

Time	Topic	What students should know	Mathswatch links for revision
2	<b>9.1 Coordinates</b>	<ul style="list-style-type: none"> <li>● Find the midpoint of a line segment.</li> <li>● Recognise, name and plot straight-line graphs parallel to the axes.</li> <li>● Recognise, name and plot the graphs of <math>y = x</math> and <math>y = -x</math>.</li> </ul>	<ul style="list-style-type: none"> <li>● 8 - Coordinates</li> <li>● 133 - Midpoint Of A Line On A Graph</li> <li>● 96 - Straight Line Graphs</li> </ul>
4	<b>9.2 Linear graphs</b>	<ul style="list-style-type: none"> <li>● Generate and plot coordinates from a rule.</li> <li>● Plot straight-line graphs from tables of values.</li> <li>● Draw graphs to represent relationships.</li> </ul>	<ul style="list-style-type: none"> <li>● 8 - Coordinates</li> <li>● 96 - Straight Line Graphs</li> </ul>

2	<b>9.3 Gradient</b>	<ul style="list-style-type: none"> <li>● Find the gradient of a line.</li> <li>● Identify and interpret the gradient from an equation.</li> <li>● Understand that parallel lines have the same gradient.</li> </ul>	<ul style="list-style-type: none"> <li>● 159 - Finding The Equation Of A Straight Line</li> <li>● 97 - The Gradient Of A Line</li> <li>● 96 - Straight Line Graphs</li> </ul>
4	<b>9.4 <math>y = mx + c</math></b>	<ul style="list-style-type: none"> <li>● Understand what m and c represent in <math>y = mx + c</math>.</li> <li>● Find the equations of straight-line graphs.</li> <li>● Sketch graphs given the values of m and c.</li> </ul>	<ul style="list-style-type: none"> <li>● 159 - Finding The Equation Of A Straight Line</li> <li>● 97 - The Gradient Of A Line</li> <li>● 96 - Straight Line Graphs</li> </ul>
3	<b>9.5 Real-life graphs</b>	<ul style="list-style-type: none"> <li>● Draw and interpret graphs from real data.</li> </ul>	<ul style="list-style-type: none"> <li>● 143 - Distance Time Graphs</li> </ul>
4	<b>9.6 Distance-time graphs</b>	<ul style="list-style-type: none"> <li>● Use distance–time graphs to solve problems.</li> <li>● Draw distance–time graphs.</li> <li>● Interpret rate of change graphs.</li> </ul>	<ul style="list-style-type: none"> <li>● 143 - Distance Time Graphs</li> </ul>

2	<b>9.7 More real-life graphs</b>	<ul style="list-style-type: none"> <li>• Draw and interpret a range of graphs.</li> <li>• Understand when predictions are reliable.</li> </ul>	<ul style="list-style-type: none"> <li>• 143 - Distance Time Graphs</li> </ul>
2	<b>10.1 Translation</b>	<ul style="list-style-type: none"> <li>• Translate a shape on a coordinate grid.</li> <li>• Use a column vector to describe a translation.</li> </ul>	<ul style="list-style-type: none"> <li>• 8 - Coordinates</li> <li>• 50 - Translations</li> </ul>
2	<b>10.2 Reflection</b>	<ul style="list-style-type: none"> <li>• Draw a reflection of a shape in a mirror line.</li> <li>• Draw reflections on a coordinate grid.</li> <li>• Describe reflections on a coordinate grid.</li> </ul>	<ul style="list-style-type: none"> <li>• 8 - Coordinates</li> <li>• 48 - Reflections</li> </ul>

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2	<b>10.3 Rotation</b>	<ul style="list-style-type: none"> <li>• Rotate a shape on a coordinate grid.</li> <li>• Describe a rotation.</li> </ul>	<ul style="list-style-type: none"> <li>• 8 - Coordinates</li> <li>• 49 - Rotations</li> </ul>
2	<b>10.4 Enlargement</b>	<ul style="list-style-type: none"> <li>• Enlarge a shape by a scale factor.</li> <li>• Enlarge a shape using a centre of enlargement.</li> </ul>	<ul style="list-style-type: none"> <li>• 8 - Coordinates</li> <li>• 148 - Enlargements</li> </ul>
1	<b>10.5 Describing enlargements</b>	<ul style="list-style-type: none"> <li>• Identify the scale factor of an enlargement.</li> <li>• Find the centre of enlargement.</li> <li>• Describe an enlargement.</li> </ul>	<ul style="list-style-type: none"> <li>• 8 - Coordinates</li> <li>• 148 - Enlargements</li> </ul>

