

Place Value and Ordering : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|--|--|
| Lesson 1 | To be able to recognise the place value of each digit in a four-digit number. | Children will identify the value of each number in a four-digit number, after recapping the value of digits in two- and three-digit numbers. They will practise writing four-digit numbers in numerals and words, and start to order numbers. | <ul style="list-style-type: none"> Can children identify place value in four-digit numbers? Can children write numbers in digits? Can children write numbers in words? | <ul style="list-style-type: none"> Slides Worksheet 1A /1B Number Cards Question Cards Digit Cards (FSD? activity only) |
| Lesson 2 | To be able to order and compare numbers beyond 1,000. | Children will recap how to express four-digit numbers in numerals and words. They will then order three- and four-digit numbers, using partitioning to help identify whether a number is larger or smaller than another. | <ul style="list-style-type: none"> Can children identify place value in four-digit numbers? Can children order four-digit numbers? Can children compare four-digit numbers? | <ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Number Cards (FSD? activity only) Question Cards (FSD? activity only) paper (FSD? activity only) |
| Lesson 3 | To be able to find 1,000 more or less than a given number. | Children will start by identifying a number, saying it aloud and identifying the place value of each digit. They will then practically add and subtract 1000 from given numbers, some of which are expressed in numerals and some in words. | <ul style="list-style-type: none"> Can children identify place value in four-digit numbers? Can children add 1,000 to a four-digit numbers? Can children subtract 1,000 from a four-digit number? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Number Cards (FSD? activity only) Partitioning Grid (FSD? activity only) |
| Lesson 4 | To be able to count in multiples of 6, 7, 9, 25 and 1000. | Children will order numbers and work out how much they are increasing by in number sequences. The number sequences will increase in multiples of 6, 7, 9, 25 and 100. To challenge the children some of the sequences will start at a random number. | <ul style="list-style-type: none"> Can children identify place value in four-digit numbers? Can children order numbers? Can children continue a sequence of numbers? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C/4D Number Cards (FSD? activity only) Sequence Cards (FSD? activity only) Multiples Cards 6/7/9/25/1000 (Plenary) |
| Lesson 5 | To be able to read Roman numerals to 100. | Children will recap the Roman numerals 1-12 (in the context of a clock face). They will then be taught how to read and write Roman numerals to 100. They will explore how the Roman numeral system is different to the modern number system in terms of place value. | <ul style="list-style-type: none"> Can children read Roman numerals to 100? Can children write Roman numerals to 100? Are children aware that Roman numerals do not use place value? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C/5D Help Sheet Code Cards (FSD? activity only) |

Exploring Addition : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|---|--|
| Lesson 1 | To estimate, then add, three-digit numbers. | Children will use rounding to estimate the answers to HTO+TO calculations (e.g. 347+33), then use partitioning to find the answers. | <ul style="list-style-type: none"> Can children accurately round numbers to the nearest ten or hundred? Can children estimate addition calculations by rounding? Can children partition two- and three-digit numbers, then add them? | <ul style="list-style-type: none"> Slides Challenge Cards 1A/1B/1C Tiddlywinks Addition 1A/1B (FSD? activity only) Blank writing frames Plastic counters |
| Lesson 2 | To add three- and four-digit numbers by partitioning. | Children will use partitioning to add together two or more three- and four-digit numbers. To develop and consolidate their understanding of this strategy, children may either use maths resources to represent the partitioning they do, or describe the process in their own words. | <ul style="list-style-type: none"> Can children use partitioning to solve three- and four-digit calculations? Can children use physical resources to represent partitioning? Can children use mathematical vocabulary to explain partitioning? | <ul style="list-style-type: none"> Slides Challenge Cards 2A/2B/2C Monster Money 2A A range of maths resources (e.g. counters, number fans) Place Value 2A (FSD? activity only) Blank writing frames |
| Lesson 3 | To solve addition calculations using the formal written method. | Children will use the formal addition method to solve HTO+TO, HTO+HTO and ThHTO+HTO calculations (none of the calculations in this lesson require exchanging between ones and tens or tens and hundreds; this is the focus of lesson 4 in this Complete Series). | <ul style="list-style-type: none"> Can children present addition calculations using the formal written method? Can children use maths vocabulary to explain how to use the formal written method? Can children estimate by rounding to help when checking their calculations? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C/3D Calculation Cards 3A (FSD? activity only) Blank writing frames |
| Lesson 4 | To solve formal addition calculations where exchanging ones with tens, or tens with hundreds is required. | Children will learn how to solve more complex formal addition calculations, where exchanging between ones and tens and/or between tens and hundreds is required. They may then either practise calculations like these, or produce posters to show how to do formal addition where exchanging is required. | <ul style="list-style-type: none"> Can children use the formal written method of addition where one or more exchange is required? Can children present formal written addition calculations clearly and neatly? Can children use maths vocabulary to explain how to use the formal written method? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C/4D Blank writing frames A range of maths resources (e.g. counters, number fans) |
| Lesson 5 | To use the formal written method of addition to solve two-step problems. | Children will use a range of strategies, including formal addition, to solve a variety of word problems and visual problems requiring addition calculations. | <ul style="list-style-type: none"> Can children identify key maths vocabulary in two-step problems? Can children use formal addition to solve two-step problems? Can children use maths vocabulary to explain strategies for solving two-step problems? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B Challenge Cards 5A/5B/5C/5D (FSD? activity only) Blank writing frames |

Seeing Doubles : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|---|--|
| Lesson 1 | To be able to double numbers to 100. | Children will identify the difference between doubling and halving before answering some quick-fire doubling questions, starting with numbers below thirty and working up to solve doubling questions with larger numbers up to a hundred. Children will match numbers to their doubles and practise quick recall of doubling facts. | <ul style="list-style-type: none"> • Can children double numbers up to 30? • Can children double numbers up to 60? • Can children double numbers up to 100? | <ul style="list-style-type: none"> • Slides • Doubles Matching Cards 1A/1B/1C • Blank Doubles Matching Game • Number Cards A/B/C (FSD? activity only) • Calculators - optional (FSD? activity only) |
| Lesson 2 | To know doubles and halves of whole numbers to 100. | Children will explore how to halve numbers below a hundred, starting with even numbers then moving on to looking at how to halve odd numbers, expressing the answer as a decimal. Children will practise rapid recall of doubling and halving facts. | <ul style="list-style-type: none"> • Can children double and halve numbers to 20? • Can children double and halve numbers to 50? • Can children double and halve numbers to 100? | <ul style="list-style-type: none"> • Slides • Double and Half Cards 2A/2B/2C • Game Board 2A/2B (FSD? activity only) • Dice and counters (FSD? activity only) • Calculators (FSD? activity only) |
| Lesson 3 | To be able to double and halve numbers using appropriate methods, including partitioning. | Children will explore how to use partitioning to help them double larger two-digit numbers. They are encouraged to work out problems mentally before using written jottings to partition a number, double the tens and one, then add them together to find their answer. Higher-ability children will use this method to double small three-digit numbers. | <ul style="list-style-type: none"> • Can children double numbers below 50? • Can children double any two-digit number? • Can children double small three-digit numbers? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Game Board 3A/3B (FSD? activity only) • Calculator - optional (FSD? activity only) |
| Lesson 4 | To be able to double three- and four-digit numbers using partitioning. | Children will partition three- and four-digit numbers and double each part of the decomposed number, before adding together vertically to find the answer. They are encouraged to identify problems that are correct and incorrect, and to solve problems mentally where possible. | <ul style="list-style-type: none"> • Can children answer two-digit by one-digit multiplication questions by repeated addition? • Can children answer two-digit by one-digit multiplication questions by partitioning? • Can children answer three-digit by one-digit multiplication questions by partitioning? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Calculation Cards 4A/4B (FSD? activity only) • Blank Calculation Cards (FSD? activity only) |
| Lesson 5 | To be able to use the chunking method to divide three- and four-digit numbers. | Children will be introduced to the chunking method of division in order to halve numbers by dividing by two. They will start with three-digit numbers and move to on four-digit numbers if appropriate. | <ul style="list-style-type: none"> • Can children do simple division calculations using a number line? • Can children answer two-digit by one-digit division calculations? • Can children answer three-digit by one-digit division calculations? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C/5D/5E • Spinner (FSD? activity only) |

Exploring Subtraction: Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|---|--|
| Lesson 1 | To know how to use the constant difference method for subtraction | The lesson will begin with some quick-fire questions involving subtracting multiples of ten from two- and three-digit numbers. Children will then learn about the constant difference method, and how this can be used to make calculations easier, allowing them to be solved mentally. In their independent activities, children will apply this knowledge to sort and solve subtraction number sentences mentally. | <ul style="list-style-type: none"> Do children understand what the constant difference method is? Can children use the constant difference method to solve subtraction number sentences? Can children explain this method and justify their reasoning? | <ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Sort 'n' Solve Cards A/B Sorting Sheet A/B Carry On Subtracting! Example Sheet (FSD? activity only) Carry On Subtracting! Challenge Cards A/B (FSD? activity only) |
| Lesson 2 | To know how to use the decomposition method for subtraction | Children will first recap on their partitioning skills, before applying them in order to solve subtraction problems using the decomposition method. They will learn how to solve number sentences involving one and two exchanges. In their independent activities, children will race against a partner to solve questions quickly and accurately. Alternatively, they will play a game where they are rewarded points according to the number of exchanges in the sentences they solve. | <ul style="list-style-type: none"> Do children understand the decomposition method for subtraction? Can children successfully use the decomposition method to solve subtraction number sentences without exchanging? Can children successfully use the decomposition method to solve subtraction number sentences with exchanging? | <ul style="list-style-type: none"> Slides Match Up! Sheet A/B/C Calculation Cards A/B/C Exchange Rates Game (FSD? activity only) Exchange Rates Game Instructions (FSD? activity only) Solved it! Cards (FSD? activity only) Recording Sheet (FSD? activity only) Dice, coloured counters, Blu-Tack (FSD? activity only) |
| Lesson 3 | To know how to use the expanded column method for subtraction | In this lesson, children will look at the expanded column method for subtraction. They will briefly compare it with the decomposition method, before using it to solve subtractions involving one and two exchanges. Children will also spot mistakes in expanded column subtractions where the method has been used incorrectly. In their independent activities, children will match up the different parts of given expanded column method solutions. In the FSD? activity, they will be challenged to find what two numbers could be used to result in a given difference, according to set criteria. | <ul style="list-style-type: none"> Do children understand the expanded column method for subtraction? Can children use the expanded column method to solve subtraction number sentences without exchanging? Can children use the expanded column method to solve subtraction number sentences with exchanging? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Jigsaw Puzzle Pieces A/B/C Blank Jigsaw Sheet Challenge Cards (FSD? activity only) |
| Lesson 4 | To know how to use the formal column method for subtraction | Children will compare the expanded column method with the formal column method. They will use the formal method to look at how to solve subtraction number sentences involving no exchanges, one exchange and finally two exchanges. Children will then use their knowledge of this method to complete column subtractions by placing missing digits in the correct row and column in order to give a specific difference. Alternatively, children are each given a unique three-digit number, then pair up with other children to make and solve subtractions with their numbers. | <ul style="list-style-type: none"> Do children understand the formal column method of subtraction? Can children use the formal column method to solve subtraction problems involving exchanging? Can children use the formal column method to solve subtraction problems including zeros? | <ul style="list-style-type: none"> Slides Worksheet 4A/B/C Pair Up! Cards (FSD? activity only) Pair Up! Recording Sheet (FSD? activity only) |
| Lesson 5 | To know how to solve subtraction problems involving zeros using the formal column method | In this final lesson, children will focus on column subtractions that involve one or more zeros. They will learn how to exchange across them in order to complete the calculation. They will look at column subtractions involving three-digit and then four-digit numbers. In their independent activities, children will choose and solve subtractions of varying levels of difficulty. | <ul style="list-style-type: none"> Do children know how to solve a column subtraction which includes a zero? Do children know how to solve a column subtraction which includes more than one zero? Can children identify and correct errors in column subtractions? | <ul style="list-style-type: none"> Slides Pick 'n' Mix Questions Sheet Worksheet 5A/5B/5C Calculation Cards A/B (FSD? activity only) Points Poster A/B (FSD? activity only) |

