Errington Primary School

Mathematics Policy 2021-2022

Mathematics lead	Policy Completion	Policy Review
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Errington Primary School Mathematics Policy

Policy Statement

At Errington we believe mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real-life problems. It also provides the materials and means for creating new imaginative worlds to explore.

The purpose of this policy is to describe our practice in Mathematics and the principles upon which this is based.

Aims

We aim to develop lively, enquiring minds encouraging children to become self-motivated, confident and capable in order to solve problems that will become an integral part of their future. The intent of our mathematics curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience, so they are fully prepared for the future. It is essential that these keystones of Mathematics are embedded throughout all the strands of the National Curriculum.

The National Curriculum for mathematics aims to ensure that pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Using the Programmes of Study from the National Curriculum for Mathematics we aim to develop:

- An enjoyment and curiosity of mathematics and for children to feel confident in becoming successful.
- Children's abilities to use and apply mathematics to solve problems in both the classroom and real-life contexts.

- A confidence to communicate ideas in both written forms and orally
- Independent and collaborative ways of working, encouraging children to share ideas and solve problems together
- A wide range of mathematical vocabulary to be modelled and used in the classroom environment
- The children's ability to recall mental facts accurately and quickly and using effective written calculation methods
- Children's logical thinking, reasoning and ability to problem solve as transferable life skills.

The National Curriculum

Early Years Foundation Stage

The programme of study for the Foundation stage is set out in the EYFS Framework. It is essential for children to develop a strong grounding in number so that all children develop the necessary building blocks to excel mathematically. At Errington, Mathematics involves providing children with opportunities to develop a deep understanding of number and the relationship between them. Children will be provided frequent and varied opportunities to improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems. Errington pupils will be provided opportunities to develop their spatial reasoning skills across all ares of mathematics including shape, space and measures.

By the end of Reception, children are expected to read the Early Learning Goal (ELG) outlined below:

Early Learning Goals:

- Children can count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number.
- Children have a deep understanding of number to 10 including the composition of each number.
- Children can subitise numbers up to 5.
- Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
- Children recognise, create and describe patterns including even and odds, double facts and how quantities can be shared equally.
- Children explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Key Stage One and Two

The Programmes of study for mathematics are set out year by year for Key Stages 1 and 2 in the new National Curriculum (2014). The programmes of study are organised in a distinct sequence and structured into separate domains. Pupils should make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Key Stage One

The principal focus of mathematics teaching in Key Stage 1 is to ensure that pupils develop confidence and fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources (e.g. concrete objects and measuring tools).

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of Year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at Key Stage 1.

Lower Key Stage Two

The principal focus of mathematics teaching in lower Key Stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient recorded and non-recorded methods and perform calculations accurately with increasingly large whole numbers.

At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing

accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number.

By the end of Year 4, pupils should have memorised their multiplication tables up to and including the x12 multiplication table and show precision and fluency in their work.

Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.

Upper Key Stage Two

The principal focus of mathematics teaching in upper Key Stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient recorded and non-recorded methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them.

By the end of Year 6, pupils should be fluent in formal written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

Pupils should read, spell and pronounce mathematical vocabulary correctly.

Teaching and Learning

At Errington Primary, we believe that teaching should be individualised, so no schemes are followed in order to achieve this. Teachers have access to a variety of websites and planning to support their planning process which enables them to find high quality maths resources.

All lessons aim to teach children to be:

- fluent in their mathematical knowledge and skills.
- able to reason mathematically by following a line of enquiry.
- be able to solve problems by applying their mathematical skills.

The staff at Errington Primary School have high expectations of all children, irrespective of ability, and encourage them to be successful and achieve their full potential.

Children will learn maths using concrete materials first and will then move onto pictorial representations before tackling abstract problems. The CPA (Concrete, Pictorial, Abstract) approach is recommended to deliver a mastery approach to teaching mathematics. True mastery aims to develop all children's mathematical understanding at the same pace. As much as possible, children should be accessing the same learning. Differentiation should primarily be through support, scaffolding and deepening, not through task.

Planning and Organisation

At Errington Primary School, teachers are responsible for the numeracy in their class in consultation with and guidance from the mathematics subject leader. Teachers follow a long term plan (Appendix A). Staff use the White Rose Maths Scheme for a basis for their lessons and use other resources to support the children's learning (Abacus, NCETM, Classroom Secrets, Grammarsaurus, Test Base and Number Sense). Planning in this way ensures that the children have a variety of resources and opportunities to develop their mathematical understanding.

