Year 3/4

National curriculum	Links
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 written and mental 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 12 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.	https://www.ncetm.org.uk/teaching-for-mastery/masterymaterials/primary-masteryprofessional-development/ https://whiterosemaths.com/resources?year=year-3-new https://www.activelearnprimary.co.uk/app/plans/powermaths2023/year/1101103

Long term overview



Year 3/4 – Autumn

Place value (4 weeks)

National Curriculum	Small steps	Vocabulary
• Count from 0 in multiples of 4, 8, 50 and 100. • Find 10 or 100 more or less than a given number. • Identify, represent and estimate numbers using different representations. • Read and write numbers up to 1,000 in numerals and in words. • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • Compare and order numbers up to 1,000. • Solve number problems and practical problems involving these ideas.	1. Hundreds, tens and ones 2. Represent numbers to 1000 3. Partition numbers to 1000 4. Thousands 5. Represent numbers to 10,000 6. Partition numbers to 10,000 7. Flexible partitioning 8. Find 1,10,100 or 1000 more or less 9. Number lines to 1000 10. Number lines to 10,000 11. Estimate on a number line 12. Compare numbers 13. Order numbers 14. Round to the nearest 10 15. Round to the nearest 100 16. Round to the nearest 1000 17. Round to the nearest 10,100,1000 18. Roman numerals	Numeral Ones Tens Hundreds Three-digit digit Equal to Equivalent to More, less Most, least Larger/bigger/greater Most, biggest, greatest Fewer, smaller, less Fewest, smallest, least Above/below Half-way between

Ready to progress criteria

3NPV – 1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.
3NPV – 2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning.
3NPV – 3 Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10
3NPV – 4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.
4NPV – 2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.
4NPV – 3 Reason about the location of any four digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each

Progression

Y2

- Count in steps of 2, 3, and 5 from 0, and in tens from any number, forwards and backward.
- Read and write numbers to at least 100 in numerals and in words.
- Identify, represent and estimate numbers using different representation, including the number line.
- Recognise the place value of each digit in a two-digit number (tens, ones)
- Compare and order numbers from 0 up to 100 using the inequality signs.
- Use place value facts to solve problems.

Y3

- Count from 0 in multiples of 4, 8, 50 and 100.
- Find 10 or 100 more or less than a given number.
- Identify, represent and estimate numbers using different representations.
- Read and write numbers up to 1,000 in numerals and in words.
- Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).
- Compare and order numbers up to 1,000.
- Solve number problems and practical problems involving these ideas.

Y4

- Count in multiples of 6, 7, 9, 25 and 1,000.
- Count backwards through zero to include negative numbers.
- Identify, represent and estimate numbers using different representations.
- Read Roman numerals to 100.
- Find 1,000 more or less than a given number.
- Recognise the place value of each digit in a four-digit number.
- Order and compare numbers beyond 1,000.
- Round any number to the nearest 10, 100 or 1,000.
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers.

Year 3/4 – Autumn

Addition and subtraction (4 weeks)

National Curriculum	Small steps	Vocabulary

• Estimate the answer to a calculation and use inverse operations to check answers. • Add and subtract numbers mentally, including a 3 digit number and ones; a 3 digit number and tens; and a 3 digit number and hundreds. • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. • Estimate and use inverse operations to check answers to a calculation • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	1. Add and subtract 1s, 10s, 100s and 1,000s 2. Add and subtract 1s, 10s, 100s and 1,000s across a boundary 3. Subtract and subtract 1s, 10s, 100s and 1,000s across a boundary 4. Make connections 5. Add up two 4-digit numbers – no exchange 6. Add up two 4-digit numbers (across a 10) 7. Add up two 4-digit numbers (across a 100) 8. Add up two 4-digit numbers (across a 1,000) 9. Add numbers with a different number of digits 10. Subtract up two 4-digit numbers – no exchange 11. Subtract up two 4-digit numbers – (across a 10) 12. Subtract up two 4-digit numbers – (across a 100) 13. Subtract up two 4-digit numbers – (across a 1,000) 14. Subtract numbers with a different number of digits 15. Complements to 100 and 1,000 16. Estimate answers 17. Inverse operations 18. Efficient methods	Partitioned Addition Addend + addend = sum/total Add, plus, more, make, altogether Subtract, take away Equals/is equal to Number bonds/pairs Expression Equation Double, near double Tens boundary/hundreds boundary

Ready to progress criteria

3NF – 1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice.
3AS – 1 Calculate complements to 100.
3AS – 2 Add and subtract up to three-digit numbers using columnar methods.
3AS – 3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.
4NF – 3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)

Progression

Y2

- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
- Add and subtract numbers using concrete objects, pictorial representations, and mentally including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers and adding three one-digit numbers.
- Solve problems with addition and subtraction.

