

YEAR 11



ASSESSMENT MANIFESTS

TERM 4 – MARCH 2019

Year 11 Assessment Manifests 2018/2019

English Language

Year Group	11				
Date of Assessment	PPE Examination Window				
Title of Assessment	Language Paper 1 - Explorations in creative reading and writing				
Structure and timing of the examination	Section A: Reading (1 hour)				
	Q1	4 marks List 4 facts from the text.			
	Q2	8 marks Analyse how writers use language to achieve effects and influence readers, using relevant subject terminology to support their views.			
	Q3	8 marks Analyse how writers use structure to achieve effects and influence readers, using relevant subject terminology to support their views.			
	Q4	20 marks Evaluate texts critically, considering both language and structural features. <u>(E.G. Q4. A student said, ‘The characters are so life-like in this part of the story.’ To what extent do you agree?)</u>			
	Section B: Writing to describe or narrate. (45 minutes)				
	You will be given a picture and asked to write a description based on this image.				
	A05 Content and Organisation (24 marks) AO6 Technical Accuracy (16 marks)				
	What content / topics do I need to know?	You should know how to <u>use</u> and <u>identify</u> the follow subject terminology:			
		Show words	Language words	Structure words	Effect words
Reflects		Imagery	Focus shift	Conclusion	
Echoes		Verb, adverb	Cliff-hanger	Result	
Conveys		Noun, adjective	Cyclical / repetition	Scenario	
Implies		Pathetic fallacy	Flashback/forward	Close	
Suggests		Atmosphere/tone	Narrow or broad focus	Consequence	
Presents		Semantic field	Disjointed	Reader/Audience	
Paints		Onomatopoeic	Perspective	Response	
Demonstrates		Repetition	Dialogue	Outcome	
Represents		Sibilance	Climax	Importance	
	Reveals	Simile/metaphor	Resolution	Significance	



<p>To achieve a grade 5 I must be able to ...</p>	<p>Section A</p> <ul style="list-style-type: none"> • Read and annotate the extract • Stick closely to the exam timings • Develop depth of response for Question 4 <p>Section B</p> <p>In the writing section (Section B Writing to describe or narrate) ensure:</p> <p>AO5</p> <p>Content</p> <ul style="list-style-type: none"> • You plan carefully • There is extensive and ambitious vocabulary with sustained crafting of linguistic devices <p>Organisation</p> <ul style="list-style-type: none"> • You use varied and inventive use of structural features • Writing is compelling, incorporating a range of convincing and complex ideas <p>AO6</p> <ul style="list-style-type: none"> • Wide range of punctuation is used with a high level of accuracy • You vary your sentence starters and sentence forms • There is a high level of accuracy in spelling, including ambitious vocabulary
<p>What pages in the revision guides should I focus on?</p>	<p>To revise for this exam you can:</p> <p>SNAP Revision Writing: pages 18, 19, 20, 21, 26, 36</p> <p>SNAP Revision Reading: pages 4, 5, 10, 11, 12, 13, 16, 17, 18, 19, 22, 23, 26, 27, 30, 31, 34, 35, 38, 39,</p> <ul style="list-style-type: none"> • Read fiction texts • Practice writing descriptively • Practice writing sentences which begin with a verb, adverb, adjective or noun. (E.G. Gasping for breath, David marched on defiantly. / Carefully, she crept forward. / Hideous and forbidding, the walls of the prison loomed before her. / Trees bowed and broke before the wind's onslaught.) • Read over and edit practice and mock exam questions • Use BBC Bitesize resources https://www.bbc.co.uk/education/examspecs/zcbchv4
<p>Total marks available for the paper.</p>	<p>80 marks</p>



Year 11 Assessment Manifests 2018/2019

English Language

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Language Paper 2 – Writers Viewpoints and Perspective (Non-fiction)
Structure and timing of the examination	<p>Section A: Reading (1 hour)</p> <p>Q1 4 marks Identify 4 statements which are TRUE.</p> <p>Q2 8 marks Use details from both Sources to summarise and make inferences with a specific focus.</p> <p>Q3 12 marks Analyse how a writer has used language to achieve effects and influence readers, using relevant subject terminology to support their views.</p> <p>Q4 16 marks Compare writers' opinions and perspectives, as well as how these are conveyed</p> <p>Section B: Writing to persuade. (45 minutes)</p> <p>You will be expected to write a non-fiction text (letter, website, newspaper or magazine article) in response to a statement.</p> <p>A05 Content and Organisation (24 marks) AO6 Technical Accuracy (16 marks)</p>
What content / topics do I need to know?	<p>Language terminology: tone, repetition, rhetorical question, hyperbole, bias etc.</p> <p>Effective persuasive writing techniques: You must use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation.</p>



<p>To achieve a grade 5 I must be able to ...</p>	<p>Section A</p> <ul style="list-style-type: none"> • Read and annotate both extracts – What is the writer opinion and how do you know • Stick closely to the exam timings • Develop depth of response for Question 3 and 4 <p>Section B</p> <p>In the writing section (Section B Writing to persuade) ensure you:</p> <ul style="list-style-type: none"> • Plan your answer to show a range of ideas relating to the topic. • Use the plan to organise your response into clear sections and paragraphs. • Think carefully about the style of writing needed and their audience. • Use language and vocabulary to interest and engage the reader. • Use a variety of different sentence structures to interest and engage. • Include a clear introduction and conclusion. • Check over work carefully to ensure it is clear and accurate.
<p>What pages in the revision guides should I focus on?</p>	<p>To revise for this exam you can</p> <p>SNAP Revision Writing: pages 22, 23, 24, 25, 29, 37</p> <p>SNAP Revision Reading: pages 6, 7, 8, 9, 10, 11, 14, 15, 20, 21, 24, 25, 28, 29, 32, 33, 36, 37, 40, 41, 42</p> <ul style="list-style-type: none"> • Read non-fiction texts • Practice writing persuasively • Read over and edit practice and mock exam questions • Use BBC Bitesize resources https://www.bbc.co.uk/education/examspecs/zcbchv4
<p>Total marks available for the paper.</p>	<p>80 marks</p>

Year 11 Assessment Manifests 2018/2019

Foundation and Higher Maths

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	GCSE papers
How am I going to be assessed?	1 x non-calculator paper 2 x calculator paper
Success Criteria with Examples	<p>I should be able to answers questions on</p> <p>Higher: Calculations, checking and rounding Revision guide page 7</p> <ul style="list-style-type: none"> ➤ Add, subtract, multiply and divide decimals, whole numbers including any number between 0 and 1; ➤ Put digits in the correct place in a decimal calculation and use one calculation to find the answer to another; ➤ Use the product rule for counting (i.e. if there are m ways of doing one task and for each of these, there are n ways of doing another task, then the total number of ways the two tasks can be done is $m \times n$ ways); ➤ Round numbers to the nearest 10, 100, 1000, the nearest integer, to a given number of decimal places and to a given number of significant figures; ➤ Estimate answers to one- or two-step calculations, including use of rounding numbers and formal estimation to 1 significant figure: mainly whole numbers and then decimals. ➤ Use decimal notation and place value; ➤ Identify the value of digits in a decimal or whole number; ➤ Compare and order decimal numbers using the symbols $<$, $>$; ➤ Understand the \neq symbol (not equal); ➤ Write decimal numbers of millions, e.g. 2 300 000 = 2.3 million; ➤ Add, subtract, multiply and divide decimals; ➤ Multiply or divide by any number between 0 and 1; ➤ Round to the nearest integer; ➤ Round to a given number of decimal places and significant figures; ➤ Estimate answers to calculations by rounding numbers to 1 significant figure; ➤ Use one calculation to find the answer to another. <p>Indices, Powers and Roots Revision guide pages 2-4</p> <ul style="list-style-type: none"> ➤ Use index notation for integer powers of 10, including negative powers; ➤ Use the square, cube and power keys on a calculator and estimate powers and roots of any given positive number, by considering the values it must lie between, e.g. the square root of 42 must be between 6 and 7; ➤ Find the value of calculations using indices including positive, fractional and negative indices;

- Recall that $n^0 = 1$ and $n^{-1} = \frac{1}{n}$ for positive integers n as well as, $\sqrt[n]{n} = 1$ and $\sqrt[n]{3n} = \sqrt[n]{3} \sqrt[n]{n}$ for any positive number n ;
- Understand that the inverse operation of raising a positive number to a power n is raising the result of this operation to the power $1/n$
- Use index laws to simplify and calculate the value of numerical expressions involving multiplication and division of integer powers, fractional and negative powers, and powers of a power;
- Solve problems using index laws;
- Use brackets and the hierarchy of operations up to and including with powers and roots inside the brackets, or raising brackets to powers or taking roots of brackets;
- Use an extended range of calculator functions, including $+$, $-$, \times , \div , x^2 , \sqrt{x} , memory, $x \ y$, $\frac{1}{x}$, brackets;
- Use calculators for all calculations: positive and negative numbers, brackets, powers and roots, four operations.

Factors, Multiples and Primes Revision guide page 1

- Find the prime factor decomposition of positive integers – write as a product using index notation;
- Find common factors and common multiples of two numbers;
- Find the LCM and HCF of two numbers, by listing, Venn diagrams and using prime factors – include finding LCM and HCF given the prime factorisation of two numbers;
- Solve problems using HCF and LCM, and prime numbers;
- Understand that the prime factor decomposition of a positive integer is unique, whichever factor pair you start with, and that every number can be written as a product of prime factors;
- Convert large and small numbers into standard form and vice versa;
- Add, subtract, multiply and divide numbers in standard form;
- Interpret a calculator display using standard form and know how to enter numbers in standard form;

Surds Revision guide pages 12 & 49

- Understand surd notation, e.g. calculator gives answer to $\sqrt{8}$ as $4\sqrt{2}$;
- Simplify surd expressions involving squares (e.g. $\sqrt{12} = \sqrt{4 \times 3} = \sqrt{4} \times \sqrt{3} = 2\sqrt{3}$).
- Rationalise the denominator involving surds;

Basic Rules of Algebra Revision guide pages 16-17

- Use instances of index laws for positive integer powers including when multiplying or dividing algebraic terms;
- Use instances of index laws, including use of zero, fractional and negative powers;
- Multiply a single term over a bracket and recognise factors of algebraic terms involving single brackets and simplify expressions by factorising, including subsequently collecting like terms;
- Expand the product of two linear expressions, i.e. double brackets working up to negatives in both brackets and also similar to $(2x + 3y)(3x - y)$;
- Know that squaring a linear expression is the same as expanding double brackets;

Rearrange formulae Revision guide page 21

- Change the subject of a formula, including cases where the subject is on both sides of the original formula, or involving fractions and small powers of the subject;

Solving equations Revision guide pages 19, 20 & 45

- Simple proofs and use of \equiv in “show that” style questions; know the difference between an equation and an identity;
- Use iteration to find approximate solutions to equations, for simple equations in the first instance, then quadratic

- Solve linear equations, with integer coefficients, in which the unknown appears on either side or on both sides of the equation;
- Solve linear equations which contain brackets, including those that have negative signs occurring anywhere in the equation, and those with a negative solution;
- Solve linear equations in one unknown, with integer or fractional coefficients;
- Set up and solve linear equations to solve a problem;
- Derive a formula and set up simple equations from word problems, then solve these equations, interpreting the solution in the context of the problem;
- Substitute positive and negative numbers into a formula, solve the resulting equation including brackets, powers or standard form;
- Use and substitute formulae from mathematics and other subjects, including the kinematics formulae $v = u + at$, $v^2 - u^2 = 2as$, and $s = ut + \frac{1}{2}at^2$;

Sequences Revision guide pages 22-24

- Find and use (to generate terms) the n th term of an arithmetic sequence;
- Use the n th term of an arithmetic sequence to decide if a given number is a term in the sequence, or find the first term above or below a given number;
- Identify which terms cannot be in a sequence by finding the n th term;
- Continue a quadratic sequence and use the n th term to generate terms;
- Find the n th term of quadratic sequences;
- Distinguish between arithmetic and geometric sequences;
- Use finite/infinite and ascending/descending to describe sequences;
- Recognise and use simple geometric progressions (rn where n is an integer, and r is a rational number > 0 or a surd);
- Continue geometric progression and find term to term rule, including negative, fraction and decimal terms;
- Solve problems involving sequences from real life situations.

Averages Revision guide page 110

- Design and use two-way tables for discrete and grouped data;
- Use information provided to complete a two-way table;
- Recognise the advantages and disadvantages between measures of average;
- Construct and interpret stem and leaf diagrams (including back-to-back diagrams):
- find the mode, median, range, as well as the greatest and least values from stem and leaf diagrams, and compare two distributions from stem and leaf diagrams (mode, median, range);
- Construct and interpret grouped frequency tables for continuous data:
- for grouped data, find the interval which contains the median and the modal class;
- estimate the mean with grouped data;
- understand that the expression 'estimate' will be used where appropriate, when finding the mean of grouped data using mid-interval values.

Representing Data Revision guide pages 113, 118-122

- Know which charts to use for different types of data sets;
- Produce and interpret pie charts:
 - find the mode and the frequency represented by each sector;
 - compare data from pie charts that represent different-sized samples;
- Produce and interpret frequency polygons for grouped data:
 - from frequency polygons, read off frequency values, compare distributions, calculate total population, mean, estimate greatest and least possible values (and range);
- Construct and interpret time-series graphs, comment on trends;
- Compare the mean and range of two distributions, or median or mode as appropriate;
- Recognise simple patterns, characteristics relationships in bar charts, line graphs and frequency polygons;

Scatter Graphs Revision guide page 114

- Draw and interpret scatter graphs in terms of the relationship between two variables;
- Draw lines of best fit by eye, understanding what these represent;
- Identify outliers and ignore them on scatter graphs;
- Use a line of best fit, or otherwise, to predict values of a variable given values of the other variable;
- Distinguish between positive, negative and zero correlation using lines of best fit, and interpret correlation in terms of the problem;
- Understand that correlation does not imply causality, and appreciate that correlation is a measure of the strength of the association between two variables and that zero correlation does not necessarily imply 'no relationship' but merely 'no linear correlation';
- Explain an isolated point on a scatter graph;
- Use the line of best fit make predictions; interpolate and extrapolate apparent trends whilst knowing the dangers of so doing.