Properties of 2D Shapes : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|--|---|---|
| Lesson 1 | To be able to identify and classify quadrilaterals. | Children will classify and sort shapes according to size, angles, sides, symmetry etc. using Carroll diagrams, tables, or by colour-coding. | <ul style="list-style-type: none"> • Can children define a quadrilateral? • Can children identify a variety of different quadrilaterals? • Can children classify quadrilaterals based on their characteristics? | <ul style="list-style-type: none"> • Slides • Quadrilateral Key • Quadrilateral Colouring Sheet A/B/C • Worksheet 1A (FSD? activity only) • Quadrilateral Templates (FSD? activity only) |
| Lesson 2 | To be able to identify and classify triangles. | Children will learn about the properties of various triangles, then sort and compare them using tables or branching diagrams. | <ul style="list-style-type: none"> • Can children define a triangle? • Can children identify a variety of different triangles? • Can children classify triangles based on their characteristics? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Triangle Cards A/B • Triangle Key • Triangle Colouring Sheet A/B (FSD? activity only) |
| Lesson 3 | To be able to measure and calculate the perimeter of a shape. | Children will calculate the perimeter of shapes by measuring their sides and totalling these measurements. Optionally, children may order shapes according to their estimates of their perimeters. | <ul style="list-style-type: none"> • Do children understand what the term 'perimeter' means? • Can children calculate the perimeter of a shape? • Can children measure the perimeter of a shape? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C/3D/3E • Shape Cards A/B (FSD? activity only) • Masking tape and metre rulers - plenary |
| Lesson 4 | To be able to calculate the area of a shape by counting squares. | Children will measure the area of rectangles and composite rectilinear shapes by counting squares. | <ul style="list-style-type: none"> • Do children understand the difference between perimeter and area? • Can children describe how to find the area of a shape? • Can children find the area of a shape by counting squares? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Squared paper (FSD? activity only) |
| Lesson 5 | To be able to classify shapes according to their properties. | Children will classify and sort a wide variety of shapes according to several criteria, showing what they have learned during previous lessons about the properties of 2-D shapes (polygons and non-polygons). | <ul style="list-style-type: none"> • Can children describe a shape according to its properties? • Can children sort shapes according to their properties? • Can children use a variety of criteria to sort shapes? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Shape Sheet • Shape Cards or 2D shapes (FSD? activity only) • Sticky notes (FSD? activity only) |

Recording Length: Maths: Year 4: Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|--|--|
| Lesson 1 | To know how to estimate, measure and record length accurately | Children will discuss what length is and how it is measured. They will learn what each single unit of measurement looks like, and understand what an estimate is. Children will recap on how to measure accurately using a ruler, and know how to use decimal notation when recording lengths. In their independent activities, they will estimate, measure and record various lengths. | <ul style="list-style-type: none"> Do children know what length is? Can children estimate length appropriately? Can children use a ruler to measure accurately in cm and mm? | <ul style="list-style-type: none"> Slides Worksheet 1A/B/C Rulers/tape measures/metre sticks String/wool Reading a Ruler Help Sheet Measurement Hunt Activity Sheet A/B (FSD? activity only) |
| Lesson 2 | To know how to convert measurements to different units | Children will learn about the relationships between the different units of measurement. They will learn how to use their multiplication facts to convert from a larger unit of measurement to a smaller one, and their division facts to convert from a smaller unit of measurement to a larger one. Children will revisit their knowledge and understanding of place value in order to record measurements in decimal form where needed. | <ul style="list-style-type: none"> Do children understand the terms 'convert' and 'conversion'? Can children convert from a larger unit of measurement to a smaller unit of measurement using their multiplication knowledge? Can children convert from a smaller unit of measurement to a larger unit of measurement using their division knowledge? | <ul style="list-style-type: none"> Slides Worksheet 2A/B/C Conversion Help Card Follow Me Set A/B/C (FSD? activity only) |
| Lesson 3 | To know how to compare and order measurements of length | Children will recap on their understanding of the relationship facts between the different units of length. They will then use this knowledge to compare and order lengths that are recorded in different units. | <ul style="list-style-type: none"> Can children recall the relationships between the different units of measurement? Can children apply their knowledge and understanding of converting lengths to different units of measurement? Can children order and compare different lengths accurately? | <ul style="list-style-type: none"> Slides Worksheet 3A/B/C Frog Top Trumps (FSD? activity only) |
| Lesson 4 | To know how to solve problems involving length | Children will use their knowledge and understanding of how to convert between different units in order to solve one- and two-step addition and subtraction problems involving length. | <ul style="list-style-type: none"> Can children solve word problems involving length? Can children convert different units of measurement in order to solve word problems? Can children explain their reasoning? | <ul style="list-style-type: none"> Slides Question Cards A/B/C Answer Cards A/B/C Frog Fact File (FSD? activity only) Frog Problems A/B (FSD? activity only) |
| Lesson 5 | To apply your knowledge and understanding of length | Children will revise what they have learnt over the last few lessons, before applying this knowledge to one of the independent activities. Children will either work in pairs to estimate, measure, record, convert and order measurements, or they will work as a group to conduct a length investigation. | <ul style="list-style-type: none"> Can children estimate different lengths appropriately? Can children accurately measure and record different lengths? Can children compare different lengths? | <ul style="list-style-type: none"> Slides Metric Me worksheet A/B/C Rulers/tape measures/metre sticks Investigation Cards (FSD? activity only) Investigation Sheet (FSD? activity only) |

Data Handling : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|---|---|
| Lesson 1 | To be able to answer a question by identifying what data to collect. | Children will consider the need to provide a set of answers when collecting data to be presented using graphs and charts. They will then either plan for collecting data using tallies or collect and present data using a tally. | <ul style="list-style-type: none"> • Can the children pose simple questions about data collection? • Can they suggest ways of collecting data? • Can they interpret the data they collect? | <ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C/1D • Dice (FSD? activity only) |
| Lesson 2 | To be able to use data to create a bar graph and interpret the information. | Children will interpret data presented in tables and in bar charts, then either ask and answer questions about data in bar charts, or conduct a traffic survey. | <ul style="list-style-type: none"> • Can the children interpret a bar graph? • Can they present a bar graph? • Can they construct a bar graph? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C/2D/2E • Graph paper |
| Lesson 3 | To be able to choose the correct scale for the vertical axis in a bar graph. | Children will learn how to choose an appropriate scale for a bar chart, then draw bar charts with an appropriate scale on which to plot sets of data. | <ul style="list-style-type: none"> • Can the children interpret a bar graph? • Can they present a bar graph? • Can they construct a bar graph? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Graph paper • Challenge Cards (FSD? activity only) |
| Lesson 4 | To be able to use Venn diagrams to sort data and objects. | Children will learn how to use and read Venn diagrams with one intersection, then sort numbers or shapes according to two criteria using Venn diagrams. | <ul style="list-style-type: none"> • Do children understand what Venn diagrams are and how they are used? • Can they sort by two criteria? • Can they sort by three criteria? | <ul style="list-style-type: none"> • Slides • Mini whiteboards • Worksheet 4A/4B/4C • Skipping ropes or similar (FSD? activity only) • Criteria Cards (FSD? activity only) |
| Lesson 5 | To be able to use Carroll diagrams to sort data and objects. | Children will learn how to interpret, and plot data using Carroll diagrams, then sort data either by using given criteria, or by choosing appropriate criteria. | <ul style="list-style-type: none"> • Do children understand what Carroll diagrams are and how they are used? • Can they sort by two criteria? • Can they sort by three criteria? | <ul style="list-style-type: none"> • Slides • Mini whiteboards • Worksheet 5A/5B/5C • Challenge Cards (FSD? activity only) • Blank Carroll Diagram sheet (FSD? activity ideas) |

Multiplication and Division Facts : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|---|---|
| Lesson 1 | To learn multiplication facts for the six and seven times tables. | Children will identify multiples of six and multiples of seven. They will practise counting up in multiples of these numbers. They will use knowledge of other familiar times tables to answer questions and solve problems, including reasoning problems. | <ul style="list-style-type: none"> • Can children count in multiples of six and seven? • Do children know multiplication facts for the six times table? • Do children know multiplication facts for the seven times table? | <ul style="list-style-type: none"> • Slides • Game Board 1A/1B • Counters and dice • Multiplication Grid • Worksheet 1A • Clue Cards 1A/1B (FSD? activity only) • Hundred Squares (FSD? activity only) |
| Lesson 2 | To revise times table facts. | Children will use a handy trick to help them learn their nine times table. They will consider the multiples of nine to twelve and identify patterns. They will answer quick-fire questions and play games to help them become more familiar both with the nine times table and other familiar times tables. | <ul style="list-style-type: none"> • Can children recall multiplication facts for the six and seven times tables? • Can children recall multiplication facts for the nine times table? • Can children count in multiples of nine? | <ul style="list-style-type: none"> • Slide • Game Cards 2A/2B/2C • Missing Number Cards 2A/2B (FSD? activity only) |
| Lesson 3 | To be able to use repeated subtraction to solve division problems. | Children will use their knowledge of multiples of six, seven and nine to complete missing number chains. They will learn how to use repeated subtraction on a number line to solve division problems that involve remainders. They will use knowledge of times tables to derive division facts. | <ul style="list-style-type: none"> • Can children count in multiples of six, seven and nine? • Can children use repeated subtraction to solve division problems? • Can children solve division problems involving remainders? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Question Cards 3A/3B (FSD? activity only) |
| Lesson 4 | To be able to use the chunking method to solve division problems. | Children will recap the chunking method of division, considering how they can 'break up' a number into chunks to take away from a number, solving division problems by subtracting 'chunks'. They will consider the most effective way of breaking down a number. | <ul style="list-style-type: none"> • Can children use multiplication facts to help them solve division problems? • Can children use the chunking method to solve division problems? • Can children identify errors in a division calculation? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Multiplication Grid • Question Cards 4A/4B (FSD? activity only) |
| Lesson 5 | To be able to use the grid method to solve multiplication problems. | Children will recap how to use the grid method to solve multiplication problems when multiplying by a single digit. They will then explore how to use the method to multiply numbers by two digits. They can solve problems and complete investigations using the grid method to help them. | <ul style="list-style-type: none"> • Can children use their times table knowledge to derive associated multiplication facts? • Can children use the grid method to multiply numbers by a single digit? • Can children use the grid method to multiply numbers by two digits? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Multiplication Grid • Challenge Card 5A/5B (FSD? activity only) • Digit Cards (FSD? activity only) |

