Holy Family Catholic Primary School

Maths Curriculum
2025-2026

What do we want for our pupils?

Intent

We strongly believe that all children, no matter what their starting points, can become confident, competent mathematicians. The use of ARK Maths Mastery is fundamental to ensuring children experience a range of concrete, pictoral and abstract learning to maximise their understanding of mathematics. It is essential that, through EYFS and KS1, children have a secure knowledge of number at the earliest opportunity and use all available time to make as much progress as possible in this area. Our Maths curriculum, through consistent high expectations and challenge, ensures the majority of children leave KS2 with sustained Mastery. This means children are fluent in basic concepts, can reason mathematically and are able to make links with their knowledge to solve problems in relation to National standards. It is our intent that children build on some of the school's intents in Maths specifically, working independently and collaboratively, building on prior knowledge, show resilience and peer and self-reflect.

Implementation

The use of ARK Maths Mastery allows our children to learn through a range of manipulatives on a daily basis, if needed. Children will leave KS1 with a secure understanding of number so they are able to make links between areas in KS2. Maths is taught on a daily basis; staff provide children with questions relating to the National Curriculum standards, stretch children through challenging, reasoning problems and offer effective, immediate, intervention to children who are struggling to understand the concept. This allows children the opportunity to progress as much as possible and have every opportunity to achieve fluency and reason mathematically by the end of KS2. Children who are below age-related expectation receive afternoon interventions (especially in KS1) to help close gaps in knowledge.

What is our goal?

Impact

Our Maths curriculum will ensure the majority of children leave KS2 with fluency and are able to apply knowledge and skills to problem solve. Children will be able to recognise relationships and make links in mathematics. It is essential every child leaves KS2 with vital life skills that are mastered and embedded. We aim for children to leave Holy Family with a joy for learning Mathematics.

Assessment in Maths

Summative assessment in Maths take place 3 times per year – end of Autumn, end of Spring and end of Summer.

Teachers analyse results and complete the school's data sheet ready for Pupil Progress meetings. Teachers identify children who are below, children who have not made expected progress, children who are not on track to achieve their target from KS1 and what the teacher is going to do about it.

In addition to this, at the end of each unit, children complete End of Unit Assessments from a combination of ARK Maths Mastery and White Rose as another indicator to see how much progress children have made and to check attainment.

FS1

<u>Autumn Term</u>
Maths Number
Maths Numerical Pattern
Shape, Space and Measure

<u>Spring Term</u>
Maths Number
Maths Numerical Pattern
Shape, Space and Measure

<u>Summer Term</u>
Maths Number
Maths Numerical Pattern
Shape, Space and Measure

Autumn 1	Autumn 2	Spring 1
Maths Number Children will learn: • Routines and expectations and children will be introduced to the areas of provision and have opportunities to get to know their peers. **Maths Numerical Pattern** Children will learn: •To recognise colours. **Shape, Space and Measure** Children will learn: • To explore and match objects which are the same. • Can you find one exactly like mine? How do you know it's the same? Can you find one different to mine? Why is this one not like mine? Sort • Children learn that collections can be sorted into sets based on attributes such as colour, size or shape. • Sorting enables the children to consider, what is the same about all the objects in one set and how • They are different to the other sets. • They begin to understand that the same collection of objects can be sorted in different ways	**Maths Number** Children will learn: • To understand that when making comparisons a set can have more, the same or fewer than another set. • To confidently sort collections into sets they learn that these sets can be compared and ordered. **Maths Numerical Pattern** Children will learn: • To copy, continue and create their own patterns. • That it is important to provide patterns with at least three full units of repeat. • To be encouraged to say the pattern out loud **Shape, Space and Measure** Children will learn: • That objects can be compared and ordered according to their size. • Encourage the use of language such as big and little, small and large to describe a range of objects. More specific language such as tall, long, short can also be introduced.	**Maths Number** Children will learn: • To identify representations of 1 and 2 • To subitise or count to find out how many and make their own collections of 1 or 2 objects. • To match the number names to quantities and numerals. • To touch count in different arrangements and recognise the final number is the quantity of the set. • Counting to 1 • Finding 1 object • Representing 1 on a 5 frame • A circle – 1 sides shape (including in the environment) • 1 action e.g. 1 hop, 1 jump, 1 clap • What is 1 made of 1 nose, 1 mouth, 1 body • Exploring different varieties of circle • 1 being the first number, its position on a number line, ordinal numbers • Numicon 1 • Dice 1 • Subitising 1 • The numeral and formation of 1 • Number 1 in the environment • Representing 1 using marks, pictures and finger • Matching numeral to quantity • They match the number names to quantities and numerals. • They touch count in different arrangements and recognise the final number is the quantity of the set.