2	<b>10.6 Combining transformations</b>	<ul style="list-style-type: none"> <li>Transform shapes using more than one transformation.</li> <li>Describe combined transformations of shapes on a grid.</li> </ul>	<ul style="list-style-type: none"> <li>182 - Combinations Of Transformations</li> <li>50 - Translations</li> <li>48 - Reflections</li> <li>49 - Rotations</li> <li>148 - Enlargements</li> </ul>
2	<b>11.1 Writing ratios</b>	<ul style="list-style-type: none"> <li>Use ratio notation.</li> <li>Write a ratio in its simplest form.</li> <li>Solve problems using ratios.</li> </ul>	<ul style="list-style-type: none"> <li>38 - Introduction To Ratio</li> <li>39 - Using Ratio For Recipe Questions</li> <li>106 - Sharing Using Ratio</li> <li>107 - Ratios, Fractions &amp; Graphs</li> </ul>
2	<b>11.2 Using ratios 1</b>	<ul style="list-style-type: none"> <li>Solve simple problems using ratios.</li> </ul>	<ul style="list-style-type: none"> <li>38 - Introduction To Ratio</li> <li>39 - Using Ratio For Recipe Questions</li> <li>106 - Sharing Using Ratio</li> <li>107 - Ratios, Fractions &amp; Graphs</li> </ul>
3	<b>11.3 Ratios and measures</b>	<ul style="list-style-type: none"> <li>Use ratios to convert between units.</li> <li>Write and use ratios for shapes and their enlargements.</li> </ul>	<ul style="list-style-type: none"> <li>38 - Introduction To Ratio</li> <li>39 - Using Ratio For Recipe Questions</li> <li>106 - Sharing Using Ratio</li> <li>107 - Ratios, Fractions &amp; Graphs</li> </ul>
2	<b>11.4 Using ratios 2</b>	<ul style="list-style-type: none"> <li>Divide a quantity into 2 parts in a given ratio. Divide a quantity into 3 parts in a given ratio.</li> <li>Solve word problems using ratios.</li> </ul>	<ul style="list-style-type: none"> <li>38 - Introduction To Ratio</li> <li>39 - Using Ratio For Recipe Questions</li> <li>106 - Sharing Using Ratio</li> <li>107 - Ratios, Fractions &amp; Graphs</li> </ul>
4	<b>11.5 Comparing using ratios</b>	<ul style="list-style-type: none"> <li>Use ratios involving decimals.</li> <li>Compare ratios.</li> <li>Solve ratio and proportion problems.</li> </ul>	<ul style="list-style-type: none"> <li>38 - Introduction To Ratio</li> <li>39 - Using Ratio For Recipe Questions</li> <li>106 - Sharing Using Ratio</li> <li>107 - Ratios, Fractions &amp; Graphs</li> </ul>
3	<b>11.7 Proportion and graphs</b>	<ul style="list-style-type: none"> <li>Recognise and use direct proportion on a graph.</li> <li>Understand the link between the unit ratio and the gradient.</li> </ul>	<ul style="list-style-type: none"> <li>42 - Introduction To Proportion</li> <li>107 - Ratios, Fractions &amp; Graphs</li> <li>199 - Direct &amp; Inverse Proportion</li> </ul>

Time	Topic	What students should know	Mathswatch links for revision
3	<b>13.1 Calculating probability</b>	<ul style="list-style-type: none"> <li>Calculate simple probabilities from equally likely events.</li> <li>Understand mutually exclusive and exhaustive outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>14 - The Probability Scale</li> <li>59 - Calculating Probabilities</li> <li>60 - Mutually Exclusive Events</li> </ul>
2	<b>13.2 Two events</b>	<ul style="list-style-type: none"> <li>Use two-way tables to record the outcomes from two events.</li> <li>Work out probabilities from sample space diagrams.</li> </ul>	<ul style="list-style-type: none"> <li>14 - The Probability Scale</li> <li>59 - Calculating Probabilities</li> <li>60 - Mutually Exclusive Events</li> <li>61 - Two Way Tables</li> </ul>
1	<b>13.3 Experimental probability</b>	<ul style="list-style-type: none"> <li>Find and interpret probabilities based on experimental data.</li> <li>Make predictions from experimental data.</li> </ul>	<ul style="list-style-type: none"> <li>14 - The Probability Scale</li> <li>59 - Calculating Probabilities</li> <li>60 - Mutually Exclusive Events</li> <li>125 - Experimental Probabilities</li> </ul>