The approach to the teaching of Mathematics within the school is based on:

- a Mathematics lesson every day of an age appropriate length.
- 15 minutes of Number Sense per day in KS1 and Reception.
- 10 minutes of mental maths daily to be completed outside of the mathematics lesson.
- Fluency for five.

In addition to a mathematics lesson, the NCETM Mastering Number scheme will be followed for 15 minutes every day in KS1 and Reception. This aims to systematically teach children core declarative knowledge which will benefit all children including those that are disadvantaged. Ensuring children are able to quickly recall math facts enables them to solve problems and reason without their working memory being overloaded.

Errington's long term plan (Appendix A) ensures that all areas of the National Curriculum are covered within the correct year group. Place Value, Addition and Subtraction, and Multiplication and Division are core mathematical concepts. To ensure that children are able to succeed in these areas, they have been placed at the beginning of the year in blocked units to ensure sufficient time for consolidation. These core areas will be continuously revisited throughout the year during mental maths and fluency for five activities.

At the start of every maths lesson, children will revisit prior learning in a Fluency for Five session. This will ensure children revisit previous learning and that core math facts and skills are practised overtime through spaced learning. Low stake quizzes will be used at the end of each fluency block to assess learning.

Assessment and Record Keeping

The work set, combined with a scrutiny of children's recorded work over the previous weeks, helps to review how well children have taken in the topics taught and identifies any remaining misconceptions. Assessment for learning is embedded in the teaching of Mathematics and teachers use this effectively to quickly identify areas of difficulty and inform planning.

Formal Assessment

Regular assessment in mathematics is important to identify where children are on their mathematic learning journey and as a diagnostic tool to identify areas of development and gaps within subject knowledge.

Teachers level all pupils towards the end of each term using a combination of evidence from recorded work, end of Key Stage SATs, End of Topic Assessments and End of Term Assessments using Errington's Mathematics Assessment document found on the website. NTS Assessments are analysed termly and are used to inform future planning and identify learning gaps.

Inclusion

All teaching and non-teaching staff at Errington are responsible for ensuring that all pupils, irrespective of ability, ethnic origin, belief and social circumstances, have access to the whole curriculum and opportunities to make the greatest progress possible in all areas of the curriculum while at this school.

Children with special educational needs will be taught within the daily mathematics lesson and are able to take part at their level through a range of support mechanisms such as adults, activities and resources. However, we recognise this is not always possible, teachers will plan for SEN children who will work with their one-to-one support to access the level of maths appropriate to them. This will be reflected in a child's SEN Support Plan. When additional support staff are available to support groups or individual children, they may withdraw small groups to provide intervention.

Within the daily Mathematics lesson teachers not only provide activities to support children who find Mathematics difficult, but also activities that provide appropriate challenges for children who are high achievers or gifted and talented in Mathematics.

Homework

Teachers, at their discretion, may provide parents and carers with opportunities to work with their children at home. These activities may only be brief but are valuable in

promoting children's learning in Mathematics. Children have the opportunity at home to access 'Times Tables Rockstars', 'NumberBots', 'Active Learn' and 'Century'.

Role of Subject Leader

- To take the lead in policy development
- To support colleagues.
- To monitor progress in Mathematics –scrutiny of work, analysis of formal assessment data.
- To take responsibility for the choice, purchase and organisation of resources for Mathematics, in consultation with colleagues.
- To be familiar with current thinking concerning the teaching of Mathematics, and to disseminate.

Review

The mathematics policy will be reflected in our practise. The policy will be reviewed September 2022.

Appendix A

	Reception Maths Timetable											
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**
Autumn	Getting to Know You Routines, rules and introducing areas of the provision.			Just Like Me! Matching and sorting objects. Comparing amounts, saying which has fewer or fewest using a 5 frame. Use of language to state how big, tall, small something is. Creating patters.			Place Value It's Me 123! Representing, comparing and composition of the numbers 1,2 and 3. Triangles have 3 sides. Circles have one curved side. Spatial awareness, next to, inside and out, over and under.			Numbers to 5 Night and Day! Count and subitise numbers to 5. Matching number of objects to the digit. One more and one less. Shapes with 4 sides. Ordering events of the day.		
Spring	Alive In Five Comparing and composition of numbers to 5. Introduce 0. Comparing Mass (heavy/light) and Capacity (full, empty, nearly empty)			Growing 6,7,8 Composition and comparing numbers to 8. Comparing 2 groups of quantities. One more and one less. Making pairs. Comparing height and length. Days of the week.			Building 9 and 10 Composition and comparing numbers to 10. Ordering numbers to 10. Counting backwards from 10. Patter and 3D shapes.			Numbers to 10 Comparing and ordering numbers to 10. Composition of numbers to 10. Subitising numbers to 5.		
Summer	To 20 and beyond Ordering and comparing numbers to 20. Counting to 20. Missing numbers and number bonds. Matching and naming shapes.			First Then Now Counting on, adding more and taking away. Recognising shapes and making patterns.			Find my Pattern Doubling and sharing. Even and odd numbers.			On the Move Subitising numbers. Patterns. Comparing length and height – longest shortest, tallest, smallest.		