Fractions, Decimals and Percentages Revision guide pages 5-6 & 62-64

- Find a fraction of a quantity or measurement, including within a context;
- Convert between mixed numbers and improper fractions;
- Add and subtract fractions, including mixed numbers;
- Multiply and divide fractions, including mixed numbers and whole numbers and vice versa;
- Understand and use unit fractions as multiplicative inverses;
- By writing the denominator in terms of its prime factors, decide whether fractions can be converted to recurring or terminating decimals;
- Convert a fraction to a recurring decimal and vice versa;
- Find the reciprocal of an integer, decimal or fraction;
- Express a given number as a percentage of another number;
- Express one quantity as a percentage of another where the percentage is greater than 100%;
- Find the new amount after a percentage increase or decrease;
- Work out a percentage increase or decrease, including: simple interest, income tax calculations, value of profit or loss, percentage profit or loss;

Ratio and Proportion Revision guide pages 60-61

- Share into two or more parts in a given part : part or part : whole ratio;
- Use a ratio to find one quantity when the other is known;
- Write a ratio as a fraction and as a linear function;
- Identify direct proportion from a table of values, by comparing ratios of values;
- Use a ratio to compare a scale model to real-life object;
- Use a ratio to convert between measures and currencies, e.g. £1.00 = €1.36;
- Scale up recipes;
- Convert between currencies.

Pythagoras Theorem Revision guide pages 76 & 103

- Understand, recall and use Pythagoras' Theorem in 2D;
- Given three sides of a triangle, justify if it is right-angled or not;
- Calculate the length of the hypotenuse in a right-angled triangle (including decimal lengths and a range of units);
- Find the length of a shorter side in a right-angled triangle;
- Calculate the length of a line segment AB given pairs of points;
- Give an answer to the use of Pythagoras' Theorem in surd form;

Trigonometry Revision guide pages 77-78

- Understand, use and recall the trigonometric ratios sine, cosine and tan, and apply them to find angles and lengths in general triangles in 2D figures;
- Use the trigonometric ratios to solve 2D problems;
- Find angles of elevation and depression;
- Know the exact values of $\sin \theta$ and $\cos \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90° ; know the exact value of $\tan \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and 60° .

Real Life graphs Revision guide page 30

- Draw and interpret straight-line graphs for real-life situations, including ready reckoner graphs, conversion graphs, fuel bills, fixed charge and cost per item;
- Draw distance–time and velocity–time graphs;
- Use graphs to calculate various measures (of individual sections), including: unit price (gradient), average speed, distance, time, acceleration; including using enclosed areas by counting squares or using areas of trapezia, rectangles and triangles;
- Find the coordinates of the midpoint of a line segment with a diagram given and coordinates;
- Find the coordinates of the midpoint of a line segment from coordinates;
- Calculate the length of a line segment given the coordinates of the end points;
- Find the equation of the line through two given points.

Straight line graphs Revision guide pages 25-26

- Plot and draw graphs of $y = a$, $x = a$, $y = x$ and $y = -x$, drawing and recognising lines parallel to axes, plus $y = x$ and $y = -x$;
- Identify and interpret the gradient of a line segment;
- Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs in the coordinate plane;
- Identify and interpret the gradient and y-intercept of a linear graph given by equations of the form $y = mx + c$;
- Find the equation of a straight line from a graph in the form $y = mx + c$;
- Plot and draw graphs of straight lines of the form $y = mx + c$ with and without a table of values;
- Sketch a graph of a linear function, using the gradient and y-intercept (i.e. without a table of values);
- Find the equation of the line through one point with a given gradient;
- Identify and interpret gradient from an equation $ax + by = c$;
- Find the equation of a straight line from a graph in the form $ax + by = c$;
- Plot and draw graphs of straight lines in the form $ax + by = c$;
- Interpret and analyse information presented in a range of linear graphs:
 - use gradients to interpret how one variable changes in relation to another;
 - find approximate solutions to a linear equation from a graph;
 - identify direct proportion from a graph;
 - find the equation of a line of best fit (scatter graphs) to model the relationship between quantities;
- Explore the gradients of parallel lines and lines perpendicular to each other;
- Interpret and analyse a straight-line graph and generate equations of lines parallel and perpendicular to the given line;
- Select and use the fact that when $y = mx + c$ is the equation of a straight line, then the gradient of a line parallel to it will have a gradient of m and a line perpendicular to this line will have a gradient of $1/m$.

Quadratic, Cubic and other graphs Revision guide page 29

- Recognise a linear, quadratic, cubic, reciprocal and circle graph from its shape;
- Generate points and plot graphs of simple quadratic functions, then more general quadratic functions;

- Find approximate solutions of a quadratic equation from the graph of the corresponding quadratic function;
- Interpret graphs of quadratic functions from real-life problems;
- Draw graphs of simple cubic functions using tables of values;
- Interpret graphs of simple cubic functions, including finding solutions to cubic equations;
- Draw graphs of the reciprocal function with $x \neq 0$ using tables of values;
- Draw circles, centre the origin, equation $x^2 + y^2 = r^2$.

Perimeter, Area and Circles Revision guide pages 80-81, 83-84

- Recall and use the formulae for the area of a triangle, rectangle, trapezium and parallelogram using a variety of metric measures;
- Calculate the area of compound shapes made from triangles, rectangles, trapezia and parallelograms using a variety of metric measures;
- Calculate the perimeter of compound shapes made from triangles and rectangles;
- Estimate area and perimeter by rounding measurements to 1 significant figure to check reasonableness of answers;
- Recall the definition of a circle and name and draw parts of a circle;
- Recall and use formulae for the circumference of a circle and the area enclosed by a circle (using circumference $= 2\pi r = \pi d$ and area of a circle $= \pi r^2$) using a variety of metric measures;
- Use $\pi \approx 3.142$ or use the π button on a calculator;
- Calculate perimeters and areas of composite shapes made from circles and parts of circles (including semicircles, quarter-circles, combinations of these and also incorporating other polygons);
- Calculate arc lengths, angles and areas of sectors of circles;
- Find radius or diameter, given area or circumference of circles in a variety of metric measures;
- Give answers in terms of π ;
- Form equations involving more complex shapes and solve these equations.

3D forms, volumes, cylinders, cones and spheres Revision guide pages 81-83, 85

- Find the surface area of prisms using the formulae for triangles and rectangles, and other (simple) shapes with and without a diagram;
- Recall and use the formula for the volume of a cuboid or prism made from composite 3D solids using a variety of metric measures;
- Convert between metric measures of volume and capacity, e.g. $1 \text{ ml} = 1 \text{ cm}^3$;
- Use volume to solve problems;
- Estimating surface area, perimeter and volume by rounding measurements to 1 significant figure to check reasonableness of answers;
- Use $\pi \approx 3.142$ or use the π button on a calculator;
- Find the volume and surface area of a cylinder;
- Recall and use the formula for volume of pyramid;
- Find the surface area of a pyramid;
- Use the formulae for volume and surface area of spheres and cones;
- Solve problems involving more complex shapes and solids, including segments of circles and frustums of cones;
- Find the surface area and volumes of compound solids constructed from cubes, cuboids, cones, pyramids, spheres, hemispheres, cylinders;
- Give answers in terms of π ;
- Form equations involving more complex shapes and solve these equations.

Accuracy and Bounds Revision guide page 10

- Calculate the upper and lower bounds of numbers given to varying degrees of accuracy;
- Calculate the upper and lower bounds of an expression involving the four operations;

- Find the upper and lower bounds in real-life situations using measurements given to appropriate degrees of accuracy;
- Find the upper and lower bounds of calculations involving perimeters, areas and volumes of 2D and 3D shapes;
- Calculate the upper and lower bounds of calculations, particularly when working with measurements;
- Use inequality notation to specify an error bound.

Transformations Revision guide pages 88-90

- Distinguish properties that are preserved under particular transformations;
- Recognise and describe rotations – know that they are specified by a centre and an angle;
- Rotate 2D shapes using the origin or any other point (not necessarily on a coordinate grid);
- Identify the equation of a line of symmetry;
- Recognise and describe reflections on a coordinate grid – know to include the mirror line as a simple algebraic equation, $x = a$, $y = a$, $y = x$, $y = -x$ and lines not parallel to the axes;
- Reflect 2D shapes using specified mirror lines including lines parallel to the axes and also $y = x$ and $y = -x$;
- Recognise and describe single translations using column vectors on a coordinate grid;
- Translate a given shape by a vector;
- Understand the effect of one translation followed by another, in terms of column vectors (to introduce vectors in a concrete way);
- Enlarge a shape on a grid without a centre specified;
- Describe and transform 2D shapes using enlargements by a positive integer, positive fractional, and negative scale factor;
- Know that an enlargement on a grid is specified by a centre and a scale factor;
- Identify the scale factor of an enlargement of a shape;
- Enlarge a given shape using a given centre as the centre of enlargement by counting distances from centre, and find the centre of enlargement by drawing;
- Find areas after enlargement and compare with before enlargement, to deduce multiplicative relationship (area scale factor); given the areas of two shapes, one an enlargement of the other, find the scale factor of the enlargement (whole number values only);
- Use congruence to show that translations, rotations and reflections preserve length and angle, so that any figure is congruent to its image under any of these transformations;
- Describe and transform 2D shapes using combined rotations, reflections, translations, or enlargements;
- Describe the changes and invariance achieved by combinations of rotations, reflections and translations.

Constructions, Loci and Bearings Revision guide pages 91-95

- Draw 3D shapes using isometric grids;
- Understand and draw front and side elevations and plans of shapes made from simple solids;
- Given the front and side elevations and the plan of a solid, draw a sketch of the 3D solid;
- Understand, draw and measure bearings;
- Calculate bearings and solve bearings problems, including on scaled maps, and find/mark and measure bearings
- Use the standard ruler and compass constructions:
 - bisect a given angle;
 - construct a perpendicular to a given line from/at a given point;
 - construct angles of 90° , 45° ;
 - perpendicular bisector of a line segment;
 - Construct:
 - a region bounded by a circle and an intersecting line;
 - a given distance from a point and a given distance from a line;

- equal distances from two points or two line segments;
- regions which may be defined by 'nearer to' or 'greater than';
 - Find and describe regions satisfying a combination of loci, including in 3D;
 - Use constructions to solve loci problems including with bearings;
 - Know that the perpendicular distance from a point to a line is the shortest distance to the line.

Solving quadratic equations Revision guide pages 31-33

- Factorise quadratic expressions in the form $ax^2 + bx + c$;
- Set up and solve quadratic equations;
- Solve quadratic equations by factorisation and completing the square;
- Solve quadratic equations that need rearranging;

Solve quadratic equations by using the quadratic formula;

Solving simultaneous equations Revision guide pages 34-35

- Find the exact solutions of two simultaneous equations in two unknowns;
- Use elimination or substitution to solve simultaneous equations;
- Solve exactly, by elimination of an unknown, two simultaneous equations in two unknowns:
 - linear / linear, including where both need multiplying;
 - linear / quadratic;
 - linear / $x^2 + y^2 = r^2$;
- Set up and solve a pair of simultaneous equations in two variables for each of the above scenarios, including to represent a situation;
- Interpret the solution in the context of the problem;

Inequalities Revision guide pages 37-38

- Show inequalities on number lines;
- Write down whole number values that satisfy an inequality;
- Solve simple linear inequalities in one variable, and represent the solution set on a number line;
- Solve two linear inequalities in x , find the solution sets and compare them to see which value of x satisfies both solve linear inequalities in two variables algebraically;
- Use the correct notation to show inclusive and exclusive inequalities.

Probability Revision guide pages 123-127

- Write probabilities using fractions, percentages or decimals;
- Understand and use experimental and theoretical measures of probability, including relative frequency to include outcomes using dice, spinners, coins, etc;
- Estimate the number of times an event will occur, given the probability and the number of trials;
- Find the probability of successive events, such as several throws of a single dice;
- List all outcomes for single events, and combined events, systematically;
- Draw sample space diagrams and use them for adding simple probabilities;
- Know that the sum of the probabilities of all outcomes is 1;
- Use $1 - p$ as the probability of an event not occurring where p is the probability of the event occurring;
- Work out probabilities from Venn diagrams to represent real-life situations and also 'abstract' sets of numbers/values;
- Use union and intersection notation;
- Find a missing probability from a list or two-way table, including algebraic terms;
- Understand conditional probabilities and decide if two events are independent;
- Draw a probability tree diagram based on given information, and use this to find probability and expected number of outcome;
- Understand selection with or without replacement;

- Calculate the probability of independent and dependent combined events;
- Use a two-way table to calculate conditional probability;
- Use a tree diagram to calculate conditional probability;
- Use a Venn diagram to calculate conditional probability;
- Compare experimental data and theoretical probabilities;
- Compare relative frequencies from samples of different sizes.