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|---|---|
| Lesson 1 | To be able to use known multiplication facts to work out what a number has been multiplied or divided by. | Children use their knowledge of times tables to derive multiplication and division facts. They will work out what an input or output number has been multiplied or divided by on a function machine, and fill in missing input and output numbers when a function is given. | <ul style="list-style-type: none"> Can the children find the function for multiplication? Can they find the function for multiplication and division? Can they find the function when there is more than one operation? | <ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D Disc cones, whiteboards and calculators (FSD? activity only) |
| Lesson 2 | To be able to use known multiplication facts to solve problems. | Children will identify factors of numbers and use their knowledge of times tables facts to complete missing number problems. They will then solve puzzles that involve identifying numbers that have been replaced by symbols. | <ul style="list-style-type: none"> Can children recall multiplication facts? Can children use multiplication facts to solve problems? Can children derive division facts from known multiplication facts? | <ul style="list-style-type: none"> Slides Puzzle Sheet 2A/2B/2C Challenge Sheet 2A/2B (FSD? activity only) Multiplication Grid (FSD? activity only) |
| Lesson 3 | To be able to derive facts about a given number using knowledge of multiplication and division. | Children will identify many different ways of using multiplication and division to reach a given number. They will use the commutative law to find multiple multiplication facts and recognise that division is not commutative. | <ul style="list-style-type: none"> Do children know that multiplication is commutative but division is not? Can children derive multiplication sentences for a given number? Can children derive division sentences for a given number? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C |
| Lesson 4 | To be able to use multiplication and division to solve problems. | Children will identify what calculation needs to be done to solve a problem and will use strategies such as the grid method and chunking method to solve multiplication and division questions in real-life contexts. Problems are set in the context of a farm. | <ul style="list-style-type: none"> Can children choose appropriate multiplication or division methods to solve problems? Can children use the grid method to solve multiplication calculations? Can children use the 'chunking' method to solve division calculations? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B Fact Cards Challenge Cards 4A/4B/4C |
| Lesson 5 | To use written methods of multiplication and division to solve problems. | Children will identify what calculation needs to be done to solve a problem and will use strategies such as the grid method and chunking method to solve multiplication and division questions in real-life contexts. Problems are set in the context of planning a festival. | <ul style="list-style-type: none"> Can children decide on appropriate methods for solving one- and two-step problems? Can children use the 'grid' method of multiplication to solve problems? Can children use the 'chunking' method of division to solve problems? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Worksheet 5D/5E (FSD? activity only) |

Fractions and Time : Maths : Year 4 : Autumn Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|---|---|
| Lesson 1 | To be able to identify the value of tenths and hundredths in a number. | Children will identify the value of numbers with two decimal places. They will learn how to express tenths and hundredths in both decimals and fractions, matching one to the other to express equivalences. | <ul style="list-style-type: none"> Do children know how tenths are expressed as a fraction and a decimal? Do children know how hundredths are expressed as a fraction and a decimal? Can children describe the value in each digit of numbers with two decimal places? | <ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Number Machines (FSD? activity only) Number Machine Digit Strips (FSD? activity only) |
| Lesson 2 | To find out the effect of dividing one- and two-digit numbers by 10 and 100. | Children will explore the effects of dividing numbers by 10 and 100 to give answers with two decimal places. They will learn to express the answers in both decimals and fractions. | <ul style="list-style-type: none"> Can children recognise the effect of dividing a number by 10? Can children recognise the effect of dividing a number by 100? Can children identify the value of decimals and fractions as tenths and hundredths? | <ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Number Sentence Cards 2A/2B (FSD? activity only) Blank Number Sentence Cards (FSD? activity only) |
| Lesson 3 | To recognise and show families of equivalent fractions. | Children will explore families of equivalent fractions, using diagrams to support them. They will identify ways of expressing a fraction in as many ways as they can, using their understanding of the number system to find equivalences. | <ul style="list-style-type: none"> Can children identify equivalent fractions through diagrams? Can children identify equivalent fractions using a fraction wall? Can children identify equivalent fractions using their knowledge of how fractions are related to each other? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Fraction Bingo sheet (FSD? activity only) Fraction Wall Chart (FSD? activity only) |
| Lesson 4 | To be able to tell the time to the nearest minute on an analogue clock. | Children will recap how to split an analogue clock face into quarters to help tell the time, before reading and writing the time accurately on analogue clocks. They can also solve word problems relating to time by calculating time intervals. | <ul style="list-style-type: none"> Can children read the time accurately on an analogue clock? Can children write the time accurately on an analogue clock? Can children use their knowledge of time to solve problems? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Word Problem Cards 4A/4B (FSD? activity only) Clock Cards 4A/4B (FSD? activity only) Blank Clock Cards (FSD? activity only) |
| Lesson 5 | To be able to read and write the time on digital clocks. | Children will recap the relationship between analogue and digital time, before reading and writing the time accurately on digital clocks. They will match digital times with analogue times. | <ul style="list-style-type: none"> Can children read the time accurately on digital clocks? Can children write the time accurately on digital clocks? Can children convert analogue and digital times? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Digital and analogue clocks or watches (FSD? activity only) |

Comparing Numbers : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|---|---|
| Lesson 1 | To order and compare three-, four- and five-digit numbers. | Children will recap the value of each digit in three- and four-digit numbers before exploring the value of each digit in a five-digit number. Children will learn to partition five-digit numbers to identify the value of each digit. Children are also challenged to add 10, 100 or 1000 to a three-, four- or five-digit number. | <ul style="list-style-type: none"> • Can children identify the value of digits in three-digit numbers? • Can children identify the value of digits in four-digit numbers? • Can children identify the value of digits in five-digit numbers? | <ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Picture Cards 1A/1B • Number Cards 1A/1B/1C (FSD? activity only) • Question Cards 1A/1B/1C (FSD? activity only) |
| Lesson 2 | To understand and use less than and greater than signs. | Children will recap what the 'greater than' and 'less than' symbols and use these correctly in number statements to compare four- and five-digit numbers. Children will use place value knowledge to fill in missing digits in numbers to make statements with the < and > symbols correct. They will identify correct and incorrect equations that include these symbols. | <ul style="list-style-type: none"> • Can the children compare four-digit numbers? • Can they compare four-digit numbers using the greater than and less than symbols? • Can they compare all numbers using the correct mathematical symbol? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Equation Cards 2A/2B (FSD? activity only) |
| Lesson 3 | To order and compare four- and five-digit numbers. | Children will order three-, four- and five-digit numbers, using the context of measures, including money, weights and distances. | <ul style="list-style-type: none"> • Can the children order three-digit numbers? • Can they order four-digit numbers? • Can they order all numbers up to five digits? | <ul style="list-style-type: none"> • Slides • Whiteboards • Worksheet 3A/3B/3C • Challenge Cards (FSD? activity only) • Access to internet (FSD? activity only) |
| Lesson 4 | To order and compare three-, four- and five-digit numbers. | Children will order increasingly large sets of three-, four- and five-digit numbers. They will identify the value of each digit in a number to help them and reinforce reading and writing larger numbers in words and numerals. | <ul style="list-style-type: none"> • Can the children order three-digit numbers? • Can they order four-digit numbers? • Can they order all numbers with up to five digits? | <ul style="list-style-type: none"> • Slides • Whiteboards • Worksheet 4A/4B/4C • Number Cards 4A/4B • Large sheets of paper • A5 paper (FSD? activity only) • Felt-tip pens (FSD? activity only) |
| Lesson 5 | To be able to count backwards through zero into negative numbers. | Children will start by adding and taking away 1000 from given three-, four- and five-digit numbers. They will then look at negative numbers, learning how to count on and back across zero and how to work out the different between a positive and negative integer. | <ul style="list-style-type: none"> • Can children find 1000 more or less than a given number? • Do children understand what negative numbers are? • Can children count backwards through zero into negative numbers? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Calculation Cards 5A/5B (FSD? activity only) • Hundred Square (FSD? activity only) • Number Line Cards (FSD? activity only) |

Methods of Addition : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|--|---|--|
| Lesson 1 | To be able to use the expanded method to solve addition problems, using approximation first. | Children will round three-digit numbers to the nearest hundred and add them together to find approximate answers. They will recap how to use the expanded method to solve addition problems and use their approximations to check for accuracy. | <ul style="list-style-type: none"> • Can the children approximate? • Can they use partitioning to answer a calculation? • Can the children use a standard vertical method to answer a calculation? | <ul style="list-style-type: none"> • Slides • Number Cards 1A/1B/1C • Challenge Sheet (FSD? activity only) |
| Lesson 2 | To be able to solve addition calculations using vertical addition. | Children will compare the vertical addition method with the expanded method to identify similarities and differences. They will recap how to use column addition to add two three-digit numbers. Higher-ability children will start to add four-digit numbers. | <ul style="list-style-type: none"> • Can children use vertical addition to solve addition calculations that do not need carrying? • Can children use vertical addition solve calculations that involve carrying? • Can children find an approximate answer before solving a problem? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Digit Cards • Addition Web 2A/2B/2C (FSD? activity only) |
| Lesson 3 | To be able to choose an appropriate method to solve an addition calculation. | Children will explore the adjustment method to help them solve addition problems mentally. They will then choose an appropriate method for a variety of addition calculations. | <ul style="list-style-type: none"> • Can the children add three-digit numbers using an informal written method? • Can they add three-digit numbers using the standard written method? • Can they add three-digit numbers mentally? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Addition Cards 3A/3B (FSD? activity only) |
| Lesson 4 | To be able to choose an appropriate mental or written method to solve an addition calculation. | Children will solve increasingly difficult addition questions, moving into adding four-digit numbers and three three-digit numbers. Children will choose an appropriate mental, informal or formal method to solve a problem, based on the calculation. | <ul style="list-style-type: none"> • Can the children add three-digit numbers using an informal written method? • Can they add three-digit numbers using the formal written method? • Can they add three-digit numbers mentally? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Challenge Sheet 4A/4B/4C (FSD? activity only) |
| Lesson 5 | To assess understanding of methods of addition. | Children will consolidate their learning and recap what they have learnt about addition methods. They will solve a variety of word problems, choosing an appropriate method and checking their answers using approximations. They will solve addition problems and investigations, using mental methods wherever possible. | <ul style="list-style-type: none"> • Can the children add three-digit numbers using an informal written method? • Can they add three-digit numbers using the standard written method? • Can they add three-digit numbers mentally? | <ul style="list-style-type: none"> • Slides • Up the Wall 5A/5B/5C • Worksheet 5A/5B (FSD? activity only) • Spinner or ten-sided dice (FSD? activity only) |

Methods of Subtraction : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|---|---|
| Lesson 1 | To be able to use the equals addition method to solve subtraction problems. | Children will learn how to use the equals addition method to help them solve subtraction problems mentally or with informal jottings. They will explore different ways of using the equals addition method to make the calculation easiest to solve. Children will check their calculations using the inverse. | <ul style="list-style-type: none"> Can children use the equals addition method to solve TO-TO calculations? Can children use the equals addition method to solve HTO-TO calculations? Can children use the equals addition method to solve HTO-HTO calculations? | <ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Sometimes, Always, Never Cards (FSD? activity only) |
| Lesson 2 | To be able to use the decomposition method to solve subtraction problems. | Children will learn how to use the decomposition method to solve subtraction problems. They will recap how to partition a number, then will arrange the decomposed numbers vertically. They will be introduced to the idea of exchanging, using apparatus to demonstrate this. | <ul style="list-style-type: none"> Can children partition a number accurately? Can children use the decomposition method to solve subtraction problems without exchanging? Can children use the decomposition method to solve subtraction problems that include exchanging? | <ul style="list-style-type: none"> Slides Calculation Cards 2A/2B/2C Colour by Number sheets 2A/2B/2C Subtraction Maze 2A/2B (FSD? activity only) |
| Lesson 3 | To be able to use a variety of methods to solve subtraction problems. | Children will link the decomposition, expanded and formal column methods of subtraction, noticing similarities and differences, and using their understanding of each method to relate to the others. Children will practise using all three methods to solve calculations. Children will solve problems that include exchanging. | <ul style="list-style-type: none"> Can children solve subtraction problems using the decomposition method? Can children solve subtraction problems using the expanded method? Can children solve subtraction problems using the formal column method? | <ul style="list-style-type: none"> Slides Calculation Cards 3A/3B/3C Method Cards Help Card Worksheet 3A/3B (FSD? activity only) |
| Lesson 4 | To be able to use the formal column method to solve subtraction problems. | Children will practise the formal column subtraction method, starting with three-digit numbers and extending to four- and five-digits if appropriate. Children will solve problems that include exchanging. | <ul style="list-style-type: none"> Can children use formal subtraction to solve three-digit subtraction problems? Can children use formal subtraction to solve four-digit subtraction problems? Can children use formal subtraction to solve subtraction problems that involve numbers of more than four digits? | <ul style="list-style-type: none"> Slides Number Cards 4A/4B/4C Worksheet 4A or squared paper Calculation Cards 4A/4B (FSD? activity only) |
| Lesson 5 | To be able to choose an appropriate method for solving subtraction problems. | Children will solve a variety of one- and two-step word problems relating to subtraction, choosing an appropriate method from the methods they have been using throughout the week. They will use the inverse to check their work. | <ul style="list-style-type: none"> Can children solve subtraction problems accurately using informal methods? Can children solve subtraction problems accurately using formal methods? Can children use approximations and the inverse to check their work? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Challenge Sheet 5A/5B (FSD? activity only) |

