

Using Place Value : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To recognise the place value of each digit in a three-digit number.	Children will recap what each digit is worth in a three-digit number, and be able to read and write numbers up to three-digits in numerals and words. They will practically add multiples of ten to a given number to reinforce their understanding of place value addition.	<ul style="list-style-type: none"> • Can children write a three-digit number? • Can children explain the value of each digit in a three-digit number? • Can children make a three-digit number using objects? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Number Cards A • Place Value Cards (FSD? activity only) • Number Cards B/C (FSD? activity only) • Digital Camera • H, T, O blocks
Lesson 2	To solve addition problems involving three-digit numbers.	Your class will partition three-digit numbers practically as well as through the use of place value cards. They will add base ten numbers and two-digit numbers to a given three-digit number.	<ul style="list-style-type: none"> • Can children say the value of each digit in a three-digit number? • Can children use partitioning to help them solve addition problems? • Do children use objects, draw pictures or work in the abstract to solve the problems? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Place Value Cards • Number Cards (FSD? activity only) • Addition Cards O/T/H (FSD? activity only) • Digital Camera • H, T, O blocks
Lesson 3	To solve addition and subtraction problems involving three-digit numbers.	Children will begin to move away from solving problems practically with objects as they work towards solving problems in the abstract using partitioning. They will add two-digit and three-digit numbers to a given three-digit number.	<ul style="list-style-type: none"> • Can children partition a three-digit number? • Can children use partitioning to help them solve addition and subtraction problems? • Do children use objects, draw pictures or work in the abstract to solve the problems? 	<ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Place Value Cards • Number Sentence Cards (FSD? activity only) • Digital Camera • H, T, O blocks
Lesson 4	To solve addition and subtraction word problems involving three-digit numbers.	Children will partition numbers in order to add or subtract them using a number line. They will work out what the given word problems are asking them to do and then write the question as a number sentence before solving it. There is also the chance to create some word problems of their own.	<ul style="list-style-type: none"> • Can children use partitioning to help them solve addition word problems? • Can children use partitioning to help them solve subtraction word problems? • Do children use objects, draw pictures or work in the abstract to solve the problems? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Place Value Cards • Number Cards O/T/H (FSD? activity only) • Digital Camera
Lesson 5	To solve addition and subtraction word problems involving three-digit numbers.	Children will consolidate their knowledge of place value by solving three-part word problems using number lines. The problems will involve addition and subtraction and bridging ten. Higher-ability children are challenged to bridge a hundred.	<ul style="list-style-type: none"> • Can children use partitioning to help them solve word problems? • Can children work out what a word problem is asking them to do? • Do children use objects, draw pictures or work in the abstract to solve the problems? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Place Value Cards • Number Cards T/H (FSD? activity only) • Operations Cards (FSD? activity only) • Challenge Cards (FSD? activity only) • H, T, O blocks

Doubling and Halving : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to double two-digit numbers with totals of more than 100.	Children will learn how to use partitioning to help them double two-digit numbers with totals up to and over a hundred. Children will practise doubling numbers with increased fluency.	<ul style="list-style-type: none"> Can the children double two-digit numbers, answers below 100? Can they double two-digit numbers using a written method? Can they double two-digit numbers mentally? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D
Lesson 2	To be able to double two-digit numbers that total more than 100.	Children will practise doubling two-digit numbers. Children are challenged to double numbers as many times as they can before matching a number to its double. There is also the opportunity for an investigation into the effects of doubling a two-digit number.	<ul style="list-style-type: none"> Can the children double two-digit numbers, answers below 100? Can they double two-digit numbers using a written method? Can they double two-digit numbers mentally? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Challenge Card (FSD? activity only)
