# Rounding and Estimating : Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To be able to round numbers to the nearest 10 or 100. | Children will learn how to round numbers to the nearest ten and the nearest hundred. They will round numbers in order to find approximate answers to addition questions and investigate rounded numbers that reach a given total when added together. | • Can children round to the nearest 10?<br><br>• Can children round to the nearest 100?<br><br>• Can children use rounding to find approximate answers in addition calculations? | • Slides<br>• Worksheet 1A/1B/1C<br>• Bingo Game Sheet (FSD? activity only)<br>• Digit Cards |
| **Lesson 2** | To be able to identify characteristics of numbers and to order and compare numbers. | Children are challenged to think of as many properties of three-digit numbers as they can, including whether it is odd or even, what each digit is worth and what the number can be rounded to. They will order and compare numbers and think about ways of grouping a set of numbers according to their own criteria. | • Can children describe some properties of three-digit numbers?<br><br>• Can children identify similarities and differences between two numbers?<br><br>• Can children order numbers? | • Slides<br>• Number Cards 2A/2B/2C/2D<br>• Worksheet 2A |
| **Lesson 3** | To be able to make estimates of numbers. | Children will make estimates of the number of objects in a given set, exploring how to make reasonable estimates as they develop their understanding. They will also check their estimates to see how close their estimates were in order to help inform future estimates. | • Can children make reasonable estimates for small numbers of objects?<br><br>• Can children make reasonable estimates for larger numbers of objects?<br><br>• Can children check their estimates accurately and check how close they were? | • Slides<br>• Worksheet 3A/3B/3C/3D<br>• Cubes, counters and paperclips |
| **Lesson 4** | To be able to make estimates in real-life contexts. | Children will use a scaled map to make estimates as to the distance between various cities. They can also estimate the length, weight and capacity of a variety of different objects. They will compare their estimates to actual measurements to see how close their estimates were. | • Can children use knowledge of length, weight and capacity to make estimations?<br><br>• Can children use the correct units of measurement for measuring length, weight and capacity?<br><br>• Can children find the difference between an estimate and an actual measurement? | • Slides<br>• Worksheet 4A/4B/4C/4D<br>• UK Cities Map<br>• Answer Sheet A/B<br>• Calculators<br>• Estimate Cards (FSD? activity only) |
| **Lesson 5** | To be able to make estimates in practical contexts. | Children will make estimates about the duration of different events. They will estimate the time it takes, for example, to write their name, then check their estimates against an accurate time. They are challenged to work out the difference between their estimate and the actual measurement. | • Can children make accurate estimates?<br><br>• Can children find the actual answers to questions to compare to an estimate?<br><br>• Can children find the difference between an estimate and an actual answer? | • Slides<br>• Stopwatches<br>• Worksheet 5A/5B/5C/5D<br>• Estimate Cards (FSD? activity only)<br>• Items for question card challenges, e.g. marbles, counters, cubes, plastic cups, plastic bottles, jam jars, etc. (FSD? activity only) |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan*

# Knowing Number Facts: Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To add tens mentally. | Children will consider and explain, using place value, what is happening when tens are added to another number – firstly without, then with, exchanging. They will go on to develop strategies for mentally solving addition of tens to two- and three-digit numbers, applying these while practising solving calculations presented using a variety of operational language. | • Can children use number bonds to mentally solve two- and three-digit + tens calculations?<br><br>• Can children visualise informal, written methods or practical resources to help mentally solve calculations where exchanging is required?<br><br>• Can children add several tens to a two-digit number, e.g. 36 + 20 + 30 + 10? | • Slides<br>• Worksheets 1A/1B/1C<br>• 0–9 Number Cards<br>• Dienes Base 10 resources<br>• Adding Answers Cards (FSD…? activity only) |
| **Lesson 2** | To mentally solve missing number problems, adding or subtracting tens to or from two-, three- and four-digit numbers. | Children will learn and develop strategies for mentally solving increasingly challenging missing number problems where tens/hundreds are added/subtracted. They may then go on either to select problems of varying difficulty to solve, or solve given missing number problems to crack a code and discover a secret message. | • Can children use addition to solving missing number subtraction problems mentally?<br><br>• Can children use subtraction to solve missing number addition problems mentally?<br><br>• Can children mentally solve more complex addition and subtraction missing number problems, e.g. 31 + 30 = □ + 40? | • Slides<br>• Question Sticks 2A/2B/2C<br>• Worksheets 2A/2B/2C<br>• Codebreaker sheet (FSD…? activity only)<br>• Secret Codes 2A/2B/2C (FSD…? activity only) |
| **Lesson 3** | To select and use mental methods (including a 'compensation method') for subtracting hundreds, tens and ones. | Children will warm up by finding pairs of numbers which total fifty, then take a look at how place value knowledge can help when subtracting tens or hundreds from another number. They will go on to learn, develop and practise a mental compensation method for subtracting tens numbers. | • Can children count back in multiples of ten/hundred to solve subtraction calculations mentally?<br><br>• Can children use place value knowledge to mentally solve subtraction calculations?<br><br>• Can children select appropriate mental methods for subtracting, depending on the values shown? | • Slides<br>• Worksheets 3A/3B/3C<br>• Bullseye! Game Board (FSD…? activity only)<br>• Counters (FSD…? activity only) |
| **Lesson 4** | To develop mental strategies for subtracting tens and hundreds. | Building on their prior knowledge of subtracting tens and hundreds, children will develop strategies for mentally solving subtraction calculations with multiple operations, e.g. 345 - 80 - 20 - 40. They may then either practise and develop these strategies by playing subtraction games, or by completing a timed subtraction challenge. | • Can children explain how multi-operation calculations may be solved in different ways?<br><br>• Can children add multiple amounts to be subtracted in a calculation?<br><br>• Can children identify which digits in a number will change when tens/hundreds are subtracted? | • Slides<br>• Number Cards 4A<br>• Subtracting Games 4A/4B/4C<br>• Plastic cups, counters, ping pong balls, tennis balls or similar<br>• Calculation Challenge 4A cards (FSD…? activity only) |
| **Lesson 5** | To count in multiples of four and eight, and mentally subtract using a compensation method. | Building upon strategies developed during previous lessons, children will practise using a mental compensation method to subtract 8, 9, 80 or 90. They will also consider and discuss methods for solving missing number problems with these subtractions. Children may then either write and solve subtraction calculations, or work on a simple subtraction investigation. | • Can children rapidly recall multiples of four and eight?<br><br>• Can children use a compensation method to mentally subtract eight?<br><br>• Can children apply their understanding of this method when subtracting 9, 80 or 90? | • Slides<br>• Worksheets 5A/5B/5C<br>• Challenge Cards 5A-5C (FSD…? activity only) |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different…?' activity within the lesson plan*

