

YEAR 7–Curriculum Plan

Mathematics

The Key Stage 3 mathematics curriculum at Bradford Academy provides every student with the opportunity to build upon their prior knowledge; to challenge and extend their understanding of key concepts, whilst expanding their mathematical horizons. Throughout the year there are a plethora of projects and investigations, ranging from assignments on the Fibonacci sequence, to whole-class data surveys (see: ‘The Average Student’).

The curriculum has been designed with mastery in mind; learners begin their journey with an introduction to algebra, before moving on to a comprehensive review of number and numerical methods. We want our learners to leave Key Stage 3 with a good grasp of threshold concepts in mathematics; providing a solid foundation for Key Stage 4. To this end, there is a focus in lessons on problem solving, using ‘many methods’, and embedding reasoning skills.

In order to support their learning, there are several clubs open to Key Stage 3 students. ‘**Mathletes**’ is a logic and games based club that meets on Thursdays, 3-4pm. Students are welcome to play and build confidence with number, in an informal and fun setting. On a Monday (7.45-8.15am), the editorial team for the Maths Department newspaper meets. ‘**The BA Times**’ is published once every half term to the whole of Year 7 and 8, and is the only student-directed broadsheet in the school.

Note: Content in **bold** denotes higher (Set 1, possible Set 2) content.

AUTUMN		SPRING		SUMMER	
Algebra & Number		Geometry & Number		Statistics & Geometry	
CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:
<p>Prior to starting the scheme of work, all Year 7 students complete a two week, ‘Basic Number Recap’ – designed in order to refresh their memories after the summer, and prepare them for the first unit of work.</p> <p>Topics covered in half term 1:</p> <ul style="list-style-type: none"> Sequences (finding the rule, finding the next term, finding the Nth term) Introduction to algebra and algebraic notation Substituting into algebraic expressions 	<p><u>Year 7 students will sit a mathematics exam in their first two weeks at Bradford Academy. This will determine the set they will move into in week 3.</u></p> <p>Formative assessment is by ‘Mini Review’ every two weeks.</p> <p><i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i></p>	<p>Topics covered in half term 3:</p> <ul style="list-style-type: none"> Angle facts (angles on a straight line, around a point, in a triangle and in a quadrilateral) Properties of 2D shapes Perimeter and area (of squares, rectangles, triangles, parallelograms and trapeziums) Perimeter and area of composite shapes Solving equations involving perimeter and area Properties of 3D shapes Surface area of cubes and cuboids 	<p>Formative assessment is by ‘Mini Review’ every two weeks.</p> <p><i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i></p> <p><u>There is no summative assessment for this term.</u></p>	<p>Topics covered in half term 5:</p> <ul style="list-style-type: none"> Charts and diagrams (bar charts, pictograms, tally charts, frequency polygons) Pie charts Mean, median, mode and range Questionnaires and surveys Year 7 Project: The Average Student (students design surveys and collect data pertaining to the ‘average student’ at Bradford Academy). 	<p>Formative assessment is by ‘Mini Review’ every two weeks.</p> <p><i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i></p> <p>Learners will be assessed on all taught material in the final weeks of the Summer term.</p> <p><u>Data from the Summer examinations will be used to inform the sets for Year 8.</u></p>

<ul style="list-style-type: none"> • Collect and simplify algebraic terms • Function machines • Solving one step and two step equations • Solving equations with brackets, variables on both sides. <p>Topics covered in half term 2:</p> <ul style="list-style-type: none"> • Negative numbers (adding, subtracting, multiplying, dividing) • Formal written methods (addition, subtraction, multiplication and division) • Working with decimals (four operations, ordering) • Equivalent fractions • Working with fractions (four operations, fractions of an amount, converting between mixed and improper fractions) • Converting between fractions, decimals and percentages • Working with percentages (of an amount, increase and decrease) 	<p>Learners will be assessed on all taught toward the end of the Christmas term. This is the first opportunity for students to move sets.</p> <p>Parents/guardians will receive a report with their child's results.</p>	<ul style="list-style-type: none"> • Volume of 3D shapes (cubes, cuboids and prisms) • Coordinates (in four quadrants) • Transformations: reflection, rotation, translation <p>Topics covered in half term 4:</p> <ul style="list-style-type: none"> • Factors, multiples, primes and square numbers • Product of prime factors • Review of fractions • Ratio (writing, simplifying and sharing) • Proportional reasoning, converting units • Maps and scales 		<p>Topics covered in half term 6:</p> <ul style="list-style-type: none"> • Angles in parallel lines • Angles in polygons • Constructions • Loci • Using a calculator • Discovering Pi • Introduction to circle nomenclature • Area and circumference of circles • Pythagoras • Grid references • Compass directions 	<p>Parents/guardians will receive a report with their child's results.</p>
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YEAR 8–Curriculum Plan