Multiplicative Reasoning Revision guide pages 65-69

- Express a multiplicative relationship between two quantities as a ratio or a fraction, e.g. when A:B are in the ratio 3:5, A is $\frac{3}{5}$ B. When $4a = 7b$, then $a = \frac{7}{4}b$ or a:b is 7:4;
- Solve proportion problems using the unitary method;
- Work out which product offers best value and consider rates of pay;
- Work out the multiplier for repeated proportional change as a single decimal number;
- Represent repeated proportional change using a multiplier raised to a power, use this to solve problems involving compound interest and depreciation;
- Understand and use compound measures and:
 - convert between metric speed measures;
 - convert between density measures;
 - convert between pressure measures;
- Use kinematics formulae from the formulae sheet to calculate speed, acceleration, etc (with variables defined in the question);
- Calculate an unknown quantity from quantities that vary in direct or inverse proportion;
- Recognise when values are in direct proportion by reference to the graph form, and use a graph to find the value of k in $y = kx$;
- Set up and use equations to solve word and other problems involving direct proportion (this is covered in more detail in unit 19);
- Relate algebraic solutions to graphical representation of the equations;
- Recognise when values are in inverse proportion by reference to the graph form;
- Set up and use equations to solve word and other problems involving inverse proportion, and relate algebraic solutions to graphical representation of the equations.

Similarity and Congruence Revision guide pages 96-98

- Understand and use SSS, SAS, ASA and RHS conditions to prove the congruence of triangles using formal arguments, and to verify standard ruler and pair of compasses constructions;
- Solve angle problems by first proving congruence;
- Understand similarity of triangles and of other plane shapes, and use this to make geometric inferences;
- Prove that two shapes are similar by showing that all corresponding angles are equal in size and/or lengths of sides are in the same ratio/one is an enlargement of the other, giving the scale factor;
- Use formal geometric proof for the similarity of two given triangles;
- Understand the effect of enlargement on angles, perimeter, area and volume of shapes and solids;
- Identify the scale factor of an enlargement of a similar shape as the ratio of the lengths of two corresponding sides, using integer or fraction scale factors;
- Write the lengths, areas and volumes of two shapes as ratios in their simplest form;
- Find missing lengths, areas and volumes in similar 3D solids;
- Know the relationships between linear, area and volume scale factors of mathematically similar shapes and solids;
- Use the relationship between enlargement and areas and volumes of simple shapes and solids;
- Solve problems involving frustums of cones where you have to find missing lengths first using similar triangles.

Graphs of Trigonometric Functions Revision guide page 39

- Recognise, sketch and interpret graphs of the trigonometric functions (in degrees)
- $y = \sin x$, $y = \cos x$ and $y = \tan x$ for angles of any size.
- Know the exact values of $\sin \theta$ and $\cos \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90° and exact value of $\tan \theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and 60° and find them from graphs.
- Apply to the graph of $y = f(x)$ the transformations $y = -f(x)$, $y = f(-x)$ for sine, cosine and tan functions $f(x)$.
- Apply to the graph of $y = f(x)$ the transformations $y = f(x) + a$, $y = f(x + a)$ for sine, cosine and tan functions $f(x)$.

Further Trigonometry Revision guide pages 99-100, 103

- Know and apply $\text{Area} = ab \sin C$ to calculate the area, sides or angles of any triangle.
- Know the sine and cosine rules, and use to solve 2D problems (including involving bearings).
- Use the sine and cosine rules to solve 3D problems.
- Understand the language of planes, and recognise the diagonals of a cuboid.
- Solve geometrical problems on coordinate axes.
- Understand, recall and use trigonometric relationships and Pythagoras' Theorem in right-angled triangles, and use these to solve problems in 3D configurations.
- Calculate the length of a diagonal of a cuboid.
- Find the angle between a line and a plane.

Collecting data Revision guide pages 115-116

- Specify the problem and plan:
- decide what data to collect and what analysis is needed;
- understand primary and secondary data sources;
- consider fairness;
- Understand what is meant by a sample and a population;
- Understand how different sample sizes may affect the reliability of conclusions drawn;
- Identify possible sources of bias and plan to minimise it;
- Write questions to eliminate bias, and understand how the timing and location of a survey can ensure a sample is representative

Circle Theorems Revision guide page 105

- Recall the definition of a circle and identify (name) and draw parts of a circle, including sector, tangent, chord, segment;
- Prove and use the facts that:
- the angle subtended by an arc at the centre of a circle is twice the angle subtended at any point on the circumference;
- the angle in a semicircle is a right angle;
- the perpendicular from the centre of a circle to a chord bisects the chord;
- angles in the same segment are equal;
- alternate segment theorem;
- opposite angles of a cyclic quadrilateral sum to 180° ;
- Understand and use the fact that the tangent at any point on a circle is perpendicular to the radius at that point;
- Find and give reasons for missing angles on diagrams using:
- circle theorems;
- isosceles triangles (radius properties) in circles;
- the fact that the angle between a tangent and radius is 90° ;
- the fact that tangents from an external point are equal in length.
- Select and apply construction techniques and understanding of loci to draw graphs based on circles and perpendiculars of lines;
- Find the equation of a tangent to a circle at a given point, by:

- finding the gradient of the radius that meets the circle at that point (circles all centre the origin);
- finding the gradient of the tangent perpendicular to it;
- using the given point;
- Recognise and construct the graph of a circle using $x^2 + y^2 = r^2$ for radius r centred at the origin of coordinates.

Vectors Revision guide pages 106-107

- Understand and use vector notation, including column notation, and understand and interpret vectors as displacement in the plane with an associated direction.
- Understand that $2a$ is parallel to a and twice its length, and that a is parallel to $-a$ in the opposite direction.
- Represent vectors, combinations of vectors and scalar multiples in the plane pictorially.
- Calculate the sum of two vectors, the difference of two vectors and a scalar multiple of a vector using column vectors (including algebraic terms).
- Find the length of a vector using Pythagoras' Theorem.
- Calculate the resultant of two vectors.
- Solve geometric problems in 2D where vectors are divided in a given ratio.
- Produce geometrical proofs to prove points are co-linear and vectors/lines are parallel.

Foundation:

Place value and number sense Revision guide page1

- Use and order positive and negative numbers (integers) and decimals; use the symbols $<$, $>$ and understand the \neq symbol;
- Add, subtract, multiply and divide positive and negative numbers (integers);
- Recall all multiplication facts to 10×10 , and use them to derive quickly the corresponding division facts;
- Multiply or divide any number by powers of 10;
- Use brackets and the hierarchy of operations (not including powers);
- Round numbers to a given power of 10;
- Check answers by rounding and using inverse operations.
- Use decimal notation and place value;
- Identify the value of digits in a decimal or whole number;
- Compare and order decimal numbers using the symbols $<$, $>$;
- Understand the \neq symbol (not equal);

Decimals Revision guide pages 6-7, 10

- Write decimal numbers of millions, e.g. 2 300 000 = 2.3 million;

- Add, subtract, multiply and divide decimals;
- Multiply or divide by any number between 0 and 1;
- Round to the nearest integer;
- Round to a given number of decimal places and significant figures;
- Estimate answers to calculations by rounding numbers to 1 significant figure;
- Use one calculation to find the answer to another.

Indices, Powers and roots Revision guide pages 8-9

- Find squares and cubes:
- recall integer squares up to 10×10 and the corresponding square roots;
- understand the difference between positive and negative square roots;
- recall the cubes of 1, 2, 3, 4, 5 and 10;
- Use index notation for squares and cubes;
- Recognise powers of 2, 3, 4, 5;
- Evaluate expressions involving squares, cubes and roots:
- add, subtract, multiply and divide numbers in index form;
- cancel to simplify a calculation;
- Use index notation for powers of 10, including negative powers;
- Use the laws of indices to multiply and divide numbers written in index notation;
- Use brackets and the hierarchy of operations with powers inside the brackets, or raising brackets to powers;
- Use calculators for all calculations: positive and negative numbers, brackets, square, cube, powers and roots, and all four operations.
- List all three-digit numbers that can be made from three given integers;
- Recognise odd, even and prime (two digit) numbers;

Factors, Multiples and Primes Revision guide pages 11-12

- Identify factors and multiples and list all factors and multiples of a number systematically;
- Find the prime factor decomposition of positive integers and write as a product using index notation;
- Find common factors and common multiples of two numbers;
- Find the LCM and HCF of two numbers, by listing, Venn diagrams and using prime factors: include finding LCM and HCF given the prime factorisation of two numbers;
- Understand that the prime factor decomposition of a positive integer is unique – whichever factor pair you start with – and that every number can be written as a product of two factors;
- Solve simple problems using HCF, LCM and prime numbers.

Basic rules of Algebra Revision guide pages 22-23

- Use notation and symbols correctly;
- Write an expression;
- Select an expression/equation/formula/identity from a list;
- Manipulate and simplify algebraic expressions by collecting 'like' terms;
- Multiply together two simple algebraic expressions, e.g. $2a \times 3b$;
- Simplify expressions by cancelling, e.g. $= 2x$;
- Use index notation and the index laws when multiplying or dividing algebraic terms;
- Understand the \neq symbol and introduce the identity \equiv sign;
- Use notation and symbols correctly;
- Write an expression;
- Select an expression/equation/formula/identity from a list;
- Manipulate and simplify algebraic expressions by collecting 'like' terms;
- Multiply together two simple algebraic expressions, e.g. $2a \times 3b$;
- Simplify expressions by cancelling, e.g. $= 2x$;
- Use index notation and the index laws when multiplying or dividing algebraic terms;

- Understand the \neq symbol and introduce the identity \equiv sign;

Substitution Revision guide pages 25

- Multiply a single number term over a bracket;
- Write and simplify expressions using squares and cubes;
- Simplify expressions involving brackets, i.e. expand the brackets, then add/subtract;
- Argue mathematically to show algebraic expressions are equivalent;
- Recognise factors of algebraic terms involving single brackets;
- Factorise algebraic expressions by taking out common factors;
- Write expressions to solve problems representing a situation;
- Substitute numbers into simple algebraic expressions;
- Substitute numbers into expressions involving brackets and powers;
- Substitute positive and negative numbers into expressions;
- Derive a simple formula, including those with squares, cubes and roots;
- Substitute numbers into a (word) formula;

Representing Data Revision guide pages 115-117, 123-124

- Use suitable data collection techniques (data to be integer and decimal values);
- Design and use data-collection sheets for grouped, discrete and continuous data, use inequalities for grouped data, and introduce \leq and \geq signs; Sort, classify and tabulate data, both discrete and continuous quantitative data, and qualitative data; Extract data from lists and tables;
- Use correct notation for time, 12- and 24-hour clock and work out time taken for a journey from a timetable;
- Construct tables for time-series data;
- Design, complete and use two-way tables for discrete and grouped data;
- Calculate the total frequency from a frequency table;
- Read off frequency values from a table;
- Read off frequency values from a frequency table;
- Find greatest and least values from a frequency table;
- Identify the mode from a frequency table;
- Identify the modal class from a grouped frequency table;
- Plotting coordinates in first quadrant and read graph scales in multiples;
- Produce and interpret:
 - pictograms;
 - composite bar charts;
 - dual/comparative bar charts for categorical and ungrouped discrete data
 - bar-line charts;
 - vertical line charts;
 - line graphs;
 - line graphs for time-series data;
 - histograms with equal class intervals;
 - stem and leaf (including back-to-back);
- Calculate total population from a bar chart or table;
- Find greatest and least values from a bar chart or table;
- Find the mode from a stem and leaf diagram;
- Identify the mode from a bar chart;
- Recognise simple patterns, characteristic and relationships in bar charts and line graphs;
- Interpret and discuss any data.

Pie Charts Revision guide page 118

- Interpret tables; represent data in tables and charts;

- Know which charts to use for different types of data sets;
- Draw circles and arcs to a given radius;
- Know there are 360 degrees in a full turn, 180 degrees in a half turn, and 90 degrees in a quarter turn;
- Measure and draw angles, to the nearest degree; Construct pie charts for categorical data and discrete/continuous numerical data;
- Interpret simple pie charts using simple fractions and percentages; , and multiples of 10% sections;
- From a pie chart:
- find the mode;
- find the total frequency;
- Understand that the frequency represented by corresponding sectors in two pie charts is dependent upon the total populations represented by each of the pie charts.

Scatter Graphs Revision guide page 119

Draw scatter graphs;

- Interpret points on a scatter graph;
- Identify outliers and ignore them on scatter graphs;
- Draw the line of best fit on a scatter diagram by eye, and understand what it represents;
- Use the line of best fit make predictions; interpolate and extrapolate apparent trends whilst knowing the dangers of so doing;
- Distinguish between positive, negative and no correlation using lines of best fit;
- Use a line of best fit to predict values of a variable given values of the other variable;
- Interpret scatter graphs in terms of the relationship between two variables;
- Interpret correlation in terms of the problem;
- Understand that correlation does not imply causality;
- State how reliable their predictions are, i.e. not reliable if extrapolated.

Fractions, Decimals and Percentages Revision guide page 56

- Convert a fraction to a decimal to make a calculation easier,
e.g. $0.25 \times 8 = \quad \times 8$, or $\quad \times 10 = 0.375 \times 10$;
- Recognise recurring decimals and convert fractions such as $\frac{1}{3}$, $\frac{2}{3}$ and $\frac{1}{6}$ into recurring decimals;
- Compare and order fractions, decimals and integers, using inequality signs;
- Understand that a percentage is a fraction in hundredths;
- Express a given number as a percentage of another number;
- Convert between fractions, decimals and percentages;
- Order fractions, decimals and percentages, including use of inequality signs.

Percentages Revision guide pages 55, 57-58, 62-63

- Express a given number as a percentage of another number;
- Find a percentage of a quantity without a calculator: 50%, 25% and multiples of 10% and 5%;
- Find a percentage of a quantity or measurement (use measurements they should know from Key Stage 3 only);
- Calculate amount of increase/decrease;
- Use percentages to solve problems, including comparisons of two quantities using percentages;
- Percentages over 100%;
- Use percentages in real-life situations, including percentages greater than 100%:
- Price after VAT (not price before VAT);
- Value of profit or loss;
- Simple interest;

- Income tax calculations;
- Use decimals to find quantities;
- Find a percentage of a quantity, including using a multiplier;
- Use a multiplier to increase or decrease by a percentage in any scenario where percentages are used;
- Understand the multiplicative nature of percentages as operators.

