

MOOR PARK HIGH SCHOOL: CURRICULUM

Key Stage 4 Long Term Planning

Year 11 SYLLABUS: AQA GCSE Mathematics 8300

Curriculum Area: Mathematics (core) – Foundation

(Please note that knowledge, 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 number 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 (2 during 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
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=yqylYh4bKKo	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	