Year 1 Maths Timetable

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Place Value Numbers to 10 then 20. Ordering numbers, comparing numbers, counting one more and one less and ordinal numbers.			Addition and Subtraction Introducing '+' symbol, part whole model, number bonds 5,6,7,8. Adding 1,2 and 3, Subtraction by crossing out and removing items.			Shape Naming and identifying 2D and 3D shapes.	Place Value Comparing and ordering numbers. Making teen numbers.		Consolidation	Addition and Subtraction Fact families Comparing number sentences Finding the difference	
Spring	Place Value Counting forwards and backwards to 50/100. Writing, reading and making 2-digit numbers. Understanding 2-digit numbers are tens and ones. One more and one less than numbers to 50/100.			Addition and Subtraction Revise number bonds Add by counting on Subtraction crossing not crossing 10s.		Length and Height Comparing and measuring	Multiplication and Division Counting in 2s, 5s and 10s. Doubling and halving numbers. Using coins to count.		Measures Weight and Mass Comparing mass. Mass problems Recapping measuring length and height. Writing results in a table.		Consolidation	Ad + S Subtract crossing 10s. Review counting on.
Summer	Place Value (Within 100) Comparing numbers 1 more/1 less. 10 more/10 less		Multiplication and Division Recap counting in 2s,5s and 10s. Making arrays Sharing equal groups		Fractions Finding a half Finding a quarter		Position and Direction Turns Recap shapes and use them to turn	Time Dates and reading a calendar. Telling the time to the hour/half past.		Consolidation	Money Money – coins and adding them	Add + Sub Addition and subtraction recap

Year 2 Maths Timetable

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Counting to 100 forwards and backwards. Reading and writing numbers to 100. Ordering numbers. Tens and ones within 50 then 100. Tens and ones part whole model. Representing numbers to 100. Recap counting in 2s,5s and 10s. Ordinal numbers.			**Addition and Subtraction** Fact families – addition and subtraction bonds to 20. Comparing number sentences, Bonds to 100 (tens). Adding and subtracting ones. 10 more and 10 less. Adding a 1-digit and 2-digit number.			**Money** Recognising coins and notes. Counting money. Adding money. Making amounts. Comparing money. Finding the total and the difference of money. Solving money problems.		**Mul + Div** Counting in 2,5s and 10s. Making arrays.	**Consolidation**	**Shapes** Recognising and identifying 2D and 3D shapes. Properties of shapes.	**Time** Recap telling the time to hour/half past. Tell time to quarter past and quarter too.
Spring	**Place Value** Partitioning numbers Place value additions. Ordering numbers.	**Addition and Subtraction** Adding/subtracting 1-digit and 2-digit numbers. Adding/subtracting two 2-digit numbers. Number bonds to 100 Add three small numbers		**Multiplication and Division** Multiplying by 2,5 and 10. Diving by 2,5 and 10.		**Statistics** Tally chards, pictograms and block diagrams. Reading tables with a key presenting 2,5 and 10.		**Fractions** Finding a half and a quarter of shapes and a quantity. Finding a third. Equivalent fractions.		**Add + Subt** Add and subtract 2-digit numbers.	**Consolidation**	**Mult + Div** Doubling Odd and even numbers Dividing by 2,5 and 10.
Summer	**Measurement** Length and height using standard and non-standard units. Compare lengths and heights. Measure weight and mass. Compare volumes. Read scales on a thermometer in 2s,5s and 10s.			**Add + Sub** Missing number problems.	**Shape** Recap naming and identifying properties of 2D and 3D shapes Line of symmetry. Making patterns.	**Time** . Tell the time to 5 minutes.	**Position and Direction** Describe position and movement. Describe turns.	**Add + Sub** . Adding and subtracting 2-dig numbers.	**Mult + Div** Mut and Divide by 2,5 and 10. Count in 3s.	**Consolidation SATS**	**Fract** Count in fractions. Finding three quarters of a shape or amount.	**Place Value** Compare 2-digit numbers. Number bonds to 100. Place value of 3-dig numbers.

