

St Aldhelm's EYFS Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn	<ul style="list-style-type: none"> • Uses some number names and number language spontaneously. • Uses some number names accurately in play. • Recites numbers in order to 10. • Knows that numbers identify how many objects are in a set. • Shows an interest in numerals in the environment. • Shows interest in shapes in the environment. • Shows an interest in shape and space by playing with shapes or making arrangements with objects. • Shows awareness of similarities of shapes in the environment. 	<ul style="list-style-type: none"> • Beginning to represent numbers using fingers, marks on paper or pictures. • Sometimes matches numeral and quantity correctly. • Shows curiosity about numbers by offering comments or asking questions. • Shows an interest in representing numbers. • Realises not only objects, but anything can be counted, including steps, claps or jumps. • Recognise some numerals of personal significance. • Recognises numerals 1 to 5. • Counts up to three or four objects by saying one number name for each item. • Counts actions
Autumn Real World Maths Enquiry	Included weekly as opportunity to apply learning	

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	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring	<ul style="list-style-type: none"> • Compares two groups of objects, saying when they have the same number. • Shows an interest in number problems. • Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same. • Counts objects to 10, and beginning to count beyond 10. • Counts out up to six objects from a larger group. • Selects the correct numeral to represent 1 to 5, then 1 to 10 objects. • Counts an irregular arrangement of up to ten objects. 	<ul style="list-style-type: none"> • Shows interest in shape by sustained construction activity or by talking about shapes or arrangements. • Uses the language of 'more' and 'fewer' to compare two sets of objects. • Finds the total number of items in two groups by counting all of them. • Says the number that is one more than a given number. • Finds one more or one less from a group of up to five objects, then ten objects. • Can describe their relative position such as 'behind' or 'next to'. • Orders two or three items by length or height. • Orders two items by weight or capacity.
Spring Real World Maths Enquiry	Included weekly as opportunity to apply learning	

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	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer	<ul style="list-style-type: none"> • Uses positional language. • Uses shapes appropriately for tasks. • Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'. • Selects a particular named shape. • Uses familiar objects and common shapes to create and recreate patterns and build models. • Measures short periods of time in simple ways. • Uses everyday language related to time. • Beginning to use everyday language related to money. • Orders and sequences familiar events. 	<ul style="list-style-type: none"> • Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. • Estimates how many objects they can see and checks by counting them. • In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. • Records, using marks that they can interpret and explain. • Begins to identify own mathematical problems based on own interests and fascinations.
Summer Real World Maths Enquiry	Included weekly as opportunity to apply learning	

St Aldhelm's Year 1 Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn White Rose	<p>W1-3 Place Value (within 10)</p> <ul style="list-style-type: none"> given a number, identify one more and one less identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least read and write numbers from 1 to 20 in numerals and words. <p>W4 – W8 Place Value and Addition and Subtraction (within 10)</p> <ul style="list-style-type: none"> read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs represent and use number bonds and related subtraction facts within 20 add and subtract one-digit and two-digit numbers to 20, including zero solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$. 	<p>W1 - Geometry: 2D and 3D Shapes</p> <ul style="list-style-type: none"> Recognise and name common 2-D and 3-D shapes, including 2-D shapes [for example, rectangles (including squares), circles and triangles]. Recognise and name common 2-D and 3-D shapes, including 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. <p>Place Value (within 20)</p>
Autumn Real World Maths Enquiry	How many more spikes does a hedgehog need to make 10?	How many cocktail sticks and marshmallows do we need to build a 2D or 3D shape?

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	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring White Rose	<p>Geometry: 2D and 3D Shapes</p> <ul style="list-style-type: none"> Recognise and name common 2-D and 3-D shapes, including 2-D shapes [for example, rectangles (including squares), circles and triangles]. Recognise and name common 2-D and 3-D shapes, including 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. <p>Addition and Subtraction (within 20)</p> <ul style="list-style-type: none"> Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$. Represent and use number bonds and related subtraction facts within 20. <p>Place Value (within 50)</p> <ul style="list-style-type: none"> Count in multiples of twos, fives and tens. Count, read and write numbers to 100 in numerals. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. 	<p>Money</p> <ul style="list-style-type: none"> Recognise and know the value of different denominations of coins and notes. <p>Time</p> <ul style="list-style-type: none"> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] <p>Multiplication and Division</p> <ul style="list-style-type: none"> Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. <p>Fractions</p> <ul style="list-style-type: none"> Recognise, find and name a half as one of two equal parts of an object, shape or quantity
Spring Real World Maths Enquiry	How many pieces of wood and card do we need to build a 3D shapes?	Which coins can I use to buy a snack?