Lesson 3	To understand the relationship between doubling and halving and to know doubles and halves of numbers from 1 to 20.	After some quick recall of doubling facts, children will explore the relationship between doubling and halving. They will start by halving even numbers before finding out how to halve odd numbers.	<ul style="list-style-type: none"> Can the children double by heart all numbers to 10? Can they double by heart all numbers to 20? Can they double and halve all numbers to 20? 	<ul style="list-style-type: none"> Slides Number Cards A/B
Lesson 4	To be able to rapidly recall doubles and halves.	The focus of this lesson is rapid recall of doubling and halving facts. Plenty of opportunities are provided in the form of games and activities to allow to children to recall doubling and halving facts for two- and three-digit numbers.	<ul style="list-style-type: none"> Can children recall doubles of whole numbers? Can children halve even numbers? Can children halve odd numbers? 	<ul style="list-style-type: none"> Slides Spinner 4A/4B/4C Game Card 4A/4B/4C Paperclips and pencils Calculation Grids 4A/4B/4C (FSD? activity only) Stopwatches - optional (FSD? activity only)
Lesson 5	To understand the relationship between doubling and halving and to double and halve numbers that total more than 100.	Children are challenged to work out what the input and output numbers on a function would be when the operation is set to 'double' of 'half'.	<ul style="list-style-type: none"> Can the children double and halve whole numbers (below 200)? Can the children double two-digit numbers (crossing the 100 boundary)? Can the children double any two-digit numbers mentally? 	<ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C/5D/5E

Partition Addition : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to use partitioning to add two two-digit numbers.	Children will recap how to partition a two-digit number into tens and one, and explore how partitioning can be used to help solve addition problems. Children will learn to set partitioned numbers up in columns as a precursor to column addition.	<ul style="list-style-type: none"> • Can the children partition two-digit numbers? • Can they add columns of numbers? • Can they add two two-digit numbers using a vertical partitioning method? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Up the Wall sheet (FSD? activity only)
Lesson 2	To be able to check calculations using the inverse.	Children will learn how to use subtraction (using a number line to support them) to check an addition calculation. Children will solve addition problems, using the column partitioning method, then check each calculation using the inverse. They will be taught how to adjust any calculations found to be incorrect.	<ul style="list-style-type: none"> • Can children partition a number? • Can children solve an addition calculation using partitioning? • Can children check an addition calculation using the inverse? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • True or False Cards 2A/2B (FSD? activity only)
Lesson 3	To be able to use partitioning to add numbers up to three digits.	Children will explore how to partition three-digit numbers into hundreds, tens and ones, before extending their understanding of the vertical partitioning method to solve addition calculations that involve two- and three-digit numbers. There are opportunities for activities that include reasoning and investigation.	<ul style="list-style-type: none"> • Can children partition a three-digit number? • Can children add numbers up to three digits using partitioning? • Can children solve addition puzzles using an appropriate method? 	<ul style="list-style-type: none"> • Slides • Challenge Cards 3A/3B/3C • Worksheet 3A/3B (FSD? activity only)
Lesson 4	To be able to use the expanded method to solve addition problems.	Children will learn how to use the expanded addition method to solve two-digit add three-digit, and three-digit add three-digit calculations. Children will use their knowledge of partitioning to solve such problems, setting out the problems in a more formal a structured way.	<ul style="list-style-type: none"> • Can children partition three-digit numbers? • Can children use the expanded method to solve addition calculations? • Can children solve missing number problems related to the expanded method? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Challenge Cards 4A/4B (FSD? activity only)
Lesson 5	To be able to use appropriate methods to solve addition problems.	Children will use what they have learnt during the week to solve addition problems, including word problems, choosing an appropriate method.	<ul style="list-style-type: none"> • Can children use the decomposition and expanded methods to solve addition problems? • Can children solve addition problems using an appropriate method? • Can children check their answers using the inverse? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Target Number Sheets (FSD? activity only)