3	<b>13.4 Venn diagrams</b>	<ul style="list-style-type: none"> <li>• Use Venn diagrams to work out probabilities.</li> <li>• Understand the language of sets and Venn diagrams.</li> </ul>	<ul style="list-style-type: none"> <li>• 14 - The Probability Scale</li> <li>• 59 - Calculating Probabilities</li> <li>• 60 - Mutually Exclusive Events</li> <li>• 127 - Venn Diagrams</li> <li>• 185 - Probability Using Venn Diagrams</li> </ul>
3	<b>13.5 Tree diagrams</b>	<ul style="list-style-type: none"> <li>• Use frequency trees and tree diagrams.</li> <li>• Work out probabilities using tree diagrams.</li> <li>• Understand independent events.</li> </ul>	<ul style="list-style-type: none"> <li>• 14 - The Probability Scale</li> <li>• 59 - Calculating Probabilities</li> <li>• 60 - Mutually Exclusive Events</li> <li>• 57 - Frequency Trees</li> <li>• 151 - Simple Tree Diagrams</li> <li>• 175 - Harder Tree Diagrams</li> </ul>

Time	Topic	What students should know	Mathswatch links for revision
6	<b>14.1 Percentages</b>	<ul style="list-style-type: none"> <li>• Calculate a percentage profit or loss.</li> <li>• Express a given number as a percentage of another in more complex situations.</li> <li>• Find the original amount given the final amount after a percentage increase or decrease</li> </ul>	<ul style="list-style-type: none"> <li>• 40 - Introduction To Percentages</li> <li>• 86 -Percentage Of An Amount (Calc)</li> <li>• 87 -Percentage Of An Amount (Non Calc)</li> <li>• 88 - Change To A Percentage (Calc)</li> <li>• 89 - Change To A Percentage (Non Calc)</li> <li>• 108 - Increase/Decrease By A Percentage</li> </ul>
3	<b>14.2 Growth and decay</b>	<ul style="list-style-type: none"> <li>• Find an amount after repeated percentage change.</li> <li>• Solve growth and decay problems.</li> </ul>	<ul style="list-style-type: none"> <li>• 40 - Introduction To Percentages</li> <li>• 86 -Percentage Of An Amount (Calc)</li> <li>• 87 -Percentage Of An Amount (Non Calc)</li> <li>• 88 - Change To A Percentage (Calc)</li> <li>• 89 - Change To A Percentage (Non Calc)</li> <li>• 108 - Increase/Decrease By A Percentage</li> </ul>
3	<b>14.3 Compound measures</b>	<ul style="list-style-type: none"> <li>• Solve problems involving compound measures.</li> </ul>	<ul style="list-style-type: none"> <li>• 142 - Compound Units</li> </ul>
2	<b>14.4 Distance, speed and time</b>	<ul style="list-style-type: none"> <li>• Convert between metric speed measures.</li> <li>• Calculate average speed, distance and time.</li> <li>• Use formulae to calculate speed and acceleration.</li> </ul>	<ul style="list-style-type: none"> <li>• 142 - Compound Units</li> </ul>
3	<b>14.5 Direct and inverse proportion</b>	<ul style="list-style-type: none"> <li>• Use ratio and proportion in measures and conversions.</li> <li>• Use inverse proportions.</li> </ul>	<ul style="list-style-type: none"> <li>• 199 - Direct &amp; Inverse Proportion</li> </ul>
1	<b>15.1 3D solids</b>	<ul style="list-style-type: none"> <li>• Recognise 3D shapes and their properties.</li> <li>• Describe 3D shapes using the correct mathematical words.</li> <li>• Understand the 2D shapes that make up 3D objects.</li> </ul>	<ul style="list-style-type: none"> <li>•9 - Simple Geometric Definitions</li> </ul>
2	<b>15.2 Plans and elevations</b>	<ul style="list-style-type: none"> <li>• Identify and sketch planes of symmetry of 3D shapes.</li> <li>• Understand and draw plans and elevations of 3D shapes.</li> <li>• Sketch 3D shapes based on their plans and elevations.</li> </ul>	<ul style="list-style-type: none"> <li>•51 - Plans &amp; Elevations</li> </ul>