		• Counting to 2 • Finding 2 objects • Representing 2 on a 5 frame • A semi-circle – 2 sides shape (including in the environment) • 2 actions e.g. 2 hops, 2 jumps, 2 claps • What 2 is made of 1 is a part of me, 1 is a part of me and the whole of me is 2 • 2 being the second number, its position on a number line, ordinal numbers • Numicon 2 • Dice 2 • Subitising 2 • The numeral and formation of 2 • Number 2 in the environment • Representing 2 using marks, pictures and finger • Matching numeral to quantity **Maths Numerical Pattern** Children will learn: • To use real objects to see that the quantity of a group can be changed by adding more. **Shape, Space and Measure** Children will learn: • Weight through carrying heavy and light items. • Encourage them to make direct comparisons holding items to estimate which feels the heaviest then use the balance scales to check. • Prompt them to use the language heavy, heavier than, heaviest, light, lighter than, lightest to compare items starting with items that have an obvious difference in weight. • Avoid common misconception that bigger items are always heavier by providing some small heavier items and some large lighter ones

Spring 2	Summer 1	Summer 2
Maths Number Children will learn: •To identify representations of 1, 2, 3. They subitise or count to find out how many and make their own collections of 1, 2 or 3 objects. • They match the number names to quantities and numerals. • They touch count in different arrangements and recognise the final number is the quantity of the set. • Counting to 3 • Finding 3 objects • Representing 3 on a 5 frame • A triangle – 3 sides shape (including in the environment) • 3 actions e.g. 3 hops, 3 jumps, 3 claps • What is 3 made of - 2 is a part of me, 1 is a part of me and the whole of me is 3. • Exploring different varieties and orientations of triangles. • 3 being the third number, its position on a number line, ordinal numbers • Numicon 3 • Dice 3 • Subitising 3 • The numeral and formation of 3 • Number 3 in the environment • Representing 3 using marks, pictures and finger • Matching numeral to quantity **Maths Numerical Pattern** Children will learn: • The first, then, now structure can be used to create mathematical stories in meaningful contexts **Shape, Space and Measure** Children will learn: • By using language to describe length and height e.g. the tree is tall the pencil is short. • When making direct comparisons they may initially say something is bigger than something else. • Encourage them to use more specific mathematical vocabulary in relation to Length • The children should then move on to finding objects that are longer/shorter than a given item. They should be encouraged to utilise Strategies such as direct comparison (e.g. placing objects side by side to determine which is longer).	**Maths Number** Children will learn: • Counting to 4 • Number blocks episode 4 • Finding 4 objects • Representing 4 on a 5 frame • Squares and rectangles, 4 sided shapes including in the environment • 4 actions e.g. 4 hops, 4 jumps, 4 claps • Composition of 4 (2 is a part of me, 2 is a part of me and the whole of me is 4; 3 is a part of me, 1 is a part of me and the whole of me is 4) • 4 being the fourth number, its position on a number line, ordinal numbers • Numicon 4 • Dice 4 • Subitising 4 • The numeral and formation of 4 • Number 4 in the environment • Representing 4 using marks, pictures and finger • Matching numeral to quantity • Children count on and back to 4. • They subitise sets of up to 4 objects to find out how many make their own collections of objects. • They match the number to numerals and quantities and are able to say which sets have more and fewer items. • When counting they continue to learn that the final number they say names the set. **Maths Numerical Pattern** Children will learn: • To see the link between counting forwards and the one more pattern • To see the link between counting back and the one less pattern. **Shape, Space and Measure** Children will learn: • The primary focus in relation shapes should be on the properties of shapes. For example, children should be encouraged to notice and describe shapes in the environment and talk about the properties using words such as 'straight/flat/round/ curved'. • When teaching the names of shapes, wherever possible, real life shapes in the environment should be used. • Note that only flat surfaces should be referred to as faces. Include sorting of natural shapes; the children may sort	**Maths Number** Children will learn: • To subitise up to 5 items and to count forwards and backwards to 5 accurately using the counting principles. • They represent up to 5 items on a five frame. • Counting to 5 • Finding 5 objects • Representing 5 on a 5 frame • Pentagons, 5 sided shapes including in the environment • 5 actions e.g. 5 hops, 5 jumps, 5 claps • Composition of 5 (3 is a part of me, 2 is a part of me and the whole of me is 5; 4 is a part of me, 1 is a part of me and the whole of me is 5) • 5 being the fifth number, its position on a number line, ordinal numbers • Numicon 5 • Dice 5 • Subitising 5 • The numeral and formation of 5 Number 5 in the environment • Representing 5 using marks, pictures and finger • Matching numeral to quantity **Maths Numerical Pattern** Children will learn: • To continue to count, Subitise and compare as they explore one more and one less. **Shape, Space and Measure** Children will learn: • To talk about night and day and order key events in their daily routines, such as waking up, coming to school, dinner, and bed time. • They use language to describe when things happen e.g. day, night, morning, afternoon, before after, today, tomorrow. • Encourage the vocabulary of first, next, then and possibly last. • Children explore measuring time • Encourage children to build on their understanding of full and empty Provide opportunities to explore capacity with different materials such as water, sand, rice and loose parts • Initially children should be exposed to the comparison of full, half full, empty using the same container. • Provide different sized and shaped

