MOOR PARK HIGH SCHOOL: CURRICULUM

Key Stage 3 Long Term Planning

Year 9 2023-2024 INTENT: AQA GCSE Mathematics 8300

Faculty Area: Mathematics (core) – Foundation

(Please note that knowledege, related skills and connections to previous learning are linked by colour coding)

Year 9	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge	Basic number Factors and multiples Angles Scale diagrams and bearings Basic Algebra	Basic fractions Coordinates and line graphs Basic decimals Rounding Collecting and representing data	Sequences Basic percentages Perimeter and area	Circumference and area Ratio and proportion Basic probability	Equations Scatter graphs	Transformations Pythagoras Theorem' 2D representation of 3D shapes
Skills	Order and calculate with integers. Recognise inverses. Estimate answers HCF, LCM, prime factorization Use angle notations. Calculate angles including related to parallel lines. Understand and use scales and bearings. Algebraic notation. Simplify. Single brackets. Factorise.	Order and calculate with fractions Read and plot coordinates in 4 quadrants Order and calculate with decimals. Understand place value. Convert from decimals to fractions Round to decimal place and significant figure. Apply limits of accuracy Read, draw and interpret a variety of charts	Know special sequences. Work out the nth term Understand percentages. Calculate percentages. Compare using percentages Identify faces, edges and vertices. Calculate perimeter. Know area formula and calculate area.	Know the parts of a circle. Know and use the formula for the areas and circumference of a circle Understand ratio notation. Divide in a given ratio Solve problems using probability. Understand and use experimental probability	Substitute into formulae. Solve simple equations Know types of correlation. Plot and interpret a scatter graph. Draw and use a line of best fit	Congruent and similar shapes. Reflections, rotations, enlargements and translations (including vector) Know and use Pythagoras' theorem Plans and elevations of 3D shapes
Connections to previous learning	Year7 Autumn Term 1 Number Skills Year8 Autumn Term 1 Number Skills Year 7 Summer 1 Lines and angles. Year 8 Spring 2 Lines and angles Year 8 Expressions and equations	Year 8 Summer 1 Calculating with fractions Year 7 Summer 1 Sequences and graphs Year 7 Autumn 2 Decimals and measure Year 8 Spring1 Decimals and ratio Year 8 Autumn 1 Statistics, graphs and charts	Year 7 Summer 1 Sequences and graphs Year 8 Summer 2 Percentages, decimals and fractions Year 8 Autumn 1 Area and volume	Year 8 Autumn term 1 Area and volume Year 7 Spring 2 Ratio and proportion Year 7 Spring 1 Probability	Year 8 Autumn 2 Expressions and equations Year 8 Autumn 2 Statistics, graphs and charts	Year 7 Summer 2 Transformations Year 8 Autumn 1 Number Year 8 Autumn 1 Area and volume
Assessment	*Skills check at the end of each unit (5 during this term)*	*Skills check at the end of each unit (5 during this term)*	*Skills check at the end of each unit (3 during this term)*	*Skills check at the end of each unit (3 during this term)*	*Skills check at the end of each unit (2 during this term)*	*Skills check at the end of each unit (3 during this term)* *End of year exam*
Homework	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet
Cultural Capital						

MOOR PARK HIGH SCHOOL: CURRICULUM

<table>
<tr><th>Literacy</th><td>Mathematical key terms for each unit.
Correct terminology used when answering questions (using standard English and full sentences)
Read and understand written questions</td><td>Mathematical key terms for each unit.
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<tr><th>CIAG</th><td colspan="2">Why Maths? – Lessons for Life - https://youtu.be/tLhcPgN1hxg</td><td colspan="2">WHY MATHS When will I ever need this? - https://youtu.be/RiPIOcmpPiI</td><td colspan="2">WHY MATHS Where will maths take you? - https://youtu.be/c0JjgoAO_wE</td></tr>
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MOOR PARK HIGH SCHOOL: CURRICULUM

Key Stage 4 Long Term Planning

Year 10 2023-2024 SYLLABUS: AQA GCSE Mathematics 8300

Curriculum Area: Mathematics (core) – Foundation

(Please note that knowlededge, related skills and connections to previous learning are linked by colour coding)