Shape Angles: Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|--|---|--|
| Lesson 1 | To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. | Children will recap the names properties of a number of quadrilaterals, then explore ways in which compound shapes may be comprised of a number of different polygons, including triangles and quadrilaterals. | <ul style="list-style-type: none"> • Can children compare, describe and organise groups of quadrilaterals according to their properties? • Can children compare, describe and organise groups of triangles according to their properties? • Can children visualise and draw accurately composite shapes comprised of quadrilaterals, triangles and other shapes? | <ul style="list-style-type: none"> • Slides • Worksheets 1A/1B/1C • 2-D Shape Word Mat (FSD? activity only) |
| Lesson 2 | To identify acute and obtuse angles and compare and order up to two right angles by size. | Focussing on the angles inside shapes, children will explore the properties of a variety of polygons, then measure and label angles inside shapes (mainly acute, obtuse and right-angles, with one instance of a reflex angle inside a chevron). | <ul style="list-style-type: none"> • Can children children place shapes on a straight line to help work out if its angles are acute, or obtuse? • Do children know that certain types of quadrilateral and triangle will always have specific types of angle? • Can children identify acute and obtuse angles inside a variety of shapes? | <ul style="list-style-type: none"> • Slides • Worksheets 2A/2B/2C • 2-D Shapes Poster/Table Mat • Angle Hunt Results (FSD? activity only) |
| Lesson 3 | To identify lines of symmetry in 2-D shapes presented in different orientations. | Children will identify vertical, horizontal and diagonal lines of symmetry inside shapes, using mirrors or tracing paper to check them. They will then draw compound shapes with one or more lines of symmetry. | <ul style="list-style-type: none"> • Do children understand that some shapes have more than one line of symmetry? • Can children find and draw lines of symmetry on a range of shapes? • Can children use mirrors and/or tracing paper to find and check lines of symmetry? | <ul style="list-style-type: none"> • Slides • Worksheets 3A/3B/3C • Dictionaries • Large sheets of paper or a roll of wallpaper (FSD? activity only) |
| Lesson 4 | To recognise lines of symmetry including those not dissecting shapes. | Children will explore ways in which shapes and patterns drawn on squared paper can be reflected vertically, horizontally or diagonal across mirror lines that are either bisecting, touching or not touching the shape or pattern to be reflected. | <ul style="list-style-type: none"> • Can children visualise reflections across horizontal, vertical and diagonal lines of symmetry? • Can children count squares to work out reflections of shapes drawn on squared paper? • Can children draw shapes and their reflections across lines of symmetry? | <ul style="list-style-type: none"> • Slides • Worksheets 4A/4B/4C • Tangram Sheet (FSD? activity only) • Masking tape (FSD? activity only) |
| Lesson 5 | To complete simple symmetrical figures with respect to specific lines of symmetry. | Children will explore ways in which more complex images, patterns and shapes can be reflected across one or two mirror lines, then create their own symmetrical patterns using a variety of resources. | <ul style="list-style-type: none"> • Can children recognise lines of symmetry including those not dissecting shapes? • Can children draw symmetrical patterns? • Can children complete symmetrical figures with more than one line of symmetry? | <ul style="list-style-type: none"> • Slides • Worksheets 5A/5B/5C • Peg boards, Lego boards, rubber band boards, chequers boards etc. (FSD? activity only) |

Measuring Weight : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|---|--|
| Lesson 1 | To be able to choose and use standard metric units and their abbreviations when estimating. | Children will explore the relationship between grams and kilograms, and learn the abbreviations for these units of measurement. They will identify which objects around them would be best suited to being weighed in grams and which to kilograms before estimating and weighing objects using the appropriate unit of measurement. | <ul style="list-style-type: none"> • Can children make an appropriate estimate? • Can children measure in grams accurately? • Can children measure in kilograms and grams accurately? | <ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Appropriate weighing scales and objects to weigh |
| Lesson 2 | To be able to choose and use standard metric units and their abbreviations when estimating, measuring and recording weight. | Children will explore different ways of expressing the same weight, namely in grams, kilograms (decimals) and kilograms and grams. They will order weights and use correct abbreviations for grams and kilograms. | <ul style="list-style-type: none"> • Can the children convert grams to kilograms? • Can they use the correct abbreviations for kilograms and grams? • Can they express the weight using a decimal point? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Challenge Cards (FSD? activity only) • Weighing scales |
| Lesson 3 | To be able to add and subtract weights, including decimals. | Children will explore different strategies for adding and subtracting weights, including kilogram weights with one decimal place, and two weights expressed in different units of measurement (necessitating the conversion of grams to kilograms and vice versa). | <ul style="list-style-type: none"> • Can children convert weights from kilograms to grams and vice versa? • Can children add weights together? • Can children find the difference between two weights? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Animal Weights sheet • Animal Cards (FSD? activity only) • Question Cards (FSD? activity only) |
| Lesson 4 | To be able to solve problems involving weight. | Children will use a variety of operations to solve word problems relating to weight. They will need to identify what operation is needed and which unit of measurement the answer should be expressed in. | <ul style="list-style-type: none"> • Can children use the correct operations to solve the problems? • Can children solve problems and express the answer using the correct unit of measurement? • Can children check their answers for accuracy? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Parcel Cards A/B (FSD? activity only) • Variety of boxes and objects to fill them (FSD? activity only) • Parcel paper (FSD? activity only) |
| Lesson 5 | To find out some fascinating facts about weight and find objects of equivalent weights. | Children will find out facts about record-breaking weights and use these to solve a variety of problems. They can also find objects that weigh the same amount as a given object, using measuring scales and recording results accurately. | <ul style="list-style-type: none"> • Can children find out facts about world records involving weight? • Can children use weighing scales appropriately? • Can children record weight appropriately using an appropriate unit of measurement? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B • Objects to weigh • Variety of weighing scales, including bathroom scales • Access to internet • Poster Template sheet (FSD? activity only) |

Presenting Data : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|--|---|
| Lesson 1 | <p>To interpret (discrete*) data using line graphs.</p> <p>*Only discrete data is shown in these lessons; however, it is not specifically referred to as such until lesson three.</p> | <p>Children will consider what kinds of data are better presented using line graphs, then read and interpret given sets of data presented using line graphs.</p> | <ul style="list-style-type: none"> Can children read data presented using line graphs? Can children ask and answer questions about data shown using line graphs? Can children decide whether bar charts or line graphs are more appropriate for showing given sets of data? | <ul style="list-style-type: none"> Slides Worksheets 1A/1B/1C Challenge Cards 1A/1B |
| Lesson 2 | <p>To present (discrete*) data using line graphs.</p> <p>* Only discrete data is shown in these lessons, however it is not specifically referred to as such until lesson three.</p> | <p>Children will learn how to plot data on line graphs (some may do this on line graphs with a variety of scales), then plot given sets of data on given line graphs.</p> | <ul style="list-style-type: none"> Can children accurately plot given sets of data on a line graph? Can children connect plotted points with straight lines? Can children identify mistakes when looking at tables of data and corresponding graphs? | <ul style="list-style-type: none"> Slides Worksheet 2A/2B Challenge Cards 2 Blank maths frames Spreadsheet software and internet access (FSD? activity only) |
| Lesson 3 | <p>To interpret and present continuous data using line graphs.</p> | <p>Children will begin to consider differences between discrete and continuous data, noticing differences between the way they can be presented using bar charts and line graphs. They will then either practise plotting continuous data using line graphs, or consider what can be learned from given line graphs of data.</p> | <ul style="list-style-type: none"> Can children begin to identify ways in which sets of discrete and continuous data differ? Can children plot given sets of data on a line graph? Can children interpret data on a line graph, generating simple statements and predictions? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Challenge Cards 3A/3B |
| Lesson 4 | <p>To be able to present data in a bar graph and choose an appropriate scale for the vertical axis.</p> | <p>Children will learn how to choose and draw appropriate scales on bar charts depending on the data being presented. They will then practise making bar charts and presenting data using appropriate scales.</p> | <ul style="list-style-type: none"> Do children know that the vertical axis can have any scale? Can children choose an appropriate scale according to the data given? Can children present and analyse data in bar graphs? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B Challenge Cards A/B/C/D Squared paper Traffic Survey Data sheet (FSD? activity only) Access to computers (FSD? activity only) |
| Lesson 5 | <p>To be able to draw bar graphs accurately, choosing an appropriate scale.</p> | <p>Children will answer a number of questions about given sets of data presented using bar charts as well as considering the effect of using different scales to present the same set of data. They will then create bar charts to show given sets of data at different scales.</p> | <ul style="list-style-type: none"> Can the children draw bar graphs accurately? Can they draw and interpret bar graphs? Can they decide on an appropriate scale for the vertical axis? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Squared paper Challenge Cards A/B/C (FSD? activity only) |

Using Multiplication and Division: Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|---|---|
| Lesson 1 | To know and use the eleven and twelve times tables facts | Children will look at the facts for the eleven and twelve times tables, and learn strategies to help them solve number sentences involving these factors. They will apply these strategies in their independent work to solve multiplication wheels and missing number questions, or to play the Banana Bonanza Game. | <ul style="list-style-type: none"> Can children recall the multiplication facts for the eleven and twelve times tables? Can children spot patterns and explain their reasoning? Can children solve number sentences by applying their knowledge of the eleven and twelve times tables? | <ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Banana Bonanza Game Sheet (FSD? activity only) Banana Bonanza Game Counters (FSD? activity only) |
| Lesson 2 | To know how to multiply a one-digit by a two-digit number | Children will revise their multiplication knowledge by answering quick-fire questions. They will learn how to multiply a one-digit number by a two-digit number using the distributive law. Children will be introduced to the use of brackets to separate the different steps in the calculation, and then will then apply this knowledge in their independent work. | <ul style="list-style-type: none"> Do children understand this method? Can children use this method to solve multiplication number sentences? Can children verbally explain the steps they have taken to solve a multiplication number sentence? | <ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Banana Balance Cards (FSD? activity only) |
| Lesson 3 | To know how to multiply three numbers together | Children will learn and use the correct terms for numbers in a multiplication sentence. They will use the commutative law to solve multiplication sentences with three factors, and revise using the distributive law when multiplying a one-digit number by a two-digit number. In their independent work, children use this knowledge to find missing products as well as missing factors. | <ul style="list-style-type: none"> Can children multiply more than two numbers together? Do children understand that the numbers can be multiplied in any order (commutative law)? Can children use their multiplication knowledge to find missing numbers in a problem? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Digit Cards A/B/C (FSD? activity only) Banana Bonus Sheet (FSD? activity only) Calculators (FSD? activity only) |
| Lesson 4 | To know and use the divisibility rules | Children will learn and use the correct terms for each number in a division sentence. As a class they will then look at the divisibility rules for divisors of two, three, four, five and ten, and apply these to different three-digit numbers. Children will explore these rules further in their independent work, and some will be challenged to use the divisibility rules for six, nine and twelve. | <ul style="list-style-type: none"> Can children explain what 'divisibility' means? Do children understand the divisibility rules? Can children use the divisibility rules to find out if a number is divisible by a specific number? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Divisibility Rules Sheet Challenge Cards Set A/B/C (FSD? activity only) |
| Lesson 5 | To use known multiplication facts to solve division number sentences with remainders | Children will be reminded of the link between multiplication and division facts. They will learn how to use their knowledge of multiples to identify remainders in a division sentence before calculating the quotient. Children then complete various activities which reinforce this strategy. | <ul style="list-style-type: none"> Do children understand the link between multiplication and division facts? Can they use their knowledge of multiplication facts to find answers to division number sentences? Can children explain how they know what the remainder in a division number sentence will be before they have worked out the quotient? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Monkey Mayhem Game A/B (FSD? activity only) Dice, markers and coloured counters (FSD? activity only) |