Sequences Revision guide pages 34-35

- Recognise sequences of odd and even numbers, and other sequences including Fibonacci sequences;
- Use function machines to find terms of a sequence;
- Write the term-to-term definition of a sequence in words;
- Find a specific term in the sequence using position-to-term or term-to-term rules;
- Generate arithmetic sequences of numbers, triangular number, square and cube integers and sequences derived from diagrams;
- Recognise such sequences from diagrams and draw the next term in a pattern sequence;
- Find the next term in a sequence, including negative values;
- Find the n th term
 - for a pattern sequence;
 - a linear sequence;
 - of an arithmetic sequence;
 - Use the n th term of an arithmetic sequence to
 - generate terms;
 - decide if a given number is a term in the sequence, or find the first term over a certain number;
 - find the first term greater/less than a certain number;
- Continue a geometric progression and find the term-to-term rule, including negatives, fraction and decimal terms;
 - Continue a quadratic sequence and use the n th term to generate terms;
 - Distinguish between arithmetic and geometric sequences.

Angles Revision guide pages 73-75

- Estimate sizes of angles;
- Measure angles using a protractor;
- Use geometric language appropriately;
- Use letters to identify points, lines and angles;
- Use two-letter notation for a line and three-letter notation for an angle;
- Describe angles as turns and in degrees and understand clockwise and anticlockwise;
- Know that there are 360° in a full turn, 180° in a half turn and 90° in a quarter turn;
- Identify a line perpendicular to a given line on a diagram and use their properties;
- Identify parallel lines on a diagram and use their properties;
- Find missing angles using properties of corresponding and alternate angles;
- Understand and use the angle properties of parallel lines
- Given some information about a shape on coordinate axes, complete the shape; Understand and use the angle properties of quadrilaterals;
- Use the fact that angle sum of a quadrilateral is 360° ;
- Recall and use properties of angles at a point, angles at a point on a straight line, right angles, and vertically opposite angles;
- Derive and use the sum of angles in a triangle;
- Find a missing angle in a triangle, using the angle sum of a triangle is 180° ;
- Understand and use the angle properties of triangles, use the symmetry property of isosceles triangle to show that base angles are equal;
- Use the side/angle properties of isosceles and equilateral triangles;

- Understand and use the angle properties of intersecting lines;
- Understand a proof that the exterior angle of a triangle is equal to the sum of the interior angles at the other two vertices; Use geometrical language appropriately, give reasons for angle calculations and show step-by-step deduction when solving problems

Polygons Revision guide pages 72 & 76

- Recall the properties and definitions of special types of quadrilaterals, including symmetry properties;
- List the properties of each special type of quadrilateral, or identify (name) a given shape;
- Draw sketches of shapes;
- Classify quadrilaterals by their geometric properties and name all quadrilaterals that have a specific property;
- Identify quadrilaterals from everyday usage;
- Distinguish between scalene, equilateral, isosceles and right-angled triangles
- Recognise and name pentagons, hexagons, heptagons, octagons and decagons;
- Understand 'regular' and 'irregular' as applied to polygons;
- Use the sum of angles of irregular polygons;
- Calculate and use the sums of the interior angles of polygons;
- Calculate and use the angles of regular polygons;
- Use the sum of the interior angles of an n-sided polygon;
- Use the sum of the exterior angles of any polygon is 360° ;
- Use the sum of the interior angle and the exterior angle is 180° ;
- Identify shapes which are congruent (by eye);
- Explain why some polygons fit together and others do not;

Statistical Measures Revision guide pages 120-122, 125-127

- Specify the problem and:
 - plan an investigation;
 - decide what data to collect and what statistical analysis is needed;
 - consider fairness;
- Recognise types of data: primary secondary, quantitative and qualitative;
- Identify which primary data they need to collect and in what format, including grouped data;
- Collect data from a variety of suitable primary and secondary sources;
- Understand how sources of data may be biased and explain why a sample may not be representative of a whole population;
- Understand sample and population.
- Calculate the mean, mode, median and range for discrete data;
- Interpret and find a range of averages as follows:
 - median, mean and range from a (discrete) frequency table;
 - range, modal class, interval containing the median, and estimate of the mean from a grouped data frequency table;
 - mode and range from a bar chart;
 - median, mode and range from stem and leaf diagrams;
 - mean from a bar chart;
- Understand that the expression 'estimate' will be used where appropriate, when finding the mean of grouped data using mid-interval values;
- Compare the mean, median, mode and range (as appropriate) of two distributions using bar charts, dual bar charts, pictograms and back-to-back stem and leaf;
- Recognise the advantages and disadvantages between measures of average.

Units of Measurement Revision guide pages 78, 85

- Indicate given values on a scale, including decimal value;
- Know that measurements using real numbers depend upon the choice of unit;

- Convert between units of measure within one system, including time and metric units to metric units of length, area and volume and capacity e.g. $1\text{ml} = 1\text{cm}^3$;
- Make sensible estimates of a range of measures in everyday settings;

Perimeter Revision guide page 79

- Measure shapes to find perimeters and areas using a range of scales;
- Find the perimeter of
 - rectangles and triangles;
 - parallelograms and trapezia;
 - compound shapes;

Area Revision guide pages 80-81

- Recall and use the formulae for the area of a triangle and rectangle;
- Find the area of a trapezium and recall the formula;
- Find the area of a parallelogram;
- Calculate areas and perimeters of compound shapes made from triangles and rectangles;
- Estimate surface areas by rounding measurements to 1 significant figure;
- Find the surface area of a prism;
- Find surface area using rectangles and triangles

Volume Revision guide pages 82-85

- Identify and name common solids: cube, cuboid, cylinder, prism, pyramid, sphere and cone;
- Sketch nets of cuboids and prisms;
- Recall and use the formula for the volume of a cuboid;
- Find the volume of a prism, including a triangular prism, cube and cuboid;
- Calculate volumes of right prisms and shapes made from cubes and cuboids;
- Estimate volumes etc by rounding measurements to 1 significant figure

Real life graphs Revision guide page 40

- Use input/output diagrams;
- Draw, label and scale axes;
- Use axes and coordinates to specify points in all four quadrants in 2D;
- Identify points with given coordinates and coordinates of a given point in all four quadrants;
- Find the coordinates of points identified by geometrical information in 2D (all four quadrants);
- Find the coordinates of the midpoint of a line segment; Read values from straight-line graphs for real-life situations;
- Draw straight line graphs for real-life situations, including ready reckoner graphs, conversion graphs, fuel bills graphs, fixed charge and cost per unit;
- Draw distance–time graphs and velocity–time graphs;
- Work out time intervals for graph scales;
- Interpret distance–time graphs, and calculate: the speed of individual sections, total distance and total time;
- Interpret information presented in a range of linear and non-linear graphs;
- Interpret graphs with negative values on axes;
- Interpret gradient as the rate of change in distance–time and speed–time graphs, graphs of containers filling and emptying, and unit price graphs.

Linear Graphs Revision guide pages 37-39

- Use function machines to find coordinates (i.e. given the input x , find the output y);
- Plot and draw graphs of $y = a$, $x = a$, $y = x$ and $y = -x$;
- Recognise straight-line graphs parallel to the axes;
- Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs in the coordinate plane;

- Plot and draw graphs of straight lines of the form $y = mx + c$ using a table of values;
- Sketch a graph of a linear function, using the gradient and y-intercept;
- Identify and interpret gradient from an equation $y = mx + c$;
- Identify parallel lines from their equations;
- Plot and draw graphs of straight lines in the form $ax + by = c$;
- Find the equation of a straight line from a graph;
- Find the equation of the line through one point with a given gradient;
- Find approximate solutions to a linear equation from a graph;
- Find the gradient of a straight line from real-life graphs too.

Transformations Revision guide pages 86-89

- Understand clockwise and anticlockwise;
- Understand that rotations are specified by a centre, an angle and a direction of rotation;
- Find the centre of rotation, angle and direction of rotation and describe rotations;
- Describe a rotation fully using the angle, direction of turn, and centre;
- Rotate a shape about the origin or any other point on a coordinate grid;
- Draw the position of a shape after rotation about a centre (not on a coordinate grid);
- Identify correct rotations from a choice of diagrams;
- Understand that translations are specified by a distance and direction using a vector;
- Translate a given shape by a vector;
- Describe and transform 2D shapes using single translations on a coordinate grid;
- Use column vectors to describe translations;
- Understand that distances and angles are preserved under rotations and translations, so that any figure is congruent under either of these transformations
- Understand that reflections are specified by a mirror line;
- Identify correct reflections from a choice of diagrams;
- Understand that reflections are specified by a mirror line;
- Identify the equation of a line of symmetry;
- Transform 2D shapes using single reflections (including those not on coordinate grids) with vertical, horizontal and diagonal mirror lines;
- Describe reflections on a coordinate grid;
- Scale a shape on a grid (without a centre specified);
- Understand that an enlargement is specified by a centre and a scale factor;
- Enlarge a given shape using (0, 0) as the centre of enlargement, and enlarge shapes with a centre other than (0, 0);
- Find the centre of enlargement by drawing;
- Describe and transform 2D shapes using enlargements by:
 - a positive integer scale factor;
 - a fractional scale factor;
- Identify the scale factor of an enlargement of a shape as the ratio of the lengths of two corresponding sides, simple integer scale factors, or simple fractions;
- Understand that distances and angles are preserved under reflections, so that any figure is congruent under this transformation;
- Understand that similar shapes are enlargements of each other and angles are preserved – define similar in this unit

Ratio Revision guide pages 59-60

- Understand and express the division of a quantity into a of number parts as a ratio;
- Write ratios in their simplest form;
- Write/interpret a ratio to describe a situation;
- Share a quantity in a given ratio including three-part ratios;
- Solve a ratio problem in context:
- use a ratio to find one quantity when the other is known;

- use a ratio to compare a scale model to a real-life object;
- use a ratio to convert between measures and currencies;
- problems involving mixing, e.g. paint colours, cement and drawn conclusions;
- Compare ratios;
- Write ratios in form $1 : m$ or $m : 1$;
- Write a ratio as a fraction;
- Write a ratio as a linear function;
- Write lengths, areas and volumes of two shapes as ratios in simplest form;
- Express a multiplicative relationship between two quantities as a ratio or a fraction.

Proportion Revision guide pages 67-68

- Understand and use proportion as equality of ratios;
- Solve word problems involving direct and inverse proportion;
- Work out which product is the better buy;
- Scale up recipes;
- Convert between currencies;
- Find amounts for 3 people when amount for 1 given;
- Solve proportion problems using the unitary method;
- Recognise when values are in direct proportion by reference to the graph form;
- Understand inverse proportion: as x increases, y decreases (inverse graphs done in later unit);
- Recognise when values are in direct proportion by reference to the graph form;
- Understand direct proportion \rightarrow relationship $y = kx$.

Pythagoras Theorem Revision guide page 90

- Understand, recall and use Pythagoras' Theorem in 2D, including leaving answers in surd form;
- Given 3 sides of a triangle, justify if it is right-angled or not;
- Calculate the length of the hypotenuse in a right-angled triangle, including decimal lengths and a range of units;
- Find the length of a shorter side in a right-angled triangle;
- Apply Pythagoras' Theorem with a triangle drawn on a coordinate grid;
- Calculate the length of a line segment AB given pairs of points;

Probability Revision guide pages 128-133

- Distinguish between events which are impossible, unlikely, even chance, likely, and certain to occur;
- Mark events and/or probabilities on a probability scale of 0 to 1;
- Write probabilities in words or fractions, decimals and percentages;
- Find the probability of an event happening using theoretical probability;
- Use theoretical models to include outcomes using dice, spinners, coins;
- List all outcomes for single events systematically;
- Work out probabilities from frequency tables;
- Work out probabilities from two-way tables;
- Record outcomes of probability experiments in tables;
- Add simple probabilities;
- Identify different mutually exclusive outcomes and know that the sum of the probabilities of all outcomes is 1;
- Using $1 - p$ as the probability of an event not occurring where p is the probability of the event occurring;
- Find a missing probability from a list or table including algebraic terms.
- Find the probability of an event happening using relative frequency;
- Estimate the number of times an event will occur, given the probability and the number of trials – for both experimental and theoretical probabilities;
- List all outcomes for combined events systematically;

- Use and draw sample space diagrams;
- Work out probabilities from Venn diagrams to represent real-life situations and also 'abstract' sets of numbers/values;
- Use union and intersection notation;
- Compare experimental data and theoretical probabilities;
- Compare relative frequencies from samples of different sizes;
- Find the probability of successive events, such as several throws of a single dice;
- Use tree diagrams to calculate the probability of two independent events;
- Use tree diagrams to calculate the probability of two dependent events.

Multiplicative Reasoning Revision guide pages 64-66

Understand and use compound measures:

density; pressure; speed:

- convert between metric speed measures;
- read values in km/h and mph from a speedometer;
- calculate average speed, distance, time – in miles per hour as well as metric measures;
- use kinematics formulae to calculate speed, acceleration (with formula provided and variables defined in the question);
- change d/t in m/s to a formula in km/h, i.e. $d/t \times (60 \times 60)/1000$ – with support;
- Express a given number as a percentage of another number in more complex situations;
- Calculate percentage profit or loss;
- Make calculations involving repeated percentage change, not using the formula;
- Find the original amount given the final amount after a percentage increase or decrease;
- Use compound interest;
- Use a variety of measures in ratio and proportion problems:
 - currency conversion; rates of pay; best value;
- Set up, solve and interpret the answers in growth and decay problems;
- Understand that X is inversely proportional to Y is equivalent to X is proportional to $\frac{1}{Y}$;
- Interpret equations that describe direct and inverse proportion.

