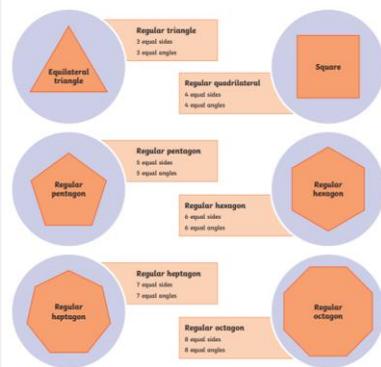
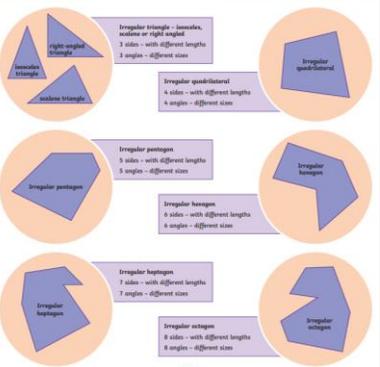


Year Five Autumn Term Reasoning		Knowledge Organiser Vocabulary	Knowledge Organiser Visuals									
Week 1	National Curriculum	<p>Place Value Recall from Y4: recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s). Order and compare numbers beyond 1,000. Compare numbers with the same number of decimal places up to 2 decimal places. Teach for Y5: read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit. Read, write, order and compare numbers with up to 3 decimal places. Stretch with: Manipulation of a number based on its place value. An emphasis on decimal places.</p>										
	Know Your Facts	<p>Millions Hundred Thousands Ten Thousands Thousands Hundreds Tens Ones Tenths Hundredths Thousandths More than (>) Less than (<) Equal (=) Decimal point</p>										
Week 2	National Curriculum	<p>Addition Recall from Y4: solve addition two-step problems in contexts, deciding which operations and methods to use and why. Teach for Y5: solve addition multi-step problems in contexts, deciding which operations and methods to use and why. Stretch with: Multi-step problems involving finding the solution from many steps.</p>	<table border="1"> <thead> <tr> <th>Written Calculations</th> <th>Addition</th> <th>Subtraction</th> </tr> </thead> <tbody> <tr> <td>Below Y5</td> <td> <p>Column addition</p> $\begin{array}{r} 9874 \\ + 1294 \\ \hline 11168 \end{array}$ </td> <td> <p>Expanded subtraction</p> $\begin{array}{r} 827 - 356 = \\ \underline{800} \quad 120 \quad 7 \\ - 300 \quad 50 \quad 6 \\ \hline 400 \quad 70 \quad 1 \\ = 471 \end{array}$ </td> </tr> <tr> <td>At Y5</td> <td> <p>Column addition</p> $\begin{array}{r} 100729 \\ + 1341 \\ \hline 102070 \end{array}$ </td> <td> <p>Column subtraction</p> $\begin{array}{r} 98465 \\ - 3924 \\ \hline 94541 \end{array}$ </td> </tr> </tbody> </table>	Written Calculations	Addition	Subtraction	Below Y5	<p>Column addition</p> $\begin{array}{r} 9874 \\ + 1294 \\ \hline 11168 \end{array}$	<p>Expanded subtraction</p> $\begin{array}{r} 827 - 356 = \\ \underline{800} \quad 120 \quad 7 \\ - 300 \quad 50 \quad 6 \\ \hline 400 \quad 70 \quad 1 \\ = 471 \end{array}$	At Y5	<p>Column addition</p> $\begin{array}{r} 100729 \\ + 1341 \\ \hline 102070 \end{array}$	<p>Column subtraction</p> $\begin{array}{r} 98465 \\ - 3924 \\ \hline 94541 \end{array}$
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Know Your Facts	<p>Pre-Teach call and response statements from Week 4 Equivalent Fractions</p>	<p>Addition Add Regroup</p>										
Week 3	National Curriculum	<p>Subtraction Recall from Y4: solve subtraction two-step problems in contexts, deciding which operations and methods to use and why Teach for Y5: solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why Stretch with: Inverse to find the original price or number.</p>	<p>Subtraction Subtract Exchange</p>									
	Know Your Facts	<p>Pre-Teach call and response statements from Week 5 Perimeter</p>										
			<table border="1"> <tbody> <tr> <td>Above Y5</td> <td> <p>Column addition</p> $\begin{array}{r} 175412 + 797 \\ \underline{175412} \\ + 797 \\ \hline 183312 \end{array}$ </td> <td> <p>Column subtraction</p> $\begin{array}{r} 9854 \\ - 936 \\ \hline 918 \end{array}$ </td> </tr> </tbody> </table>	Above Y5	<p>Column addition</p> $\begin{array}{r} 175412 + 797 \\ \underline{175412} \\ + 797 \\ \hline 183312 \end{array}$	<p>Column subtraction</p> $\begin{array}{r} 9854 \\ - 936 \\ \hline 918 \end{array}$						
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Week 4	National Curriculum Statements	<p>Equivalent Fractions Recall from Y4: recognise and show, using diagrams, families of common equivalent fractions. Teach for Y5: compare and order fractions whose denominators are all multiples of the same number. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Stretch with: Non-obvious equivalent fractions. Finding two equivalent fractions for an original fraction.</p>	<p>Equivalent Numerator Denominator Equivalent Arrows Common Denominator</p>	
	Know Your Facts	<p>Pre-Teach call and response statements from Week 6 Measures</p> <p>Call and Response Statements Equivalent Fractions Equivalent means the ... same The top number is the ... numerator The bottom number is the ... denominator Whatever I do to the numerator ... I do to the denominator (swap it around)</p>		
Week 5	National Curriculum Statements	<p>Perimeter Recall from Y4: measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Teach for Y5: measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Use the properties of rectangles to deduce related facts and find missing lengths and angles Stretch with: Perimeter of shapes created by different shapes.</p>	<p>Perimeter Side Centimetres Metres Rectangle Quadrilateral</p>	
	Know Your Facts	<p>Pre-Teach call and response statements from Week 7 Angle Rules Week 7</p> <p>Call and Response Statements Perimeter The perimeter is the ... outside of the shape. A square has ... four equal sides A four sided shape is a ... quadrilateral.</p>		