Multiplication and Division Facts : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|---|---|
| Lesson 1 | To use the grid method to solve real-life multiplication problems | Children will recap on their knowledge of the grid method for multiplication, and apply it to real-life problems in the context of party planning and using money. Children are also challenged to spot mistakes in given grid methods, and use their understanding to correct them. In their independent activities, children will use this method to work out the costs of different party items, or in the alternative activity, find and correct errors in given calculations. | <ul style="list-style-type: none"> • Can children explain how to use the grid method for multiplication? • Can children use the grid method to solve multiplication sentences? • Can children identify and explain errors in grid method calculations? | <ul style="list-style-type: none"> • Slides • Party Paradise Sheet 1A/1B/1C • Shopping List Sheet • Buying Blunders Sheet A/B (FSD? activity only) • Whiteboards |
| Lesson 2 | To use the expanded method to solve real-life multiplication problems | In this lesson, children will be introduced to the expanded method for multiplication. They will first multiply two-digit numbers by a one-digit number, then move onto multiplying three-digit numbers by a one-digit number, discussing the extra steps that are needed. Children will be encouraged to compare the grid method and the expanded method. Children will use this method in their independent activities to work out the amounts of different ingredients needed for baking cakes. | <ul style="list-style-type: none"> • Do children understand the expanded method for multiplication? • Can children use the expanded method to solve multiplication problems? • Can children check their work, and identify and correct any mistakes? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Recipe Cards A/B/C • Baking Store Sheet A/B • What's in my Basket? Sheet A/B (FSD? activity only) • Whiteboards/paper |
| Lesson 3 | To use the repeated subtraction method for division to solve real-life problems | Children will recap on their knowledge of the repeated subtraction method for division, and apply it to real-life problems in the context of party planning. They will be challenged to explain why a remainder will always be smaller than the divisor. Children will apply this method to their independent activities when calculating how much of each party food different numbers of children can have. | <ul style="list-style-type: none"> • Can children explain the repeated subtraction method? • Can children apply their knowledge of the repeated subtraction method to solve real-life problems? • Can children check their work, and identify and correct mistakes? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Blank Number Line Sheet • Party Plate Sheet A/B • Pic 'n' Mix Amount Cards (FSD? activity only) • Pic 'n' Mix Sweets Cards (FSD? activity only) • Pic 'n' Mix Recording Sheet (FSD? activity only) |
| Lesson 4 | To use the chunking method for division to solve real-life problems | In this lesson, children will recap on the chunking method for division, and discuss when it is better to use this method instead of repeated subtraction. They will learn that it doesn't matter what size chunks they use- as long as their calculations are correct! Children will apply this method when playing the Snap Challenges or Remainder Round Up game. | <ul style="list-style-type: none"> • Can children explain how to solve division number sentences using the chunking method? • Do children understand the term 'remainder'? • Can children apply their knowledge of the chunking method to solve division number sentences? | <ul style="list-style-type: none"> • Slides • Snap Cards Set A/B/C • Snap Challenges Sheet • Remainder Round Up Game (FSD? activity only) • Score Sheet (FSD? activity only) • Dice Templates A/B (FSD? activity only) • Counters (FSD? activity only) • White boards |
| Lesson 5 | To choose and use appropriate multiplication and division methods to solve real-life problems | In this final lesson, children will discuss the methods they have used for multiplication and division so far, and explain how to solve word-based problems using them. Children will then apply all of their knowledge and understanding to solve multiplication and division problems based on different party trips. | <ul style="list-style-type: none"> • Can children choose the correct operation to solve a problem? • Can children choose and apply a suitable method for solving multiplication problems? • Can children choose and apply a suitable method for solving division problems? | <ul style="list-style-type: none"> • Slides • Terrific Trips Price Card A/B/C • Terrific Trips Question Sheet A/B/C • Manic Match Up! Q & A Sheet A/B • Manic Match Up! Instructions • White boards |

Telling the Time : Maths : Year 4 : Spring Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|---|--|
| Lesson 1 | To be able to read and convert times on digital and analogue clocks. | Children will recap how to tell the time to the nearest minute on both analogue and digital clocks. It then challenges your class to match analogue clocks to 12-hour digital clocks, and convert times from one to the other. There is also the option of using their knowledge of time to create a visual timetable to show what time different activities are undertaken during the day. | <ul style="list-style-type: none"> Can children read and write the time on analogue and digital 12-hour clocks? Can children convert the time from an analogue clock to a digital clock? Can children convert the time from a digital clock to an analogue clock? | <ul style="list-style-type: none"> Slides Analogue Clock Cards 1A/1B Digital Clock Cards 1A/1B Blank Clock Cards 1A/1B Challenge Card (FSD? activity only) Visual Timetable Cards (FSD? activity only) |
| Lesson 2 | To be able to read, write and convert time using 24-hour digital clocks. | Children will learn how to read and write the time using 24-hour digital clocks. They will think about how times shown on a 24-hour clock relate to activities during the day as well as converting times from analogue to 24-hour digital time. | <ul style="list-style-type: none"> Do children understand the difference between 12-hour and 24-hour clocks? Can children read the time on a 24-hour digital clock? Can children write the time on a 24-hour digital clock? | <ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Watch Cards Activity Sheet 2A/2B Memory Game Cards (FSD? activity only) |
| Lesson 3 | To be able to convert measures of time. | Children will recap the relationship between units of time, such as years, weeks, months, days, hours and minutes before looking at how to convert years to months, hours to minutes, minutes to seconds, and vice versa. They can also order and compare times once they have converted them all to a single unit of measurement. | <ul style="list-style-type: none"> Can children convert years to months? Can children convert weeks to days? Can children convert minutes to seconds and hours to minutes? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Challenge Cards 3A/3B (FSD? activity only) |
| Lesson 4 | To solve problems involving converting hours to minutes and minutes to seconds, and vice versa. | Children will solve word problems involving converting hours to minutes, minutes to seconds, and vice versa. | <ul style="list-style-type: none"> Can children solve problems converting hours to minutes and vice versa? Can children solve problems converting minutes to seconds and vice versa? Can children use appropriate methods to solve problems and check their answers? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Challenge Cards (FSD? activity only) |
| Lesson 5 | To solve problems involving converting years to months, weeks to days, and vice versa. | Children will solve a variety of problems relating to converting years to months, weeks to days, and vice versa. They will convert ages to months and order from youngest to oldest, or convert years to months to compare the gestation periods of a variety of animals. | <ul style="list-style-type: none"> Can children convert years to months and vice versa? Can children convert weeks to days and vice versa? Can children solve problems involving the conversion of different measure of time? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C/5D Fact Cards (FSD? activity only) |

Fractions and Decimals : Maths : Year 4

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|--|---|--|
| Lesson 1 | To recognise and write decimal equivalents to fractions, including mixed number fractions. | Children will identify the place value of digits in decimal numbers, and compare them to their equivalent fractions. They will learn how to convert decimal numbers (up to two decimal places) to fractions and vice versa. Following this, children will practise converting between the two. | <ul style="list-style-type: none"> Can children say how many hundredths a number with two decimal places has? Can children convert decimal numbers less than one to fractions and vice versa? Can children convert decimal numbers greater than one to mixed numbers and vice versa? | <ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Base 10 resources (for Lower ability Main Activity; optional) Invisible Battleships 1A-1F (FSD...? activity only) Invisible Battleships Instructions (FSD...? activity only) |
| Lesson 2 | To compare and order whole numbers, decimal numbers and fractions. | Children will compare equivalent fractions firstly using a 'fraction wall', then by dividing the denominator by the numerator. Following this, children will practise comparing and ordering sets of fractions (including mixed number fractions) and decimal numbers to two decimal places | <ul style="list-style-type: none"> Can children identify equivalent fractions using a fraction wall? Can children use a fraction wall to compare and order sets of fractions? Can children compare and order sets of whole numbers, decimal numbers, and fractions? | <ul style="list-style-type: none"> Slides Worksheets 2A/2B/2C Decimal Dominoes (FSD...? activity only) |
| Lesson 3 | To find the difference between numbers with up to two decimal places. | Children will learn how to use a formal written method of subtraction to subtract decimal numbers up to two decimal places. They will also learn how to use an informal 'counting on' method to find the difference between two decimal numbers. Following this, children will practise these skills, solving calculations involving three-, four- and five-digit numbers. | <ul style="list-style-type: none"> Can children use a formal written method to subtract decimal numbers less than one? Can children use a mental method to find the difference between similar decimal numbers? Can children use a formal written method to subtract decimal numbers greater than one? | <ul style="list-style-type: none"> Slides Worksheets 3A/3B/3C Difference Pyramid 3A-3F cards (FSD...? activity only) |
| Lesson 4 | To add and subtract fractions with the same denominator. | Children will begin by adding equal fractions totalling one or less than one. They will progress to adding fractions totalling more than one, and subtracting a fraction from a mixed number e.g. $1\frac{1}{3} - \frac{2}{3}$. Following this they will practise adding and subtracting fractions, optionally using maths resources to help them. | <ul style="list-style-type: none"> Can children add and subtract fractions with the same denominator, where the answer is less than one? Can children add and subtract mixed number fractions? Can children multiply or divide a fraction to find a common denominator with another fraction? | <ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Unifix® cubes, play dough, bead strings, counters etc. Challenge Card 4 (FSD...? activity only) |
| Lesson 5 | To solve word problems and present information using fractions and decimals. | Children will practise counting up and down in decimal numbers and fractions. They will then interpret data, given using fractions or decimals, by asking questions and making statements. There is an optional activity where children may practise and consolidate the skills developed during previous lessons. | <ul style="list-style-type: none"> Can children solve one-step word problems involving addition or subtraction of fractions or decimal numbers? Can children interpret data by writing statements including fractions or decimal numbers? Can some children solve two-step fractions/decimals problems about given sets of data? | <ul style="list-style-type: none"> Slides Worksheets 5A/5B/5C Unifix® cubes, play dough, bead strings, counters etc. (optional) Challenge Cards 5A-5F (FSD...? activity only) |

