Durley CE (Controlled) Primary School
Mathematics Curriculum – Long Term Overview

INTENT

Why do we teach maths? Why do we teach it in the way we do?

Mathematics is an important discipline which helps us to understand and change the world. We want all pupils at Durley Primary School to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject with a clear understanding. At Durley Primary School we foster positive attitudes and promote the fact that 'We can all do maths!'. We believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich problems. Weaving through the heart of our maths education is a commitment to enhancing and promoting our core Christian Values: Love, Respect and Forgiveness.

We aim for all pupils to:

- become fluent in the fundamentals of mathematics so they can develop contextual understanding and apply their knowledge rapidly.
- be proficient at recalling key facts.
- be able to solve problems by applying their mathematics to a variety of problems.
- be able to reason mathematically and methodically by following a line of enquiry and present a justification, argument or proof using mathematical language.
- have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be a successful mathematician.

IMPLEMENTATION

What do we teach? What does this look like?

Our whole curriculum is shaped by our school vision which enables all children, regardless of background, ability, additional needs, to flourish to become the very best version of themselves they can possibly be. We teach National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. We use a range of resources such as White Rose, NCETM, nrich and ISee reasoning, alongside our own calculation progressions and times tables schemes.

KS1 – Children are taught for approximately 1 hour daily – this includes a 10 minute mental maths session either at the start or the end of the lesson.
KS2 – Children are taught for approximately 1 hour 15 minutes daily – this includes a 15 minute mental maths session either at the start or end of the lesson.

Challenge is evident throughout all lessons, children are always asked to reason and prove their understanding at a deeper secure level.

Support is given to all children who need it within the maths lesson. If required, extra support is given through high quality interventions such as precision teaching outside the main maths lesson time.
Children are encouraged to further secure their mathematical understanding by carefully planned maths homework to reinforce concepts taught in school.

IMPACT
By the end of KS2 we aim for the children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. Our children will have the confidence to succeed in all areas of mathematics. Children will have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

Yellow and Blue Class - Year 1- Long Term Planning - AUTUMN TERM												
Yellow & Blue Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 1	<u>Number & Place Value (Within 10)</u> I can count to and across 10, forwards and backwards. I can count, read and write numbers to 10 in numerals. I can identify one more and one less than any given number. I can identify and represent numbers using objects and pictorial representation. I can read and write numbers from 1 to 10 in numerals and words.				<u>Number: Addition & Subtraction (Within 10)</u> I can read, write and interpret mathematical statements involving addition, subtraction and equals signs. I can represent and use number bonds and related subtraction facts within 10. I can add and subtract one digit numbers to 10, including zero. I can solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.					<u>Geometry: Shape</u> I can recognise and name 2D and 3D shapes.		<u>Number: Place Value (Within 20)</u> I can count to and across 20, forwards and backwards. I can count, read and write numbers to 20 in numerals. I can identify one more and one less than any given number. I can identify and represent numbers using objects and pictorial representation. I can read and write numbers from 1 to 20 in numerals and words.

Yellow and Blue Class - Year 1- Long Term Planning - SPRING TERM												
Yellow & Blue Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 1	Consolidation	<u>Number: Addition and Subtraction (Within 20)</u> I can read, write and interpret mathematical statements involving addition, subtraction and equals signs. I can represent and use number bonds and related subtraction facts within 20. I can add and subtract one digit numbers to 20, including zero. I can solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.			<u>Number: Place Value (Within 50)</u> I can count to and across 50, forwards and backwards. I can count, read and write numbers to 50 in numerals. I can identify one more and one less than any given number. I can identify and represent numbers using objects and pictorial representation. I can read and write numbers from 1 to 50 in numerals and words.			<u>Measurement: Length & Height</u> I can compare describe and solve practical problems for lengths and heights. I can measure and begin to record lengths and heights.		<u>Measurement: Weight and Volume</u> I can compare describe and solve practical problems for mass/weight, capacity and volume. I can measure and begin to record mass/weight, capacity and volume		Consolidation