Mathematics

The Key Stage 3 mathematics curriculum at Bradford Academy provides every student with the opportunity to build upon their prior knowledge; to challenge and extend their understanding of key concepts, whilst expanding their mathematical horizons. Throughout the year there are a plethora of projects and investigations, ranging from assignments on Pythagoras, to creating architectural plans for houses and gardens!

The curriculum has been designed with mastery in mind; learners reinforce their knowledge of algebra in the first two terms, and start to develop links between topics. Area and perimeter of 2D shapes is covered in geometry, for instance, and again in ‘solving equations’. We want our learners to leave Key Stage 3 with a good grasp of threshold concepts in mathematics; providing a solid foundation for Key Stage 4. To this end, there is a focus in lessons on problem solving, using ‘many methods’, and embedding reasoning skills.

In order to support their learning, there are several clubs open to Key Stage 3 students. ‘**Mathletes**’ is a logic and games based club that meets on Thursdays, 3-4pm. Students are welcome to play and build confidence with number, in an informal and fun setting. On a Monday (7.45-8.15am), the editorial team for the Maths Department newspaper meets. ‘**The BA Times**’ is published once every half term to the whole of Year 7 and 8, and is the only student-directed broadsheet in the school.

Note: Content in **bold** denotes higher (Set 1, possible Set 2) content.

AUTUMN		SPRING		SUMMER	
Algebra & Number		Geometry & Algebra		Geometry, Probability & Statistics	
CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:
Topics covered in half term 1: <ul style="list-style-type: none"> Negative numbers (adding, subtracting, multiplying, dividing) Laws of indices Substituting into algebraic expressions Simplifying algebraic terms Expanding single brackets Solving linear equations (two-step, variables on both sides, including brackets) Factorising into single brackets Rearranging simple formulae 	Formative assessment is by ‘Mini Review’ every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i> Learners will be assessed on all taught material towards the end of the Christmas term. This is the first opportunity for students to move sets.	Topics covered in half term 3: <ul style="list-style-type: none"> Recap of perimeter (of 2D shapes) Area of 2D shapes (triangle, rectangle, parallelogram, trapezium) Circle nomenclature Area and circumference of circles Area of composite shapes Volume (of cubes, cuboids and prisms). Surface area Converting units 	Formative assessment is by ‘Mini Review’ every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i> <u>There is no summative assessment for this term.</u>	Topics covered in half term 5: <ul style="list-style-type: none"> Ratio and proportion Constructions Loci Bearings Scale drawing Plans and elevations Year 8 Architect Project (creating scale drawings, plans and elevations for a garden or home, designed by them). Congruence Trigonometry 	Formative assessment is by ‘Mini Review’ every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i> Learners will be assessed on all taught material in the final weeks of the Summer term.