	Stones, for example, into sets that have straight edges, sets that have curved edges etc.	Children need opportunities to be exposed to and to use the language of position and direction; Position: 'in', 'on', 'under'. Direction: 'up', 'down', 'across' • Children also need opportunities to use terms which are relative: 'in front of, 'behind', 'on top of'. • Create as many opportunities as possible to explore this language such as hunting for hidden objects with some prompts (e.g. look behind the shed). Money.

FS2

<u>Autumn Term</u>
Early Mathematical experiences
Pattern and early number
Numbers within 6
Addition and subtraction within 6
Measures
Shape and sorting

<u>Spring Term</u>
Numbers within 10
Calendar and time
Addition and subtraction within 10
Grouping and sharing
Number patterns within 15
Doubling and halving
Shape and pattern

<u>Summer Term</u>
Securing addition and subtraction facts
Number patterns within 20
Number patterns beyond 20
Money
Measures
Exploration of patterns within number

Autumn 1	**Autumn 2**	**Spring 1**

Early Mathematical Experiences • Classifying objects based on one attribute • Matching equal and unequal sets • Comparing objects and sets • Ordering objects and sets Pattern and Early Number • Recognise, describe, copy and extend colour and size patterns • Count and represent the numbers 1 to 3 • Estimate and check by counting	Numbers within 6 • Count up to six objects • One more or one fewer • Order numbers 1 – 6 • Conservation of numbers within six Addition and subtraction within 6 • Explore zero • Explore addition and subtraction Measures • Estimate, order compare, discuss and explore capacity, weight and lengths Shape and sorting • Describe, and sort 3- D shapes • Describe position accurately	Numbers within 10 • Count up to ten objects • Represent, order and explore numbers to ten • One more or fewer, one greater or less Calendar and time • Days of the week, seasons • Sequence daily events Addition and subtraction within 10 • Explore addition as counting on and subtraction as taking away Grouping and Sharing • Counting and sharing in equal groups • Grouping into fives and tens • Relationship between grouping and sharing