Yellow and Blue Class - Year 1- Long Term Planning - SUMMER TERM												
Yellow & Blue Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 1	Consolidation	Number: Multiplication & Division I can solve one step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays.			Number: Fractions I can recognise, find and name a half as one of two equal parts of an object, shape or quantity. I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.		Geometry: Position Direction I can describe position, direction and movement, including whole, half, quarter and three-quarter turns.	Number: Place Value (Within 100) I can count to and across 100, forwards and backwards. I can count, read and write numbers to 100 in numerals. I can identify one more and one less than any given number. I can identify and represent numbers using objects and pictorial representation. I can read and write numbers from 1 to 100 in numerals and words.		Measure: Money I can recognise and know the value of different denominations of coins and notes.	Measurement: Time I can sequence events in chronological order using appropriate language. I can recognise and use language relating to dates, including days of the week, weeks, months and years. I can tell the time to the hour and half past the hour and draw the hands on a clock to show these times. I can compare describe and solve practical problems for time I can measure and begin to record time.	

Yellow Class - Year 2- Long Term Planning - AUTUMN TERM												
Yellow Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 2	<u>Number: Place Value</u> I can count insteps of 2,3,5 and 0, and in tens from any number forwards and backwards. I can recognise the place value of each number in a 2 digit number. I can identify, represent and estimate numbers using different representations. I can compare and order numbers from 0 up to 100; use < > and = signs. I can read and write numbers to at least 100 in numerals and words. I can use place value and number facts to solve problems.			<u>Number: Addition & Subtraction</u> I can solve problems with addition and subtraction, using concrete objects and pictorial representations. I can apply my increasing knowledge of mental and written methods. I can recall and use addition and subtraction facts to 20 fluently, and derive related facts up to 100. I can add and subtract numbers using concrete objects, pictorial representations and mentally including: a 2 digit number and ones, tens, 2 digit numbers and adding 3 one digit numbers. I can show that addition of 2 numbers can be done in any order (commutative) and subtraction cannot. I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.				<u>Measurement: Money</u> I can recognise and use symbols for pounds (£) and pence (p). I can combine amounts to make a particular value. I can find different combinations of coins that equal the same amount of money. I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.		<u>Number: Multiplication & Division</u> I can recall and use multiplication and division facts for the 2,5 and 10 tables. I can calculate mathematical statements for multiplication and division using the correct signs. I can show that multiplication can be done in any order (commutative) but division cannot. I can solve problems involving multiplication & division.	<u>Consolidation</u>

Yellow Class - Year 2- Long Term Planning - SPRING TERM												
Yellow Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 2	<u>Number: Multiplication & Division</u> I can recall and use multiplication and division facts for the 2,5 and 10 tables. I can calculate mathematical statements for multiplication and division using the correct signs. I can show that multiplication can be done in any order (commutative) but division cannot. I can solve problems involving multiplication & division.				<u>Statistics</u> I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables. I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. I can ask and answer questions about totalling and comparing categorical data.			<u>Geometry: Properties of Shape</u> I can identify and describe the properties of 2D shapes, including the number of sides and line of symmetry. I can identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. I can identify 2D shapes on the surface of 3D shapes. I can compare and sort common 2D and 3D shapes and everyday objects.		<u>Number Fractions</u> I can recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity. I can write simple fractions for example ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.		