St Aldhelm's Year 1 Curriculum Design

	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer White Rose	<p>Fractions</p> <ul style="list-style-type: none"> Recognise, find and name a half as one of two equal parts of an object, shape or quantity <p>Money</p> <ul style="list-style-type: none"> Recognise and know the value of different denominations of coins and notes. <p>Time</p> <ul style="list-style-type: none"> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] <p>Geometry: Position and Direction</p> <ul style="list-style-type: none"> Describe position, direction and movement, including whole, half, quarter and three-quarter turns. 	<p>Number: Place value within 100</p> <ul style="list-style-type: none"> count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens <p>Measurement:</p> <ul style="list-style-type: none"> Compare, describe and solve practical problems for lengths and heights [for example, long or short, longer or shorter, tall or short, double or half]. Compare, describe and solve practical problems for capacity and volume [for example, full or empty, more than, less than, half, half full, quarter].
Summer Real World Maths Enquiry	Can I direct a friend around from the classroom to a specific area in our school?	Can I compare the lengths of different plants or animals?

St Aldhelm's Year 2 Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn White Rose	<p>W1-W3 Number – Place Value</p> <ul style="list-style-type: none"> • Read and write numbers to at least 100 in numerals and in words. • Recognise the place value of each digit in a two digit number (tens, ones) • Identify, represent and estimate numbers using different representations including the number line. • Compare and order numbers from 0 up to 100; use <, > and = signs. • Use place value and number facts to solve problems. • Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward. <p>W4 – W8 plus W1-W2 Number – Addition and Subtraction</p> <ul style="list-style-type: none"> • Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. • Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods. • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	<p>W1-W2 Finish Addition and Subtraction</p> <p>W3 and W4 Measurement: Money</p> <ul style="list-style-type: none"> • Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. <p>W5 – W7 Multiplication and Division</p> <ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication & division facts, including problems in contexts. • Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
Autumn Real World Maths Enquiry	<p>Science and Maths Enquiry Question - Which animal is the tallest? Smallest? Fastest? Can jump the furthest? Create animal top trumps</p> <p>Project & Maths Enquiry Question: Which is the quickest way to count the pile of termites? Multiples of 2,5 and 10</p>	<p>Project and Maths Enquiry Question – Which coins could we use to pay for the stamps? Money</p> <p>Context - Insect shop from MM Paying and giving change ?? has 20p What could he buy?</p>

St Aldhelm's Year 2 Curriculum Design

	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring White Rose	<p>W1-W2 Multiplication and Division</p> <ul style="list-style-type: none"> Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. <p>Context – How can we arrange granny's cakes in a rectangle tray?</p> <p>W3 – W4 Statistics</p> <ul style="list-style-type: none"> Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data. <p>W5 – W6 Geometry- properties of shape</p> <ul style="list-style-type: none"> Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid.] Compare and sort common 2-D and 3-D shapes and everyday objects. 	<p>W1 Geometry continued from Spring 1 Prove it Tables 10 x 5x 2 x How many names and letters can you write in 1 minute? (Name and count in multiples)</p> <p>W2 - 4 Number – fractions</p> <ul style="list-style-type: none"> Recognise, find, name and write fractions 13, 14, 24 and 34 of a length, shape, set of objects or quantity. Write simple fractions for example, 12 of 6 = 3 and recognise the equivalence of 24 and 12. <p>W5 – W6 Measurement: length and height</p> <ul style="list-style-type: none"> Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$
Spring Real World Maths Enquiry	<p>Science & Maths Enquiry Question - Do the largest/heaviest seeds grow the tallest plants?</p> <p>Project & Maths Enquiry Question – How can we make a cottage for Granny using 3d shapes? Geometry property of 3d shapes (Computing link)</p> <p>Prove it – A cake costs 45p. How many different ways can we pay for it? Money</p>	<p>Science and Maths Enquiry Question - What does 100 seeds look like? Estimate and then count accurately in 2s, 5s and 10s Project and Maths Enquiry Question - How many different ways can we cut Paddington's sandwich into quarters? Square rectangle triangle circle</p>