Spring 2	**Summer 1**	**Summer 2**
Number patterns within 15 • Count up to 15 objects and recognise different representations • Order and explore number patterns to 15 • One more or fewer Doubling and halving • Doubling and halving • Relationship between doubling and halving Shape and pattern • Describe and sort 2-D and 3-D shapes • Recognise, complete and create patterns	Securing addition and subtraction facts • Commutativity • Explore addition and subtraction • Compare two amounts Number patterns within 20 • Count up to 10 and beyond with objects • Represent, compare and explore numbers to 20 • One more or fewer Number patterns beyond 20 • One more one less • Estimate and count	Money • Coin recognition and values • Combinations to total 20p • Change from 10p Measures • Describe capacities • Compare volumes • Compare weights • Estimate, compare and order lengths Exploration of patterns within number • Explore numbers and strategies • Recognise and extend patterns

	• Grouping and sharing	• Apply number, shape and measures knowledge • Count forwards and backwards
Year 1 **<u>Autumn Term</u>** Numbers to 10 Addition and subtraction within 10 Shape and patterns Numbers to 20 Addition and subtraction within 20 **<u>Spring Term</u>** Time Exploring calculation strategies within 20 Numbers to 50 Addition and subtraction within 20 Fractions Measures: Length and Mass **<u>Summer Term</u>** Numbers 50 to 100 and beyond Addition and subtraction Money Multiplication and division Measures: Capacity and volume		
Autumn 1	**Autumn 2**	**Spring 1**

Numbers to 10 • Represent, compare and explore numbers within 10 • One more and one less • Doubling and halving Addition and subtraction within 10 • Represent and explain addition and subtraction • Commutativity • Addition and subtraction facts Shape and patterns • Identify, describe, sort and classify 2-D and 3-D shapes • Investigate repeating patterns • Use and follow instructional and positional language	Numbers to 20 • Identify, represent, compare and order numbers to 20 • Doubling and halving • One more and one less Addition and subtraction within 20 • Represent and explain addition and subtraction strategies including 'Make Ten' • Use known facts to add and subtract	Time • Read, write and tell the time to o'clock and half past on analogue clock • Sequencing daily activities • Whole and half turns linked to time Exploring calculation strategies within 20 • Model, explain and choose addition and subtraction strategies Numbers to 50 • 2-digit numbers – represent, sequence, explore, compare • Count in 2s, 5s and 10s • Describe and complete number patterns

Spring 2	**Summer 1**	**Summer 2**
Addition and subtraction within 20 • Illustrate, explain and link addition and subtraction with equations • Apply 'Make Ten' strategy • Use language to quantify and compare difference Fractions • Identify 1/2 and 1/4 of a shape or object • Find 1/2 and 1/4 of a quantity Measures: Length and Mass • Compare and measure lengths and mass using cm and kg • Doubling and halving	Numbers 50 to 100 and beyond • Read, write, represent, compare and order numbers to 100 • One more / fewer, ten more / fewer • Identify number patterns Addition and subtraction • Explore addition and subtraction involving 2-digit numbers and ones • Represent and explain addition and subtraction with regrouping • Investigate number bonds within 20 Money • Name coins and notes and understand their value • Represent the same value using different coins • Find change	Multiplication and division • Explore arrays • Share equally into groups • Doubling • Link halving to fractions Measures: Capacity and volume • Compare capacities, volumes and lengths • Explore litres • Apply understanding of fractions to capacity

Year 2

<u>Autumn Term</u>
Numbers within 100
Addition and subtraction of 2-digit numbers
Addition and subtraction word problems
Measures: Length
Graphs
Multiplication and division

<u>Spring Term</u>
Time
Fractions
Addition and subtraction of 2-digit numbers
Money
Face, shapes and patterns; lines and turns