<ul style="list-style-type: none"> • The Nth term • Introduction to quadratic sequences (finding the nth term) • Plotting linear graphs (with and without a table of values) • Finding the equation of a line • Distance-Time graphs (interpreting and drawing) • Finding the speed from a distance-time graph <p>Topics covered in half term 2:</p> <ul style="list-style-type: none"> • Fractions (adding, subtracting, multiplying, dividing) • Converting between mixed and improper fractions • Fractions of an amount • Converting between fractions and decimals • Recurring decimals • Working with decimals (multiplying, dividing, ordering) • Percentages (of an amount, increase and decrease) • Rounding to decimal places and significant figures • Estimating • Standard form • Product of prime factors 	<p>Parents/guardians will receive a report with their child's results.</p>	<ul style="list-style-type: none"> • Pythagoras (finding the hypotenuse) • Midpoints • Transformations (reflection, rotation, translation using vectors) • Transformations: enlargements • Interior and exterior angles in polygons <p>Topics covered in half term 4:</p> <ul style="list-style-type: none"> • Expanding single brackets • Expanding double brackets (with coefficients of x larger than 1) • Review of plotting linear graphs • Review of equation of a line • Review of sequences (link to linear graphs) • Plotting quadratic graphs • Solving quadratics graphically • Factorising into double brackets • Solving quadratics by factorising (link to graphs) 		<p>Topics covered in half term 6:</p> <ul style="list-style-type: none"> • Probability • Relative frequency • Venn diagrams • Probability trees • Pie charts • Scatter graphs • Mean, median, mode and range • Frequency tables • Grouped frequency tables • Box plots • Cumulative frequency 	<p><u>Data from the Summer examinations will be used to inform the sets for Year 9.</u></p> <p>Parents/guardians will receive a report with their child's results.</p>
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YEAR 9–Curriculum Plan

Mathematics

Year 9 students at Bradford Academy start their GCSE course in Mathematics this year. The GCSE scheme of work has been designed in order for each student to achieve their full potential given different starting points building on and enhancing learning from Key Stage 3 into Year 9. Each group will have started from one of four different points from those accessing Grade 1 material to those potentially achieving a Grade 9 by the end of year 11. Year 10 students will be part of the way through their second strand this year reviewing topics already taught and enhancing learning further. We are following a spiral curriculum where content taught is repeated again later but at a higher level embedding key skills and a review of prior learning. The curriculum is designed to cover all content to give students the opportunity to match or exceed their potential target grades. Each curriculum strand follows similar curriculum objectives e.g. percentages but each class' starting point and learning objectives will be different. These key skills will be revisited and enhanced when students move onto the next strand up. There will be an emphasis on teaching core skills, embedding that content and developing those skills further to tackle difficult problem solving questions. Each class will complete 3 strands in Key Stage 4.

In order to support learning written homework is given once a week. Students have login details for Mathswatch to support learning and revision both at home and in school. Students also have opportunity to attend Maths Clinic on a Thursday (3-4pm) to address any issues they have with their learning with members of the maths team.

Exam Boards:

Foundation: WJEC

Higher: Edexcel

Note: Content in **bold** denotes higher (Set 1, possible Set 2) content.

Not all content displayed may be covered and will depend on which set the student is in and what strand of learning they are following.

AUTUMN		SPRING		SUMMER	
Term 1		Term 2		Term 3	
CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:
Topics covered in half term 1: <ul style="list-style-type: none"> • Fractions (4 operations, of shapes, of a quantity) • Percentages (Of an amount, increase/decrease, reverse, compound interest) • Co-ordinates • Linear Graphs 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i>	Topics covered in half term 3: <ul style="list-style-type: none"> • Symmetry • Recap of fractions • Enlargement • Simultaneous Equations • Re-arrange formulae • Ratio • Transformations 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the</i>	Most classes this half term will be starting the next strand up so will be re-visiting some topics taught before so will be consolidating prior learning and building on that. Topics covered in half term 5:	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material</i>