Yellow Class - Year 2- Long Term Planning - SUMMER TERM												
Yellow Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 2	<u>Measurement: Length & Height</u> I can choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm) using rulers.		<u>Geometry: Position & Direction</u> I can order and arrange combinations of mathematical objects in patterns and sequences, I can 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.		<u>Consolidation &Problem Solving</u>		<u>Measurement: Time</u> I can compare and sequence intervals of time. I can 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. I know the number of minutes in an hour and the number of hours in a day.		<u>Measurement: Mass, Capacity and Temperature</u> I can choose and use appropriate standard units to estimate and measure mass (kg/g), temperature, capacity (litres and ml) to the nearest appropriate unit using thermometers, scales and measuring vessels.			<u>Consolidation</u>

Red Class - Year 3/4- Long Term Planning - AUTUMN TERM												
Red Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 3	<u>Number: Place Value</u> **Year 3:** I can recognise the place value of each digit in a 3 digit number. I can compare and order numbers up to 1000. I can identify, represent and estimate numbers using diff representations. I can read and write numbers up to 1000 in digits and words. I can count in multiples of 4,8,50, 100. I can find 10 or 100 more/less than given number.				<u>Number: Addition & Subtraction</u> **Year 3:** I can add and subtract numbers mentally (3 digit and ones, tens and hundreds) I can add and subtract numbers with up to 3 digits, using formal written methods. I can estimate the answer to a calculation and use inverse to check.				<u>Number: Multiplication & Division</u> **Year 3:** I can write and calculate maths statements for multiplication and division using the tables I know including 2 digit by one digit numbers, using mental and formal methods. I can solve missing number problems. I can recall multiplication facts for the 3,4 and 8 multiplication tables.			
Year 4	**Year 4:** I can find 1000 more/less than given number. I can count backwards through zero including negative numbers. I can recognise the value of each digit in a 4 digit number. I can order/compare numbers beyond 1000. I can identify, represent and estimate number using diff representations. I can round any number to the nearest 10,100, 1000. I can read Roman numerals to 100. I can count in multiples of 6,,7,9,25 and 1000.				**Year 4:** I can add and subtract numbers with up to 4 digits, using formal written methods. I can estimate the answer to a calculation and use inverse to check. I can solve addition and subtraction two step problems in contexts, deciding which operations to use and why.				**Year 4:** I can recall multiplication and division facts for multiplication tables up to 12 x 12. I can use place value, known and derived facts to multiply and divide mentally. I can multiply 3 numbers. I can recognise and use factor pairs and commutativity in mental calculations. I can multiply a 2 and 3 digit number by a 1 digit number using formal methods.			

Red Class - Year 3/4- Long Term Planning - SPRING TERM												
Red Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 3	<u>Number: Multiplication & Division</u> **Year 3:** I can write and calculate maths statements for multiplication and division using the tables I know including 2 digit by one digit numbers, using mental and formal methods. I can solve missing number problems.		<u>Measurement: Length, perimeter and area.</u> **Year 3:** I can measure, compare and add lengths, mass and volume/capacity. I can measure the perimeter of 2D shapes.		<u>Number: Fractions</u> **Year 3** I can count up and down in tenths. I can recognise, find and write fractions of a set of objects, unit fractions and non-unit fractions. I can recognise and use fractions as numbers. I can recognise and show, using diagrams, equivalent fractions. I can add and subtract fractions with the same denominator within one whole. I can compare and order unit fractions, and fractions with the same denominator.				<u>Y3: Measurement, Mass and Capacity.</u> <u>Y4: Number: Decimals</u> **Year 3:** I can measure, compare and add lengths, mass and volume/capacity.			Consolidation
Year 4	**Year 4:** I can use place value, known and derived facts to multiply and divide mentally. I can multiply 3 numbers. I can recognise and use factor pairs and commutativity in mental calculations. I can multiply a 2 and 3 digit number by a 1 digit number using formal methods.		**Year 4:** I can convert between units of measure. I can measure perimeter of rectilinear shape. I can find area by counting squares.		**Year 4:** I can recognise and show, using diagrams, families of equivalent fractions. I can count up and down in hundredths. I can solve problems to calculate quantities. I can add and subtract fractions with the same denominator.				**Year 4:** I can recognise and write decimal equivalents of any number of tenths and hundredths. I can recognise decimal equivalents to ½, ¼ and ¾. I can find the effect of dividing a one and 2 digit number by 10 or 100. I can round decimals with one decimal place to the nearest whole number. I can compare numbers with the same number of decimal places up to 2dp.			Consolidation

