Year 8 Summer 1				
Emerging (Support)	Expected (Core)	Exceeding (Extension)		
Pythagoras' Theorem and Trigonometry				
<ul> <li>Draw right-angled triangles</li> <li>Square numbers up to 10<sup>2</sup></li> <li>Square roots of numbers</li> <li>Name the sides of right- angled triangle</li> <li>Investigate Pythagoras' theorem</li> <li>Calculate the longest side</li> <li>Opposite, adjacent and hypotenuses</li> <li>Pythagoras theorem, trigonometry and problem solving</li> </ul>	<ul> <li>Name the sides of right-angled triangle</li> <li>Investigate Pythagoras' theorem</li> <li>Calculate the longest side</li> <li>Calculate shorter side</li> <li>Pythagoras' theorem and problem solving</li> <li>Opposite, adjacent and hypotenuses</li> <li>Trigonometry and missing angles</li> <li>Trigonometry and missing angle</li> <li>Pythagoras theorem, trigonometry and problem solving</li> </ul>	<ul> <li>Name the sides of right- angled triangle</li> <li>Investigate Pythagoras' theorem</li> <li>Calculate the longest side</li> <li>Calculate shorter side</li> <li>Pythagoras' theorem and problem solving</li> <li>Opposite, adjacent and hypotenuses</li> <li>Trigonometry and missing angles</li> <li>Pythagoras theorem, trigonometry and problem solving</li> </ul>		
	Percentages			
<ul> <li>Part as a percentage of the whole</li> <li>10,%, 20%, 30% 40%, 50% of amount</li> <li>5%. 15%, 35%, 95% of amounts</li> <li>Percentage of amount</li> <li>Percentage increase and decrease</li> <li>Multiplier</li> <li>Repeated percentages</li> </ul>	<ul> <li>Part as a percentage of the whole</li> <li>5%. 15%, 35%, 95% of amounts</li> <li>Percentage of amount</li> <li>Percentage of amount</li> <li>Percentage increase and decrease</li> <li>Multiplier</li> <li>Repeated percentages</li> <li>Simple and compound interest</li> </ul>	<ul> <li>Part as a percentage of the whole</li> <li>5%. 15%, 35%, 95% of amounts</li> <li>Percentage of amount</li> <li>Percentage of amount</li> <li>Percentage increase and decrease</li> <li>Multiplier</li> <li>Repeated percentages</li> <li>Simple and compound interest</li> </ul>		

Percentages and problem	• Percentages and problem	• Growth and decay		
solving	solving	• Percentages and problem		
		solving		
Ratio and Proportion				
Simplify ratio	• Share quantity in a given ratio	• Share quantity in a given		
• Share quantity in a given	• Ratio when part is given	ratio		
ratio	• Ratio and proportion	• Ratio when part is given		
• Ratio when part is given	• Exchange rate	• Ratio and proportion		
Ratio and proportion	• Proportion and recipe	• Proportion and recipe		
• Proportion and drawing	Conversion graphs	Conversion graphs		
• Distance, time and speed	• Distance, time and speed	• Distance, time and speed		
• Ratio, proportion and	• Ratio, proportion and problem	• Volume, density and mass		
problem solving	solving	• Ratio, proportion and		
		problem solving		

## Revision for End of year Assessment

Year 8 Summer 2				
Emerging (Support)	Expected (Core)	Exceeding (Extension)		
Transformation of shapes				
• Plan and side elevation	Similar shape	• Similar shape		
• Congruent	• Reflection	• Reflection		
• Reflection	Rotation	Rotation		
• Rotation	Translation	• Translation		
• Translation	• Enlargement with or without	• Enlargement with or		
• Enlargement without centre	centre	without centre		
• ICT and transformation	• Fractional scale factor	• Fractional scale factor		
• Transformation	• ICT and transformation	• ICT and transformation		
End-of-year Assessment (Last two weeks before Christmas Holiday)				
Graphs				

Coordinates	Coordinates of midpoints	• Coordinates and properties
Coordinates of midpoints	• Coordinates and properties of	2D of shapes
• Coordinates and properties of	2D shapes	Conversion graphs
2D shapes	• Conversion graphs	• Draw graphs from table of
Conversion graphs	• Draw graphs from table of	values
• Draw graphs from table of	values	• Gradient and y-intercept
values	• Gradient and y-intercept	• Drawing graphs from
• ICT and graphs	• ICT and graphs	gradient and y-intercept
• Graphs and problem solving	• Graphs and problem solving	• Real-life graphs
		• ICT and graphs
		• Quadratic graphs
		• Graphs and problem
		solving
	Construction and Loci	
Draw and measure angles	Making patterns using	• Perpendicular bisectors of
<ul><li>Draw and measure angles</li><li>Draw triangles and</li></ul>	Making patterns using compasses, ruler and	• Perpendicular bisectors of line segments
Draw triangles and	compasses, ruler and	line segments
• Draw triangles and quadrilaterals to scale	compasses, ruler and protractors	<ul><li>line segments</li><li>Perpendicular line from a</li></ul>
<ul> <li>Draw triangles and quadrilaterals to scale</li> <li>Making patterns using</li> </ul>	<ul><li>compasses, ruler and protractors</li><li>Perpendicular bisectors of</li></ul>	<ul><li>line segments</li><li>Perpendicular line from a point</li></ul>
<ul> <li>Draw triangles and quadrilaterals to scale</li> <li>Making patterns using compasses, ruler and</li> </ul>	<ul> <li>compasses, ruler and protractors</li> <li>Perpendicular bisectors of line segments</li> </ul>	<ul> <li>line segments</li> <li>Perpendicular line from a point</li> <li>Construct triangles and</li> </ul>
<ul> <li>Draw triangles and quadrilaterals to scale</li> <li>Making patterns using compasses, ruler and protractors</li> </ul>	<ul> <li>compasses, ruler and protractors</li> <li>Perpendicular bisectors of line segments</li> <li>Perpendicular line from a</li> </ul>	<ul> <li>line segments</li> <li>Perpendicular line from a point</li> <li>Construct triangles and other shapes</li> </ul>
<ul> <li>Draw triangles and quadrilaterals to scale</li> <li>Making patterns using compasses, ruler and protractors</li> <li>Perpendicular bisectors of</li> </ul>	<ul> <li>compasses, ruler and protractors</li> <li>Perpendicular bisectors of line segments</li> <li>Perpendicular line from a point</li> </ul>	<ul> <li>line segments</li> <li>Perpendicular line from a point</li> <li>Construct triangles and other shapes</li> <li>Loci</li> </ul>
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