Year 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge	Standard form Calculating with percentages Measures	Statistical measures Indices Constructions and loci	Algebra – recap and extension Congruence and similarity Trigonometry	Further perimeter and area Graphs recap and extension Further circumference and area	Simultaneous equations Properties of polygons	Real life graphs Probability
Skills	Place value for large numbers. Write numbers in standard form. Percentage problems including increase/decrease, original value problems and simple interest. Limits of accuracy. Metric units to solve problems including conversions. Density and speed.	Mean, mode, median and range Positive integer powers. Calculate with powers. Use standard ruler and compass constructions and use to solve problems	Collect like terms, multiply out a single bracket and factorise. Solve equations. Write the nth term for a linear sequence. Identify congruent triangles (SSS, SAS, ASA, RHS) Know the trigonometric ratio. Use them to find sides and angles.	Identify faces, edges and vertices. Calculate perimeter. Know area formula and calculate area. Solve problems using coordinates. Equations of straight lines. Know the parts of a circle. Know and use the formula for the areas and circumference of a circle	Solve simultaneous equations. Know the properties of polygons. Calculate interior and exterior angles of polygons.	Plot graphs of real life situations and find solutions, including speed/distance graphs Understand the probability scale. Work out probabilities and solve problems. Use tree diagrams.
Connection to previous learning	Year 8 Autumn 1 Number Year 9 Spring 1 Basic percentages Year 7 Autumn 1 Decimals and measure. Year 8 Autumn 1 Area and volume	Year 8 Autumn 2 Statistics, graphs and charts Year 9 Factors and multiples Year 9 Autumn 1 Scale diagrams and bearings	Year 9 Autumn 2 Expressions and equations Year 7 Summer 2 Transformations Year 9 Summer 2 Pythagoras'	Year 9 Spring 1 Area and perimeter Year 9 Autumn 2 Coordinates and graphs Year 9 Spring 1 Area and perimeter	Year 9 Summer 1 Equations Year 9 Autumn 1 Angles	Year 9 Autumn 2 Coordinates and graphs Year 9 Spring 2 Basic probability
Assessment	*Skills check at the end of each unit (3 during this term)*	*Skills check at the end of each unit (3 during this term)* *CAP1*	*Skills check at the end of each unit (3 during this term)*	*Skills check at the end of each unit (3 during this term)*	*Skills check at the end of each unit (2 during this term)*	*Skills check at the end of each unit (2 during this term)* *End of year exam*
Homework	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet
Cultural Capital						
Literacy	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions
CIAG	Aspiring Astronaut - https://www.youtube.com/watch?v=Boi-FMB4-vs		Business Owner - https://www.youtube.com/watch?v=C7tQW5ieGHg		digital tech engineer - https://youtu.be/TWGgqmQAfvM	

MOOR PARK HIGH SCHOOL: CURRICULUM

Key Stage 4 Long Term Planning

Year 11 2023-2024 SYLLABUS: AQA GCSE Mathematics 8300

Curriculum Area: Mathematics (core) – Foundation

(Please note that knowledege, related skills and connections to previous learning are linked by colour coding)

Year 11	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Knowledge	Volume Quadratics, rearranging formula and identities	Inequalities Algebra and graphs Sketching graphs	Direct and inverse proportion Trigonometry	Solving quadratic equations Quadratic graphs Growth and decay	Vectors Exam preparation - Revision
Skills	Calculate the volume of cubes, cuboids and prisms. Expand and factorise quadratics. Simplify expressions. Use mathematical formula and change the subject. Show that algebraic expressions are equivalent.	Represent inequalities on a numbers line. Solve linear inequalities. Solve equations. Plot linear graphs. Find solutions using graphs. Recognise graphs if linear, quadratic, cubic and reciprocal functions	Solve problems using direct and inverse proportion. Interpret equations for direct and inverse proportion. Use graphs for proportion problems Know the trigonometric ratio. Use trigonometric ratios to find sides and angles. Know the exact values for 0, 30, 45, 60 and 90 degrees.	Solve quadratic equations by factorizing. Find approximate solutions from a graph. Recognise, sketch and interpret quadratic graphs. Solve growth and decay problems including compound interest.	Add and subtract vectors. Multiply a vector by a scalar. Use diagrams and column representation of vectors.
Connection to previous learning	Year 10 Spring 2 Perimeter and area Year 10 Spring 1 Algebra recap	Year 10 Spring 2 Graphs recap and extension. Year 9 summer 1 Equations. Year 10 Spring 2 Graphs recap and extension Year 10 Spring 2 Graphs recap and extension	Year 10 Spring 2 Graphs recap and extension. Year 9 Summer 2 Pythagoras' Year 10 Spring 1	Year 10 Spring 1 Algebra recap Year 11 Autumn 2 Algebra and graphs Year 10 Autumn 2 indices Year 10 Autumn 1 Calculating with percentages.	Year 9 summer 2 Transformations
Assessment	*Skills check at the end of each unit (2during this term)*	*Skills check at the end of each unit (3 during this term)* *Mock 1 CAP1*	*Skills check at the end of each unit (2 during this term)*	*Skills check at the end of each unit (3 during this term)* *Mock 2 CAP2*	*Skills check at the end of each unit (2 during this term)* *GCSE Examinations*
Homework	Revision/numeracy booklet	Revision/numeracy booklet	Revision/numeracy booklet	Revision plan	Revision plan
Cultural Capital					
Literacy	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions	Mathematical key terms for each unit. Correct terminology used when answering questions (using standard English and full sentences) Read and understand written questions
CIAG	Data Analysts - https://www.youtube.com/watch?v=yqyIYh4bKKo	Software Engineer - https://youtu.be/Q9tUUP-phCw	Film Maker - https://www.youtube.com/watch?v=C7tQW5ieGHg	Climate Scientist - https://youtu.be/HZND8Fas8Uw Mathematics KS5 taster sessions	