Year 3 Maths Timetable

<table>
<tr><th></th><th>Week 1</th><th>Week 2</th><th>Week 3</th><th>Week 4</th><th>Week 5</th><th>Week 6</th><th>Week 7</th><th>Week 8</th><th>Week 9</th><th>Week 10</th><th>Week 11</th><th>Week 12</th></tr>
<tr><td>Autumn</td><td colspan="3">Place Value
Represent numbers to 100 identifying the tens and the ones.
Part whole – tens and ones.
Find 1, 10 and 100 more or less.
Counting in 100s to 1000.
Representing and partitioning 3-digit numbers. Knowing the place value of 3-digit numbers.
Comparing and ordering 3-digit numbers.
Count in 50s.
Roman numberals.</td><td colspan="3">Addition and Subtraction
Recap adding and subtracting 1s.
Add and subtract 1-digit, and 2-digit numbers to and from 3-digit numbers.
Add and subtract 100s.</td><td colspan="3">Multiplication and Division
Recap multiplying and dividing by 2, 5 and 10.
Multiply and divide by 3 and 4.
Patterns and links between the 2 and 4 times tables.</td><td>Consolidation</td><td colspan="2">Shape
Recap 3D and 2D shapes.
Turns and angles.
Comparing and drawing angles.
Making 3D shapes.</td></tr>
<tr><td>Spring</td><td colspan="2">Addition and Subtraction
Adding and subtracting two 3-digit numbers.</td><td colspan="2">Multiplication and Division
Recap multiplying and dividing by 3 and 4.
Multiply by 8 and show patterns between the 4 and 8 times tables.</td><td>Money
Recap counting money. Add and subtract money.
Give change.</td><td>Statistics
Drawing and interpreting tally charts, pictograms, bar charts and tables.</td><td colspan="3">Measurement
Measure lengths using m/cm/mm.
Add and subtract lengths.
Calculating and measuring the perimeter.</td><td colspan="2">Fractions
Finding half/quarter and a third.
Equivalent fractions.</td><td>Consolidation</td><td>Mult/ Div
Multiply 2-digit by 1-digit numbers.</td></tr>
<tr><td>Summer</td><td colspan="2">Multiplication and Division
Multiply and divide 2-digit by 1-digit.</td><td colspan="2">Fractions
Counting in tenths.
Fractions on a number line.
Equivalent fractions
Compare and order fractions
Add and subtract fractions.</td><td colspan="2">Time
Recap telling the time to 5 minutes.
Tell the time to a minute.
24 hour clock.
Roman numeral clock and the symbols.</td><td colspan="3">Measurement
Measure and compare mass.
Add and subtract mass.
Measure capacity.
Compare volume.
Recap temperature.</td><td>Mult/ Div
Divide with remainders Mult/divid 2-digit by 1-digit.</td><td>Consolidation</td><td colspan="2">Add and Subtract
Add and subtract two 3-digit numbers using formal methods.</td></tr>
</table>

Year 4 Maths Timetable

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Recap numbers to 1000. Recap place value of 100s, 10s and 1s. Rounding to the nearest 10 and 100. Partitioning 4-digit numbers. Find 1,10,100 more or less. Compare and ordering numbers.			**Addition and Subtraction** Add and subtract 1,10,100 and 1000. Add and subtract two 3-digit numbers. Add and subtract two 4-digit numbers.			**Measurement** Equivalent lengths – m/cm and mm/cm. Introduce kilometres. Add and subtract lengths. Measure perimeter.		**Mult/ Div** Multiply and divide by 10 and 100. Recap 3, 4 and 8 times tables.	Consolidation	**Multiplication and Division** Multiply and divide by 3, 6 and 9 showing the patterns and relationship between them. Multiply and divide by 7.	
Spring	**Place Value** Negative numbers. Roman numerals.	**Add/ Subt** Adding and subtracting two 4-digit numbers Finding missing numbers..	**Area** Counting squares. Find the area of rectilinear shapes.	**Multiply and Divide** 11 and 12 times tables. Factor pairs Multiply 3 numbers. Multiply 2-digit by 1-digit.		**Fractions** Recap unit and non-unit fractions. What is a fraction. Counting in tenths. Equivalent fractions. Adding and subtracting fractions. Fractions of a quantity.			**Decimals** Tenths and hundredths. Tenths on a number line. Divide 1-digit by 10 and 2-digit by 100. Place value of decimals on place value frid.		Consolidation	**Stat** Interpreting charts. Line graphs.
Summer	**Decimals** Recap bonds to 10 and 100. Make a whole by adding decimals. Compare and order decimals. Rounding decimals.		**Mult/ Div** Recap times tables.	**Money** Adding and subtracting money. Finding change. Estimating money. Ordering money.		**Geometry** Compare, order and identify angles and turns. Recap shapes describing properties. Position on a grid.	**Mult/ Div** Recap times tables.		**Time** Recap telling time. Converting 12 hour to 24 hour. Years/months weeks and days.	Consolidation	**Geometry** Classify quadrilaterals and triangles based on properties. Lines of symmetry.	