Rounding and Ordering Numbers: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|--|--|
| Lesson 1 | To be able to count in multiples of 6, 7, 9, 25 and 1000. | Children will look at sequences of numbers where the value increases/decreases by a fixed amount, then complete missing number sequences. | <ul style="list-style-type: none"> • Can children identify place value in four-digit numbers? • Can children order numbers? • Can children continue a sequence of numbers? | <ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C/1D • Number Cards (FSD? activity only) • Sequence Cards (FSD? activity only) • Multiples Cards (Plenary only) |
| Lesson 2 | To round any number to the nearest 10, 100 or 1000. | Children will round two-, three- and four-digit numbers to the nearest ten, hundred and thousand. | <ul style="list-style-type: none"> • Can children round numbers to the nearest ten? • Can children round numbers to the nearest hundred? • Can children round numbers to the nearest thousand? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Board Game Sheet (FSD? activity only) • Number Cards 10/100/1000 (FSD? activity only) • Whiteboards, counters, timers, dice (FSD? activity only) |
| Lesson 3 | To identify and represent numbers. | Children will consider the various ways in which two-, three- and four digit numbers can be represented, e.g. using symbols and pictures, or money. | <ul style="list-style-type: none"> • Can the children use objects to represent numbers? • Can the children use symbols to represent numbers? • Can the children use objects or symbols to represent number sentences? | <ul style="list-style-type: none"> • Slides • Challenge Cards A/B/C/D/E/F • Objects • Number Cards A/B (FSD? activity only) • Whiteboards or paper (FSD? activity only) |
| Lesson 4 | To identify, represent and estimate numbers using different representations | Children will consider why being able to order and estimate is useful when working with different measures such as those used to measure weight or volume. They will use a variety of measuring equipment to practise these skills. | <ul style="list-style-type: none"> • Can the children estimate the mass of an object? • Can the children estimate the volume of a liquid? • Can the children check their measurements accurately? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Challenge Cards A/B (FSD? activity only) • A variety of analogue and digital weighing scales (FSD? activity only) • A variety of measuring jugs (FSD? activity only) |
| Lesson 5 | To solve problems involving counting in multiples, identifying, representing, estimating and rounding numbers. | Children will use their developing skills for ordering, rounding and estimating numbers — including ordering multiples of numbers — by solving problems. | <ul style="list-style-type: none"> • Can the children solve problems involving multiples? • Can the children solve problems involving estimating? • Can the children solve problems involving rounding numbers? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Product Cards • Stock Cards (FSD? activity only) |

Using Addition and Subtraction 1: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|--|--|
| Lesson 1 | To recap on how to use the formal method for addition | In this first lesson, children will recap on their knowledge and understanding of the formal column method for addition. They will solve number sentences which involve carrying from one column to another. Children will also estimate their answers prior to working them out by rounding the addends to the nearest ten or hundred, and will understand how this is helpful for checking results. | <ul style="list-style-type: none"> Can children use their rounding skills to estimate and check an answer? Can children use the formal method for addition to solve $HTO + HTO$ and $ThHTO + ThHTO$? Can children use the formal method for addition to solve $HTO + HTO$ and $ThHTO + ThHTO$ including carrying? | <ul style="list-style-type: none"> Slides Results Cards A/B/C Worksheet 1A/1B/1C Who Scored What? Sheets A/B/C (FSD? activity only) |
| Lesson 2 | To use the formal method for addition, including carrying more than once | Children solve additions using the formal column method where carrying is needed more than once. They will understand that the digits they are carrying represent either tens or hundreds. Children will then progress to adding three 3-digit numbers together. In their independent activities, they will apply this knowledge to work out who has won the gold, silver and bronze medals for different sports day events. | <ul style="list-style-type: none"> Can children use the formal method for addition to solve $HTO + HTO$ where carrying is needed more than once? Can children add three and four HTO numbers together using the formal method? Can children explain their methods clearly? | <ul style="list-style-type: none"> Slides Score Cards A/B/C Gold, Silver or Bronze? Worksheet A/B/C HiLo Game Cards (FSD? activity only) HiLo Game Cube (FSD? activity only) HiLo Game Instructions Cards (FSD? activity only) HiLo Game Score Cards (FSD? activity only) |
| Lesson 3 | To recap on how to use the formal method for subtraction | To begin, children will recap on their knowledge and understanding of the formal method for subtraction. They will estimate their answers by rounding to the nearest 100 before calculating the actual answer. Children will solve number sentences which involve one exchange from the tens or the hundreds column, and explain what happens to the numbers when an exchange is needed. | <ul style="list-style-type: none"> Can children use their rounding skills to estimate and check an answer? Can children use the formal method for subtraction to solve $HTO - HTO$ and $ThHTO - ThHTO$? Can children use the formal method for subtraction to solve $HTO - HTO$ and $ThHTO - ThHTO$ including exchanging? | <ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Egg & Spoon Race Clue Cards A/B (FSD? activity only) Egg & Spoon Race Calculation Sheet A/B (FSD? activity only) |
| Lesson 4 | To use the formal method for subtraction, including exchanging more than once | In this lesson, will children continue to develop their understanding of the column method for subtraction. They will solve number sentences where exchanging is needed more than once, and where one or more of the digits in the larger number is zero. In their independent activities, children will sort true and false statements by finding the difference between two team's scores. Alternatively, they will create a 'personal best' score by solving questions that are levelled according to difficulty, and adding up the points they achieve from each correct answer. | <ul style="list-style-type: none"> Can children identify errors in completed column methods for subtraction? Can children use the formal method for subtraction to solve $HTO - HTO$ and $ThHTO - ThHTO$ including more than one exchange? Can children explain when and why they exchange in a column subtraction? | <ul style="list-style-type: none"> Slides Team Results Cards Worksheet 4A/4B/4C Personal Best Challenge Sheet (FSD? activity only) |
| Lesson 5 | To solve addition and subtraction word problems using the column method | In this final lesson, children will apply their knowledge and understanding of the formal column method for both addition and subtraction by solving a range of one- and two-step word problems. They will play a board game where they have to answer word problems to gain bronze, silver then gold medals in different events. Alternatively, children will take part in an orienteering challenge where they need to find and answer questions in the correct order! | <ul style="list-style-type: none"> Can children identify the operation needed to solve a word problem? Can children estimate an answer using rounding before solving with the formal column method? Can children use the formal column method to solve addition and subtraction word problems? | <ul style="list-style-type: none"> Slides Quadrathlon Game Board Question Cards A/B/C Medals Sheet Blank Calculations Sheet, Dice, Counters Orienteering Answer Sheet A/B/C/D/E/F (FSD? activity only) Orienteering Question Posters (FSD? activity only) |

Using Addition and Subtraction 2: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|---|--|
| Lesson 1 | To use the inverse operation to check calculations | In this first lesson, children will recap on what 'inverse' means, and how they can use it to check answers to addition and subtraction problems. They will understand how to identify if an answer is correct or incorrect based on the answer the inverse gives. Children will also learn the correct terms for the numbers that they are adding and subtracting in each number sentence. | <ul style="list-style-type: none"> • Can children explain what 'inverse' means? • Can children use their knowledge of addition to check answers to subtraction questions? • Can children use their knowledge of subtraction to check answers to addition questions? | <ul style="list-style-type: none"> • Slides • Teach the Teacher! Sheet A/B/C • Just Checking! Game Cards (FSD? activity only) • Just Checking! Game Instructions (FSD? activity only) • Speech Bubbles Sheet (FSD? activity only) |
| Lesson 2 | To understand and use the language of addition and subtraction | Children will explore the language of addition and subtraction by identifying the words or phrases in a problem that indicate which operation is needed. In their independent activities, children will work out competitors' scores by solving one- and two-step problems. Alternatively, children will write their own word problems using the language of addition and subtraction for others to solve. | <ul style="list-style-type: none"> • Can children identify the language of addition in word problems? • Can children identify the language of subtraction in word problems? • Can children solve mixed word problems involving a range of language relating to addition and subtraction? | <ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Language of Addition and Subtraction Cards (FSD? activity only) • Blank Question Cards (FSD? activity only) |
| Lesson 3 | To be able to solve two-step word problems involving addition and subtraction | Children will apply their knowledge of the language of addition and subtraction to solve two-step word problems. They will use their reasoning skills to discuss which information is important, what calculations are needed, and what order they need to be done in. Children will answer questions to compete in an 'obstacle course', or in the alternative activity, they will use their problem-solving skills to complete a number search puzzle. | <ul style="list-style-type: none"> • Can children identify the information in a word problem that they need in order to solve it? • Can children explain their reasoning and justify their choices? • Can children use an appropriate method to calculate two-step questions? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Green/Blue/Yellow Obstacle Course Questions • Number Search Puzzle A/B |
| Lesson 4 | To use addition and subtraction skills to solve puzzles | In this lesson, children will use their knowledge of addition and subtraction to solve puzzles using the trial and improvement method. They will develop their reasoning skills by explaining their thought processes and the steps they need to take in order to narrow down the possible answers and find the solution. | <ul style="list-style-type: none"> • Do children understand how to use the trial and improvement method? • Can children use reasoning to decide how and where to begin a puzzle? • Can children persevere until they find a solution? | <ul style="list-style-type: none"> • Slides • Event Winners Sheet 🏆 • Puzzle Cards 4A/4B • Create a Puzzle Instructions A/B (FSD? activity only) • Create a Puzzle Question Cards A/B (FSD? activity only) |
| Lesson 5 | To develop and use reasoning skills | In this final lesson, children will continue to develop their reasoning skills by solving missing number problems. They will identify various missing digits in both addition and subtraction column methods, and be encouraged to explain their thinking. In their independent activities, children will solve missing number problems, and identify whether or not they can be certain about their answers. Alternatively, children will generate their own column additions and subtractions based on given 'rules'. | <ul style="list-style-type: none"> • Can children identify missing digits in a column addition or subtraction? • Can children identify calculations where we cannot be certain what the missing digits are? • Can children explain their reasoning clearly? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Reasoning Sentence Starter Cards • The Generation Game A/B/C (FSD? activity only) |