Y3

- Estimate the answer to a calculation and use inverse operations to check answers.
- Add and subtract numbers mentally, including a 3 digit number and ones; a 3 digit number and tens; and a 3 digit number and hundreds.
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Y4

- Estimate and use inverse operations to check answers to a calculation
- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

Year 3/4 – Autumn

Multiplication and division A (3 weeks)

National Curriculum	Small steps	Vocabulary
• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. • Count in multiples of 6, 7, 9, 25 and 1,000 • Recall multiplication and division facts for multiplication tables up to 12 x 12	1. Arrays 2. Sharing and groupings 3. The 2,5,10 times-tables 4. The 4 times-table 5. The 8 times-table 6. The 2,4 and 8 times-table 7. The 3 times-table 8. The 6 times-table 9. The 9 times-table 10. The 3, 6 and 9 times-table 11. The 7 times-table 12. The 11 times-table 13. The 12 times-table 14. Multiply by 1 and 0 15. Divide a number by 1 and itself	Multiple Factor Groups of Repeated addition grouping, sharing Array Factor x factor = product

Ready to progress criteria

3NF – 2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.

3NF – 3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).

3MD – 1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division.

4NPV – 1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.

4NF – 1 Recall multiplication and division facts up to 12 × 12 and recognise products in multiplication tables as multiples of the corresponding number.

4NF – 2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.

4MD – 1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. 4MD – 2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.

Progression

Y2

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.
- Show that multiplication of 2 numbers can be done in any order (commutative) and division of one number by another cannot.
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs.

Y3

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

Y4

- Count in multiples of 6, 7, 9, 25 and 1,000
- Recall multiplication and division facts for multiplication tables up to 12 x 12

Year 3/4 – Autumn

Measurement Area (1 week)

National Curriculum	Small steps	Vocabulary
• Find the area of rectilinear shapes by counting squares • Estimate, compare and calculate different measures	1. What is area? 2. Count squares 3. Make shapes 4. Compare areas	Length, width, area, space, rectangle, square, rectilinear shape, unit, least, greatest, quadrilateral, reflection, rotation Square centimetre

Ready to progress criteria

4G – 2 Identify regular polygons, including equilateral triangles and squares, as those in which the side lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.

Progression

Y5

- • Calculate and compare the area of rectangles, and including using standard units, square centimetres and square metres and estimate the area of irregular shapes.

Year 3/4 – Spring

Multiplication and division B (3 weeks)

National Curriculum	Small steps	Vocabulary
• Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. • Recognise and use factor pairs and commutativity in mental calculations • Use place value, known facts and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers. • Multiply two-digit and three digit numbers by a one-digit number using formal written layout Solve problems involving multiplying and adding, including using the distributive	1. Factor pairs 2. Multiply and divide by 10 and 100 3. Reasoning about multiplication 4. Multiply three numbers 5. Efficient multiplication 6. Scaling 7. Correspondence problems 8. Multiply up to a 3-digit number by a 1-digit number – no exchange 9. Multiply up to a 3-digit number by a 1-digit number – with exchange 10. Related calculations – multiplication and division 11. Divide by a 1-digit number – flexible partitioning 12. Divide up to a 3-digit number by a 1-digit number – no exchange 13. Divide up to a 3-digit number by a 1-digit number – with exchange 14. Divide up to a 3-digit number by a 1-digit number – with remainders	Factor x factor=product dividend ÷ divisor = quotient Multiple Factor Product Groups of Repeated addition grouping, sharing Array Remainder Partition

law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.		

Ready to progress criteria

3MD – 1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.

4NPV – 4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.

4NF – 1 Recall multiplication and division facts up to 12 × 12 and recognise products in multiplication tables as multiples of the corresponding number.

4MD – 3 Understand and apply the distributive property of multiplication.