Plans and Elevations Revision guide pages 95-97

Understand clockwise and anticlockwise;

- Draw circles and arcs to a given radius or given the diameter;
- Measure and draw lines, to the nearest mm;
- Measure and draw angles, to the nearest degree;
- Know and use compass directions;
- Draw sketches of 3D solids;
- Know the terms face, edge and vertex;
- Identify and sketch planes of symmetry of 3D solids;
- Make accurate drawings of triangles and other 2D shapes using a ruler and a protractor;
- Construct diagrams of everyday 2D situations involving rectangles, triangles, perpendicular and parallel lines;
- Understand and draw front and side elevations and plans of shapes made from simple solids;
- Given the front and side elevations and the plan of a solid, draw a sketch of the 3D solid.

Constructions Revision guide pages 99-100

- Understand congruence, as two shapes that are the same size and shape;
- Visually identify shapes which are congruent;
- Use straight edge and a pair of compasses to do standard constructions:
- understand, from the experience of constructing them, that triangles satisfying SSS, SAS, ASA and RHS are unique, but SSA triangles are not;
- construct the perpendicular bisector of a given line;
- construct the perpendicular from a point to a line;

- construct the bisector of a given angle;
- construct angles of 90° , 45° ;
- Draw and construct diagrams from given instructions, including the following:
 - a region bounded by a circle and an intersecting line;
 - a given distance from a point and a given distance from a line;
 - equal distances from two points or two line segments;
 - regions may be defined by 'nearer to' or 'greater than';
- Find and describe regions satisfying a combination of loci;
- Use constructions to solve loci problems (2D only);
- Use and interpret maps and scale drawings;
- Estimate lengths using a scale diagram;
- Make an accurate scale drawing from a diagram;

Trigonometry Revision guide pages 92-94

- Understand, use and recall the trigonometric ratios sine, cosine and tan, and apply them to find angles and lengths in general triangles in 2D figures;
- Use the trigonometric ratios to solve 2D problems;
- Find angles of elevation and depression;

Quadratic and other Graphs Revision guide pages 44-45, 48

- Generate points and plot graphs of simple quadratic functions, then more general quadratic functions;
- Identify the line of symmetry of a quadratic graph;
- Find approximate solutions to quadratic equations using a graph;
- Interpret graphs of quadratic functions from real-life problems;
- Identify and interpret roots, intercepts and turning points of quadratic graphs.
- Find roots of a quadratic algebraically by factorisation
- Find roots of a quadratic algebraically by factorisation – with rearrangement needed

Vectors Revision guide page 112

- Understand and use column notation in relation to vectors;
- Be able to represent information graphically given column vectors;
- describe translations as 2d vectors, translate a given shape by a vector
- Identify two column vectors which are parallel;
- Calculate using column vectors, and represent graphically, the sum of two vectors, the difference of two vectors and a scalar multiple of a vector.
- Add and subtract column vectors, multiply vectors by a scalar

Total Marks

240 Marks

Available

Grade Boundaries

	9	8	7	6	5	4	3	2	1	U
Higher	202	170	139	109	79	50	35			
	84%	71%	58%	45%	33%	21%	15%			
Foundation					169	136	101	66	31	
					70%	57%	42%	28%	13%	

Year 11 Assessment Manifests 2019

Science - Biology

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Trilogy Biology (Combined Science) Biology (Separate Science)
Structure and timing of the examination	Trilogy Biology (Combined Science) 75 minutes written paper comprising short and longer answer questions. Biology (Triple Science) 105 minute written paper comprising short and longer answer questions.
What content / topics do I need to know?	B5 Homeostasis and Response B6 Inheritance, Variation and Evolution, B7 Ecology
To achieve a grade 5 I must be able to ...	<ul style="list-style-type: none"> •demonstrate mostly accurate and appropriate knowledge and understanding and apply these mostly correctly to familiar and unfamiliar contexts, using mostly accurate scientific terminology •use appropriate mathematical skills to perform multi-step calculations •analyse qualitative and quantitative data to draw plausible conclusions supported by some evidence •evaluate methodologies to suggest improvements to experimental methods, and comment on scientific conclusions
What pages in the revision guides should I focus on?	Double BBC Bitesize GCSE Combined Science AQA Trilogy (https://www.bbc.com/bitesize/examspecs/z8r997h) Triple BBC Bitesize GCSE Biology AQA (https://www.bbc.com/bitesize/examspecs/zpgcbk7) Knowledge Organisers sections B5,B6 and B7. These will be on SMHW. CGP Revision Guides Sections B5, B6, and B7.
Total marks available for the paper.	Trilogy Biology 70 marks Biology 100 marks



Year 11 Assessment Manifests 2019

Science - Chemistry

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Trilogy Chemistry (Combined Science) Chemistry (Separate Science)
Structure and timing of the examination	Trilogy Chemistry (Combined Science) 75 minutes written paper comprising short and longer answer questions. Chemistry (Triple Science) 105 minute written paper comprising short and longer answer questions.
What content / topics do I need to know?	C6 The rate and extent of Chemical Change, C7 Organic Chemistry, C8 Chemical Analysis, C9 Chemistry of the Atmosphere and C10 Earth's Resources.
To achieve a grade 5 I must be able to ...	<ul style="list-style-type: none">•demonstrate mostly accurate and appropriate knowledge and understanding and apply these mostly correctly to familiar and unfamiliar contexts, using mostly accurate scientific terminology•use appropriate mathematical skills to perform multi-step calculations•analyse qualitative and quantitative data to draw plausible conclusions supported by some evidence•evaluate methodologies to suggest improvements to experimental methods, and comment on scientific conclusions
What pages in the revision guides should I focus on?	Double BBC Bitesize GCSE Combined Science AQA Trilogy (https://www.bbc.com/bitesize/topics/z88jjty) Triple BBC Bitesize GCSE Chemistry AQA (https://www.bbc.com/bitesize/examspecs/z8xtmnb) Knowledge Organisers sections C6, C7, C8, C9 and C10. These will be on SMHW. CGP Revision Guides Sections C6, C7, C8, C9 and C10.
Total marks available for the paper.	Trilogy Chemistry 70 marks Chemistry 100 marks



Year 11 Assessment Manifests 2018/2019

Science - Physics

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Trilogy Physics (Combined Science) Physics (Separate Science)
Structure and timing of the examination	Trilogy Physics (Combined Science) 75 minutes written paper comprising short and longer answer questions. Physics (Triple Science) 105 minute written paper comprising short and longer answer questions.
What content / topics do I need to know?	P5 Forces, P6 Waves, P7 Magnetism and Electromagnetism <i>P8 Space (Triple only)</i>
To achieve a grade 5 I must be able to ...	<ul style="list-style-type: none"> •demonstrate mostly accurate and appropriate knowledge and understanding and apply these mostly correctly to familiar and unfamiliar contexts, using mostly accurate scientific terminology •use appropriate mathematical skills to perform multi-step calculations •analyse qualitative and quantitative data to draw plausible conclusions supported by some evidence •evaluate methodologies to suggest improvements to experimental methods, and comment on scientific conclusions
What pages in the revision guides should I focus on?	Double BBC Bitesize GCSE Combined Science AQA Trilogy (https://www.bbc.com/bitesize/topics/zqw77p3) Triple BBC Bitesize GCSE Physics AQA (https://www.bbc.com/bitesize/examspecs/zsc9rdm) Knowledge Organisers sections P5, P6, P7, P8 (triple only). These will be on SMHW. CGP Revision Guides Sections P5, P6, P7, P8 (triple only).
Total marks available for the paper.	Trilogy Physics 70 marks Physics 100 marks



Year 11 Assessment Manifests 2018/2019

Geography

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Paper 1 – Living with the Physical Environment Paper 2 – Challenges in the Human Environment
Structure and timing of the examination	2x 90 minute examination paper In total 70% of the final grade Mixture of multiple choice, short and extended answer questions Section A – Answer all Section B - Answer all Section C – Choose the correct modules (rivers and coasts on paper 1) (water on paper 2)
What content / topics do I need to know?	<p><u>Natural Hazards - Tectonic Hazards</u></p> <ul style="list-style-type: none"> • What are natural hazards? What factors affect hazard risk? • How are tectonic hazards distributed around the world? • Understand the different plate margins. What processes and hazards occur at each one? (constructive, destructive, collision, conservative). • Learn in detail a case study of an earthquake in a HIC (Christchurch, NZ, 2011) <ul style="list-style-type: none"> ○ Effects of the earthquake (primary and secondary) ○ Responses to the earthquake (immediate and long term) • Learn in detail a case study of an earthquake in a LIC (Haiti, 2010) <ul style="list-style-type: none"> ○ Effects of the earthquake (primary and secondary) ○ Responses to the earthquake (immediate and long term) • Why are hazards often more serious in LICs? • Why do people live in hazardous areas? (e.g. geothermal energy, fertile soils etc) • Reducing the risk from tectonic hazards. (MPPP - Monitoring, Prediction, Protection, Planning). <p><u>Weather hazards:</u></p> <ul style="list-style-type: none"> • Learn the Global Atmospheric Circulation Model • Understand where and how tropical storms are formed. • Learn the structure and features of tropical storms. • Learn in detail a case study of a tropical storm. (Typhoon Haiyan, Philippines 2013). <ul style="list-style-type: none"> ○ Effects of the storm (primary and secondary) ○ Responses to the storm (immediate and long term) • Understand how the effects of tropical storms can be reduced (MPPP) • Understand how the UK can be affected by extreme weather events. • Learn in detail a case study of extreme weather in the UK (Somerset Levels flooding 2014). <ul style="list-style-type: none"> ○ Causes of the floods ○ Impacts of the floods ○ Immediate and long term responses to the floods. • Learn the different types of evidence for climate change.



- Understand the causes of climate change (natural causes and human causes).
- Understand how humans can reduce the causes of climate change (mitigation).
- Understand how humans can deal with the problems caused by climate change (adaptation).

The Living World

- Be able to describe a small scale ecosystem (Seahaven Pond).
- Understand how changes can affect small scale ecosystems. (e.g. nutrient cycle, food chain).
- Be able to describe global ecosystems or biomes.

Tropical Rainforests:

- Learn the characteristics of the tropical rainforest biome. (e.g. climate, distribution).
- Learn in detail a case study of tropical rainforest (The Amazon)
 - Causes of deforestation
 - Impacts of deforestation
- Understand how tropical rainforests can be managed sustainably so that they are protected for the future.

Hot deserts

- Learn the characteristics of the hot desert biome.
- Learn in detail a case study of a hot desert (Thar Desert)
 - What opportunities are there for development in the Thar Desert?
 - What challenges are there in the Thar Desert?
- Understand the process of desertification.
- How can desertification be reduced in hot deserts?

Physical landscapes in the UK (coasts and rivers)

Coasts

- Be able to describe the differences between constructive and destructive waves.
- Understand the processes of weathering and how it can cause mass movement.
- Learn the different types of erosion (solution, abrasion, attrition, hydraulic action).
- Understand how erosion can lead to different landforms. (e.g. stack, wave cut platform, headland etc)
- Be able to describe how material is transported by the sea.
- Understand longshore drift and be able to draw a diagram of this process.
- Understand how deposition can lead to different landforms. (e.g. spit, bar, beach).
- Learn a case study of a coastal area and its different landforms. (Swanage, Dorset)
- Understand the different strategies of managing coasts and protecting areas from erosion (hard engineering, soft engineering and managed retreat).
- Learn a case study of coastal management (Eastbourne).

Rivers

- Understand how river valleys change downstream.
- Understand how erosion from the river creates different landforms. (e.g. waterfall)
- Learn how material can be transported down a river.
- Understand how deposition can cause landforms. (e.g. levees)
- Understand what factors can cause flooding.
- Understand how hard engineering and soft engineering can defend against flooding.
- Learn a case study of how flooding can be managed (Somerset Levels)

Paper 2 –

Urban Issues and Challenges

- Understand what Urbanisation is and where it is occurring. Understand why urbanisation is occurring faster in NEEs and LICs.
- Know what a Megacity is and the different types of Megacities. Know why most Megacities are growing faster in LICs and NEEs.
- Learn in detail Rio de Janeiro as your case study for a city in a NEE.
 - Why has Rio grown? Where have the migrants come from?
 - What are the social challenges in Rio? E.g. health care, education, water and energy supplies.
 - What are the economic challenges in Rio? E.g. unemployment, inequalities between rich and poor areas, crime.
 - What are the environmental problems and how can they be improved? E.g. traffic congestion, water pollution, waste pollution.
 - What are squatter settlements and why have they grown? How are they being improved?
 - Learn your case study for how urban planning is improving the quality of life for the urban poor. (Favela Bairro Project).

The Changing Economic World

- Be able to explain how development of countries is measured using a variety of development indicators such as birth rate, GNI per capita.
- Explain why combining indicators such as Human Development Index (HDI) is an accurate way of measuring development.
- Learn the Demographic Transition Model (DTM) and what stages different countries are at.
- Understand how population pyramids can show the population structure of countries and describe the differences between LICs and HICs.
- Understand the causes of uneven development. Why are some countries rich and some poor. e.g:
 - Historical reasons – colonialism
 - Economic reasons – unfair trade
 - Physical causes – e.g. extreme climate, landlocked countries.
- Explain how uneven development can lead to migration.
 - Economic migration – Poland to UK.
 - Forced migration from conflict – Syria to Germany
- Understand the different strategies that can be used to reduce the development gap.
 - Foreign investment (FDI) and Trans National Corporations (TNCs)
 - Industrialisation
 - Fair Trade
 - Aid and intermediate technology (Goat Aid)
 - Microfinance loans
 - Tourism (Kenya)
- Understand how an NEE is developing and the issues and challenges this brings. (India)
 - How has India changed as it develops?
 - Are TNCs good for India? (Unilever)
 - Is Aid good for India?
 - Has development caused environmental issues in India?
- Understand how the UK economy is changing:
 - What changes have happened in the UK economy?
 - How has deindustrialisation led to a North-South divide?
 - How can the North-South Divide be reduced?