Multiplying Doubles and Digits: Maths : Year 4 : Summer Term, Week 4

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|---|---|
| Lesson 1 | To use known facts and informal written methods to multiply by one-digit multiples including 0 and 1. | Children will consider and explain (in their own words) what happens when a number is multiplied by 0 or 1. They will go on to consider real-world scenarios where this knowledge is applied. After that they will recap, then practise, multiplying two- or three-digit numbers by a one-digit number using the grid method where appropriate. | <ul style="list-style-type: none"> Can children write calculations to show what happens when multiplying by 0 and 1? Can children use other known multiplication facts to solve $O \times O$ calculations? Can children use an informal written method to solve $TO \times O$, $HTO \times O$ and $ThHTO \times O$ calculations? | <ul style="list-style-type: none"> Slides Worksheets 1A/1B/1C Maths resources: bead strings, counters, number lines Shopping Items cards (FSD...? activity only) Shopping List sheet (FSD...? activity only) |
| Lesson 2 | To use known and derived facts to multiply two numbers, or three numbers together. | Children will develop strategies for mentally solving trickier multiplication calculations, e.g. $2 \times 12 \times 5$, or 6×24 . Strategies include drawing upon times tables knowledge and finding pairs of factors of large numbers in calculations, e.g. 6×24 could be changed to $6 \times 6 \times 4$. They will then go on to practise these skills, jotting notes to help them. | <ul style="list-style-type: none"> Can children use known times tables facts to simplify a calculation where three numbers are to be multiplied together? Can children simplify a multiplication calculation by replacing a large number with one of its factor pairs? Can children find all of the factors of a two-digit number? | <ul style="list-style-type: none"> Slides Worksheets 2A/2B/2C 'Factor Pairs' Target Number Cards (FSD...? activity only) 'Factor Pairs' Pairs Cards (FSD...? activity only) |
| Lesson 3 | To use place value knowledge, times tables knowledge and a formal written method to double large numbers. | Children will recap doubling three-digit numbers mentally using a partitioning method. They will then go on to learn and practise using written, short multiplication to double larger numbers quickly and efficiently, including those with one or more 'exchanges'. | <ul style="list-style-type: none"> Can children explain how to double numbers using only mental methods? Can children show doubling of three-digit+ numbers using informal written methods? Can children use a formal written method to calculate doubles of larger numbers? | <ul style="list-style-type: none"> Slides 'Hot', 'Boiling' and 'On Fire!' Doubling Sticks Doubling Down Cards (FSD...? activity only) Doubling Down Challenge (FSD...? activity only) |
| Lesson 4 | To multiply two-digit and three-digit numbers by a one-digit number using formal written layout. | Children will compare various written methods for solving multiplication calculations, including a short multiplication method. They will then practise and consolidate their learning by solving multiplications, including those requiring 'exchanges', using a short multiplication method. | <ul style="list-style-type: none"> Can children solve short multiplication calculations requiring no exchanges? Can some children solve short multiplication calculations requiring two or more exchanges? Can some children solve tricky short multiplication calculations with multiple exchanges and an increase in the total digits? | <ul style="list-style-type: none"> Slides Tiddlywinks Target 4A/4B/4C sheets Counters and paperclips Worksheet 4 (FSD...? activity only) |
| Lesson 5 | To use place value, known and derived facts to multiply mentally, then use a formal, written multiplication method. | Children will consider how multiplication/division 'fact families' can help when solving and checking problems. They will then use them while estimating, solving and checking multiplication calculations. | <ul style="list-style-type: none"> Can children derive facts about a given times table multiplication up to 12? Can children use known times table facts to estimate answers up to 12? Can children use a formal written method to solve multiplication calculations (up to $HTO \times O$)? | <ul style="list-style-type: none"> Slides Household Statistics 5A–5C cards Challenge Card 5 Word Problems 5A–5F (FSD...? activity only) |

Position and Direction: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|---|--|
| Lesson 1 | To find, plot and describe coordinates on a grid. | Children will recap the features of coordinate grids (1st quadrant only), then plot given coordinates accurately in the 1st quadrant. | <ul style="list-style-type: none"> Can children name and identify the features of a coordinate grid? Can children find and plot given coordinates on a grid? Can children write coordinates in the first quadrant? | <ul style="list-style-type: none"> Slides Worksheets 1A/1B/1C Connect Coordinates game (FSD? activity only) Dice (FSD? activity only) Counters (FSD? activity only) |
| Lesson 2 | To plot specified points and draw sides to complete a given polygon. | Children will plot given coordinates on a grid (1st quadrant), then connect them in the order given to create polygons with their vertices plotted on a grid. | <ul style="list-style-type: none"> Can children plot a series of specified coordinates? Can children connect coordinates to make polygons? Can children visualise and predict the shape of polygons based only on a set of given coordinates? | <ul style="list-style-type: none"> Slides Worksheets 2A/2B/2C Blank Coordinate Grid Find the Quadrilateral game (FSD? activity only) 2-D Shapes poster/table mat (FSD? activity only) |
| Lesson 3 | To describe movements between coordinates on a grid as translations. | Children will learn how to translate coordinates on a grid, then practise this by translating polygons or compound shapes on a coordinate grid (1st quadrant only). | <ul style="list-style-type: none"> Can children describe the translation of a shape in terms of movement up/down/left/right? Can children use algebraic terms to describe the translation of a shape? Can children draw translations of a shape according to given instructions? | <ul style="list-style-type: none"> Slides Worksheets 3A/3B/3C 3-D Letters Sheet (FSD? activity only) Blank Coordinate Grid (FSD? activity only) |
| Lesson 4 | To find and plot coordinates on graphs to show linear relationships. | Children will consider the relationship between line graphs and coordinate grids, then read given sets of data, plotting their corresponding coordinates on grids. They will also write questions which can be answered by identifying sets of coordinates. | <ul style="list-style-type: none"> Can children express two corresponding values as a coordinate? Can children connect coordinates with a line to make a straight-line graph? Can children think of, and answer questions about data shown on a straight-line graph? | <ul style="list-style-type: none"> Slides Worksheets 4A/4B/4C Blank Coordinate Grid A/B/C |
| Lesson 5 | To solve problems using grids and coordinates. | Children will solve a variety of problems including word problems, where they will have to read or plot coordinates, translate coordinates or draw straight line graphs and read coordinates at points along the line. | <ul style="list-style-type: none"> Can children plot coordinates and draw lines to make shapes on a grid? Can children translate a shape on a grid accurately? Can children turn directly proportional data into coordinates on a grid? | <ul style="list-style-type: none"> Slides Worksheets 5A/5B/5C Translation Table Mat (FSD? activity only) |

Times Table Facts: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|--|--|---|
| Lesson 1 | To be able to recall and use multiplication and division facts for the 2, 3, 4, 5 and 10 times tables. | This lesson starts by showing children a multiplication grid with missing numbers. They will need to use their times tables knowledge to identify patterns and complete the grid. They then move on to practise recalling multiplication and division facts for the 2, 3, 4, 5 and 10 times tables through a variety of fun activities, including multiples colouring to reveal words, speed tests and a board game. | <ul style="list-style-type: none"> Can children recall times table facts for the 2, 3, 4, 5 and 10 times tables? Can children recall division facts for the 2, 3, 4, 5 and 10 times tables? Can children identify multiples of the 2, 3, 4, 5 and 10 times tables? | <ul style="list-style-type: none"> Slides Number Grid Grid Codes 1A/1B Speed Tests Board Game (FSD? activity only) Coloured pencils, dice and counters (FSD? activity only) Bingo Question Sheet (plenary) |
| Lesson 2 | To be able to recall facts for the 6, 7, 8 and 9 times tables. | Starting with a fun game that will encourage recall of multiples of 6 and 8 (using their knowledge of the 3 and 4 times tables to help them), children will go on to look at the multiples of the 7 times table to identify patterns and recap some other tips and tricks for learning the 6, 7, 8 and 9 times tables. During their independent learning, they can then play a game to encourage quick recall of these facts, or test each other with fact family cards. | <ul style="list-style-type: none"> Can children identify multiples of the 6, 7, 8, and 9 times tables? Can children recall multiplication facts for the 6, 7, 8 and 9 times tables? Can children recall associated division facts for the 6, 7, 8 and 9 times tables? | <ul style="list-style-type: none"> Slides Spinner Game Card 2A/2B/2C/2D/2E/2F Multiplication Grid Fact Family Cards (FSD? activity only) |
| Lesson 3 | To be able to find and recall multiples of the 11 and 12 times tables. | Children will start with a multiplication game, using dominoes to multiply two numbers (up to 12x12) together. They then go on to look in closer detail at the 11 and 12 times tables, exploring how to use partitioning to make calculations easier. They then undertake a variety of fun activities, including using a multiplication code to reveal a tongue twister. | <ul style="list-style-type: none"> Can children use partitioning to help them multiply numbers by 11 and 12? Can children recall facts for the 11 times table? Can children recall facts for the 12 times table? | <ul style="list-style-type: none"> Slides Domino Cards Worksheet 3A/3B/3C Calculation and Multiple Cards (FSD? activity only) |
| Lesson 4 | To be able to identify fact families for different multiplication tables. | This lesson focuses on identifying fact families once one multiplication or division fact has been established. Starting by challenging children to pair up their given numbers with other numbers to create a statement, they will go on to explore how the three numbers can be rearranged to make different statements. The main activity gives them the chance to consolidate this, as well as practising their recall of times table facts. | <ul style="list-style-type: none"> Can children recall facts for the 12 times table? Do children understand how to find multiple facts from a given multiplication or division fact? Can children create multiple multiplication and division statements that contain a given number? | <ul style="list-style-type: none"> Slides Number and Symbol Cards Fact Family Cards 4A/4B/4C Worksheet 4A Instruction Card (FSD? activity only) Fact Family Rummy Cards (FSD? activity only) |
| Lesson 5 | To be able to recall and use multiplication and division facts for all times tables up to 12x12. | Children will have the chance to consolidate everything they have learnt and to further practise the quick recall of times table facts up to 12x12. They will be challenged to use their times table knowledge to solve a variety of problems, including missing number problems. | <ul style="list-style-type: none"> Can children recall multiplication facts for all times tables up to 12x12? Can children recall division facts for all times tables up to 12x12? Can children use their knowledge of times tables to solve a variety of problems? | <ul style="list-style-type: none"> Slides Times Tables Activity Sets (purple, green and orange) Superhero Top Trump Cards (FSD? activity only) |

Dividing and Multiplying: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|---|---|
| Lesson 1 | To recall multiplication and division facts | In this first lesson, children will practise their skills of quick recall for multiplication and division facts. They will work in pairs or groups to identify number sentences which prove that a given statement is either true or false. In their independent activities, children will apply their quick recall skills to play games or solve puzzles. | <ul style="list-style-type: none"> • Can children use number sentences to prove whether a statement is correct or incorrect? • Can children recall and use multiplication facts quickly and accurately? • Can children recall and use division facts quickly and accurately? | <ul style="list-style-type: none"> • Slides • Multiplication Cards (Teaching Input) • Division Cards (Teaching Input) • Camping Essentials Cards A/B/C • Camping Essentials Points Sheet • Camping Essentials Instructions Card • Tentominos Game Cards A/B (FSD? activity only) |
| Lesson 2 | To multiply three numbers together | Children will explore the different ways in which three digits can be multiplied together by beginning with an interactive game. They will then discuss their strategies for working out each step of the calculations they made. Children will practise using the partitioning and recombining method to mentally multiply three single-digit numbers. In their independent activities, they will multiply three given digits together to find the product, or in the alternative activity, they need to find the three digits that multiply together to make a given product. | <ul style="list-style-type: none"> • Can children multiply three numbers together? • Do children understand that numbers can be multiplied in any order (commutative law)? • Can children use the distributive law to help them mentally multiply three numbers together? | <ul style="list-style-type: none"> • Slides • Digit Cards (Teaching Input) • Calculators (Teaching Input) • Marshmallow Multiplication Sheet 3A/3B/3C • Marshmallow Stick Strips • How Old Are We? Challenge Cards (FSD? activity only) • Whiteboards or paper (optional) |
| Lesson 3 | To recognise and use factor pairs | Children will find out what factor pairs are, and generate them for different given numbers. They will develop their knowledge and understanding of factor pairs by playing bingo, before applying it in their independent activities, where they will attempt to find as many factor pairs as possible for a given number within a time limit. In the alternative activity, children will decide whether statements concerning factor pairs are true or false, and provide evidence for their opinions. | <ul style="list-style-type: none"> • Do children understand what a factor is? • Do children understand what a factor pair is? • Can children generate and identify factor pairs of a given number? | <ul style="list-style-type: none"> • Slides • Factor Pairs Bingo Cards (Teaching Input) • Camp Fire Factors Game Cards A/B • Instructions Cards • Recording Sheet • Stopwatches • True or False? Cards (FSD? activity only) |
| Lesson 4 | To solve scaling problems using multiplication and division | In this lesson, children will learn how to use their multiplication and division knowledge in order to solve problems which involve scaling up and scaling down. They will look at a range of different problems as a class before moving on to their independent work, where they will apply this understanding to solve clues to identify the winner of a scavenger hunt. In the alternative activity, children will determine the different amounts of items in picnic baskets according to the size of the group of people. | <ul style="list-style-type: none"> • Do children know how to scale up using their multiplication skills? • Do children know how to scale down using their division skills? • Can children explain how they solved a problem? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Scavenger Hunt Clue Cards A/B/C • Picnic Basket Contents Cards (FSD? activity only) • Picnic Basket Order Strips (FSD? activity only) |
| Lesson 5 | To solve correspondence problems using multiplication and division skills | Children will learn how to solve correspondence problems using their knowledge of multiplication and division. As a class, they will discuss and solve questions worded in a variety of different ways, before solving similar problems in their independent activities. | <ul style="list-style-type: none"> • Do children understand how to solve a correspondence problem? • Can children use their multiplication skills to solve a correspondence problem? • Can children use their division skills to solve a correspondence problem? | <ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Campsite Conundrum Cards (FSD? activity only) |

