (e.g. linking 2 erosional processes to the different landforms etc.) Revise key geographical vocabulary by self-quizzing and creating/using revision cards 3 Revise key content and ask for help from Mr Fryer during his drop-in sessions 4

Revision Resources Showbie Revision Hub : WBQB6						
Books	Websites	QR Codes				
CGP Revision Guides and Question Booklets	Past papers					
	BBC Bitesize					
	Quizlet Keywords					
	Seneca Learning					

# FRENCH

Family, friends, relationships and marriage  Family members and pets  Personal & physical descriptions  Opinions on family and relations		
Family members and pets Personal & physical descriptions		
Personal & physical descriptions		
Reflexive verbs		
Future plans		
Perfect tense		
Free time and cinema		
sports + expressions of frequency		
Re-visit aller vs jouer vs faire		
Tv programmes		
Film genres		
Reading		
Customs and festivals		
Perfect tense		
Justified opinions		
Describing future plans		
Holidays		
Countries and nationalities		
Means of transport		
Opinions and justifications		
Perfect tense		
Near future		
Lexical phrases using the conditional e.g. je		
voudrais/j'aimerais+infinitive		
Healthy living		
Opinions and justifications		
Perfect tense		
Near future		
Schools		
Modal verbs		
Conditional tense		
Near future tense		
Complex justified opinions		
Si + imperfect + conditional clauses		
Imperfect tense		
Jobs and future plans	 	
Conditional tense		
Near future tense		
Complex justified opinions		
Si + imperfect + conditional clauses		
Imperfect tense		
Simple future		
Perfect tense		
Home and local area	 	Г
Town vocabulary		
Lexical item of 'on peut+infinitive"		
Y pronoun		
Complex justified opinions		
Environment and social issues		
Modal verbs		
Conditional tense		
Near future tense		

Complex justified opinions		
Si + imperfect + conditional clauses		
Imperfect tense		
Simple future		
Perfect tense		

# **BUSINESS STUDIES**

	$\odot$	( <u>-</u> )	()
Enterprise and entrepreneurship Students are introduced to the dynamic nature of business in relation to how and why business ideas come about. They also explore the impact of risk and reward on business activity and the role of entrepreneurship			
Spotting a business opportunity Students will explore how new and small businesses identify opportunities through understanding customer needs and conducting market research. They will also focus on understanding the competition.			
Putting a business idea into practice This topic focuses on making a business idea happen through identifying aims and objectives and concentrating on the financial aspects.			
Making the business effective Students will explore a range of factors that impact on the success of the business, including location, the marketing mix and the business plan.			
Understanding external influences on businesses Students are introduced to a range of factors, many of which are outside of the immediate control of the business, such as stakeholders, technology, legislation and the economy. Students will explore how businesses respond to these influences.			
Growing the business Students are introduced to methods of growth and how and why business aims and objectives change as businesses evolve. The impact of globalisation and the ethical and environmental questions facing businesses are explored.			
Making marketing decisions Students will explore how each element of the marketing mix is managed and used to inform and make business decisions in a competitive marketplace.			
Making operational decisions This topic focuses on meeting customer needs through the design, supply, quality and sales decisions a business makes.			
Making financial decisions Students will explore the tools a business has to support financial decision making, including ratio analysis and the use and limitation of a range of financial information.			
Making human resource decisions Growing a business means that decisions relating to organisational structure, recruitment, training and motivation need to be made to influence business activity. These aspects are considered in this final topic.			