	<ul style="list-style-type: none"> ○ Has development caused environmental issues in the UK? ○ How has transport in the UK changed? ○ How is the UK connected to the rest of the world? <p><u>The Challenge of Resource Management</u></p> <ul style="list-style-type: none"> • Understand how resources are unevenly distributed across the world and how this causes social and economic impacts. • UK resources: <ul style="list-style-type: none"> ○ Understand how water is distributed across the UK and what is done to help areas with water deficits. ○ Understand how food is produced in the UK and the carbon footprint of our imports. ○ Learn how the UK produces its energy and how much comes from renewable sources. • Global resources – water <ul style="list-style-type: none"> ○ Understand how the demand for water varies around the world and why it is rising. ○ Consider how more water can be supplied to areas with water insecurity. ○ Understand how water can be sourced in sustainable ways. E.g. conservation and recycling of water. ○ Learn two examples of how water supply can be increased to areas in need. <ul style="list-style-type: none"> ▪ Large scale scheme = China transferring water from the South to the North. ▪ Small scale scheme = Artificial Glaciers in the Indian Himalayas.
To achieve a grade 5 I must be able to ...	<ul style="list-style-type: none"> • Demonstrate mostly accurate and appropriate knowledge, understanding and application of geographical information and issues • Demonstrate clear understanding of interactions and interrelationships between people and the environment and between geographical phenomena • Construct coherent arguments to draw conclusions supported by evidence (make points and develop) • Use a range of geographical skills and techniques accurately, showing understanding of their purpose
What pages in the revision guides should I focus on?	<p>Paper 1 - Pages 2-57 in green CGP revision book (not 32-36).</p> <p>Paper 2 – Pages 67-105 (not 94-99) in green CGP revision book.</p>
Total marks available for the paper.	<p>Paper 1 – 1hr30 exam paper</p> <p>Paper 2 – 1hr30 exam paper</p>



Assessment Manifests 2018/2019

History

Year Group	Year 11
Date of Assessment	PPE Examination Window
Title of Assessment	Mock Exams
Structure and timing of the examination	<p>Medicine - Thursday 14th March 10:40am 1 hour 15 minutes (30% of overall GCSE grade)</p> <p>Cold War/Elizabeth – Wednesday 20th March 8:30am 1 hour 45 minutes – 64 marks (40% of overall GCSE grade)</p> <p>Germany – Thursday 21st March 8:30am 1 hour 20 minutes (30% of overall GCSE grade)</p>
What content / topics do I need to know?	<p><u>Knowledge</u></p> <p><u>Paper 1 – Thursday 14th March</u></p> <p>You will need to revise all 5 of the Medicine units:</p> <p>Medieval medicine</p> <p>Renaissance medicine</p> <p>Early modern medicine</p> <p>Modern medicine</p> <p>Medicine in the trenches of the Western Front 1914-18</p> <p><u>Paper 2 – Wednesday 20th March</u></p> <p>You will need to revise each of the 3 units for both Elizabeth and the Cold War:</p> <p><u>Elizabeth:</u></p> <p>Queen, government and religion, 1555-69</p> <p>Challenges to Elizabeth at home and abroad, 1569-88</p> <p>Elizabethan society in the Age of Exploration, 1558-88</p> <p><u>The Cold War:</u></p> <p>The origins of the Cold War, 1941-58</p> <p>Cold War crisis, 1958-70</p> <p>The end of the Cold War crisis, 1970-91</p>



Paper 3 – Thursday 21st March

You will need to revise all 4 of the units for the Germany paper:

The Weimar Republic, 1918-29

Hitler's Rise to power, 1919-33

Nazi control and dictatorship

Life in Nazi Germany, 1933-39

To achieve well
in the
assessment I
should be able
to

You will be assessed on the following skills:

AO1: Show that you have **knowledge** and understanding of the topics. For example, 4 mark 'describe two features of...' question.

AO2: **Explain** and analyse historical events. For example, 12 mark 'explain why...' question.

AO3: Analyse **sources** and make judgements on their usefulness. For example, 8 mark usefulness of a source question)

AO4: Analyse **interpretations** and evaluate their judgement. For example, 4 mark 'What is the difference between these views?' 4 mark 'Suggest one reason why interpretation X and Y give different views about...' and 16 mark 'How far do you agree with Interpretation X/Y about...?'

Success criteria:

Level 7

AO1: You can include accurate and precisely selected historical knowledge to support your answers.

AO2: You can explain historical events with in-depth analysis and you can show an understanding of historical linkage (how one event led to the next).

AO3: Analysis is focused on the enquiry and contextual knowledge is used to assess usefulness of the source content

AO4: Detailed evaluation of different interpretations, showing a clear understanding of their differences. Relevant and precisely selected contextual knowledge.

Level 4

AO1: You include relevant information in your answers.

AO2: You can explain historical events using some analysis.

AO3: General comments about the usefulness of the source with reference made to the content of the source.

AO4: You can make general comments about the interpretations and support them with some contextual knowledge.



What resources should I use to help prepare for the assessment?	<p>You will need to use your books to revise, paying particular attention to feedback you have received for practice exam questions. You will also need to revise in depth from you books and your revision resources you have made for factual knowledge. Use your resources and your books to test yourself.</p> <p>The Medicine, Cold War, Elizabeth and Germany Pearson EDEXCEL revision guides will be relevant for these mocks. Pay attention to the condensed knowledge sections as well as the skills sections at the back of each books. These books can still be purchased from Mr Newnham-Reeve.</p>
Total marks available for the assessment.	<p>Medicine – 52 marks available</p> <p>Cold War/Elizabeth – 64 marks available</p> <p>Germany – 52 marks available</p>



Year 11 Assessment Manifests 2018/2019

French

Year Group	11 French	
Date of Assessment	PPE Examination Window	
Title of Assessment	Foundation Listening, Reading and Writing GCSE papers Foundation Speaking tests	
Structure and timing of the examination	Speaking 20 min slots/ Listening 35 mins Reading 45 mins / Writing 1 hr	
What content / topics do I need to know?	Topics covered in the exam, by theme and Mod number: 1.1 Relationships with family and friends 1.1 Marriage and partnership 1.2 Social media 1.2 Mobile technology 1.2 Music, cinema and TV 1.2 Sport 1.3 Food and eating out 1.3 France and customs 1.3 Francophone festivals 2.4 House and home	2.4 Where I live 2.5 Holidays and travel 2.5 Regions of France 2.8 Charity and voluntary work 2.6 Healthy and unhealthy living 2.8 Environment 2.8 Poverty and Homelessness 3.6 School and subjects 3.6 Life at school and college 3.7 University or work 3.7 Choice of career
To achieve a grade 5 I must be able to ...	Students can write and speak with reasonable accuracy using at least two tenses and giving simple opinions and justifications. Students can also understand short written and spoken passages on familiar topics and work out the gist of unfamiliar extracts.	
What pages in the revision guides should I focus on?	Topic- based vocabulary book AQA Revision Guides 9-1 workbook General conversation speaking booklet (completed during lessons)	
Total marks available for the paper.	Speaking: 25% of overall GCSE Listening: 25% of overall GCSE Reading: 25% of overall GCSE Writing: 25% of overall GCSE	

Year 11 Assessment Manifests 2018/2019

GCSE Art

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Sheet 3 – A02 Experimental and developing of Ideas for Component 2, theme Reflection.
Structure and timing of the examination	Sheet 3 for Component 2 will be carried out during lessons over a 4-week period. Deadline for this sheet is the 1st April
What content / topics do I need to know?	<p>The following tasks need to be covered and presented onto an A2 or A1 black sheet.</p> <ul style="list-style-type: none"> • Use your own photos to experiment with, using Photoshop, print techniques, clay, textiles, fashion, sculpture, collage, drawings (ink, charcoal, pastels, chalk etc) or any other ideas that show a development from your previous work. • Produce 3-4 high quality experimental pieces linked to your chosen artist. (Using your own photos/images) • Evaluation– Explaining your ideas and the techniques you have used.
To achieve a grade 5 I must be able to ...	<p>Students must be:</p> <ul style="list-style-type: none"> • Competent and consistent in their ability to refine work, driven by insights gained through exploration of ideas and reflection • Competent and consistent ability to explore ideas through a process of experimentation and review • Competent and consistent ability to select and experiment with media, materials, techniques and processes appropriate to personal intention
What pages in the revision guides should I focus on?	<p>Revision Guide: BBC Bitesize GCSE Art and Design page 8-9 'Experimenting with Media'</p> <p>Sheet 3 handout (Given in lessons) with tasks and examples of pass students work.</p>
Total marks available for the paper.	<p>18 Marks can be given for Assessment Objective 2.</p> <p>Component 2- Reflection is 40% of your final grade for year 11.</p>



Year 11 Assessment Manifests 2018/2019

Design Technology

Year Group	11
Date of Assessment	<p>PPE Examination Window:</p> <ul style="list-style-type: none"> 11A: Mon 18/3/19 Lesson 5 and Tues 19/3/19 Lesson 1 11D: Weds 20/3/19 Lesson 5 and Thurs 21/3/19 Lesson 4
Title of Assessment	Unit 1: Design and Technology Exam
Structure and timing of the examination	<p>2 Hour written Exam</p> <p>Section A: Core Technical principles</p> <p>Section B: Specialist Technical principles</p> <p>Section C: Designing and Making principles</p>
What content / topics do I need to know?	<p>Section A: Core Technical principles</p> <ul style="list-style-type: none"> Power sources and Fossil fuels Forces (Compression, Shear, Tension and Torsion) Voltages of commonly used batteries Specific 'Smart Materials' which respond to specific stimuli (e.g Ultraviolet light) Input, Process, Output components in Electronic circuits Motions (Linear, Oscillating, Reciprocating and Rotary) Cams (Eccentric, Heart, Pear and Snail) and movements Rotary systems (Chain and sprocket, Crank and Slider, Gear train, Pulley and belt) Specific materials within the material groups and primary sources of these materials Properties of materials (Woods, Metals, Polymers and Cards and Boards) Reasons for reduction of CO2 emissions <p>Section B: Specialist Technical principles</p> <ul style="list-style-type: none"> Specialist finishing techniques – be prepared to explain the process and draw diagrams (e.g Spot UV finishing, Stain protection, Plastic dip coating) 'Tolerances' within designing and manufacturing CAD/CAM: <ul style="list-style-type: none"> -Reasons and advantages for using CAD/CAM -Materials used -Products produced -Specific CAM manufacturing processes (e.g. Laser cutting, CNC Routing, CNC Milling) 8 Mark QWC question: Be confident in describing the 'Five stages of a Lifecycle assessment (LCA) and evaluating how it could influence how a product is manufactured <p>Section C: Designing and Making principles</p> <ul style="list-style-type: none"> Be able to evaluate confidently the following: <ul style="list-style-type: none"> -How a product is suitable for a user -The 'Aesthetic qualities' of a product -The Ergonomics of a product Explain the term 'Design fixation' with confidence and discuss how designers could avoid it



	<ul style="list-style-type: none"> • Be able to describe and justify two tests that could be carried out on a product to ensure it is fit for purpose • Be able to explain how a Designer could reduce the negative global impact on the following factors when designing a product: <ul style="list-style-type: none"> -Deforestation -CO2 levels -Poorly paid and unsafe working conditions -Waste going to Landfill sites • Be confident in describing two ways in which designers could use information from Audio or Video recordings in their research (Interviews, Photo's, Film clips of documentaries etc) • Know the difference between Primary and Secondary sources and provide examples for each • Be confident in drawing in: <ul style="list-style-type: none"> -Isometric Projection ➤ Maths elements: <ul style="list-style-type: none"> -Analysing data -Percentages -Tessellation -Calculating wastage of materials -Calculating costings
To achieve a grade 5 I must be able to ...	<ul style="list-style-type: none"> *Answer in detail in full sentences *Use technical language with confidence *Understand a variety of key terms
What pages in the revision guides should I focus on?	<ul style="list-style-type: none"> -9-1 D&T Revision guides -Use the Index and look up the key terms and words for each section listed above (This will be explained in the lessons)
Total marks available for the paper.	100 Marks



Year 11 Assessment Manifests 2018/2019

DRAMA

Year Group	11
Date of Assessment	PERFORMANCE OF TEXTS IN PRACTICE- TUESDAY 2ND APRIL- EXTERNAL EXAMINER
Title of Assessment	Component 3: TEXTS IN PRACTICE
Structure and timing of the examination	<p>Written examination-1 hour 45 minutes: Section A- Multiple Choice- 10 minutes Section B – The Crucible- set text- 45 mins Section C – Live production- 50 mins</p> <p>Group Performance of Devised drama- 20 mins approximately- filmed on Tuesday 18th December Devising Log- approximately 2500 words</p>
What content / topics do I need to know?	<p>Students must perform 2 extracts from the same play to a visiting AQA assessor. They must contribute as a performer.</p> <p>For this component students are required to complete the following two assessment tasks:</p> <ol style="list-style-type: none"> 1. Performance of two key extracts- monologue or duologue or group- they must be fully off script- lines learned for the performance on Tuesday 2nd April 2. Complete a statement of dramatic intent
To achieve a grade 5 I must be able to ...	<p>This is a practical component in which students are assessed on their ability to create and develop ideas to communicate meaning for theatrical performance:</p> <p>PRACTICAL- TEXTS IN PRACTICE PERFORMANCE- 20 marks for each extract GRADE 7-GOOD/GRADE 4- REASONABLE- knowledge and understanding of how drama and theatre is developed and performed using vocal and physical skills to communicate character, theme, mood, atmosphere and style and genre. A good/reasonable level of creativity and imagination in the application of performance ideas</p> <p>WRITTEN- Statement of dramatic intent- approx. 150 words REVISION FOR WRITTEN EXAM</p>
What pages in the revision guides should I focus on?	AQA GCSE DRAMA –ANNIE FOX- TEXTS IN PRACTICE- pages 222-258
Total marks available for the paper.	<p>TOTAL MARKS- 40</p> <p>20% OF GCSE</p>