Solving Subtraction: Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to solve three-digit subtraction problems using a number line.	Children begin with some quick-fire subtraction questions which challenge them to subtract ones, tens and hundreds from three-digit numbers. They then go on to use a number line to subtract two- or three-digit numbers from a three-digit number.	<ul style="list-style-type: none"> • Can children subtract numbers mentally? • Can children use a number line to subtract a two-digit number from a three-digit number? • Can children use a number line to subtract a three-digit number from a three-digit number? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Tarsia Puzzle 1A/1B (FSD? activity only)
Lesson 2	To be able to use decomposition to solve subtraction problems that involve exchanging.	Children answer some quick-fire mental subtraction questions before looking at how the decomposition method can be used to solve HTO-TO and HTO-HTO problems. They will start to look at exchanging, using diagrams and apparatus to help them visualise the process.	<ul style="list-style-type: none"> • Can children solve simple subtraction problems mentally? • Can children use the decomposition method to solve subtraction problems that don't require exchanging? • Can children use the decomposition method to solve subtraction problems that require exchanging? 	<ul style="list-style-type: none"> • Slides • Calculation Cards 2A/2B/2C • Worksheet 2A/2B/2C • Challenge Card 2A/2B (FSD? activity only) • Dienes blocks or Place Value Cards (FSD? activity only)
Lesson 3	To be able to use column subtraction without exchanging.	Children will be introduced to the formal column subtraction in cases where no exchanging is required. They will learn how to set out such calculations correctly and solve problems with up to four digits.	<ul style="list-style-type: none"> • Can children note similarities and differences between the decomposition and column subtraction methods? • Can children subtract one number from another using column subtraction without exchanging? • Can children subtract more than one number at once using column subtraction without exchanging? 	<ul style="list-style-type: none"> • Slides • Calculation Cards 3A/3B/3C • Game Board 3A/3B/3C • Challenge Cards 3A/3B (FSD? activity only) • Number Sheet 3A/3B (FSD? activity only) • Worksheet 3A/3B (FSD? activity only)
Lesson 4	To be able to use column subtraction involving exchanging.	Children will recap the formal column method of subtraction, starting with some examples where no exchanging is required and moving on to examples where exchanging is needed both from the tens and hundreds columns. Children will solve increasingly more challenging calculations using this method, using diagrams and apparatus to help them if necessary.	<ul style="list-style-type: none"> • Can children solve TO-TO calculations using the column subtraction method with exchanging? • Can children solve HTO-TO calculations using the column subtraction method with exchanging? • Can children solve HTO-HTO calculations using the column subtraction method with exchanging? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Place Value Cards • Challenge Cards 4A/4B/4C (FSD? activity only)
Lesson 5	To be able to use subtraction to solve problems.	Children will consider the various subtraction methods they have used throughout the week and discuss which they find easiest and which they think are most efficient. They will then go on to use their subtraction skills to solve a variety of word problems.	<ul style="list-style-type: none"> • Can children identify a variety of strategies and methods for solving subtraction problems? • Can children use mental methods to subtract ones, tens and hundreds from numbers with three digits? • Can children use written methods accurately to solve subtraction calculations? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Challenge Cards 5A/5B (FSD? activity only)

Space and 3D Shape : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to read and record the language of position, direction and movement.	Children will learn some of the language associated with position, direction and movement, such as clockwise, anti-clockwise, grid, row, column, horizontal and vertical, before learning how to describe the position of objects within a grid using coordinates.	<ul style="list-style-type: none"> Can the children use appropriate language to describe position? Can they use appropriate language to describe position and movement? Can they use co-ordinates? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D/1E/1F Blank Battleship Grids 1A/1B Roamers - optional (FSD? activity only) Masking tape or skipping ropes (FSD? activity only)
Lesson 2	To be able to use the four compass directions to describe movement about a grid.	Children will learn about the four directions on a compass and extend their understanding of how to describe movement around a grid using the directions North, South, East and West.	<ul style="list-style-type: none"> Can they use the language of position? Can they use the language of position, direction and movement? Can they use the four compass points to describe position and movement? 	<ul style="list-style-type: none"> Slides Compass Worksheet 2A/2B/2C/2D Island Map sheet