St Aldhelm's Year 2 Curriculum Design

	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer White Rose	<p>W1 – W2 Measurement: Mass, Capacity and Temperature</p> <ul style="list-style-type: none"> Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and = <p>W3 – W4 Measurement: Time</p> <ul style="list-style-type: none"> Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. Know the number of minutes in an hour and the number of hours in a day. Compare and sequence intervals of time. <p>W5 Position and Direction</p> <ul style="list-style-type: none"> Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). Order and arrange combinations of mathematical objects in patterns and sequences 	<p>Cross Curricular application opportunities</p> <p>Address any whole class weaknesses identified from the tests</p>
Summer Real World Maths Enquiry	<p>Science and Maths Enquiry Question – Which material is the most common for toys? Statistics graphing and tally</p> <p>Project and Maths Enquiry Question – How can Traction Man get from A to B? Position and direction including compass</p> <p>Prove it – Are taller toys heavier? Measures mass and length</p>	<p>Problem Solving Focus - Summer 2 Word problems (WR KS2 and KS1 Problems of the Day 2019)</p> <p>Science and Maths Enquiry Question - Project and Maths Enquiry Question – Which is the most common way to communicate now? Tally and block graph</p>

St Aldhelm's Year 3 Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn White Rose	<p>W1 – W4 Number – Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words solve number problems and practical problems involving these ideas <p>W5 – W8 Number – Addition and Subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> a three-digit number and ones a three-digit number and tens a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<p>W9-W11 Number: Multiplication and Division</p> <ul style="list-style-type: none"> Count from 0 in multiples of 4, 8, 50 and 100 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.
Autumn Real World Maths Enquiry	'Which foods had the most fat and sugar?' ordering and comparing numbers.	'Which surface makes the car move furthest?' based on units of measure, cm, and working out difference.

St Aldhelm's Year 3 Curriculum Design

	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring White Rose	<p>Week 1-3 Number: Multiplication and Division</p> <ul style="list-style-type: none"> Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives. <p>Week 4 Money</p> <ul style="list-style-type: none"> Add and subtract amounts of money to give change, using both £ and p in practical contexts <p>Week 5-6 Statistics</p> <ul style="list-style-type: none"> Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. 	<p>Week 7 – 9 Measurement: Length and Perimeter</p> <ul style="list-style-type: none"> Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2D shapes <p>Week 7-11 Number: fractions</p> <ul style="list-style-type: none"> Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Recognise and use fractions as numbers: unit fractions and non unit fractions with small denominators. Recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators. Solve problems that involve all of the above.
Spring Real World Maths Enquiry	<p>Where do the Egyptians fit in chronology? (history/maths ordering numbers link) Is the Egyptian flag symmetrical? (THEN link to fractions- what fraction of the flag is ____ (final weeks of Spr1)), Egyptian architecture (link to shape and 3D nets).</p>	

St Aldhelm's Year 3 Curriculum Design

	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer White Rose	<p>Week 1-3 Number: fractions Recognise and show, using diagrams, equivalent fractions with small denominators.</p> <ul style="list-style-type: none"> • Compare and order unit fractions, and fractions with the same denominators. • Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]. • Solve problems that involve all of the above <p>Week 4-6 Measurement: Time Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clocks.</p> <ul style="list-style-type: none"> • Estimate and read time with increasing accuracy to the nearest minute. • Record and compare time in terms of seconds, minutes and hours. • Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. • Know the number of seconds in a minute and the number of days in each month, year and leap year. • Compare durations of events [for example to calculate the time taken by particular events or tasks]. 	<p>Week 7-8 Geometry: Property of Shapes Recognise angles as a property of shape or a description of a turn.</p> <ul style="list-style-type: none"> • Identify right angles, recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. • Draw 2-D shapes and make 3-D shapes using modelling materials. • Recognise 3-D shapes in different orientations and describe them. <p>Week 9 -10 Measurement: Mass and Capacity</p> <ul style="list-style-type: none"> • Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
Summer Real World Maths Enquiry	To follow as new to Year group planning	