Year 11 Assessment Manifests 2018/2019

BTEC Music

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Unit 4 Introducing Music Composition
Structure and timing of the examination	Assignments 1 (4 extracts), 2, (2 extracts extended) & 3 (1 extended extract completed in full) must be completed.
What content / topics do I need to know?	<ol style="list-style-type: none"> 1. The Seeds: create four original ideas, lasting between 10 and 20 seconds that show different styles. The extracts must include a historical drama, a mystery, a comedy and a series with a romantic story line. Your four ideas should each reflect different themes to show off your flexibility. 2. The Roots & Shoots: choose two ideas that are different in character to develop further. You should select and use appropriate compositional techniques so that your ideas continue to meet the brief. These may include: repetition, variation, modulation, melodic transformations, instrumentation, textures. 3. The Fruits: take one of your extended ideas and complete it. Your piece should have a complete structure (eg song form/ ternary ABA) and should make use of both repetition and contrast.
To achieve a grade 5 I must be able to ...	<ol style="list-style-type: none"> Create four effective and contrasting musical ideas in response to a compositional brief that could form the basis for a composition, showing the appropriate application of at least two different starting points. Select and use melodic and harmonic techniques to develop two contrasting musical ideas into more extended compositional drafts, showing effective use of skills and techniques. Select and use appropriate musical structures effectively to develop one compositional draft into a completed composition to fulfil a given brief.
What pages in the revision guides should I focus on?	Listen to a variety of relevant musical examples for inspiration eg comedy theme tunes
Total marks available for the paper.	25%





Seahaven Academy
The best in everyone™
Part of United Learning

Year 11 Assessment Manifests 2018/2019

GCSE Art

Year Group	11 Photograohy
Date of Assessment	PPE Examination Window
Title of Assessment	Sheet 3 – A02 Experimental and developing of Ideas for Component 2, theme Reflection.
Structure and timing of the examination	Sheet 3 for Component 2 will be carried out during lessons over a 4-week period. Deadline for this sheet is the 1st April
What content / topics do I need to know?	<p>The following tasks need to be covered and presented onto an A2 or A1 black sheet.</p> <ul style="list-style-type: none"> ➤ Collect as many photographs, images etc...as possible. These must be related to your ideas and what you intend to do. You MUST include your own photos as part of this work! ➤ Produce 10-15 high quality photographs. Using photoshop to edit and manipulate in a similar style as your artists. ➤ Evaluation– Explaining your ideas and the techniques you have used. <p>This is a minimum for you to do and should be high quality. Grade 9 students would develop this further, more personally and more independently.</p>
To achieve a grade 5 I must be able to ...	<p>Students must be:</p> <ul style="list-style-type: none"> • Competent and consistent in their ability to refine work, driven by insights gained through exploration of ideas and reflection • Competent and consistent ability to explore ideas through a process of experimentation and review • Competent and consistent ability to select and experiment with media, materials, techniques and processes appropriate to personal intention
What pages in the revision guides should I focus on?	<p>Revision Guide: BBC Bitesize GCSE Art and Design page 8-9 'Experimenting with Media'</p> <p>Sheet 3 handout (Given in lessons) with tasks and examples of pass students work.</p>



Total marks
available for the
paper.

18 Marks can be given for Assessment Objective 2.
Component 2- Reflection is 40% of your final grade for year 11.



Seahaven Academy
The best in everyone™
Part of United Learning

Year 11 Assessment Manifests 2018/2019

GCSE PE

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	AP2 Theory Exams. Component 1: Applied physiology and physical training. Component 2: Health and performance.
Structure and timing of the examination	Paper 1: Applied physiology and physical training. (105 marks) Paper 2: Health and performance. (95 marks) Both papers have multiple choice questions, short answer questions (1-4 marks) and two long answer (9 mark) questions.
What content / topics do I need to know?	<p>For Component 1 Applied Physiology and Physical Training: I should be able to:</p> <p>The structure and functions of the muscular-skeletal system.</p> <p>Identify the functions of the skeleton applied to performance in physical activities and sports:</p> <p>Say how the Skelton protects vital organs; allows muscle attachment; has joints for movement; platelets; why red and white blood cells are produced. Where calcium and phosphorous are stored.</p> <p>Know the classification of bones: long (leverage); short (weight bearing); flat (protection, broad surface for muscle attachment); irregular (protection and muscle attachment). Apply these to performance in physical activities and sport.</p> <p>Identify the cranium; clavicle; scapula; five regions of vertebral column (cervical, thoracic, lumbar, sacrum, coccyx); ribs; sternum; humerus; radius; carpals; metacarpals; phalanges (in the hand); pelvis; femur; patella; tibia; fibula; tarsals; metatarsals; phalanges (in the foot) and their classification and use applied to performance</p> <p>Classify joints and talk about their range of movement: pivot (neck – atlas and axis); hinge (elbow, knee and ankle); ball and socket (hip and shoulder); condyloid (wrist); and state their impact on the range of possible movements.</p> <p>Understand the role of ligaments and tendons, and their relevance to participation in physical activity and sport.</p> <p>Classify and characterise muscle types: voluntary muscles of the skeletal system; involuntary muscles in blood vessels; cardiac muscle; forming the heart and their roles when participating in physical activity.</p>



Location and know the role of the voluntary muscular system to work with the skeleton to bring about specific movement during physical activity and sport. These include the deltoid, biceps, triceps, pectoralis major, latissimus dorsi, external obliques, hip flexor, gluteus maximus, quadriceps, hamstrings, gastrocnemius and tibialis anterior.

Know antagonistic pairs of muscles (agonist and antagonist). Explain how they create opposing movement at joints to allow physical activities. Be able to give examples (bicep/tricep)

Explain what fast twitch and slow twitch muscle fibre types (type I, type IIa and type IIx) are and how this impacts on their use in physical activities.

The structure and functions of the cardio-respiratory system

Understand the functions of the cardiovascular system applied to performance in physical activities: transport of oxygen, carbon dioxide and nutrients; clotting of open wounds; regulation of body temperature

Identify the structure of the cardiovascular system: atria; ventricles; septum; tricuspid, bicuspid and semi-lunar valves; aorta; vena cava; pulmonary artery; pulmonary vein; and their role in maintaining blood circulation during performance in physical activity and sport.

Identify the structure of arteries, capillaries and veins, and how this relates to function and importance during physical activity and sport in terms of: blood pressure; oxygenated and deoxygenated blood; and changes due to physical exercise.

Understand the mechanisms required (vasoconstriction, vasodilation) and the need for redistribution of blood (vascular shunting) during physical activities compared to when resting.

Explain the function and importance of red and white blood cells, platelets and plasma for physical activity and sport.

Identify the composition of inhaled and exhaled air and the impact of physical activity and sport on oxygen consumption and carbon dioxide production.

Explain vital capacity and tidal volume, and change in tidal volume due to physical activity and sport, and the reasons that make the change in tidal volume necessary.

Locate the main components of respiratory system (lungs, bronchi, bronchioles, alveoli, diaphragm) and the role in movement of oxygen and carbon dioxide into and out of the body.

Label the structure of alveoli to enable gas exchange and the process of gas exchange to meet the demands of varying intensities of exercise (aerobic and anaerobic).

Explain how the cardiovascular and respiratory systems work together to allow participation in physical activity and sport.

Anaerobic and aerobic exercise.

Explain the use of glucose and oxygen to release energy aerobically with the production of carbon dioxide and water; the impact of insufficient oxygen on energy release; the by-product of anaerobic respiration (lactic acid).

Justify which energy sources: fats as a fuel source for aerobic activity, carbohydrates are used as a fuel source for aerobic and anaerobic activity.

Identify short-term effects of physical activity and sport on lactate accumulation, muscle fatigue, and the relevance of this to the player/performer.

The short term effects of exercise.

Determine the short-term effects of physical activity and sport on lactate accumulation, muscle fatigue, and the relevance of this to the player/performer.

Explain how the respiratory and cardiovascular systems work together to allow participation in, and recovery from, physical activity and sport: oxygen intake into lungs; transfer to blood and transport to muscles; and removal of carbon dioxide.

Interpret graphical representations of heart rate, stroke volume and cardiac output values at rest and during exercise.

Lever systems, examples of their use in activity and the mechanical advantage they provide in movement.

Identify and explain first, second and third class levers and their use in physical activity and sport. Explain mechanical advantage and disadvantage (in relation to loads, efforts and range of movement) and their impact on sporting performance.

Planes and axes of movement.

Identify and explain movement patterns using the body planes and axes (sagittal, frontal and transverse plane and frontal, sagittal, vertical axes) Apply these to physical activities and sporting actions such as tucked or piked somersaults, twists on trampolines and cartwheels.

The principles of training and their application to personal exercise/training programmes.

Plan training using the principles of training: individual needs, specificity; progressive overload; FITT (Frequency, Intensity, Time, Type); overtraining; reversibility; thresholds of training (aerobic target zone: 60–80% and anaerobic target zone: 80%–90% calculated using Karvonen formula).

Know factors to consider when deciding the most appropriate training methods and training intensities for different physical activities and sport (fitness/sport requirements, facilities available, current level of fitness).

Understand the use of different training methods for specific components of fitness, physical activity and sport: continuous: Fartlek; circuit; interval; plyometric; weight/resistance.

Know long-term effects of aerobic and anaerobic training and exercise and the benefits to the muscular-skeletal and cardio-respiratory systems and performance.

Understand long-term training effects: able to train for longer and more intensely.

Components of fitness

Know the components of fitness and the relative importance of these components in physical activity and sport: cardiovascular fitness (aerobic endurance), strength, muscular endurance, flexibility, body composition, agility, balance, coordination, power, reaction time, and speed

Fitness testing

Know the following about fitness tests: the value of fitness testing, the purpose of specific fitness tests, the test protocols, the selection of the appropriate fitness test for components of fitness and the



rationale for selection. Collection and interpretation of data from fitness test results and analysis and evaluation of these against normative data tables. Fitness tests for specific components of fitness: cardiovascular fitness – Cooper 12 minute tests (run, swim), Harvard Step Test, strength – grip dynamometer, muscular endurance – one-minute sit-up, one-minute press-up, speed – 30m sprint, power – vertical jump, flexibility – sit and reach.

For paper 2: Component 2: Health and performance.

I should be able to:

Commercialisation of physical activity and sport:

Know the relationship between commercialisation, the media and physical activity and sport. They should understand the advantages and disadvantages of commercialisation and the media for sponsors, the sport, the player/performer, the spectator. Interpretation and analysis of graphical representation of data associated with trends in the commercialisation of physical activity and sport.

Engagement patterns of different social groups in physical activity and sport

Identify participation rates in physical activity and sports and the impact on participation rates considering the following personal factors: gender, age, socio-economic group, ethnicity, disability. The relationship between commercialisation, the media and physical activity and sport. Interpretation and analysis of graphical representation of data associated with trends in participation rates

Sporting behaviour

Write about different types of sporting behaviour: sportsmanship, gamesmanship, and the reasons for, and consequences of, deviance at elite level.

Physical, emotional and social health, fitness and well-being

Apply how increased physical ability improves health and reduces health risks, increases emotional/psychological health, improves social health impacts fitness and increases life choices. This positive impact on life choices should also be applied to drugs, alcohol and activity levels.

Consequences of a sedentary lifestyle

Define a sedentary lifestyle and identify consequences such as becoming, overweight, overfat, obese. Students should know the increased risk to long-term health, for example depression, coronary heart disease, high blood pressure, diabetes, increased risk of osteoporosis, loss of muscle tone, posture, impact on components of fitness

Energy use, diet, nutrition and hydration

Know the nutritional requirements and ratio of nutrients for a balanced diet to maintain a healthy lifestyle and optimise specific performances in physical activity and sport.



	<p>They should identify the role and importance of macronutrients (carbohydrates, proteins and fats) for performers/players in physical activities and sports, carbohydrate loading for endurance athletes, and timing of protein intake for power athletes. They should also identify the role and importance of micronutrients (vitamins and minerals), water and fibre for performers/players in physical activities and sports. Also, factors affecting optimum weight: sex, height, bone structure and muscle girth and the variation in optimum weight according to roles in specific physical activities and sports. Students should know the correct energy balance to maintain a healthy weight and how hydration for physical activity and sport impacts sports performance.</p> <p>Classification of skills (basic/ complex, open/closed)</p> <p>Classify skills, identify practice structures (massed, distributed, fixed and variable) and these to different skills.</p> <p>The use of goal setting and SMART targets.</p> <p>Explain the use of goal setting to improve and/or optimise</p> <p>Performance, explain SMART targets (specific, measurable, achievable, realistic, time-bound)</p> <p>improving and/or optimising performance. Set and reviewing targets to improve and/or optimise performance</p> <p>Guidance and feedback on performance</p> <p>List types of guidance to optimise performance (visual, verbal, manual and mechanical). Explain the advantages and disadvantages of each type of guidance and its appropriateness in a variety of sporting contexts. Know different types of feedback to optimise performance: intrinsic, extrinsic, concurrent, terminal. Finally, they should understand mental preparation such as warm up and mental rehearsal.</p>
To achieve a grade 5 I must be able to ...	<p>Grade 7: Students can Analyse and Evaluate the factors that underpin performance and involvement in physical activity and sport.</p> <p>Grade 4: Students can demonstrate knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport. They can also apply knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport.</p>
What pages in the revision guides should I focus on?	Use all of the Textbook to revise, questions can come from any of the content.



Total marks
available for the
paper.