Lesson 3	To be able to identify and describe 3D shapes and their properties.	Children will think about how 3D shapes are different to 2D shapes. They will then explore the difference between a face, edge and vertex before being challenged to describe the features of some familiar 3D shapes.	<ul style="list-style-type: none"> Can the children name basic 3D shapes? Can they describe 3D shapes by their properties? Can they identify 3D shapes around them? 	<ul style="list-style-type: none"> Slides 3D shapes Worksheet 3A/3B/3C Picture Cards Riddle Cards Variety of 3D containers/objects (FSD? activity only) Sticky notes (FSD? activity only)
Lesson 4	To be able to identify and describe 3D shapes according to their properties.	Children will describe 3D shapes in more detail, recognising how many faces, edges and vertices various 3D shapes have. Children will also explore examples of objects that are the same shape as the shapes they have been describing, such as balls (spheres), sugar lumps (cubes), candles (cylinders) cases (cuboids) and many other examples.	<ul style="list-style-type: none"> Can the children name basic 3D shapes? Can they describe 3D shapes by their properties? Can they identify 3D shapes around them? 	<ul style="list-style-type: none"> Slides 3D shapes Worksheet 4A/4B/4C Shape Description sheets (FSD? activity only) Picture Sheet (FSD? activity only)
Lesson 5	To be able to make 3D shapes.	Children will learn how to make 3D shapes, primarily through constructing nets. They will learn how to identify the shape the net will create by looking at its features, and how to put 3D nets together. Alternatively, they can use their knowledge of 3D shapes to construct shapes from other materials.	<ul style="list-style-type: none"> Can children explain what a 3D net is? Can children identify a 3D shape from its net? Can children make 3D shapes? 	<ul style="list-style-type: none"> Slides Cube, Cuboid, Triangular Prism, Pyramid, Pentagonal Prism and Octahedron Net sheets Dried spaghetti (FSD? activity only) Plasticine (FSD? activity only) Challenge Cards (FSD? activity only) 3D Shapes Opaque bag

What is Weight? : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know the relationship between kilograms and grams and begin to estimate weights.	Children will explore the relationship between grams and kilograms and start to think about objects that would be most suited to being weighed in kilograms and those best weighed in grams. They will start to make estimates about weights based on their prior knowledge.	<ul style="list-style-type: none"> Do the children know that 1000 grams equals 1 kilogram? Can they use the correct unit in estimation? Can they estimate reasonably accurately? 	<ul style="list-style-type: none"> Slides 1 kg weights Worksheet 1A/1B/1C Answer Sheet Variety of empty containers (FSD? activity only) Question Cards (FSD? activity only) Picture Cards (FSD? activity only)
Lesson 2	To be able to estimate the weight of an object and check using scales.	Children will be able add weights to one side of a balance scale to make the scales balance. They will then learn how to use measuring scales accurately, and estimate the weight of a variety of classroom objects before checking their estimates by weighing each one.	<ul style="list-style-type: none"> Could the children estimate? Could the children use appropriate units? Could they weigh with increasing accuracy? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C/2D Variety of objects to weigh Digital scales Balance scales (FSD? activity) Weights (FSD? activity only)
Lesson 3	To be able to estimate the weight of an object and check by weighing on scales.	Children will estimate, measure and order the weight of a variety of different books. They will identify books that are heavier or lighter than another, and make increasingly accurate estimations based on their experiences.	<ul style="list-style-type: none"> Could the children estimate? Could the children use appropriate units? Could they weigh with increasing accuracy? 	<ul style="list-style-type: none"> Slides Variety of books Worksheet 3A/3B/3C/3D Scales
Lesson 4	To be able to solve problems involving weight.	Children will solve problems involving weight by adding the weight of various parcels together to see if they can be safely loaded into a delivery van, based on their total weight.	<ul style="list-style-type: none"> Could the children add the weights accurately? Could they decide if the weights were too heavy? Could they investigate different weights? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C/4D Picture Cards (FSD? activity only)
Lesson 5	To be able to solve problems involving weights.	Children will solve problems involving the cost of sending various parcels based on their weight. They will learn how to work out the price of sending a parcel that is, e.g. 10 kg, if they know that it costs £20 to send 5 kg.	<ul style="list-style-type: none"> Could the children calculate simple prices for parcels? Could they calculate more complex prices? Could they calculate weights from given prices? 	<ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Boxes, cartons, padded envelopes, etc. (FSD? activity only) Objects to pack (FSD? activity only) Scales (FSD? activity only)