Progression

Y2

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.
- Show that multiplication of 2 numbers can be done in any order (commutative) and division of one number by another cannot.
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs.

Y3

- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
- Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Y4

- Recognise and use factor pairs and commutativity in mental calculations
- Use place value, known facts and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Year 3/4 – Spring

Length and perimeter (2 weeks)

National Curriculum	Small steps	Vocabulary

• Measure, compare, add and subtract lengths (m/cm/mm). • Measure the perimeter of simple 2-D shapes. • Convert between different units • Measure and calculate the • perimeter of a rectilinear figure in cm and m	1. Measure in m and cm 2. Measure in km and m 3. Km, m, cm, mm 4. Equivalent lengths 5. Add and subtract lengths 6. What is perimeter? 7. Calculate perimeter 8. Perimeter of rectilinear shapes 9. Calculate perimeter of rectilinear shapes 10. Perimeter of polygons	Milimetre, centimeter, metre Ruler, metre stick, tape measure Length, width, height, depth Long, short, tall, high, low, wide, narrow, thick, thin Longer, shorter, taller, higher Perimeter Rectilinear Polygon

Ready to progress criteria

3NPV – 3 Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10

3NF – 3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).

4G-2 – 3 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal, and the angles are equal. Find the perimeter of regular and irregular polygons.

Progression

Y2

- Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm)
- Compare and order lengths and record the results using the inequality symbols.

Y3

- Measure, compare, add and subtract lengths (m/cm/mm).
- Measure the perimeter of simple 2-D shapes.

Y4

- Convert between different units
- Measure and calculate the perimeter of a rectilinear figure in cm and m

Year 3/4 – Spring

Fractions A (3 weeks)

National Curriculum	Small steps	Vocabulary

• Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. • Recognise, find and write fractions and non-unit fractions with small denominators. • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. • Recognise and show, using diagrams, equivalent fractions with small denominators. • Solve problems that involve all of the above. • Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by 10. • Recognise and show, using diagrams, families of common equivalent fractions • Add and subtract fractions with the same denominator • Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. • Solve simple measure and money problems involving fractions and decimals to two decimal places.	1. Understanding denominators 2. Compare and order unit fractions 3. Understanding numerators 4. Understand the whole 5. Fractions on a number line 6. Compare and order non-unit fractions 7. Equivalent fractions 8. Count beyond 1 9. Partition a mixed number 10. Compare and order mixed numbers 11. Understand improper fractions 12. Convert mixed numbers to improper fractions 13. Convert improper fractions to mixed numbers 14. Equivalent fraction families	Numerator, denominator Parts of a whole Unit fractions Non-unit fractions Equivalent fraction Mixed number Improper fraction

Ready to progress criteria

4F – 1 Reason about the location of mixed numbers in the linear number system.

4F – 2 Convert mixed numbers to improper fractions and vice versa.

4F – 3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.

Progression

Y2

- Recognise, find and name ¼, ⅓, ¾ and 2/4 of a length, set of objects, shape or quantity.
- Recognise the equivalence of 2/4 and ½.
- Write simple fractions for example ½ of 6 = 3

Y3

- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
- Recognise, find and write fractions and non-unit fractions with small denominators.
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- Recognise and show, using diagrams, equivalent fractions with small denominators.
- Compare and order unit fractions, and fractions with the same denominators.
- Add and subtract fractions with the same denominator within one whole e.g. 5/7 + 1/7 = 6/7)
- Solve problems that involve all of the above.

Y4

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by 10.
- Recognise and show, using diagrams, families of common equivalent fractions
- Add and subtract fractions with the same denominator

- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Year 3/4 – Spring

Mass and capacity (3 weeks)

National Curriculum	Small steps	Vocabulary
• Measure, compare, add and subtract mass (kg/g) and volume/capacity (l/ml).	1. Measure mass in grams 2. Measure mass in kilograms and grams 3. Equivalent masses 4. Compare mass 5. Add and subtract mass 6. Measure capacity and volume in millilitres 7. Measure capacity and volume in millilitres and litres 8. Equivalent capacities and volumes 9. Compare capacity and volume 10. Add and subtract capacity and volume	Kilogram Half kilogram Weigh Balances Heavy/light Heavier than/lighter than Heaviest/lightest Scales Litre Half litre Capacity Volume Full/empty Half full/quarter full Holds Container

Ready to progress criteria

3NPV – 4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.