Paper One: Applied physiology and physical training (90 marks)

Paper Two: Heath and Performance (70 marks)



Seahaven Academy
The best in everyone™
Part of United Learning

Year 11 Assessment Manifests 2018/2019

Subject: Religious Studies

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Paper 1 – Buddhism and Christianity
Structure and timing of the examination	There will be 20 questions of various marks (1,2,4,5 and 12 marks). The examination will last one hour and forty-five minutes. (105 minutes)
What content / topics do I need to know?	Buddhism – Siddhartha Gautama's life and experiences, the Eightfold Path, the Four Noble Truths. The Six Perfections, meditation, Wesak, compassion (Karuna). Christianity - original sin, Jesus' crucifixion, incarnation, God as loving. Church growth, worship, reconciliation, baptism.
To achieve a grade 5 I must be able to ...	Answer all the questions fully and provide religious references and teachings to support your answers. Also, structure the 12 mark question well by giving two sides to the argument.
What pages in the revision guides should I focus on?	Buddhism Kerboodle pages 8-74; Revision book pages 18-39 Christianity Kerboodle pages 8-64; Revision book pages 40-61
Total marks available for the paper.	108 marks (including 3 marks for SPaG for the 12 mark Buddhist beliefs question and 3 marks for the 12 mark Christianity beliefs question – 6 SPaG marks in total)



Year 11 Assessment Manifests 2018/2019

Subject: Religious Studies

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Paper 2 – the themes paper
Structure and timing of the examination	<p>Students answer the questions from the following four themes only – Theme B Religion and Life; Theme D Religion, Peace and Conflict; Theme E Religion, Crime and Punishment and Theme F Religion, Human Rights and Social Justice.</p> <p>The paper will take one hour and 45 minutes.</p>
What content / topics do I need to know?	Religion and Life – religion and eating meat, euthanasia, the afterlife, the environment. Religion, Peace and Conflict – beliefs on violent protest, nuclear weapons, terrorism, attitudes to war. Religion, Crime and Punishment – causes of crime, community service, hate crime, death penalty. Religion, Human Rights and Social Justice – social justice, wealth, racial discrimination, laws regarding human rights.
To achieve a grade 5 I must be able to ...	Answer all the questions fully by showing a clear understanding of key words and provide religious references and teachings to support your answers. Also, structure the 12 mark question well by giving two sides to the argument.
What pages in the revision guides should I focus on?	<p>Various pages from Themes B, D, E and F only in the revision guide.</p> <p>The themes sections in the Buddhist and Christianity Kerboodle may also be helpful.</p>
Total marks available for the paper.	99 marks (including 3 marks for SPaG for the 12 mark questions)



Year 11 Assessment Manifests 2018/2019

BTEC Sport

Year Group	11
Date of Assessment	PPE Examination Window
Title of Assessment	Unit One - BTEC External computer exam.
Structure and timing of the examination	<p>A one-hour computer based exam.</p> <p>Questions will be multiple choices (one mark each), short answer (1-4 marks each) and a variety of long answer (six or eight marks each) style questions. Questions will come from across the whole of the theory content that you have learnt.</p>
What content / topics do I need to know?	<p>I should be able to identify, explain and apply to sporting examples the following components:</p> <p>Topic A.1 Components of physical fitness:</p> <ul style="list-style-type: none"> ● Aerobic endurance: <ul style="list-style-type: none"> ○ Definition: The ability of the cardiorespiratory system to work efficiently, supplying nutrients and oxygen to working muscles during sustained physical activity (other names for this component are cardiorespiratory endurance, or aerobic fitness) ○ The cardiorespiratory system consists of the cardiovascular system (the circulatory system – comprising the heart, blood, and blood vessels) together with the respiratory system (lungs and airways). The cardiorespiratory system is responsible for the uptake of oxygen from the air we breathe, the transport of nutrients and oxygen around the body and the removal of waste products including carbon dioxide. ● Muscular Endurance: <ul style="list-style-type: none"> ○ Definition: The ability of the muscular system to work efficiently, where a muscle can continue contracting over a period of time against a light to moderate fixed resistance load. ● Flexibility: <ul style="list-style-type: none"> ○ Definition: Having an adequate range of motion in all joints of the body; the ability to move a joint fluidly through its complete range of movement. ● Speed: <ul style="list-style-type: none"> ○ Definition: Distance divided by the time taken. Speed is measured in metres per second (m/s). The faster an athlete runs over a given distance, the greater their speed. There are three basic types of speed: accelerative speed (sprints up to



30 metres), pure speed (sprints up to 60 metres) and speed endurance (sprints with short recovery period in-between).

- Muscular strength:
 - Definition: the maximum force (in kg or N) that can be generated by a muscle or muscle group.
- Body composition:
 - Definition: The relative ratio of fat mass to fat-free mass (vital organs, muscle, bone) in the body.

Topic A.2 Components of skill-related fitness:

- Agility:
 - Definition: The ability of a sports performer to quickly and precisely move or change direction without losing balance or time.
- Balance:
 - Definition: The ability to maintain centre of mass over a base of support. There are two types of balance: static balance and dynamic balance. A gymnast uses static balance when performing a headstand and dynamic balance to perform a cartwheel.
- Coordination:
 - Definition: The smooth flow of movement needed to perform a motor task efficiently and accurately.
- Power:
 - Definition: The product of strength and speed. This is expressed as the work done in a unit of time.
- Reaction time:
 - Definition: The time taken for a sports performer to respond to a stimulus and the initiation of their response.

Topic A.3 Students should say why fitness components are important for successful participation in given sports in terms of:

- Being able to successfully meet the physical demands of the sport in order to reach optimal performance.
- Being able to successfully meet the skill-related demands of the sport in order to reach optimal performance.
- Being able to perform efficiently.
- Giving due consideration to the type of event/position played.

Topic A.5 Students should be able to identify the basic principles of training (FITT):

- Frequency: the number of training sessions completed over a period of time, usually per week
- Intensity: how hard an individual will train
- Time: how long an individual will train for
- Type: how an individual will train by selecting a training method to improve a specific component of fitness and/or their sports performance.

Topic A.6 Additional Principles of Training:

- Progressive overload:
 - Definition: In order to progress, training needs to be demanding enough to cause the body to adapt, improving performance.
- Specificity:
 - Definition: Training should be specific to the individual's sport, activity or physical/skill-related fitness goals to be developed.
- Individual differences/needs:
 - Definition: The programme should be designed to meet individual training goals and needs.
- Adaptation:
 - Definition: How the body reacts to training loads by increasing its ability to cope with those loads
 - Adaptation Occurs during the recovery period after the training session is completed.
- Reversibility:
 - Definition: If training stops, or the intensity of training is not sufficient to cause adaptation, training effects are reversed.
- Variation: It is important to vary the training regime to avoid boredom and maintain enjoyment
- Rest and Recovery are required so that the body can recover from the training and to allow adaptation to occur

Topic B.1 Requirements for each of the following fitness training methods:

- Safe, correct use of equipment
- Safe, correct use of training technique
- Requirements for undertaking the fitness training method, including warm-up and cool down

- Application of the basic principles of training (FITT) for each fitness training method
- Linking each fitness training method to the associated health-related/skill-related component of fitness.

Topic B.2 Students should be able to state the additional requirements for each of the fitness training methods:

- Advantages/disadvantages
- Application of exercise intensity to fitness training methods
- Application of principles of training to fitness training methods
- Appropriate application of fitness training method(s) for given situation(s)
- Appropriate application of fitness training method(s) to given client needs/goals/aims/objectives.

Topic B.3 Students should be able to identify and explain different fitness training methods for:

Flexibility training:

- **Static:** There are two types of static flexibility training. Firstly active stretching, which is performed independently where the performer applies internal force to stretch and lengthen the muscle. The second is passive stretching, also known as assisted stretching, which requires the help of another person or an object such as a wall. The other person/object applies external force causing the muscle to stretch.
- **Ballistic:** This is where the performer makes fast, jerky movements through the complete range of motion, usually in the form of bobbing or bouncing. Ballistic stretching is specific to the movement pattern of the sport/activity to be performed. It needs to be undertaken with care as the technique can cause muscle soreness and strains.
- **Proprioceptive Neuromuscular Facilitation (PNF) technique:** This is used to develop mobility, strength and flexibility. The technique may be performed with the help of a partner or alternatively by using an immovable object (as resistance to inhibit movement). PNF stretches can be used in rehabilitation programmes. To perform the PNF technique with a partner, the performer should stretch the muscle to the upper limit of its range of movement and then, with the help of a partner, hold the muscle in an isometric contraction, where there is no active shortening or lengthening of the muscle, for 6–10 seconds. Then relax the muscle and with the help of a partner a static (passive) stretch is performed to enable the muscle to stretch even further. The technique inhibits the stretch reflex which occurs when a muscle is stretched to its full capability, so that an even greater stretch and range of movement can occur.

Strength, muscular endurance and power training:

- Circuit training: this is where different stations/exercises are used to develop strength, muscular endurance and power. The stations/exercises use different muscle groups to avoid fatigue.
- Free weights:
 - Use of barbells or dumb-bells to perform different types of dynamic exercises
 - Concepts to use when training for strength (low reps and high loads)
 - Concepts to use when training for endurance (high reps and low loads)
 - Order of exercises: focus on core exercises (working muscles which help to stabilise the spine and pelvis) before assistance exercises (working muscles associated with the events in a performer's specific sport, or the main exercises in a training programme if a performer is not training for a specific sport)
 - Intensity (% 1 Repetition Maximum – 1RM)
 - Training for strength endurance (50–60% 1RM and 20 reps – repetitive movements of a muscle or muscle group)
 - Training for elastic strength (75% 1RM and 12 reps – for producing movements in very close succession, like in gymnastics)
 - Training for maximum strength (90% 1RM and 6 reps – producing a single movement against a resistance/load), reps, sets, rest period.
- Plyometrics: This type of training develops sport-specific explosive power and strength. It is used by sports performers such as sprinters, hurdlers, and netball, volleyball and basketball players. Plyometric exercises need maximal force as the muscle lengthens (eccentric action) before an immediate maximal force as the muscle shortens (concentric action). Types of exercises include lunging, bounding, incline press-ups, barrier hopping and jumping. This type of training needs to be performed carefully because it can cause muscle soreness.

Aerobic endurance training:

- Continuous training: This is training at a steady pace and moderate intensity for a minimum period of 30 minutes.
- Fartlek training: This is where the intensity of training is varied by running at different speeds or over different terrain. The training is continuous with no rest period. It is important to know about other ways in which intensity of training can be increased, including the use of equipment (harness, running with weights or weighted backpack).
- Interval training: This is where the individual performs a work period followed by a rest or recovery period. Typical work time can vary from training for 30 seconds to five minutes; recovery periods can be complete rest, walking or light jogging. Typical work intervals for aerobic endurance will be around 60% maximum oxygen uptake (VO_2 max). Decrease the number of rest periods and decrease work intensity to develop aerobic endurance.
- Circuit training: This is where different stations/exercises are used to develop aerobic endurance. The station order/order of exercises is important to ensure

different muscle groups are used to avoid fatigue. The number of stations, time spent at each station, number of circuits, rest period between exercises and number of circuit sessions per week can be varied.

Speed training:

- Hollow sprints: A series of sprints separated by a 'hollow' period of jogging or walking.
- Acceleration sprints. This is where the pace is gradually increased from a standing or rolling start to jogging, then to striding, and then to a maximum sprint. Different drills can be used, such as resistance drills and hill sprints. Rest intervals of jogging or walking are used in between each repetition.
- Interval training: The individual performs a work period followed by a rest or recovery period. For speed training, the work intervals will be shorter and more intense – performed at a high intensity, close to maximum. Increase the number of rest periods and increase work intensity to develop speed.

perform exercises which alternate between upper and lower body, alternate push and pull exercises)

- Intensity (% 1 Repetition Maximum – 1RM)
- Training for strength endurance (50–60% 1RM and 20 reps – repetitive movements of a muscle or muscle group)
- Training for elastic strength (75% 1RM and 12 reps – for producing movements in very close succession, like in gymnastics)
- Training for maximum strength (90% 1RM and 6 reps – producing a single movement against a resistance/load), reps, sets, rest period.
- Plyometric: This type of training develops sport-specific explosive power and strength. It is used by sports performers such as sprinters, hurdlers, and netball, volleyball and basketball players. Plyometric exercises need maximal force as the muscle lengthens (eccentric action) before an immediate maximal force as the muscle shortens (concentric action). Types of exercises include lunging, bounding, incline press-ups, barrier hopping and jumping. This type of training needs to be performed carefully because it can cause muscle soreness.

of circuit sessions per week can be varied.

Topic C.4 Interpretation of fitness test results:

- Compare fitness test results to normative published data
- Compare fitness test results to those of peers
- Be able to draw conclusions from data results
- Be able to analyse and evaluate test results
- Be able to suggest and justify appropriate recommendations for improvements to fitness for a given purpose/situation/participant
- Be able to suggest and justify appropriate fitness training methods that could be used for a given purpose/situation/participant.



To achieve a grade 5 I must be able to ...	<p>Grading is over four categories:</p> <p>Level 1 Pass: Students can identify, match and in some cases describe key terms such as components of fitness and methods of training.</p> <p>Level 2 Pass: Students can accurately describe and in some cases explain what key concepts mean.</p> <p>Level 2 Merit: Students can analyse data and apply knowledge to detailed explanations in both short answer questions (2 marks) as well as longer answer questions (6 marks).</p> <p>Level 2 Distinction: Students can eluate and contrast in both short (4 mark) and long answer (8 mark) questions, critically evaluating the effectiveness of different concepts such as fitness tests and methods of training.</p>
What pages in the revision guides should I focus on?	Pages 1-45 in the Pearson BTEC First, Sport, Revision guide.
Total marks available for the paper.	50