<u>Summer Term</u>
Numbers within 1000
Measures: Capacity and volume
Measures: Mass
Exploring calculation strategies
Exploring multiplicative thinking

Autumn 1	**Autumn 2**	**Spring 1**
Numbers within 100 • Read, write, represent, partition, compare and order numbers to 100 • Explore patterns including, odds and evens, tens and ones Addition and subtraction of 2-digit numbers • Apply number bonds to add and subtract • Represent and explain addition and subtraction of two 2-digit numbers • Add three 1-digit numbers	Measures: Length • Draw and measure lengths in centimetres • Use and = to compare and order lengths in metres and centimetres Graphs • Represent and interpret: pictograms, block diagrams, tables and tally charts Multiplication and division • Explore multiplication and division through arrays	Time • Tell the time on an analogue clock: quarter past, quarter to and five minute intervals • Calculate durations of time in minutes and seconds • Sequence daily events • Minutes in an hour and hours in a day Fractions • Part-whole relationships • Fractions as part of a whole or a whole set • Relate to division

Addition and subtraction word problems • Introduction to bar models as a representation • Create, label and sketch bar models	• Explore division as grouping and as sharing • Connect multiplication and division facts using commutativity and inverse • Calculate the times tables of 2, 5, and 10 using different strategies	• Equivalent fractions Addition and subtraction of 2-digit numbers • Illustrate, represent and explain addition and subtraction involving regrouping including 'Make Ten', 'Round and adjust' and near doubles strategies

Spring 2	**Summer 1**	**Summer 2**
Money • Recognise coins and notes • Use £ and p accurately • Add and subtract amounts • Calculate change Face, shapes and patterns; lines and turns • Explore, sort and describe 2-D shapes • Lines of symmetry in 2-D shapes • Identify 2-D shapes on 3-D shapes • Compare and sort 2-D and 3-D shapes • Use language to describe position, direction and rotation to follow a route	Numbers within 1000 • Represent in different ways • Compare using symbols • Read scales Measures: Capacity and volume • Read and measure temperature • Estimate, measure and understand litres and millilitres • Compare and order capacities Measures: Mass • Weigh and compare masses in kilograms and grams	Exploring calculation strategies • Apply addition and subtraction strategies to solve equations • Illustrate and explain addition and subtraction using column method Exploring multiplicative thinking • Pattern seek with multiples of 2, 3, 4 5 and 10 using an array • Use known facts to derive facts from the 3 and 4 times tables • Connect multiplication and division facts using commutativity and inverse

Year 3

<u>Autumn Term</u>
Number sense and exploring calculation strategies
Place value
Graphs
Addition and subtraction
Length and perimeter

<u>Spring Term</u>
Multiplication and division
Calculating with multiplication and division
Time
Fractions

<u>Summer Term</u>
Angles and shapes
Measures
Applying multiplicative thinking
Exploring calculation strategies and place value

Autumn 1	**Autumn 2**	**Spring 1**
Number sense and exploring calculation strategies • Read, write, order and compare numbers to 100 • Calculate mentally using known facts, round and adjust, near doubles, adding on to find the difference • Derive new facts from a known fact Place value • Read, write, represent, partition, order and compare 3-digit numbers	Addition and subtraction • Develop and use a range of mental calculation strategies • Illustrate and explain formal written methods – column method Length and perimeter • Measure, draw and compare lengths • Add and subtract lengths • Calculate perimeter	Multiplication and division • Understanding multiplicative relationships: commutativity and inverse • Exploring multiplication and division facts for 2, 3, 4, 5, 6, 8 and 10 Calculating with multiplication and division • Multiply and divide by 10 • Multiply a 2-digit number by a 1-digit number • Divide 2-digit by a 1-digit • Correspondence problems

• Find 10 and 100 more or less • Round to the nearest multiple of 10 and 100 Graphs • Collect, interpret and present data using charts and tables		