# HEALTH AND SOCIAL CARE

Sect	Section 1		( <u>·</u>	(33)
2	PIES			
	Physical – Body (Broken Bone)			
	Intellectual (Brain – How we learn and How we think)			
	Emotional – How we feel			
	Social – Relationships with others			
3	Genetic Inheritance – Genes (eye, hair colour)			
	Diseases/Illness that can be passed through families. Example Cancer			
	(Breast)			
4	Ill Health and Diseases – Asthma, Cancer & Cystic Fibrosis			
5	Lifestyle Factors – <b>DES</b> – Diet, Exercise & Sleep			
6	Substance Use – Alcohol, Smoking, Drugs, Prescription Drugs			
7	Personal Hygiene – Showering and Keeping clean			
8	Cultural Factors – Religion, Traditions, Language, Food, Clothing,			
	where they are originally from.			
9	Economic Factors – finances/income/money			
10	Environmental Factors – Pollution – noise & air /housing/location			
	Lifestyle Data – Charts given to you and how you read them to			
	find data and what it means.			
11	Resting Pulse – Heart Rate			
12	Blood Pressure – Average 120/80			
13	Peak Flow – Breathing into tube (measuring lung function)			
14	Body Mass Index (BMI) Height and Weight Chart			
Sect	ion 2			
15	<b>Health</b> and <b>Wellbeing</b> Improvement Plans taking into consideration			
	the patients:			
	1. Needs			
	2. Wishes			
	3. Circumstances			
	How will you improve their life			
16	Recommended Actions – Targets that are achievable – do not set			
	them up to fail.			
	Short Term (Between 3-6 months) Long Term (Longer than 6 months)			
17	Sources of Support		1	
''	Formal – Professional - (GP, Nurse, Dietician) Informal – Family, Friend			
	or Neighbour			
18	Obstacles to implementing the plan and how that would be			
	overcome. The potential obstacles are listed below:			
	1. Lack of motivation			
	2. Time			
	3. Resources			
	4. Unachievable targets			
	5. Lack of support			
	6. Lack of transport			
	Lack of money/finances/income			

	The best way to revise in this subject area is to				
1	Practice past exam papers - testing each other				
2	Model Answers in class with SB				
3	Revision / Flash Cards / Bingo / A3 or A4 sheets of paper with examples and info on				
	with SB				
4	Reading through revision guide and making notes				
5	Attend Revision Sessions				

Revision Resources				
BTEC Tech Award H&SC Revision Guide	Showbie			
Sarah Case Study – Exam Paper	Pearson (Past Exam Papers)			
Mark – Mock Exam Paper	https://qualifications.pearson.com/en/qualifications/btec-			
Model Exam Answers Q5 & Q6 Exam	tech-awards/health-and-social-			
Advice Word Document Exercise	care.coursematerials.html#%2FfilterQuery=category:P			
Books	earson-UK:Category%2FExternal-assessments			
Folders				
Knowledge Organiser				

# **BTEC DIGITAL IT**

		$\odot$	<u></u>	(35)
1	Communication with stakeholders			
2	Adhoc networks			
3	External threats to security systems			
4	Internal threats to security systems			
5	Security measures			
6	Security policies			
7	Cloud storage			
8	Cloud computing			
9	Platforms and services			
10	Cloud and traditional services			
12	Collaborative Technologies			
13	Scheduling and planning			
14	Communication with stakeholders			
15	How modern technologies impact organisations			
16	How technology impacts individuals			
17	Cyber attack motivations			
18	Net neutrality			
19	Information flow diagrams			
20	Data flow diagrams			
21	Flowcharts			
22	System Diagrams			
23	Tables			
24	Sharing Data			
25	Criminal Use of Systems			

The best way to revise in this subject area is to		
1	Past paper questions	
2	Dual coding of key concepts	
3	Quick online tests	
4	Note taking	

Books	Websites
Pearson (2019) "BTEC Tech Award in	Past Papers:
DIT Level 1/2 Component Unit 3	https://qualifications.pearson.com/en/qualifications/btec-tech-
External Assessment Learning Aims A	awards/digital-information-
to D"	technology.coursematerials.html#filterQuery=category:Pearso
	n-UK:Category%2FSpecification-and-sample-assessments
PG Online (2020) "ClearRevise	
Pearson BTEC DIT Digital Information	BBC Bitesize
Technology"	
	BBC Click: <a href="https://www.bbc.co.uk/programmes/b006m9ry">https://www.bbc.co.uk/programmes/b006m9ry</a>
Pearson (2019) "BTEC Tech Award	
DIT Revision Guide"	Cloud Storage Video:
	https://www.youtube.com/watch?v=trE225jQ7Lk
Pearson (2018) "BTEC Tech Award	
DIT: Student Book"	Managing Modern Teams Video:
	https://www.youtube.com/watch?v=ur1_owUM2rw
	Implications for Organisations Video:
	https://www.youtube.com/watch?v=TbyqFIA49Io
	Changes to Modern Teams Video:
	https://www.youtube.com/watch?v=JnKvz286ik4
	neeps,//www.yodedbe.com/wdeem.v=smv22oom/
	Platforms and Services Video:
	https://www.youtube.com/watch?v=Xiasty1-hZA
	Cloud vs Traditional Video:
	https://www.youtube.com/watch?v=PA5WK93DA4A
	Cloud Computing Video:
	https://www.youtube.com/watch?v=iYOKCKBKzjQ
	Communication Technology Vide
	Communication Technology Video: https://www.youtube.com/watch?v=yrdtfN71ghM
	inceps.//www.youtube.com/watch?v=yruthv/ rgmvi
	Mr Brown Complete Component 3 Playlist:
	https://www.youtube.com/playlist?list=PL04uZ7242 M5C7q2X
	ry39ZSe3hOb3etQQ