Organising Data : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To interpret data using bar charts.	Children will recap familiar ways of presenting data, such as straightforward tables, pictograms and block diagrams. Moving on, the slides show the features of bar charts and how data can be presented in them. The activities encourage children to start using bar charts as well as using mathematical vocabulary to describe them.	<ul style="list-style-type: none"> • Are children confident interpreting data presented in tables, tally charts, pictograms and block diagrams? • Can children identify the features of bar charts? • Can children read and interpret information presented in bar charts? 	<ul style="list-style-type: none"> • Slides • Worksheets 1A/1B/1C/1D • Maths Vocabulary Cards • Unifix/multilink cubes (FSD? activity only)
Lesson 2	To present data using bar charts.	As a warm-up, children are challenged to think about the features of bar charts. The main focus concerns presenting data collected in tables and tally charts. Children will explore ways of ensuring bar charts are drawn accurately, going on to think about how data in tables can be checked using bar charts and vice-versa. Children are challenged to make accurate bar charts using the provided sets of data.	<ul style="list-style-type: none"> • Can children compare data presented in tables and bar charts? • Can children generate instructions for drawing a bar chart? • Can children present given sets of data in a bar chart? 	<ul style="list-style-type: none"> • Slides • Worksheets 2A/2B/2C/2D • Maths Vocabulary Cards (FSD? activity only) • Large sheets of plain paper (FSD? activity only) • Maths cubes, plastic building blocks, dominoes, playing cards etc. (FSD? activity only)
Lesson 3	To collect data using tally charts and present it using bar charts.	Children will consider what makes a good/bad question when conducting a survey. They are shown some common problems and misconceptions that can arise when making bar charts, before planning and conducting their own survey and showing the data they collect using a bar chart.	<ul style="list-style-type: none"> • Can children devise a logical process for collecting data and presenting it in a bar chart? • Do children understand why (depending on context) it is often important to provide a choice of answers when collecting survey data? • Can children conduct a survey, collect data using a tally chart and present it in a bar chart? 	<ul style="list-style-type: none"> • Slides • Worksheets 3A/3B/3C • Challenge Cards 3A/3B/3C • Rulers and tape measures • Squared paper (FSD? activity only)
Lesson 4	To read and present information in scaled bar charts.	Children will consider why it is useful to be able to present data in bar charts using different scales. Children will study several examples of data sets requiring bar charts at different scales, and learn how to draw and interpret bar charts at 2:1, 5:1 and 10:1 scales.	<ul style="list-style-type: none"> • Can children read information presented on scaled bar charts? • Can children choose an appropriate scale when presenting data using bar charts? • Can children accurately draw scaled bar charts? 	<ul style="list-style-type: none"> • Slides • Worksheets 4A/4B/4C/4D • Bar Charts 4A (FSD? activity only)
Lesson 5	To solve questions with one or two steps by interpreting data presented in bar charts.	Children will consider strategies for unpicking word problems that can be answered using bar charts. They will be challenged to put what they have learned throughout the week into practice by reading and interpreting a variety of bar charts.	<ul style="list-style-type: none"> • Can children find the difference between groups of data presented in bar charts? • Can children identify the steps required to answer questions about data presented in bar charts? • Can children select appropriate sets of data to answer problems with one or two steps? 	<ul style="list-style-type: none"> • Slides • Worksheets 5A/5B/5C/5D • Theme Park Bar Charts

Linking Multiplication and Division : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to count on and back in patterns.	Children will practise counting on and back in steps of a certain size. Starting as a whole class, your children can then work out some number patterns suited to their ability level, using a hundred square to support them.	<ul style="list-style-type: none"> • Could the children count on and back in twos? • Could the children count on and back in threes and fours? • Could the children count on and back in sevens, eights and nines? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Hundred Square • Pattern Cards A/B/C (FSD? activity only)
Lesson 2	To revise multiplication facts and their corresponding division facts.	Children will explore the link between multiplication and division, establishing how to derive 'fact families' from one given multiplication or division fact. They will identify whether given multiplication or division statements are correct or solve some missing number problems.	<ul style="list-style-type: none"> • Can children recall facts for the 3 and 4 times tables? • Can children recall facts for the 8 times tables? • Can children find corresponding division and multiplication facts for a given statement? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Fact Cards 2A/2B (FSD? activity only)