Red Class - Year 3/4- Long Term Planning - SUMMER TERM												
Red Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 3	<u>Number: Decimals (including money)</u> **Year 3:** I can add and subtract amounts of money to give change, using £ and p notation.			<u>Measurement: Time</u> **Year 3:** I can tell the time on an analogue clock, including Roman numerals, and 12 and 24 hour clocks. I can estimate and read time with increasing accuracy to the nearest minute. I know the number of seconds in a minute and number of days each month, year. I can compare the duration of events.			<u>Statistics</u> **Year 3:** I can interpret and present data using bar charts, pictograms and tables. I can solve one and two step problems using info in scaled bar charts, pictograms and tables.		<u>Geometry: Properties of Shape (including Y4 Position & Direction)</u> **Year 3:** I can draw 2D shapes and make models of 3D shapes. I can recognise angles as a property of shape or a description of turn. I can identify right angles. I recognise that 2 right angles make a half turn etc. I can identify whether angles are smaller or bigger than a right angle. I can identify horizontal and perpendicular lines and pairs of perpendicular and parallel lines.			consolidation
Year 4	**Year 4:** I can recognise and write decimal equivalents of any number of tenths and hundredths. I can recognise decimal equivalents to ½, ¼ and ¾. I can find the effect of dividing a one and 2 digit number by 10 or 100. I can round decimals with one decimal place to the nearest whole number. I can compare numbers with the same number of decimal places up to 2dp.			**Year 4:** I can read, write and convert time between analogue and digital 12 and 24 hour clocks. I can solve problems involving converting from hours to minutes etc.			**Year 4:** I can interpret and present discrete and continuous data. I can solve comparison, sum and difference problems using info presented in bar charts, pictograms, tables and graphs.		**Year 4:** I can compare and classify geometric shapes. I can identify acute and obtuse angles and compare and order angles. I can identify lines of symmetry in 2D shapes. I can complete a simple symmetric figure with respect to a specific line of symmetry. I can describe positions on a 2D grid as coordinates in the first quadrant. I can describe movements between positions as translations. I can plot specified points and draw sides to complete a polygon.			Consolidation

Green Class – Maths Year 4/5 Long Term Planning - AUTUMN TERM												
Red Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 4	**Number: Place Value** I can find 1000 more/less than given number. I can count backwards through zero including negative numbers. I can recognise the value of each digit in a 4 digit number. I can order/compare numbers beyond 1000. I can identify, represent and estimate number using diff representations. I can round any number to the nearest 10,100, 1000. I can read Roman numerals to 100. I can count in multiples of 6,,7,9,25 and 1000.				**Number: Addition & Subtraction** I can add and subtract numbers with up to 4 digits, using formal written methods. I can estimate the answer to a calculation and use inverse to check. I can solve addition and subtraction two step problems in contexts, deciding which operations to use and why.			**Number: Multiplication & Division** I can recall multiplication and division facts for multiplication tables up to 12 x 12. I can use place value, known and derived facts to multiply and divide mentally. I can multiply 3 numbers. I can recognise and use factor pairs and commutativity in mental calculations. I can multiply a 2 and 3 digit number by a 1 digit number using formal methods.			**Measurement: Length, Area and Perimeter** I can convert between units of measure. I can measure perimeter of rectilinear shape. I can find area by counting squares.	
Year 5	**Number: Place Value** I can read, write, order and compare numbers to at least 1000000 and determine the value of each digit. I can count forwards and backwards in steps of powers of 10 for any given number up to 1000000. I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers. I can round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000. I can solve problems that involve all the above. I can read Roman numerals to 1000(M).				**Number: Addition & Subtraction** I can add and subtract while numbers with more than 4 digits, including using formal written methods. I can add and subtract numbers mentally with increasingly large numbers. I can use rounding to check answers to calculations and determine levels of accuracy. I can solve addition and subtraction multi-step problems in context.			**Number: Multiplication & Division** I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. I know and can use the vocabulary of prime numbers, prime factors and composite numbers. I can establish whether a number up to 100 is prime and recall prime numbers up to 19. I can 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. I can multiply and divide numbers mentally drawing upon known facts. I can divide numbers up to 4 digits by a one digit number using the formal written method. I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.			**Measurement: Length, Area and Perimeter** I can measure and calculate the perimeter of composite rectilinear shapes in cm and m. I can calculate and compare the area of rectangles and including using standard units, square centimetres and square metres and estimate the area of irregular shapes.	