# **BTEC SPORT**

		$\odot$	<u>(i)</u>	(33)
1	Components of fitness			
2	Interpreting fitness data in relation to sport and activity			
	<ul> <li>Normative data</li> </ul>			
	<ul> <li>Linking components of fitness</li> </ul>			
3	Fitness testing			
	Appropriate test for each component of fitness			
4	Methods of training for sport and activity			
	Training methods appropriate for each component of fitness			
_	Advantages and disadvantages of each training method			
5	The FITT principles and principles of training			
	<ul> <li>Understand the FITT principles and how they can be used for improving performance</li> </ul>			
	<ul><li>improving performance</li><li>Understand the principles of training and how they are</li></ul>			
	applied to training programmes			
6	Components of a session plan			
	Structure of a session plan			
	<ul> <li>Importance of personalising training programmes for the</li> </ul>			
	individual			
7	Macronutrients			
	<ul> <li>Structure, functions and sources</li> </ul>			
	Effects on performance			
	<ul> <li>Recommended daily intake</li> </ul>			
8	Micronutrients			
	<ul> <li>Structure, functions and sources</li> </ul>			
	Effects on performance			
9	Hydration			
	Importance of hydration			
	Effects on performance			
10	• RDI			
10	Improving nutrition for sport and activity			
12	Nutritional methods to enhance performance  The impact of metivation on participation in sport and activity.			
12	The impact of motivation on participation in sport and activity  • Definitions of motivation			
	Benefits of motivation			
	Methods to increase motivation			
13	The impact self-confidence can have on participation in sport and			
	activity			
	Definition of self-confidence			
	Benefits of self-confidence			
	Methods to increase self-confidence			
14	The impact of anxiety on participation in sport and activity			
	Definitions of anxiety			
	<ul> <li>The effects of anxiety on performance</li> </ul>			
	<ul> <li>Methods to control anxiety</li> </ul>			

The best way to revise in this subject area is to			
1	Past papers and practice questions		
2	Flash cards/Mind mapping		
3	Use of revision materials on Showbie		
4	Effective use of the revision guide, including questions		

Revision Resources				
Books	Websites			
BTEC Tech Award Sport, Activity and Fitness: Student Book	Showbie (TSA Revision Hub)			
(Pearson)	www.brianmac.co.uk			
<ul> <li>BTEC Tech Award Sport, Activity and</li> </ul>				
Fitness: Revision Guide	Remember, you can download the online version			
(Pearson)	of the revision guide.			
<ul> <li>BTEC Tech Award Sport, Activity and</li> </ul>				
Fitness: Practice Assessments Plus+				
(Pearson)				
<ul> <li>BTEC Tech Award in Sport Activity and</li> </ul>				
Fitness				
(Oxford)				

# **ENGINEERING**

		$\odot$	<u></u>	(22)
1	The Design Cycle  • Identify problems			
	Design of solutions			
	Optimise solutions			
	Validate solutions			
2	Product Requirement			
	Functions and features			
	<ul><li>Limitations and constraints</li><li>Performance</li></ul>			
3	Human Factors			
	Anthropometrics			
	Ergonomics			
	User needs			
	People, society and culture			
4	Scales of Production			
	One off			
	Batch			
	Continuous			
	Mass			
_	Just in time			
5	Product Evolution			
	Market pull     Tochnology push			
	<ul><li>Technology push</li><li>Iconic products</li></ul>			
6	Manufacturing Consideration			
	Stock forms			
	Standard components			
	Durability and maintenance			
	Supply chains			
	Cost and budget			
7	Regulations & Standards			
	Consumer protections laws			
	<ul> <li>Copyright, patents and trademarks</li> </ul>			
	<ul> <li>British and european standards</li> <li>Health and safety</li> </ul>			
8	Engineering Drawings			
	Types of drawing			
	Labelling and tolerances			
9	Materials			
	Plastics			
	Natural timbers			
	Manufactured boards			
	Metals			
	Modelling materials			
	Modern and smart materials			