Spring 2	**Summer 1**	**Summer 2**
Time • Tell, record, write and order the time analogue and digital • 12-hour, a.m., p.m • Measure, calculate and compare durations Fractions • Part-whole relationships • Fractions as part of a whole or a whole set and as a number • Add, subtract, compare and order fractions	Angles and shapes • Identify angles including right angles and recognise as a quarter of a turn • Identify and draw parallel and perpendicular lines • Draw/make, classify and compare 2-D and 3-D shapes • Measure the perimeter Measures • Read scales with different intervals when measuring mass and volume • Weigh and compare masses and capacities with mixed units • Estimate mass and capacity	Applying multiplicative thinking • Representing multiplication and division problems • Solve a one-step problem Exploring calculation strategies and place value • Add and subtract mentally • Find 10, 100 and 1000 more or less • Order and compare beyond 1000 • Round numbers

Year 4

<u>Autumn Term</u>
Reasoning with large numbers
Addition and subtraction
Multiplication and division
Discrete and continuous data

<u>Spring Term</u>
Calculating with multiplication and division
Fractions
Time
Decimals
Area and perimeter

<u>Summer Term</u>
Solving measures and money problems
Shape and symmetry
Position and direction
Reasoning with pattern and sequences
3D shape

Autumn 1	**Autumn 2**	**Spring 1**
Reasoning with large numbers • 4-digit place value. Read, write, represent, order and compare • Find 10, 100 or 1000 more or less • Round numbers to the nearest 10, 100 or 1000 Addition and subtraction • Select appropriate strategies to add and subtract • Illustrate and explain appropriate addition and subtraction strategies including column method with regrouping	Multiplication and division • Identify and explore patterns in multiplication tables including 7 and 9 • Distributive property including multiplying three 1-digit numbers • Mental multiplication and division strategies using place value and known and derived facts • Short multiplication Discrete and continuous data • Read, interpret and construct pictograms, bar charts and time graphs • Compare tables, pictograms and bar charts	Calculating with multiplication and division • Division using partitioning • Short division Fractions • Explore different interpretations and representations of fractions • Equivalent fractions • Represent fractions greater than one as mixed number and improper fractions • Add and subtract fractions with the same denominator including fractions greater than one

Spring 2	Summer 1	Summer 2
Time • Analogue to digital, 12- hour and 24-hour • Convert between units of time Decimals • Decimal equivalents to tenths, quarters and halves • Compare and order numbers with same number of decimal places • Multiply and divide by 10 and 100 including decimals Area and perimeter • Perimeter of rectangles and rectilinear shapes • Area of rectangles and rectilinear shapes • Investigate area and perimeter	Solving measures and money problems • Convert units of measure • Select appropriate units to measure • Use strategies to investigate problems: trial and improvement, organising using lists and tables, working systematically Shape and symmetry • Classify, compare and order angles • Compare and classify 2-D shapes • Identify lines of symmetry	Position and direction • Describe and plot using coordinates • Describe translations Reasoning with pattern and sequences • Roman numerals up to 100 • Place value of other number systems • Number sequences and patterns 3D shape • Use understanding of 3-D shapes • Identify 3-D shapes from 2-D representations

Year 5

<u>Autumn Term</u>
Reasoning with large integers
Integer addition and subtraction
Line graphs and timetables
Multiplication and division
Perimeter and area

<u>Spring Term</u>
Fractions and decimals
Angles
Fractions and percentages
Transformations

<u>Summer Term</u>
Converting units of measure
Calculating with whole numbers and decimals
2D and 3D shape
Volume
Problem Solving

Autumn 1	**Autumn 2**	**Spring 1**
Reasoning with large integers • Read, write, order and compare numbers up to one million • Round numbers within one million to the nearest multiple of powers of ten • Read Roman numerals up to M Integer addition and subtraction • Use rounding to estimate • Use a range of mental calculation strategies to add and subtract integers	Multiplication and division • Identify multiples and factors • Investigate prime numbers • Multiply and divide by 10, 100 and 1000 (integers) • Multiply and divide using derived facts • Use written methods to multiply and divide • Use a range of mental calculation strategies Perimeter and area	Fractions and decimals • Read, write, order and compare decimals • Round decimals to the nearest whole number • Represent, identify, name, write, order and compare fractions (including improper and mixed numbers) • Calculate fractions of amounts Angles • Classify, compare and order angles • Measure a draw angles with a protractor

