

HALF TERM 5 CURRICULUM CONTENT – Key Stage 3 Maths

Intent statement:

Preparation is the key to success. Our intent in KS3 Maths is to prepare students for their mathematical journey at school and beyond. Students experience a KS3 curriculum which supports them to gain a deeper understanding of topics and development of reasoning skills. The curriculum also aims to enable students to recall and apply key knowledge and apply a structured and logical approach to problem solving effectively. Throughout our lessons, skills are broken down into key steps and we ensure that students master each small step before moving on to the next. We then build these skills together towards the end of a topic to ensure students are able to make links between the skills and topics they have studied and so that they are able to apply them to complex problems.

Year 7

Topics	Exploring geometry	Exploring angles and symmetry of shapes
Prior knowledge / skills	<ul style="list-style-type: none"> ● Build on KS2 knowledge of measuring objects and using rulers, protractors & other measuring equipment ● Number lines and negative numbers 	Inverse operations
Key concepts / knowledge / skills covered this half term	<ul style="list-style-type: none"> ● Area as the number of squares inside a shape ● Area of rectangle, triangle, parallelogram, trapezium & simple compound shapes ● Perimeter as the total length of the boundary of a shape ● Perimeter of a rectangle & other simple polygons ● Perimeter of compound shapes made from rectangles 	<ul style="list-style-type: none"> ● Angles around a point & at a point on a straight line ● Sum of angles in a triangle ● Vertically opposite angles ● Solving angle problems using combinations of these rules ● Measuring angles using a protractor ● Use protractor & compasses to construct triangles: SSS, SAS, ASA ● Solve simple problems using compasses ● Identify reflection & rotation symmetry
Assessment	In lesson formative assessments: hinge, exit questions. Book scrutiny takes place once a half term. Retrieval topics.	
Personal Development opportunities	KS3 Maths competition taking place, all students will be entered and parents will need to complete permission forms for finalists to attend the show.	
Homework requirements	https://sites.google.com/westfield.academy/ks3maths?usp=sharing	

Year 8

Topics	Exploring geometry & measure	Exploring compound measures
Prior knowledge / skills	Angles & lines and polygons	
Key concepts / knowledge / skills covered this half term	<ul style="list-style-type: none"> • Recognise alternate, corresponding & co-interior angles • Solve geometrical problems involving parallel and intersecting lines • Draw and measure bearings to describe direction • Know and recognise the main types of quadrilateral • Know the symmetry and angle properties of different quadrilaterals & the properties of the diagonals of different quadrilaterals 	<ul style="list-style-type: none"> • Draw & recognise isometric drawings of simple solid shapes, nets of simple solid shapes & plans and elevations of simple solid shapes • Faces, edges, vertices of 3D shapes • Construct the perpendicular bisector of a line segment, the angle bisector of any angle & the perpendicular from a point to a straight line
Assessment	In lesson formative assessments: hinge, exit questions. Book scrutiny takes place once a half term. Summative assessments take place once a term (Year 8 follows the OCR Foundation curriculum). Retrieval topics.	
Personal Development opportunities	KS3 Maths competition, all students will be entered and parents will need to complete permission forms for finalists to attend the show.	
Homework requirements	https://sites.google.com/westfield.academy/ks3maths?usp=sharing	

Year 9

Topics	Numbers
Prior knowledge / skills	Decimals, fractions, ratios, unit
Key concepts / knowledge / skills covered this half term	<ul style="list-style-type: none">• Solve problems involving direct proportion, using the unitary method & using multipliers• Work with graphs of quantities that are in direct proportion• Interpret the gradient of the graph of quantities in direct proportion• Share a quantity in a given ratio• Solve a range of problems involving sharing in a ratio & problems involving simple interest• Work out percentage equivalents of simple fractions• Find one number as a percentage of another, without a calculator & with a calculator• Work out percentages and percentage changes without a calculator• Use multipliers to work out percentages and percentage changes• Express a change as a percentage change
Assessment	In lesson formative assessments: hinge, exit questions. Book scrutiny takes place once a half term. Summative assessments take place once a term (Year 9 follows the OCR Foundation curriculum). Retrieval topics.
Personal Development opportunities	KS3 Maths competition taking place every year, all students will be entered
Homework requirements	https://sites.google.com/westfield.academy/ks3maths?usp=sharing