Lesson 3	To be able to recall multiplication facts quickly.	Children will practise multiplication facts for the 2, 3, 4, 5, 6 and 10 times tables. They will test their recall of these multiplication tables and have opportunities to identify strengths and weaknesses to help them develop their fluency.	<ul style="list-style-type: none"> • Do the children know their 2, 3, 4, 5, 6 and 10 times tables? • Do the children know their 2, 3, 4, 5, 6 and 10 times tables and corresponding division facts? • Can children answer quick-fire multiplication and division questions? 	<ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Stopwatches • Game Cards A/B/C (FSD? activity only)
Lesson 4	To be able to multiply and divide numbers by 10 and 100.	Children will explore what happens to a number when it is multiplied and divided by 10 and 100. Children will solve a variety of multiplication and division problems using reasoning activities or board games to practise these skills.	<ul style="list-style-type: none"> • Can children multiply a number by 10 or 100? • Can children divide a number by 10 or 100? • Can children multiply or divide numbers by 1000? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Dice • Spinner 4A • Game Board 4A/4B (FSD? activity only) • Question Cards 4A/4B (FSD? activity only) • Counters
Lesson 5	To be able to divide two-digit numbers by a single digit and check using the inverse.	Children will explore the concept of division as repeated subtraction, using a number line to support them. They will divide two-digit numbers by single digits, and solve problems involving remainders.	<ul style="list-style-type: none"> • Can children divide numbers by two and three? • Can children divide numbers by four, five and ten? • Can children check their answers using the inverse? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B/5C • Question Sheet A/B/C (FSD? activity only)

Using Division and Multiplication: Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know how to multiply numbers by multiples of 10 and 100 using known facts	Children will first recap on how to multiply by 10 and 100. They will be encouraged to explain what happens to the digits in each number. Children will then learn how to apply this to multiply numbers by multiples of 10 and 100. In their independent activities, children will use this knowledge and understanding to solve tarsia puzzles. Alternatively they will be challenged to find what other number facts they know based on one given number sentence.	<ul style="list-style-type: none"> Can children multiply and divide numbers using a multiple of 10? Can children multiply and divide numbers using a multiple of 100? Can children explain how they reached their answer and how they know it is correct? 	<ul style="list-style-type: none"> Slides Tarsia Puzzle Sheet A/B/C Number Sentence List (FSD? activity) Reasoning Sheet (FSD? activity only)
Lesson 2	To be able to multiply numbers using partitioning and repeated addition	Children will use their knowledge of partitioning and repeated addition to multiply two- and three-digit numbers by a one-digit number. They will start to use the column method for adding numbers. Children will be encouraged to explain the different steps needed when using this strategy. In their independent activities, they will use spinners to generate and then solve their own number sentences, or alternatively they will identify calculations which contain errors, and correct them.	<ul style="list-style-type: none"> Can children partition two- and three-digit numbers? Do children understand how to use repeated addition for multiplication? Can children explain how they used this method to multiply two- and three-digit numbers by a one-digit number? 	<ul style="list-style-type: none"> Slides Number Generator Spinner Set A/B/C Worksheet 2A/2B/2C Right or Wrong? Sheet A/B (FSD? activity only) Corrections Sheet (FSD? activity only)
Lesson 3	To know how to use the grid method for multiplication	Children will be introduced to the grid method for multiplication. They will learn what each box in the grid is for, and how to enter the information from the number sentence that they are solving. They will learn where each separate multiplications should go, and how to recombine using addition to find the final answer.	<ul style="list-style-type: none"> Do children understand how to use the grid method to solve multiplication number sentences? Can children explain how to use the grid method? Can children use the grid method to solve and check answers to number sentences? 	<ul style="list-style-type: none"> Slides Grid Method Cards A/B/C Grid Method Investigation Sheet (FSD? activity only)