St Aldhelm's Year 4 Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn White Rose	<p>Week 1-4 Number: Place Value</p> <ul style="list-style-type: none"> Count in multiples of 6, 7, 9, 25 and 1000. Find 1000 more or less than a given number. Recognise the place value of each digit in a four digit number (thousands, hundreds tens and ones). Order and compare numbers beyond 1000. Identify, represent and estimate numbers using different representations. Round any number to the nearest 10, 100 or 1000. Solve number and practical problems that involve all of the above and with increasingly large positive numbers. Count backwards through zero to include negative numbers. <p>Week 5-7 Number: Addition and Subtraction</p> <ul style="list-style-type: none"> Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Estimate and use inverse operations to check answers to a calculation. Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why 	<p>Week 8 Measurement: Length and Perimeter</p> <ul style="list-style-type: none"> Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Convert between different units of measure [for example, kilometre to metre] <p>Week 9-11 Number: Multiplication and Division</p> <ul style="list-style-type: none"> Recall and use multiplication and division facts for multiplication tables up to 12×12. Count in multiples of 6, 7, 9, 25 and 1000. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
Autumn Real World Maths Enquiry	<p>Project: Can you order and compare the weight of the Iron Man's cars?</p> <p>Science: Which drinks are cheaper? Healthy and unhealthy drinks</p>	<p>Project: How did the Roman count? Roman numerals</p> <p>Science: Which region is colder? North or South pole?</p>

St Aldhelm's Year 4 Curriculum Design

	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring White Rose	<p>Week 1-3 Number: Multiplication and Division</p> <ul style="list-style-type: none"> Recall and use multiplication and division facts for multiplication tables up to 12×12. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Recognise and use factor pairs and commutativity in mental calculations. Multiply two digit and three digit numbers by a one digit number using formal written layout. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. <p>Week 4 Measurement: area</p> <ul style="list-style-type: none"> Find the area of rectilinear shapes by counting squares. <p>Week 5-8 Number: Fractions</p> <ul style="list-style-type: none"> Recognise and show, using diagrams, families of common equivalent fractions. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Add and subtract fractions with the same denominator. 	<p>Week 9-11 Number: Decimals</p> <ul style="list-style-type: none"> Recognise and write decimal equivalents of any number of tenths or hundredths. Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Solve simple measure and money problems involving fractions and decimals to two decimal places. Convert between different units of measure [for example, kilometre to metre].
Spring Real World Maths Enquiry	<p>Project: How long are Roman Roads? Science: How far does sound travel?</p>	<p>Project: What is the longest river in the world? Science: How long does it take for a solid to turn into a liquid?</p>

St Aldhelm's Year 4 Curriculum Design

	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer White Rose	<p>Week 1-2 Number: Decimals</p> <ul style="list-style-type: none"> • Compare numbers with the same number of decimal places up to two decimal places. • Round decimals with one decimal place to the nearest whole number. • Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$. • Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths. <p>Week 3-4 Measurement: Money</p> <ul style="list-style-type: none"> • Estimate, compare and calculate different measures, including money in pounds and pence. • Solve simple measure and money problems involving fractions and decimals to two decimal places <p>Week 5 Measurement: Time</p> <ul style="list-style-type: none"> • Read, write and convert time between analogue and digital 12- and 24-hour clocks. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days <p>Week 6-7 Statistics</p> <ul style="list-style-type: none"> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs 	<p>Week 8-10 Geometry: properties of Shape</p> <ul style="list-style-type: none"> • Identify acute and obtuse angles and compare and order angles up to two right angles by size. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. • Identify lines of symmetry in 2-D shapes presented in different orientations. • Complete a simple symmetric figure with respect to a specific line of symmetry. <p>Week 11 Geometry: position and direction</p> <ul style="list-style-type: none"> • Describe positions on a 2- D grid as coordinates in the first quadrant. • Plot specified points and draw sides to complete a given polygon. • Describe movements between positions as translations of a given unit to the left/ right and up/ down.
Summer Real World Maths Enquiry	<p>Project: Which location has the highest rainfall? Statistics</p> <p>Science: Which household items use the most electricity?</p>	<p>Project: How much does it cost to be environmentally friendly?</p> <p>Science: What is living on our school grounds? Statistics</p>