Year 5 Timetable

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Recap 1000s, 100s, 10s and 1s. Numbers and place value to 10,000 then 100,000 and then 1 million. Compare and order numbers to 1 million. Counting forward and backwards with negative numbers. Roman numerals			**Addition and Subtraction** Add and subtract numbers with more than 4 digits. Round to estimate answers and use inverse operations. Solve multi-step problems.		**Multiply and Divide** Multiplies, factors, prime numbers, cube numbers and square numbers		**Stat** Interpreting charts and reading and interpreting tables and timetables.	**Measu** Recap Perimeter. Calculate the area.	Consolidation	**Stat** Reading, interpreting and drawing line graphs.	**Mult/ Div** Multiply and divide by 10,100 and 1000..
Spring	**Add/ sub** Adding and subtracting more than 4-digit numbers.	**Multiply and Divide** Recap multiply 1-digit by 2 and 3-digit numbers. Multiply 4-digit by 1-digit. Multiply 2 and 3-digit by 2-digit. Recap divide 2/3-digit by 1-digit numbers. Divide 4-digit by 1-digit with remainders.		**Fractions** Recap equivalent fractions and fractions greater than 1. Convert improper fractions to mixed numbers and mixed numbers to improper fractions. Compare and order fractions. Add and subtract fractions. Add and subtract mixed numbers. Multiply fractions and mixed numbers by integers. Calculate fractions of a quantity. Using fractions as operators. .						**Deci** Decimals as fractions. Thousandths as decimals. Order and compare decimals.	Consolidation	**Perc** Understanding percentages. Percentages as fractions and decimals. Equivalent fractions/ decimals/ percentages.
Summer	**Decimals** Adding and subtracting decimals with the same and with a different number of decimal places.		**Geometry: Shape** Recap identifying angels and comparing and ordering angels. Measure and draw angels with a protractor. Calculate angles on a straight line and around a point. Recap triangles and quadrilaterals. Calculate angles in shapes. 3D shapes.		**Posit + Dir** Recap describing position and drawing on a grid. Position in the frst quadrant. Translation with coordinates. Recap line of symmetry. Reflection with coordinates.			**Deci** Multiply and divide decimals by 10, 100 and 1000.	**Volume** Comparing and estimating volume.	Consolidation	**Measurement** Converting units of measurement. Convert: kilometres and metres. Kilograms and grams. Milligrams and grams. Metric and imperial units. Converting units of time. Converting time on timetables.	

Year 6 Timetable

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Recognise the place value of each digit in numbers up to 10,000,000. Compare and order numbers. Round numbers. Negative numbers. Roman numerals.		**Addition and Subtraction** Add and subtract numbers with more than 4-digits using the column method. Add and subtract integers.		**Multiplication and Division** Recap multiplying 2,3,4 -digit numbers by 2-digit numbers. Recap dividing 4-digit by 1-digit with remainders. Short division, long division. Recap factors, multiples, primer/cube and square numbers.			**Pos + Direc** Four quadrants. Translations and reflections.	**Frac** Recap equivalent fractions and simplifying fractions. Convert improper fractions and mixed numbers.	Consolidation	**Fractions** Fractions on a number line, compare and order fractions. Add and subtract fractions. Multiply and divide fractions by integers. Fractions of amounts.	
Spring	**Decimals** Multiply and divide decimals by 10,100 and 1000. Multiply and divide decimals by integers. Decimals as fractions.		**Percentages** Fractions to percentages. Equivalent fractions, decimals and percentages. Percentages of amounts.		**Algebra** Forming expressions. Substitution Use formulae Solve two step equations		**Measurement** Converting units: metric measure and imperial measures. Area and perimeter. Area of a triangle and a parallelogram. Volume of a cuboid.		**Ratio** Ratio and fractions. Calculating ratio. Use scale factors.		Consolidation	**Stat** Line graphs and pie charts. The mean
Summer	**Shape** Angles on a straight-line and a point. Missing angles in shapes. Draw shapes and 3D nets accurately.		**SATS revision**		**Revision and consolidation**					Consolidation	**Revision**	