# ART

		$\bigcirc$	(:)	(3)
1	Artist research:  Information about their lives Information about their art Quotes by the artist and critic Images of their artwork Copies, made by and, of their art work An explanation of what you will use of their style Experiments using the artist's style and techniques			
2	Visual research: Of your chosen subject matter – drawings, paintings, photographs, prints, books and magazines			
3	<ul> <li>Experimenting with media and techniques when developing ideas:</li> <li>Paints / inks</li> <li>Printing</li> <li>3D clay and resistant materials</li> <li>Experimenting with media when developing selected ideas beyond their initial appearance, paying attention to scale, movement, colour, and techniques – selecting, modifying and improving.</li> </ul>			
4	Annotation  • What are you planning to do in the exam? How will you achieve this? What materials, techniques and processes will you use?  At key stages of your project work – what did you do? How did you do it? Why did you do it like that? What were the successes? How could it be improved?			
5	Presentation Piece This must evolve from your visual and artist research. It must have evidence of evolving from your experiments with media, techniques, and processes as you were developing ideals.			

	The best way to revise in this subject area is to
1	Work regularly / daily for 15 – 45 minutes. The time spent is partly dependant upon the task
	selected and the success of your response.
2	Look at where you can pick up marks with the least amount of stress.
3	Attend Monday after school sessions in the art room or in the lunchtime of your choice from,
	Monday, Wednesday, or Thursday.
4	Attend art catch-up sessions during the half-term holidays.
5	Look at craft, art, and design in galleries, museums, shops. What do you like? What techniques
	can you see?
6	Complete activities following feedback.
	complete detrices rottoming recobacti

# PERFORMANCE

		$\odot$	( <u>··</u> )	(55)
Hod	erstanding how to respond to a brief through discussion and praction	al evolor	ation acti	ivities
1	Key things to remember when undertaking workshop performances:	.at exptor	מנוטוו מננ	ivities
	<ul> <li>target audience</li> <li>performance space</li> <li>planning and managing resources</li> <li>running time</li> <li>style of work.</li> </ul>			
2	What to consider when responding to a brief:			
	<ul> <li>a theme: concept such as distance or key word such as discovery</li> <li>an issue: social, health or safety issues</li> <li>a prop: an umbrella, an apple, a dustbin</li> <li>time and place: e.g. a beach in winter, night-time in a hospital, early morning in the park</li> <li>existing repertoire: a play, a composition, choreography, that can be investigated and explored to inform the response.</li> </ul>			
	ct and develop skills and techniques in response to a brief			
1	<ul> <li>What do you need to consider as a performer?</li> <li>Skills and techniques of the individual performer, e.g. vocal, physical.</li> <li>Skills and techniques of the performers as a group, e.g. comedy, improvisation.</li> <li>Skills and techniques of the designer, e.g. understanding implications of selected performance skills and techniques in relation to design, research, shaping and refining ideas.</li> <li>The style and/or genre of the work being created, e.g. street dance, physical theatre.</li> <li>The influence of selected practitioners, e.g. Brecht, Fosse, Julie Taymor.</li> <li>Appropriate skills for the target audience, e.g. young children, the elderly.</li> <li>Taking part in skills development classes or workshops.</li> <li>Taking part in the rehearsal process, including individual preparation and group rehearsals.</li> </ul>			

The best way to revise in this subject area is to				
1	1 Work regularly / daily for 15 – 45 minutes. The time spent is partly dependant upon the task			
	selected and the success of your response.			
2	Look at where you can pick up marks with the least amount of stress.			
5	Engage with performances and plays online?			
6	Complete activities following feedback.			