St Aldhelm's Year 5 Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn White Rose	<p>W1 - W4 Core Maths: Place Value</p> <ul style="list-style-type: none"> - Value of each digit in a whole number up to one million – read and write - Compare numbers and equations - Order numbers and in context (use family tree activity to produce timeline) - Interpret negative numbers (Science link) - Round number up to a million - Read Roman Numerals to 1000 (M) - Solve problems involving all of these <p>T4S Focus: One number per box, commas in the correct place and use lists</p> <p>Links: Science (negative numbers in context, ordering numbers and comparing numbers), Geography (coordinates)</p> <p>W5 – W8 Core Maths: Addition and Subtraction</p> <ul style="list-style-type: none"> - Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. <p>T4S Focus: One number per box, commas in the correct place and use lists</p> <p>Links: Science and Geography (statistics, timetables and coordinates)</p>	<p>W1 Core Maths: Addition and Subtraction continued</p> <p>W2 – W3 Core Maths: Statistics</p> <p>Only covering timetables, as other objectives were covered through Science/Geog</p> <ul style="list-style-type: none"> - Complete, read and interpret info in tables including timetables. <p>T4S Focus: For scales count up to check before writing to work out what it goes up in. Read line graphs by using a ruler to draw lines to the axes</p> <p>Links: Science (timetables and comparing data).</p> <p>W4 – W6 Core Maths: Multiplication and Division</p> <ul style="list-style-type: none"> - Multiply and divide numbers mentally drawing upon known facts. - Multiply and divide whole numbers and decimals by 10, 100 and 1000. - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. - Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3) - Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. - Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. - Establish whether a number up to 100 is prime and recall prime numbers up to 19 <p>T4S Focus: List coin multiples to help solve multiplication and division problems (1x, 2x, 5x, 10x, 20x, 50x and 100x)</p> <p>W7 Core Maths: Perimeter and Area</p> <ul style="list-style-type: none"> - Measure and calculate the perimeter of composite rectilinear shapes in cm and m. <p>T4S Focus: Use a bar model to work out missing sides for area and perimeter.</p>
Autumn Real World Maths Enquiry	<p>Science Question: Which material has the greatest difference in melting and freezing point?</p> <p>Project Question: How far did Michael travel? Which method of transport would be fastest?</p>	<p>Project Question: How can we categorise the planets in our solar system?</p> <p>Science Question: Which material creates the greatest air resistance? Prove</p>

St Aldhelm's Year 5 Curriculum Design

	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring White Rose	<p>W1 – W2 Core Maths: Perimeter and Area</p> <ul style="list-style-type: none"> - Measure and calculate the perimeter of composite rectilinear shapes in cm and m. - Calculate and compare the area of rectangles (including squares), and including using standard units, cm², m² estimate the area of irregular shapes. <p>T4S Focus: Use a bar model find missing a+p</p> <p>W 3 – W6 Core Maths: Multiplication and Division</p> <ul style="list-style-type: none"> - Multiply and divide numbers mentally drawing upon known facts. - Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers. - Divide numbers up to 4 digits by a one digit number using the formal written method of short division and interpret remainders appropriately for the context. - Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign. <p>Links: Science (statistics and measures)</p>	<p>Core Maths: Fractions</p> <ul style="list-style-type: none"> - Compare and order fractions whose denominators are multiples of the same number. - Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths. - Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example $2 \frac{4}{6} = 1 \frac{1}{1}$] - Add and subtract fractions with the same denominator and denominators that are multiples of the same number. - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. - Read and write decimal numbers as fractions [for example $0.71 = \frac{71}{100}$] - Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. <p>T4S Focus: To compare fractions, decimals and percentages, convert to equivalents first</p> <p>Links: Science (statistics – sorting and classifying)</p>
Spring Real World Maths Enquiry	<p>Science Question: Which surface slows down the object quickest?</p> <p>Project Question: Which ancient civilisation had the longest success?</p>	<p>Project Question: Where in the world is Kilve positioned?</p> <p>Science Question: What can affect an object's speed?</p>