Lesson 4	To know how to solve division number sentences with repeated subtraction	Children will recap on how to use repeated subtraction on a number line to solve number sentences where they are dividing two- and three-digit numbers by a one-digit number. They will be encouraged to think about where mistakes could be made when using this method, and discuss how they can ensure that they themselves do not make these errors.	<ul style="list-style-type: none"> Can children solve a division number sentence using repeated subtraction on a number line? Can children explain how to solve a division sentence using repeated subtraction? Can children identify and correct errors in the number sentences which have been incorrectly solved using the repeated subtraction method? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Blank Number Line Strips Sheet (FSD? activity only) Instruction Cards A/B/C (FSD? activity only)
Lesson 5	To know how to solve missing number problems	Children will recap on the methods they have used for multiplication and division over the last few lessons. They will then compare and contrast two methods for finding a missing number in a sentence – trial and improvement, and using the inverse operation. In their independent activities, children will be encouraged to use the inverse operation when playing the What's Missing? board game, or in the alternate activity, they will use the trial and improvement method to find missing numbers.	<ul style="list-style-type: none"> Do children understand what an inverse operation is? Can children use the inverse operation to solve missing number problems involving multiplication and division? Can children explain their methods and reasoning? 	<ul style="list-style-type: none"> Slides What's Missing? Game A/B/C What's Missing? Instructions Card Dice, different coloured counters Blank Number Lines Sheet Blank Grid Method Boxes Sheet Challenge Cards A/B (FSD? activity only)

What's the Time? : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to tell the time on an analogue clock to the nearest five minutes.	Children will recap telling the time to the nearest quarter of an hour and the nearest five minutes. They will practise counting in fives to help them tell the time more quickly on an analogue clock.	<ul style="list-style-type: none"> Can children tell the time on an analogue clock to the nearest quarter of an hour? Can children tell the time on an analogue clock to the nearest five minutes? Can children tell the time on an analogue clock to the nearest minute? 	<ul style="list-style-type: none"> Slides Analogue clock faces Worksheet 1A/1B/1C Time Cards 1A/1B (FSD? activity only)
Lesson 2	To be able to tell the time on an analogue clock to the nearest minute.	Children will recap telling the time to the nearest five minutes and will then learn how to tell the time to the nearest minute. They will identify the times of various daily activities and match times on an analogue clock to their written description.	<ul style="list-style-type: none"> Do children know how many minutes there are in an hour? Can children tell the time to the nearest minute on analogue clocks? Can children match a written time to a time shown on an analogue clock? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Information Sheet Jigsaw Time Pieces (FSD? activity only) Blank Jigsaw Time Pieces (FSD? activity only) Analogue clock faces - plenary
Lesson 3	To be able to tell the time on analogue and digital clocks.	Children will be introduced to digital clocks as they explore different ways of reading and expressing times. They will explore how digital clocks work and how they are different to analogue clocks, and learn how to say the time in different ways, such as 'three twenty' and 'twenty past three'.	<ul style="list-style-type: none"> Do children know the difference between analogue and digital clocks? Do children know that the same time can be said in different ways? Can children match times shown on analogue and digital clocks? 	<ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C/3D Digital Clock Cards 3A/3B Analogue Clock Cards 3A/3B Time Cards 3A/3B (FSD? activity only)
Lesson 4	To be able to match morning and afternoon times to events throughout the day.	Children will learn the difference between 'a.m.' and 'p.m.'. They will also define the terms 'midnight', 'midday', 'dawn' and 'dusk'. Children will read and interpret daily timetables or create their own timetables to show what they do at different times in a typical day.	<ul style="list-style-type: none"> Do children know that the hour hand moves around an analogue clock twice in one day? Do children know the difference between a.m. and p.m.? Can children identify events that might happen at certain times in a typical day? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Blank Timeline Sheet (FSD? activity only)
Lesson 5	To be able to solve word problems involving time.	Children will solve a variety of word problems relating to time. They will learn how to use analogue clocks to work out the start and end times of different activities to calculate time intervals.	<ul style="list-style-type: none"> Can children read times on analogue and digital clocks? Can children solve problems involving time intervals? Can children solve problems involving comparing duration of events? 	<ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C/5D Analogue clocks Time Cards 5A/5B (FSD? activity only)