Green Class – Maths Year 4/5 Long Term Planning - SPRING TERM												
Red Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 4	**Number: Multiplication & Division** I can use place value, known and derived facts to multiply and divide mentally. I can multiply 3 numbers. I can recognise and use factor pairs and commutativity in mental calculations. I can multiply a 2 and 3 digit number by a 1 digit number using formal methods.			**Number: Fractions:** I can recognise and show, using diagrams, families of equivalent fractions. I can count up and down in hundredths. I can solve problems to calculate quantities. I can add and subtract fractions with the same denominator.					**Number: Decimals** I can recognise and write decimal equivalents of any number of tenths and hundredths. I can recognise decimal equivalents to ½, ¼ and ¾. I can find the effect of dividing a one and 2 digit number by 10 or 100. I can round decimals with one decimal place to the nearest whole number. I can compare numbers with the same number of decimal places up to 2dp.		
Year 5	**Number: Multiplication & Division** I can recognise and use square numbers and cube numbers, and the notation for squared and cubed. I can solve problems involving multiplication and division using knowledge of factors and multiples, squares and cubes. I can solve problems involving addition, subtraction, multiplication and division. I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.			**Number: Fractions** I can compare and order fractions whose denominators are all multiples of the same number. I can identify, name and write equivalent fractions of a given fraction. I recognise mixed numbers and improper fractions and convert from one form to the other. I can add and subtract fractions with the same denominator and denominators that are multiples of the same number. I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.					**Number: Decimals** I can read and write decimals as fractions. I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. I can round decimals with two decimal places to the nearest whole number and to one decimal place. I can read, write, order and compare numbers up to 3 decimal places. I can solve problems involving number up to 3dp.		

Green Class – Maths Year 4/5 Long Term Planning - SUMMER TERM												
Red Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 4	**Number: Decimals including money.** I can recognise and write decimal equivalents of any number of tenths and hundredths. I can recognise decimal equivalents to ½, ¼ and ¾. I can find the effect of dividing a one and 2 digit number by 10 or 100. I can round decimals with one decimal place to the nearest whole number. I can compare numbers with the same number of decimal places up to 2dp.		**Time** I can read, write and convert time between analogue and digital 12 and 24 hour clocks. I can solve problems involving converting from hours to minutes etc.	**Statistics:** I can interpret and present discrete and continuous data. I can solve comparison, sum and difference problems using info presented in bar charts, pictograms, tables and graphs.		**Geometry: Properties of shapes** I can compare and classify geometric shapes. I can identify acute and obtuse angles and compare and order angles. I can identify lines of symmetry in 2D shapes. I can complete a simple symmetric figure with respect to a specific line of symmetry.			**Geometry: Position & Direction** I can describe positions on a 2D grid as coordinates in the first quadrant. I can describe movements between positions as translations. I can plot specified points and draw sides to complete a polygon.	**Year 4: Consolidation**		Consolidation