St Aldhelm's Year 5 Curriculum Design

	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer White Rose	<p>W1 – W4 Core Maths: Decimals and Percentages</p> <ul style="list-style-type: none"> - Read, write, order and compare numbers with up to three decimal places. - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. - Round decimals with two decimal places to the nearest whole number and to one decimal place. - Solve problems involving number up to three decimal places. - Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. - Solve problems which require knowing percentage and decimal equivalents and those fractions with a denominator of a multiple of 10 or 25. - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <p>T4S Focus: Line up decimal points and add 0s if needed. To order decimals, add 0 on the end to make them all the same number of decimal points.</p> <p>Links: Science (statistics and measures)</p> <p>W5 Core Maths: Geometry – Properties of Shapes and Angles</p> <ul style="list-style-type: none"> - Identify 3D shapes... - Use the properties of rectangles to deduce related facts ... - Distinguish between regular and irregular... - Estimate and compare acute, obtuse and reflex angles and measure <p>T4S: Turn page around.</p>	<p>W1 – W2 Core Maths: Geometry – Position and Direction</p> <ul style="list-style-type: none"> - identify, describe and represent the position of a shape following a reflection or translation. <p>T4S Focus: Use tracing paper to check translations. Use a mirror to check and complete reflect'</p> <p>W3 – W4 Core Maths: Decimals</p> <ul style="list-style-type: none"> - Solve problems involving number up to three decimal places. - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <p>T4S Focus: Include the units</p> <p>W5 – W6 Core Maths: Measurement converting units</p> <ul style="list-style-type: none"> - Convert between different units of metric measure - Understand and use approximate equivalences between metric units and common imperial units - Solve problems <p>W7 Core Maths: Measurement Volume</p> <ul style="list-style-type: none"> - Estimate volume and capacity - Use all four operations to solve problems
Summer Real World Maths Enquiry	<p>Project Question: Does the larger diameter cam make a greater movement?</p> <p>Science Question: Can you compare life cycles of different living things?</p>	<p>Science Question: What links can be made with height and foot size / height and fore arm size? Can we make a generalisation?</p> <p>Project Question: How far did the Vikings travel?</p>

St Aldhelm's Year 6 Curriculum Design

	Autumn 1	Autumn 2
Autumn Whole School Problem Solving Focus	Finding all possibilities	Word Problems and Barvember
Autumn White Rose	<p>Number - Place value Read, write, compare and order numbers up to ten million; rounding to a greater deal of accuracy; using negative numbers in context, and calculate intervals across 0; solving word problems</p> <p>Number – addition, subtraction, multiplication, division Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy Multiply multi-digit numbers up to four digits by a 2-digit whole number using the formal written method of long multiplication Divide numbers up to four digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context Divide numbers up to four digits by a 2-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context Use their knowledge of the order of operations to carry out calculations involving the four operations Solve problems involving addition, subtraction, multiplication and division Multiply 1-digit numbers with up to two decimal places by whole numbers</p> <p>Fluency and reasoning questions daily to consolidate previous learning</p>	<p>Fractions Use factors to simplify fractions; use common multiples to express fractions in the same denominator Compare and order fractions, including fractions > 1 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1\ 4 \times 1\ 2 = 1\ 8$] Divide proper fractions by whole numbers [for example, $1\ 3 \div 2 = 1\ 6$]</p> <p>Geometry – position and direction Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes</p> <p>Prove its daily to consolidate previous learning</p>
Autumn Real World Maths Enquiry	How much does our heart rate increase during exercise?	How does the Mayan calendar work? How does it compare to other calendars?

St Aldhelm's Year 6 Curriculum Design

	Spring 1	Spring 2
Spring Whole School Problem Solving Focus	Problem Solving Focus - Spring 1 Word problems (WR KS2 and KS1 Problems of the Day 2017 and 2018)	Problem Solving Focus - Spring 2 Rules and patterns
Spring White Rose	<p>Decimals and percentages Multiply 1-digit numbers with up to two decimal places by whole numbers Use equivalences between simple fractions, decimals and percentages, including in different contexts</p> <p>Ratio and Proportion Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples</p> <p>Algebra Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns</p> <p>Prove its daily to consolidate previous learning</p>	<p>Measurement – converting units, perimeter, area and volume Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Recognise that shapes with the same areas can have different perimeters and vice versa Calculate the area of parallelograms and triangles</p> <p>Prove its daily to consolidate previous learning</p>
Spring Real World Maths Enquiry	Recording the length of shadows throughout a day How do the levels of light differ throughout a day (link to graphs, keys and scales)	How do we interpret light sensor readings? How has the speed of transport vehicles changed over time? (statistics)

St Aldhelm's Year 6 Curriculum Design

	Summer 1	Summer 2
Summer Whole School Problem Solving Focus	Problem Solving Focus - Summer 1 Logic problems	Enterprise money
Summer White Rose	<p>Geometry – properties of shape Draw 2-D shapes using given dimensions and angles Recognise, describe and build simple 3-D shapes, including making nets Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygon</p> <p>Problem solving Prove its daily to consolidate previous learning</p>	<p>Statistics Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average</p> <p>Investigations Prove its daily to consolidate previous learning</p>
Summer Real World Maths Enquiry	How far have our focus explorers travelled? Who has travelled the furthest? How long would their journey have taken them with their mode of transport?	How long did it take for humans to evolve? (includes a range of timeline questions) World Trade – how do I convert currencies?