• Illustrate and explain the written method of column addition and subtraction • Select efficient calculation strategies Line graphs and timetables • Complete, read and interpret data presented in line graphs • Read and interpret timetables including calculating intervals	• Investigate area and perimeter of rectilinear shapes • Estimate area of nonrectilinear shapes	• Understand and use angle facts to calculate missing angles

Spring 2	**Summer 1**	**Summer 2**
Fractions and percentages • Add, subtract fractions with denominators that are multiples of the same number • Multiply fractions (and mixed numbers) by a whole number • Explore percentage, decimal, fractions equivalence Transformations • Coordinates in all four quadrants • Translation and reflection • Calculate intervals across zero as a context for negative numbers	Converting units of measure • Convert between metric units of length, mass and capacity and units of time • Know and use approximate conversion between imperial and metric Calculating with whole numbers and decimals • Mental strategies to add and subtract involving decimals • Formal written strategies to add, subtract and multiply involving decimals • Multiply and divide decimal numbers by ten, 100 and 1,000 •Derive addition, subtraction and multiplication facts involving decimals	2D and 3D shape • Classify 2-D shapes and reason about regular and irregular polygons • Properties of diagonals of quadrilaterals • Classify 3-D shapes • 2-D representations of 3-D shapes Volume • Use cube numbers and notation • Estimate volume • Convert units of volume Problem Solving • Negative numbers and calculating intervals across zero • Calculating the mean • Interpret remainders • Investigate numbers: consecutive, palindromic, multiples

Year 6

<u>Autumn Term</u>
Integers and decimals
Multiplication and division
Calculation problems
Missing angles and length
Coordinates and shapes

<u>Spring Term</u>
Fractions
Decimals and measure
Percentage and statistics

<u>Summer Term</u>
Proportion problems

Autumn 1	**Autumn 2**	**Spring 1**
Integers and decimals • Represent, read, write, order and compare numbers up to ten million • Round numbers, make estimates and use this to solve problems in context • Solve multi-step problems involving addition and subtraction Multiplication and division • Identify and use properties of number, focusing on primes • Multiply larger integers and decimal numbers using a range of strategies • Divide integers by 1-digit and 2-digit numbers representing remainders appropriately • Illustrate and explain formal multiplication and division strategies	Missing angles and length • Compare and classify a range of geometric shapes • Use angle facts to find unknown angles Coordinates and shapes • Draw a range of geometric shapes using given dimensions and angles • Describe, draw, translate and reflect shapes on a co-ordinate plane • Recognise and construct 3-D shapes • Name and illustrate parts of a circle	Fractions • Deepen understanding of equivalence • Order, simplify and compare fractions, including those greater than one • Recall equivalence between common fractions and decimals • Find decimal quotients using short division • Add and subtract fractions • Represent multiplication involving fractions • Multiply two proper fractions • Divide a fraction by an integer

Calculation problems • Understand the use of brackets • Use knowledge of the order of operations to carry out calculations • Generate and describe linear number sequences • Express missing number problems algebraically • Solve equations with unknown values		

Spring 2	**Summer 1**	**Summer 2**
Decimals and measure • Use, read, write and convert between standard units of measures; length, mass, time, money and volume as well as imperial units • Calculate the area of parallelograms and triangles • Calculate, estimate and compare the volume of cuboids Percentage and statistics • Calculate and compare percentages of amounts • Connect percentages with fractions • Explore the equivalence of fractions, decimals and percentages • Calculate the mean • Construct and interpret lines graphs and pie charts • Compare pie charts	Proportion problems • Use fractions to express proportion • Identify ratio as a relationship between quantities and as a scale factor • Unequal sharing involving ratio	