Week 6	National Curriculum Statements	<p>Measures Problems Recall from Y4: estimate, compare and calculate different measures, including money in pounds and pence. Teach for Y5: use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. Stretch with: application of conversion skills.</p>	<p>Length Mass Volume Money Millilitre (ml) Litre (l) Gram (g) Kilogram (kg) Millimetre (mm) Centimetre (cm) Metre (m) Kilometre (km) Pence (p) Pound (£)</p>	
	Know Your Facts	<p>Pre-Teach call and response statements from Week 8 2D Shape</p> <p>Call and Response Statements Measures Problems There are how many metres in kilometre ... 1000 There are how many grams in a kilogram ... 1000 There are how many millilitres in a litre ... 1000</p>		
Week 7	National Curriculum Statements	<p>Angle Rules Recall from Y4: identify acute and obtuse angles and compare and order angles up to two right angles by size Teach for Y5: know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°), other multiples of 90° Stretch with: link angles on a straight line with angles in a triangle (180°). Link full turn with angles in a quadrilateral (360°).</p>	<p>right angle (90°) obtuse angle ($>90^\circ$) acute angle ($<90^\circ$) degrees $^\circ$ reflex ($180^\circ < \text{reflex} < 360^\circ$) half turn/ straight line 180° full turn 360°</p>	
	Know Your Facts	<p>Pre-Teach call and response statements from Week 1 Rounding</p> <p>Call and Response Statements Angle Rules Angles are measured in ... degrees An acute angle is ... less than 90 degrees A right angle is 90 degrees An obtuse angle is ... more than 90 degrees. Angles on a straight line add up to ... 180 degrees Angles in a full turn add up to ... 360 degrees</p>		

Week 8	National Curriculum Statements	<p>2D Shape Recall from Y4: compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Teach for Y5: distinguish between regular and irregular polygons based on reasoning about equal sides and angles. use the properties of rectangles to deduce related facts and find missing lengths and angles Stretch with: Explain type questions.</p>	<p>Regular Irregular Sides Angles Corners Angles Triangle Quadrilateral Pentagon Hexagon Heptagon Octagon</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <h3 style="color: purple;">Regular Polygons</h3> <p>A polygon is a shape with straight sides.</p> <p>If all the sides are the same length, the shape is regular.</p> <p>Regular shapes have equal sides and equal angles.</p>  </div> <div style="text-align: center;"> <h3 style="color: orange;">Irregular Polygons</h3> <p>A polygon is a shape with straight sides.</p> <p>If any of the sides are different lengths, the shape is irregular.</p> <p>Irregular shapes have sides of different lengths and angles of different sizes.</p>  </div> </div>
	Know Your Facts	<p>Pre-Teach call and response statements from Week 2 Multiplication</p> <p>Call and Response Statements 2D Shape A three sided shape is a ... triangle A four sided shape is a ... quadrilateral A five sided shape is a ... pentagon A six sided shape is a ... hexagon A seven sided shape is a ... heptagon An eight sided shape is an ... octagon 2D shapes have ... sides and corners In a regular shape, the sides and angles are the ... same</p>		
Week 9		<p>Consolidation Week</p>		



Week 10

Consolidation Week

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