<ul style="list-style-type: none"> Angles Rounding/Estimating Probability Algebra- Collecting like terms Expanding Brackets Solving Equations (two-step, variables on both sides, including brackets) Solving inequalities Construction – Using protractors and compasses <p>Topics covered in half term 2:</p> <ul style="list-style-type: none"> Averages Types of number <ul style="list-style-type: none"> I. Factors II. Multiples III. Primes IV. Prime Factors V. LCM/HCF using prime factors Solving Equations Negative numbers Sequences <ul style="list-style-type: none"> I. Nth term II. Quadratic Sequences Circles Scatter Diagrams Pythagoras 	<p>Learners will be assessed on all taught material towards the end of the Christmas term.</p> <p>This is the first opportunity for students to move sets.</p> <p>Parents/guardians will receive a report with their child's results.</p>	<ul style="list-style-type: none"> Formulae Scales/Measurement Two Way Tables Powers <p>Topics covered in half term 4:</p> <ul style="list-style-type: none"> Area and perimeter Maps Scale Drawing Bearings Expanding double brackets Factorising quadratic Equations Vectors (2D and column) Volume (of Prisms) Surface Area (of prisms) Compound Measures <ul style="list-style-type: none"> I. Speed/Distance/Time II. Density Standard Form Trigonometry (Right angled triangles) 	<p><i>material that has been covered in previous fortnight.</i></p> <p><u>There is no summative assessment for this term.</u></p>	<ul style="list-style-type: none"> Percentages Graphs (linear and quadratic) Angles (in polygons) Circle theorems Probability <ul style="list-style-type: none"> I. Simple II. Mutually exclusive III. Probability Trees IV. Independent Events <p>Topics covered in half term 6:</p> <ul style="list-style-type: none"> Properties of shape Averages Volume (Cuboids) Standard Form Probability <ul style="list-style-type: none"> V. Simple VI. Mutually exclusive VII. Probability Trees VIII. Independent Events Solving Equations Inequalities (including solving) Enlargement (including fractional and negative) Cumulative Frequency 	<p><i>that has been covered in previous fortnight.</i></p> <p>Learners will be assessed on all taught material in June</p> <p><u>Data from the Summer examinations will be used to inform the sets for Year 10.</u></p> <p>Parents/guardians will receive a report with their child's results.</p>
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YEAR 10–Curriculum Plan

Mathematics

Year 10 students at Bradford Academy start their 2nd year of the GCSE course in Mathematics this year. The GCSE scheme of work has been designed in order for each student to achieve their full potential given different starting points building on and enhancing learning from Key Stage 3 and year 9 into Year 10. Each group will have started from one of four different points from those accessing Grade 1 material to those potentially achieving a Grade 9 by the end of year 11. Year 10 students will be part of the way through their second strand this year reviewing topics already taught and enhancing learning further. We are following a spiral curriculum where content taught is repeated again later but at a higher level embedding key skills and a review of prior learning. The curriculum is designed to cover all content to give students the opportunity to match or exceed their potential target grades. Each curriculum strand follows similar curriculum objectives e.g. percentages but each class' starting point and learning objectives will be different. These key skills will be revisited and enhanced when students move onto the next strand up. There will be an emphasis on teaching core skills, embedding that content and developing those skills further to tackle difficult problem solving questions. Each class will complete 3 strands in Key Stage 4.

In order to support learning written homework is given once a week. Students have login details for Mathswatch to support learning and revision both at home and in school. Students also have opportunity to attend Maths Clinic on a Thursday (3-4pm) to address any issues they have with their learning with members of the maths team.

Exam Boards:

Foundation: WJEC

Higher: Edexcel

Note: Content in **bold** denotes higher (Set 1, possible Set 2) content.

Not all content displayed may be covered and will depend on which set the student is in and what strand of learning they are following.

AUTUMN		SPRING		SUMMER	
Term 1		Term 2		Term 3	
CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:
Topics covered in half term 1: <ul style="list-style-type: none"> • Function Machines • 2D and 3D shape classification and properties • Circles (area and circumference) • Frequency Diagrams (Interpreting and plotting) 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i>	Topics covered in half term 3: <ul style="list-style-type: none"> • Area and Perimeter of shapes • Maps (including co-ordinates) • Scale drawing • Bearings • Vectors 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the</i>	Topics covered in half term 5: <ul style="list-style-type: none"> • Probability (including probability trees) • Estimation (using rounding to 1 significant figure) • Standard Form 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material</i>