2	<b>15.3 Accurate drawings 1</b>	<ul style="list-style-type: none"> <li>• Make accurate drawings of triangles using a ruler, protractor and compasses.</li> <li>• Identify SSS, ASA, SAS and RHS triangles as unique from a given description.</li> <li>• Identify congruent triangles</li> </ul>	<ul style="list-style-type: none"> <li>• 47 - Drawing A Triangle Using A Protractor</li> <li>• 166 - Congruent Triangles • 12 - Tessellations &amp; Congruent Shapes</li> </ul>
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2	<b>15.4 Scale drawings and maps</b>	<ul style="list-style-type: none"> <li>• Draw diagrams to scale.</li> <li>• Correctly interpret scales in real-life contexts.</li> <li>• Use scales on maps and diagrams to work out lengths and distances.</li> <li>• Know when to use exact measurements and estimations on scale drawings and maps.</li> <li>• Draw lengths and distances correctly on given scale drawings.</li> </ul>	
3	<b>15.5 Accurate drawings 2</b>	<ul style="list-style-type: none"> <li>• Accurately draw angles and 2D shapes using a ruler, protractor and compasses.</li> <li>• Construct a polygon inside a circle.</li> <li>• Recognise nets and make accurate drawings of nets of <b>common 3D objects</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• 46 - Drawing &amp; Measuring Angles</li> <li>• 10 - Polygons</li> <li>• 44 - Nets</li> </ul>
4	<b>15.6 Constructions</b>	<ul style="list-style-type: none"> <li>• Draw accurately using rulers and compasses.</li> <li>• Bisect angles and lines using rulers and compasses.</li> </ul>	<ul style="list-style-type: none"> <li>• 145 - Bisecting An Angle</li> <li>• 130 - Averages From A Table</li> </ul>
3	<b>16.1 Expanding double brackets</b>	<ul style="list-style-type: none"> <li>• Multiply double brackets.</li> <li>• Recognise quadratic expressions.</li> <li>• Square single brackets.</li> </ul>	<ul style="list-style-type: none"> <li>• 33 - Simplifying Addition &amp; Subtraction</li> <li>• 134 - Expanding &amp; Simplifying Brackets</li> </ul>
2	<b>17.1 Circumference of a circle 1</b>	<ul style="list-style-type: none"> <li>• Calculate the circumference of a circle.</li> <li>• Solve problems involving the circumference of a circle.</li> </ul>	<ul style="list-style-type: none"> <li>• 116 - Circle Definitions</li> <li>• 118 - Circumference Of A Circle</li> </ul>
2	<b>17.2 Circumference of a circle 2</b>	<ul style="list-style-type: none"> <li>• Calculate the circumference and radius of a circle.</li> <li>• Work out percentage error intervals.</li> </ul>	<ul style="list-style-type: none"> <li>• 116 - Circle Definitions</li> <li>• 118 - Circumference Of A Circle</li> <li>• 115 - Error Intervals</li> </ul>
3	<b>17.3 Area of a circle</b>	<ul style="list-style-type: none"> <li>• Work out the area of a circle.</li> <li>• Work out the radius or diameter of a circle.</li> <li>• Solve problems involving the area of a circle.</li> <li>• Give answers in terms of <math>\pi</math>.</li> </ul>	<ul style="list-style-type: none"> <li>• 116 - Circle Definitions</li> <li>• 117 - Area Of A Circle</li> </ul>

4	<b>17.4 Semicircles and sectors</b>	<ul style="list-style-type: none"> <li>• Understand and use maths language for circles and perimeters.</li> <li>• Work out areas of semicircles and quarter circle and perimeters.</li> <li>• Solve problems involving sectors of circles.</li> </ul>	<ul style="list-style-type: none"> <li>• 116 - Circle Definitions</li> <li>• 117 - Area Of A Circle • 118 - Circumference Of A Circle • 167 - Sectors Of A Circle</li> </ul>
2	<b>17.4 Semicircles and sectors</b>	<ul style="list-style-type: none"> <li>• Understand and use maths language for circles and perimeters.</li> <li>• Work out areas of semicircles and quarter circle and perimeters.</li> <li>• Solve problems involving sectors of circles.</li> </ul>	<ul style="list-style-type: none"> <li>• 116 - Circle Definitions</li> <li>• 117 - Area Of A Circle • 118 - Circumference Of A Circle • 167 - Sectors Of A Circle</li> </ul>
2	<b>17.5 Composite 2D shapes and cylinders</b>	<ul style="list-style-type: none"> <li>• Solve problems involving areas and perimeters of 2D shapes.</li> <li>• Work out the volume and surface area of cylinders.</li> </ul>	<ul style="list-style-type: none"> <li>• 115 - Volume Of A Cuboid</li> <li>• 119 - Volume Of A Prism • 114 - Surface Area Of A Prism • 53 - Area Of A Rectangle • 54 - Area Of A Triangle • 55 - Area Of A Parallelogram • 52 - Area Of A Trapezium • 52 - Perimeters</li> </ul>

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<b>Half Term</b>	<b>Targetted Intervention Topics</b>	<b>Targetted Intervention Topics</b>	<b>Targetted Intervention Topics</b>