Measuring Capacity: Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|---|---|---|
| Lesson 1 | To know and use the relationship between millilitres and litres | In this first lesson, children will recap on what capacity is, and which units it can be measured in. They will then use their knowledge and understanding of multiplication, division and place value to convert between the different units of measurement, involving numbers with up to two decimal places. Children will apply and consolidate this learning in their independent activities. | <ul style="list-style-type: none"> Do children understand what capacity is? Do children understand the relationship between millilitres and litres? Can children convert millilitres to litres and vice versa? | <ul style="list-style-type: none"> Slides True or False? Statement Cards (Teaching Input) Conversion Cards A/B Worksheet 1A/1B/1C Drops and Puddles Cards Set 1/2 (FSD? activity only) Instructions Cards (FSD? activity only) |
| Lesson 2 | To estimate and measure capacity | Children will be reminded of what an estimate is. They will use known capacities of containers to estimate the capacity of other containers. They will then look at how to measure capacity accurately, and learn how to read different scales by calculating what each division represents. In their independent activities, children will complete a carousel of challenges involving estimating, measuring and reading scales. | <ul style="list-style-type: none"> Can children give an accurate estimate of a container's capacity? Can children measure the capacity of a container accurately? Can children read and interpret scales accurately? | <ul style="list-style-type: none"> Slides Capacity Cards (Teaching Input) Worksheet 2A/2B/2C Container Hunt Sheet (FSD? activity only) Teacher Notes Measuring jugs, water, clear plastic cups, containers of varying sizes e.g. bottle caps, margarine tubs, yoghurt cartons, water bottles (all with labels removed). |
| Lesson 3 | To order and compare measurements | In this lesson, children will use their knowledge and understanding of converting between different units of measurement to order and compare a range of capacities. Children will apply and consolidate this skill in their independent activities. In the alternative activity, they will compare the capacities of different sets of containers, using inequality signs to complete the picture equations. | <ul style="list-style-type: none"> Can children order and compare measurements in millilitres? Can children order and compare measurements in litres? Can children order and compare measurements in millilitres and litres by converting them to the same unit? | <ul style="list-style-type: none"> Slides Measurement Cards Set A/B (Teaching Input) Worksheet 3A/3B/3C More or Less? Sheet A/B (FSD? activity only) Container Card A/B (FSD? activity only) |
| Lesson 4 | To use addition and subtraction to solve capacity problems | Children will apply their knowledge and understanding of converting between different units of measurement to solve a variety of capacity problems involving addition and subtraction. In their independent activities, they will be challenged to solve a range of word problems about a given set of measures. In the alternative activity, children will use their knowledge to play a game involving gaining and losing different amounts of water. | <ul style="list-style-type: none"> Can children solve capacity problems involving addition and subtraction? Can children use their knowledge and understanding of conversion to help them solve these problems? Can children explain their reasoning? | <ul style="list-style-type: none"> Slides Container Conundrum Card A/B/C Container Conundrum Sheet 4A/4B/4C A Bucketful of Fun! Game Board A/B (FSD? activity only) A Bucketful of Fun! Card Set A/B/C/D (FSD? activity only) A Bucketful of Fun! Instructions A/B (FSD? activity only) Recording Sheet (FSD? activity only) |
| Lesson 5 | To solve capacity problems involving money | In this final lesson, children will combine their knowledge and understanding of measuring capacity, as well as their multiplication, division and addition skills to solve a variety of two- and multi-step problems involving money. In their independent activities they will work out the cost of different health drinks, or in the alternative activity, design and cost their own drinks based on given criteria. | <ul style="list-style-type: none"> Can children use their multiplication knowledge to solve capacity problems involving money? Can children use their division knowledge to solve capacity problems involving money? Can children explain how to solve a multi-step problem? | <ul style="list-style-type: none"> Slides Ingredients Price List Recipe Cards A/B/C Worksheet 5A/5B/5C Gulp! Challenge Cards (FSD? activity only) |

Handling Data: Maths : Year 4 : Summer Term, week 9

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|---|--|--|---|
| Lesson 1 | To solve problems using information presented in a variety of tables and graphs. | Children will read and interpret a variety of data shown in bar charts with different scales, including stacked bar charts showing discrete data year-on-year. They will practise rapidly solving problems about data in graphs using familiar mental methods, and devise questions of their own which may be answered using data in given graphs. | <ul style="list-style-type: none"> Can children read data in graphs, including stacked bar charts, with a variety of scales? Can children use mental methods to solve problems about data in graphs? Can children, using appropriate vocabulary, devise their own questions about data in graphs? | <p>Slides Graphs 1A–1F Question Cards 1A–1C Quiz 1 sheet (FSD...? activity only) Answers 1 sheet (FSD...? activity only)</p> |
| Lesson 2 | To plan and conduct surveys, collecting data which may be presented and interpreted using graphs. | Children will consider and learn about what makes an effective survey question, including thinking about when 'other' or 'nothing' answer choices may be appropriate. They may then either devise a survey according to a given brief or design one to find out about a query of their own. | <ul style="list-style-type: none"> Can children identify features of effective, useful survey questions? Can children suggest questions where having 'nothing' or 'other' answer choices would be appropriate? Can children devise survey questions and collect/compile survey data? | <p>Slides Example Uniform Questions Worksheets 2A–2C Survey Ideas cards(FSD...? activity only)</p> |
| Lesson 3 | To present discrete data accurately in graphs, using appropriate scales. | Children will identify what is wrong with a 'flawed' bar chart showing common mistakes done when drawing them. They will also develop strategies for selecting and using appropriate scales when drawing bar charts. Children may then either plot given or collected data on bar charts, or find interesting ways of presenting given data using 'graphic' bar charts in the style of newspapers and news websites. | <ul style="list-style-type: none"> Can children identify common mistakes, or misleading design choices, made when creating bar charts? Can children identify features of accurate, helpful bar charts? Can children select appropriate scales when drawing bar charts on squared/graph paper? | <p>Slides Survey 3 sheet 0.5 cm squared paper and 2 mm graph paper Visual Data 3 sheet (FSD...? activity only) Bar Chart Data 3 cards</p> |
| Lesson 4 | To present sets of data with high/large values using bar charts with appropriate scales. | Children are challenged to identify common mistakes and difficulties when plotting data on graphs. They will go on to consider the challenges associated with presenting data sets with high/large values on bar charts at different scales, as well as the advantages of using spreadsheet software. Children may then either draw bar charts showing given data sets, or use spreadsheet software to automatically produce bar charts. | <ul style="list-style-type: none"> Can children identify common, easily made mistakes when plotting data on graphs? Can children select and use appropriate scales when plotting data with high/large values on bar charts? Can children estimate where to draw the tops of bars when their values do not exactly align with gridlines? | <p>Slides Worksheets 4A–4C 1 cm squared paper, 0.5 cm squared paper and 2 mm graph paper Big Number Data 4 (FSD...? activity only) Spreadsheet software (FSD...? activity only)</p> |
| Lesson 5 | To present discrete data showing changes over time using time graphs. | Children will identify ways in which time data may be presented in meaningful ways, then learn how to plot time data on line graphs at different scales and on different types of paper. They may then either plot given sets of data or collect and plot their own data, either on paper or using spreadsheet software. | <ul style="list-style-type: none"> Can children suggest reasons why line graphs are appropriate for showing data with changes over time? Can children select and use appropriate scales for line graphs showing time data? Can children draw, read and interpret time graphs? | <p>Slides Worksheets 5A–5C 0.5 cm squared paper and 2 mm graph paper Sticky notes Time Activities 5 (FSD...? activity only) Thermometers, tape measures, metre rules (FSD...? activity only) Spreadsheet software (optional, FSD...? activity only)</p> |

Proportion Problems : Maths : Year 4 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|---|--|---|
| Lesson 1 | To be able to recognise and show equivalent fractions. | Children will start by recapping exactly what fractions and decimals are, and how the two relate to each other. They will then focus on identifying equivalent fractions using diagrams. For example, in several diagrams with 16 circles, they will identify which has been shaded to represent one quarter. During their independent learning, they can either play an equivalent fraction matching game or complete a 'Colour by Fraction' activity to reveal a picture. | <ul style="list-style-type: none"> Do children understand that fractions and decimals represent part of a whole? Can children identify equivalent fractions? Can children identify equivalent fractions represented pictorially? | <ul style="list-style-type: none"> Slides Fraction Cards 1A/1B/1C Fraction Wall Colour by Fractions sheet (FSD? activity only) Symbol Cards (plenary) |
| Lesson 2 | To be able to add and subtract fractions with a common denominator. | In this lesson, children use real-life problems to add and subtract fractions with a common denominator. The slides guide them through some problems to solve, explaining how to add and subtract fractions, including what happens if the answer is larger than one. They are then challenged to solve some addition and subtraction problems independently, including missing number problems. | <ul style="list-style-type: none"> Can children add fractions with a common denominator? Can children subtract fractions with a common denominator? Can children add fractions whose answer is larger than one, converting the answer to a mixed number fraction? | <ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Game Board 2A/2B (FSD? activity only) Game Cards 2A/2B (FSD? activity only) |
| Lesson 3 | To be able to find fractions of quantities. | Children will recap how to find fractions of quantities in this lesson. Starting with objects, children will find, e.g. one quarter of 24. They will learn how finding fractions of quantities relates to division, and learn to find unit fractions of increasingly challenging numbers. There is also the opportunity to solve some missing number problems and play a class game of 'Pointless'. | <ul style="list-style-type: none"> Can children find fractions of objects? Can children find fractions of numbers? Can children use division to find fractions of quantities? | <ul style="list-style-type: none"> Slides Question Cards Worksheet 3A/3B/3C Plenary Question Sheet |
| Lesson 4 | To be able to find fractions of amounts using non-unit fractions. | Moving on from their learning in the previous lesson, children will learn how to find fractions of amounts using non-unit fractions, e.g. finding three fifths of 35. Once they are comfortable with the process for this, they will move on to solving some real-life problems that involve finding fractions of amounts. There are also some challenging tarsia puzzles to solve. | <ul style="list-style-type: none"> Can children find unit fractions of amounts? Can children find non-unit fractions of amounts? Can children solve missing number problems relating to finding non-unit fractions of amounts? | <ul style="list-style-type: none"> Slides Challenge Cards 4A/4B/4C Worksheet 4A Tarsia Puzzle 4A/4B (FSD? activity only) |
| Lesson 5 | To be able to round decimals with one decimal place to the nearest whole number. | The final lesson in this series looks again at the relationship between fractions and decimals, focussing on the place value of decimal numbers up to two decimal places. Children will then learn how to round numbers with one decimal place to the nearest whole number. They can then complete some crossword puzzles to practise this (as well as consolidating finding fractions of quantities), or play decimal bingo. | <ul style="list-style-type: none"> Can children link decimals and fractions, explaining the relationship between the two? Do children understand the place value of numbers with two decimal places? Can children round numbers with one decimal place to the nearest whole number? | <ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Number Vocabulary Card Bingo Grids (FSD? activity only) Bingo Decimals Sheet (FSD? activity only) |