<ul style="list-style-type: none"> Venn Diagrams Negative Numbers Sequences <ol style="list-style-type: none"> Nth Term Generating a sequence Volume of cuboids Real life graphs Ratio (Linking fractions and percentages) Decimals (adding, subtracting, multiplying and dividing) Averages Quadratic Equations <ol style="list-style-type: none"> Plotting graphs Solving Equations using graphs Scatter diagrams Pythagoras Cumulative Frequency <ol style="list-style-type: none"> 3D co-ordinates <ol style="list-style-type: none"> Finding midpoints Box plots (including comparing data sets) Similar shapes (using lengths areas and volumes and their ratio to each other) <p>Topics covered in half term 2:</p> <ul style="list-style-type: none"> Fractions Using Formulae Symmetry Enlargement (including from a centre) Pie Charts Ratio (dividing into a ratio, solving problems) Using powers Plans and elevations of 3D objects Sampling Venn Diagrams Frequency Trees Interpreting time series graphs 	<p>Learners will be assessed on all taught material towards the end of the Christmas term.</p> <p>This is the first opportunity for students to move sets.</p> <p>Parents/guardians will receive a report with their child's results.</p>	<ul style="list-style-type: none"> Ratio Proportion Units of measure (metric and imperial conversions) Standard Form Expand double brackets Factorising quadratic expressions Area, perimeter and Volume recap Areas of sectors of circles Perimeter and arc length of sectors of circles Surface area of prisms Histograms Algebraic Fractions Equations of circles Velocity time graphs <p>Most classes this half term will be starting the next strand up so will be re-visiting some topics taught before so will be consolidating prior learning and building on that. This will be the final strand taken with elements of the next one up taught where appropriate.</p> <p>Topics covered in half term 4:</p> <ul style="list-style-type: none"> Percentage increase/decrease Percentage of a quantity Compound Interest Angles in parallel lines Exterior and interior angles Linear Graphs Recurring Decimals Fractional Indices Negative Indices 3D Pythagoras Probability (including probability trees, finding the probability of two or more events) 	<p><i>material that has been covered in previous fortnight.</i></p> <p><u>There is no summative assessment for this term.</u></p>	<ul style="list-style-type: none"> Solving Equations (with one and two unknowns) Linear inequalities (including solving) Constructions (of triangles and quadrilaterals) Loci (finding the locus of a point/solving problems) Averages (including estimate of the mean from a table) Cumulative Frequency Upper/Lower Bounds Exponential Growth/Decay Circles (finding arc lengths and areas of sectors of circles) Functions (using $f(x)$, $fg(x)$ notation and solving problems) <p>Topics covered in half term 6:</p> <ul style="list-style-type: none"> Types of number (factors, multiples, primes) Finding the HCF and LCM of 2 or 3 numbers Finding the prime factors of numbers Finding the LCM and HCF for 2 numbers using prime factors Solving Equations Finding the area of a circle Finding the perimeter of a circles Quadratic Graphs Sketch cubic and reciprocal graphs Scatter Diagrams Finding correlation 3D Co-ordinates Finding the midpoint of a line Plotting box plots from <ol style="list-style-type: none"> Data A graph 	<p><i>that has been covered in previous fortnight.</i></p> <p>Learners will be assessed on all taught material in June</p> <p><u>Data from the Summer examinations will be used to inform the sets for Year 11.</u></p> <p>Parents/guardians will receive a report with their child's results.</p>
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<ul style="list-style-type: none">• Transformations (Translations, rotations and reflections)• Rearranging formulae• Simultaneous Equations• Trigonometry (Right angled triangles)• Functions (introducing f(x) notation)• Quadratic Sequences• Enlargement (including fractional and negative)				<ul style="list-style-type: none">• Simplifying surds• Performing the 4 number operations on surds• Expanding brackets with surds• Rationalising the denominator of a surd• Solving quadratic equations by<ol style="list-style-type: none">1. Factorisation2. Using the quadratic formula3. Completing the square• Finding the volume and surface areas of<ol style="list-style-type: none">1. Cones2. Spheres3. Pyramids	
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YEAR 11–Curriculum Plan