Progression

Y2

- Choose and use appropriate standard units to estimate and measure mass (kg/g) using scales and capacity (litres/ml) using measuring vessels.
- Compare and order mass and volume/capacity and record results using the inequality symbols.

Y4 – None

Year 3/4 – Spring

Fractions B (2 weeks)

National Curriculum	Small steps	Vocabulary
• Compare and order unit fractions, and fractions with the same denominators. • Add and subtract fractions with the same denominator within one whole e.g. 5/7 + 1/7 = 6/7) • Solve problems that involve all of the above. • Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by 10. • Recognise and show, using diagrams, families of common equivalent fractions • Add and subtract fractions with the same denominator • Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. • Solve simple measure and money problems involving fractions and decimals to two decimal places.	1. Add fractions 2. Add fractions and mixed numbers 3. Subtract fractions 4. Subtract from whole amounts 5. Subtract from mixed numbers 6. Unit fractions of an amount 7. Non-unit fractions of an amount 8. Reasoning with fractions of an amount	Numerator, denominator Parts of a whole Unit fractions Non-unit fractions Equivalent fraction More, less Most, least Larger/bigger/ greater

Ready to progress criteria

3F – 1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.

3F – 2 Find unit fractions of quantities using known division facts (multiplication tables fluency).

3F – 3 Reason about the location of any fraction within 1 in the linear number system.

3F – 4 Add and subtract fractions with the same denominator, within 1

4F – 1 Reason about the location of mixed numbers in the linear number system.

4F – 2 Convert mixed numbers to improper fractions and vice versa.

4F – 3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.

Progression

Y2

- Recognise, find and name ¼, ⅓, ¾ and 2/4 of a length, set of objects, shape or quantity.
- Recognise the equivalence of 2/4 and ½.
- Write simple fractions for example ½ of 6 = 3

Y3

- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
- Recognise, find and write fractions and non-unit fractions with small denominators.
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- Recognise and show, using diagrams, equivalent fractions with small denominators.

- Compare and order unit fractions, and fractions with the same denominators.
- Add and subtract fractions with the same denominator within one whole e.g. 5/7 + 1/7 = 6/7)
- Solve problems that involve all of the above.

Y4

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by 10.
- Recognise and show, using diagrams, families of common equivalent fractions
- Add and subtract fractions with the same denominator
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Year 3/4 – Summer

Time (2 weeks)

National Curriculum	Small steps	Vocabulary
• Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24hour clocks. • Estimate and read time with increasing accuaracy to the nearest minutes; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. • Know the number of seconds in a minute and the number of days in each month, year and leap year. • Compare durations of events (for examples to calculate the time taken by particular events or tasks.	1. Tell the time to 5 minutes 2. Tell the time to the minute 3. Read time of a digital clock 4. Use a.m and p.m 5. Convert between analogue and digital times 6. Convert between 12- and 24-hour clock times 7. Hours, minutes and seconds 8. Find and use durations 9. Years, months, weeks and days	Days of the week… Hour, o'clock Half past, quarter past, a.m./p.m. Morning, afternoon, midnight Clock face, Analogue 24-hour watch, hands, hour hand, minute hand Hours, minutes. Roman numerals

Ready to progress criteria

3NPV – 1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.
3AS – 3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.

Progression

Y2

- Recognise the symbols for pounds and pence; combine the amounts to make a particular value.
- Find different combinations of coins that equal the same amounts of money.
- Solve simple problems in a context involving addition and subtraction of money of the same unit, including giving change.

Y4

- Solve simple measure and money problems involving fractions and decimals to two decimal places.
- Estimate, compare and calculate different measures, including money in pounds and pence

Year 3/4 – Summer

Decimals (3 weeks)

National Curriculum	Small steps	Vocabulary
• Recognise and write decimal equivalents of any number of tenths and hundredths • Recognise and write decimal equivalents to ¼, ½ and ¾ • Round decimals with one decimal place to the nearest whole number • Compare numbers with the same number of decimal places up to two decimal places • Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths Solve simple measure and money problems involving fractions and decimals to two decimal places.	1. Tenths as fractions 2. Tenths as decimals 3. Tenths on a place value chart 4. Tenths on a number line 5. Hundredths as fractions 6. Hundredths as decimals 7. Hundredths on a place value chart 8. Halves and quarters as decimals 9. Make a whole 10. Partition decimals 11. Compare and order decimals 12. Round to the nearest whole number 13. Divide a number by 10	Tens, ones, tenths, hundredths Decimal fraction Decimal point Decimal place Decimal equivalent