Year 5	**Number: Decimals** I can recognise the percent sign and understand that per cent relates to 'number of parts per hundred' and write fractions as a fraction and a decimal. I can solve problems which require knowing percentage and decimal equivalents and those fractions with a denominator of a multiple of 10 or 25.	**Time:** I can solve problems involving converting between units of time.	**Statistics:** I can solve comparison, sum and difference problems using information presented in a line graph. I can complete, read and interpret information in tables, including timetables.	**Geometry: Properties of Shape** I can identify 3D shapes, including cubes and cuboids, from 2D representations. I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. I can draw given angles and measure them in degrees. I can identify angles at a point and one whole turn, angles at a point on a straight line and other multiples of 90. I can use the properties of rectangles to deduce related facts and find missing lengths and angles. I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	**Geometry: Position & Direction** I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language and know that the shape has not changed.	**Year 5: Converting units and volume.** I can convert between different units of metric measure. I can understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	**Consolidation**

Purple Class - Year 6 Long Term Planning - AUTUMN TERM												
Purple Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 6	<u>Number: Place Value</u> I can read, write, order and compare numbers up to 10 000 000 and determine the value of each digit. I can round any whole number to a required degree of accuracy. I can use negative numbers in context, and calculate intervals across zero I can solve number problems and practical problems that involve all of the above.		<u>Number: Addition, Subtraction, Multiplication & Division</u> I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. I can divide numbers up to 4 digits by a two-digit whole number using the efficient written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. I can perform mental calculations, including with mixed operations and large numbers. I can identify common factors, common multiples and prime numbers. I can use my knowledge of the order of operations to carry out calculations involving the four operations. I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. I can solve problems involving addition, subtraction, multiplication and division. I can use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.					<u>Number: Fractions</u> I can use common factors to simplify fractions. I can use common multiples to express fractions in the same denomination I can compare and order fractions, including fractions >1. I can associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^3/_8$). I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. I can multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $^1/_4 \times {}^1/_2 = {}^1/_8$). I can divide proper fractions by whole numbers (e.g. $^1/_3 \div 2 = {}^1/_6$).			<u>Geometry: Position & Direction</u> I can describe positions on the full coordinate grid (all four quadrants). I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Purple Class - Year 6 Long Term Planning - SPRING TERM												
Purple Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 6	<u>Number: Decimals</u> I can identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places I can multiply one-digit numbers with up to two decimal places by whole numbers. I can use written division methods in cases where the answer has up to two decimal places.		<u>Number: Percentages</u> I can solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360 and the use of percentages for comparison. I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.		<u>Number: Algebra</u> I can express missing number problems algebraically. I can use simple formulae expressed in words. I can generate and describe linear number sequences. I can find pairs of numbers that satisfy number sentences involving two unknowns.		<u>Measurement: Converting Units</u> I can solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate. I can 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 3dp. I can convert between miles and kilometres.	<u>Measurement: Perimeter, Area & Volume</u> I can recognise that shapes with the same areas can have different perimeters and vice versa. I can calculate the area of parallelograms and triangles. I can recognise when it is necessary to use the formulae for area and volume of shapes. I can calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3) and extending to other units, such as mm^3 and km^3.		<u>Number: Ratio</u> I can solve problems involving the relative sizes of two quantities, including similarity. I can solve problems involving unequal sharing and grouping.		<u>Consolidation</u>

Purple Class - Year 6 Long Term Planning - SUMMER TERM												
Purple Class	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Year 6	<u>Statistics</u> I can interpret and construct pie charts and line graphs and use these to solve problems. I can calculate and interpret the mean as an average.		<u>Geometry: Properties of Shapes</u> I can recognise, describe and build simple 3-D shapes, including making nets. I can compare and classify geometric shapes based on their recognise, describe and build simple 3-D shapes, including making nets. I can illustrate and name parts of circles, including radius, diameter and circumference. I can find unknown angles where they meet at a point, are on a straight line, and are vertically opposite.			<u>Consolidation and Themed Projects</u>						