Mathematics

Year 11 students at Bradford Academy start their 3rd year of the GCSE course in Mathematics this year. The GCSE scheme of work has been designed in order for each student to achieve their full potential given different starting points building on and enhancing learning from Key Stage 3 into Year 9. Each group will have started from one of four different points from those accessing Grade 1 material to those potentially achieving a Grade 9 by the end of year 11. Year 10 students will be part of the way through their second strand this year reviewing topics already taught and enhancing learning further. We are following a spiral curriculum where content taught is repeated again later but at a higher level embedding key skills and a review of prior learning. The curriculum is designed to cover all content to give students the opportunity to match or exceed their potential target grades. Each curriculum strand follows similar curriculum objectives e.g. percentages but each class' starting point and learning objectives will be different. These key skills will be revisited and enhanced when students move onto the next strand up. There will be an emphasis on teaching core skills, embedding that content and developing those skills further to tackle difficult problem solving questions. Each class will complete 3 strands in Key Stage 4.

In order to support learning written homework is given once a week. Students have login details for Mathswatch to support learning and revision both at home and in school. Students also have opportunity to attend Maths Clinic on a Thursday (3-4pm) to address any issues they have with their learning with members of the maths team.

Exam Boards:

Foundation: WJEC

Higher: Edexcel

Note: Content in **bold** denotes higher (Set 1, possible Set 2) content.

Not all content displayed may be covered and will depend on which set the student is in and what strand of learning they are following.

AUTUMN		SPRING		SUMMER	
Term 1		Term 2		Term 3	
CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:
Topics covered in half term 1: <ul style="list-style-type: none"> • Decimals • Number Sequences including nth term • Plans and elevations of 3D shapes • Two way tables • Sampling 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the</i>	Topics covered in half term 3/4: <p>Classes will be finishing any aspects of each strand their class that has not been taught yet.</p> Each students November PPE mock papers will have been	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the</i>	Topics covered in half term 5: <p>Each students February PPE mock papers will have been analysed and teachers will be teaching diagnostically based on strengths/weaknesses of their class. There will be</p>	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material</i>

<ul style="list-style-type: none"> • Venn Diagrams • Frequency trees • Time Series Graphs • Fractions (4 operations) • Fractions of a quantity • Expressing one value as a fraction of another • Using formulae • Substitution of numbers into formulae • Translations of shapes • Rotations • Reflections • Indices • Pythagoras' Theorem • Drawing Real Life Graphs • Real life graphs • Box Plots/Comparing Data • Similar Shapes – lengths/areas and volumes • Solving linear and quadratic equations • Trigonometry • Histograms • Direct Proportion • Inverse proportion • Using graphs to solve equations • Congruency <p>Topics covered in half term 2:</p> <ul style="list-style-type: none"> • Changing the subject of a formula • Ratio • Proportion • Vectors • Simultaneous Equations • Area/Perimeter of rectangles. Triangles and other shapes. • Imperial-Metric units • Standard Form • Expanding double brackets • Factorising including quadratic equations • Volume of prisms 	<p><i>material that has been covered in previous fortnight.</i></p> <p>Learners will be sitting a PPE (mock) exam in the week beginning the 11th of November. Foundation learners will be completing 2 WJEC papers (One non-calculator and one calculator). Higher learners will complete three Edexcel papers (one non calculator, two calculator). Students will be given a grade from these exams.</p>	<p>analysed and teachers will be teaching diagnostically based on strengths/weaknesses of their class. There will be revision/review of the learning so far.</p> <p>Revision lessons will incorporate teaching using past paper questions, reviewing key topics and practising exam papers.</p>	<p><i>material that has been covered in previous fortnight.</i></p> <p>Learners will be sitting a PPE (mock) exam in the week beginning the 10th of February. Foundation learners will be completing 2 WJEC papers (One non- calculator and one calculator). Higher learners will complete three Edexcel papers (one non calculator, two calculator). Students will be given a grade from these exams.</p>	<p>revision/review of the learning so far.</p> <p>Revision lessons will incorporate teaching using past paper questions, reviewing key topics and practising exam papers.</p>	<p><i>that has been covered in previous fortnight.</i></p> <p>Learners will be sitting their GCSE exams in May/June. Foundation learners will be completing 2 WJEC papers (One non- calculator and one calculator). Higher learners will complete three Edexcel papers (one non calculator, two calculator). Students will receive their grades in August.</p>
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<ul style="list-style-type: none">• Surface area of prisms• Trigonometry• Functions• Quadratic sequences (finding and using the nth term)• Recurrence relationships and iteration• Non-linear simultaneous equations• Sine Rule• Cosine Rule• Equation of straight lines using parallel and perpendicular equations• Equation of circles• Algebraic Fractions• Algebraic proof• Trigonometric Graphs• Velocity time graphs• Vectors• Capture-recapture					
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YEAR 12/13 GCSE Resit–Curriculum Plan