Ready to progress criteria

Progression

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Year 3/4 – Summer

Money (2 weeks)

National Curriculum	Small steps	Vocabulary
• Add and subtract amounts of money to give change, using both £ and p in practical contexts.	1. Pounds and pence 2. Write money using decimals 3. Convert pounds and pence 4. Compare amounts of money 5. Estimate with money 6. Add money 7. Subtract money 8. Find change 9. Solve problems with money	Coin, penny, pence, pound Price, cost Spend, spent Pay, change total Dear, costs more Cheap, costs less

Ready to progress criteria

Progression

Y3

- Add and subtract amounts of money to give change, using both £ and p in practical contexts.

Y5

- Read and write decimal numbers as fractions
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Read, write, order and compare numbers with up to three decimal places
- Solve problems involving number up to three decimal places
- Recognise the % symbol and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25

Year 3/4 – Summer

Shape (2 weeks)

National Curriculum	Small steps	Vocabulary
• Draw 2-D shapes • Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. • Recognise angles as a property of a shape or description of a turn. • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Identify the lines of symmetry in 2-D shapes presented in different orientations • Complete a simple symmetric figure with respect to a specific line of symmetry Identify acute and obtuse angles and compare and order angles up to two right angles by size	1. Turns and angles 2. Identify angles 3. Compare and order angles 4. Types of lines 5. Triangles 6. Quadrilaterals 7. Polygons 8. Draw polygons 9. Symmetry 10. 3-D shapes	2D Corner, side, point, rectangle, square, circle, triangle, quadrilateral, kite, trapezium, rhombus, parallelogram 3D Face, edge, vertex, vertices, cube, cuboid, pyramid, sphere, cone, cylinder, cuboid, triangular prism, square based pyramid Angles Right angle, acute, obtuse Lines Horizontal, vertical, parallel and perpendicular Clockwise Anticlockwise

Ready to progress criteria

3G – 1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.

3G – 2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.

Progression

Y2

- Identify and describe the properties of 2-D shapes, including the number of sides and line of symmetry in a vertical line.
- Identify 2-D shapes on the surface of 3D shapes.
- Compare and sort common 2-D shapes and everyday objects.
- Recognise and name common 3-D shapes.
- Compare and sort common 3-D shapes and everyday objects.

Y4

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- Identify the lines of symmetry in 2-D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry
- Identify acute and obtuse angles and compare and order angles up to two right angles by size

Year 3/4 – Summer

Position and direction (1 Week)

National Curriculum	Small steps	Vocabulary
• Describe positions on a 2-D grid as coordinates in the first quadrant • Describe movements between positions as translations of a given unit to the left/right and up/down • Plot specifies points and draw sides to complete a given polygon	1. Describe position using coordinates 2. Plot coordinates 3. Draw 2-D shapes on a grid 4. Translate on a grid 5. Describe translation on a grid	Position Horizontal, vertical Up, down Left, right Coordinate Plot Vertex Verticies Point grid

Ready to progress criteria

3G -2 Draw polygons by joining marked points, and identify parallel and perpendicular sides
4G – 1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.

Progression

Y5

- • 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 3/4 – Summer

Statistics (2 Weeks)

National Curriculum	Small steps	Vocabulary
• Interpret and present data using bar charts, pictograms and tables. • Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables. • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs • Solve comparison, sum and difference problems using information presents in bar charts, pictograms, tables and other graphs.	1. Pictograms 2. Interpret bar charts 3. Draw bar charts 4. Comparison, sum and difference 5. Interpret line graphs 6. Draw line graphs 7. Two-way tables 8. Collect and represent data	Pictogram, key, bar chart, scale, table, row, column, vertical/horizontal axis

Ready to progress criteria

Progression

Y2

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
- Ask and answer questions about totalling and comparing categorical data.

Y3

- Interpret and present data using bar charts, pictograms and tables.
- Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.

Y4

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- Solve comparison, sum and difference problems using information presents in bar charts, pictograms, tables and other graphs.

Y5

- Complete, read and interpret information in tables, including timetables

Solve comparison, sum and difference problems using information presented in a line graph