Mathematics

Year 12/13 students at Bradford Academy will be resitting the GCSE exam. Grade 3 students will re-sit in November and any other students will take their exam in June. The scheme of work has been designed in order for each student to achieve their full potential given different starting points, enhancing prior learning and building confidence. Each group will have started from one of two different points from those accessing Grade 1/2 material to those achieving a Grade 3/4/5. The curriculum is designed to cover all content to give students the opportunity to improve their current grade. Each curriculum strand follows similar curriculum objectives e.g. percentages but each class' starting point and learning objectives will be different. There will be an emphasis on teaching core skills, embedding that content and developing those skills further to tackle difficult problem solving questions.

In order to support learning written homework is given once a week. Students have login details for Mathswatch to support learning and revision both at home and in school. Students also have opportunity to attend Maths Clinic on a Thursday (3-4pm) to address any issues they have with their learning with members of the maths team.

Exam Boards:

Foundation: WJEC

Not all content displayed may be covered and will depend on which set the student is in and what strand of learning they are following.

AUTUMN		SPRING		SUMMER	
Term 1		Term 2		Term 3	
CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:	CONTENT:	ASSESSMENT:
Topics covered in half term 1: <ul style="list-style-type: none"> • Percentages • Linear Graphs • Angles in shapes • Angles in parallel lines • Probability • Estimation/Rounding • Collecting like terms • Solving Equations • Solving inequalities • Constructions • Loci • Averages 	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i> Grade 3 learners will be re-sitting their exam at the beginning of November. Foundation learners will be	Topics covered in half term 3: <ul style="list-style-type: none"> • Plans and elevations • Real life graphs • Translations • Rotations • Reflections • Venn Diagrams • Frequency trees • Pie Charts • Using formulae Topics covered in half term 4:	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i> Learners will be sitting a PPE (mock) exam in the week beginning the 10th of February. Foundation learners will be	Topics covered in half term 5: <p>Each students February PPE mock papers will have been analysed and teachers will be teaching diagnostically based on strengths/weaknesses of their class. There will be revision/review of the learning so far.</p> Revision lessons will incorporate teaching using past paper questions, reviewing key topics and practising exam papers.	Formative assessment is by 'Mini Review' every two weeks. <i>Mini Reviews are small, low-stakes assessments that are designed by the class teacher. They test students on the material that has been covered in previous fortnight.</i> Learners will be sitting their GCSE exams in May/June. Foundation learners will be completing 2 WJEC papers (One

<p>Topics covered in half term 2:</p> <ul style="list-style-type: none"> • Types of number (Factors, multiples, primes) • Highest common factor • Lowest common multiple • Prime Factors • Scatter Diagrams • Area of circles • Circumference of a circle • Nth term of a sequence • Multiplying decimals • Pythagoras' Theorem 	<p>completing 2 WJEC papers (One non- calculator and one calculator). Students will be receive their grades in January.</p>	<ul style="list-style-type: none"> • Expanding brackets including quadratic • Factorising including quadratic • Area and perimeter of shapes • Volume of prisms • Surface area of prisms • Simultaneous equations 	<p>completing 2 WJEC papers (One non- calculator and one calculator). Higher learners will complete three Edexcel papers (one non calculator, two calculator). Students will be given a grade from these exams.</p>		<p>non- calculator and one calculator).</p>
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