# Let's Add and Subtract: Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To be able to use a variety of appropriate methods to solve addition and subtraction problems. | Children start by answering questions about what addition and subtraction are, before clarifying the relationship between the two operations. Bar models are used to support children with this. They are then challenged to solve some addition and subtraction missing number problems using a variety of methods and approaches. | • Do children know that addition is the inverse of subtraction, and vice versa?<br>• Can children solve addition problems using a variety of appropriate methods?<br>• Can children solve subtraction problems using a variety of appropriate methods? | • Slides<br>• Worksheet 1A/1B/1C<br>• Mindmap Calculation Sheet (FSD? activity only)<br>• Mindmap Calculation Cards 1A/1B/1C (FSD? activity only) |
| **Lesson 2** | To be able to use the formal column addition method. | Children will start by being shown a formal column addition calculation where the digits have been replaced with place value counters. They will use this diagram to explain what is being shown and start to understand how the formal column method works. The slides then go through further examples, modelling how to solve formal column addition, using place value counters to support. Children can then use column addition to solve a variety of problems. | • Can children describe how the formal column addition method works?<br>• Can children use the formal column addition method with calculations that involve exchanging?<br>• Can children use the formal column addition to solve a variety of problems? | • Slides<br>• Place Value Counter Cards (input)<br>• Number Cards<br>• Game Sheet 2A/2B/2C<br>• Worksheet 2A<br>• Challenge Cards (FSD? activity only) |
| **Lesson 3** | To be able to use the formal column subtraction method. | Children start by estimating the answer to a subtraction calculation, then considering how they could find the actual answer. They then go on to explore column subtraction, using place value counters to help them visualise what is happening when numbers are exchanged. They then have a variety of problems to solve, using column subtraction to find the solutions. | • Can children describe how the formal column subtraction method works?<br>• Can children use the formal column subtraction method with calculations that involve exchanging?<br>• Can children use the formal column subtraction to solve a variety of problems? | • Slides<br>• Place Value Counter Cards (input)<br>• Challenge Cards 3A/3B/3C<br>• Worksheet 3A<br>• Place Value Number Cards 3A/3B (FSD? activity only) |
| **Lesson 4** | To be able to use addition and subtraction methods to solve problems. | This lesson will deepen their understanding of the relationship between addition and subtraction. Numbers within addition and subtraction sentences are replaced with symbols. Children are challenged to work out the value of the symbols using their knowledge of addition and subtraction. | • Can children use appropriate addition and subtraction methods to solve problems?<br>• Can children check the answers to addition and subtraction problems using the inverse?<br>• Can children use their reasoning skills to solve problems? | • Slides<br>• Worksheet 4A/4B/4C 👆<br>• Code Cracker 4A/4B/4C (FSD? activity only)<br>• Calculation Cards 4A/4B/4C (FSD? activity only)<br>• Code Words 4A/4B/4C (FSD? activity only) |
| **Lesson 5** | To be able to use addition and subtraction to solve word problems. | Children are challenged to use their knowledge of addition and subtraction to solve a variety of word problems. The slides guide children through some different questions, using the RUCSAC model to help them identify and complete the different steps needed to successfully solve word problems. Children are challenged to use the inverse to check their answers. | • Can children read word problems and understand what they are being asked to find out?<br>• Can children choose appropriate operations and methods to solve addition and subtraction problems?<br>• Can children check that their answers are accurate? | • Slides<br>• Challenge Cards 5A/5B/5C<br>• Question Cards (FSD? activity only)<br>• Worksheet 5A/5B/5C (FSD? activity only) |

*NB: 'FSD? activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan* **www.planbee.com**

# Using Times Tables : Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To revise multiplication facts and identify multiples of eight. | Children will use a hundred square to support them in counting in multiples of eight. They will find out what the word 'multiple' means and explore the link between multiples of four and multiples of eight. The independent learning activities give them opportunities to become more familiar with the eight times table, or recap other times tables facts. | • Can children count in multiples of eight?<br>• Do children understand what the term 'multiple' means?<br>• Can children recall facts for the four and eight times tables? | • Slides<br>• Number Fact Cards<br>• Colour by Number sheet<br>• Game Board<br>• Dice<br>• Coloured pencils<br>• Times Table Memory Games (FSD? activity only) |
| **Lesson 2** | To investigate multiples of three, four and eight. | Children will recap what a multiple is before identifying factors of different multiples. They will identify the 'odd one out' in a set of multiples and practise the eight times table. They will complete number statements in a variety of ways to show how factor pairs of different multiples or carry out investigations into multiples of three, four and eight. | • Can children identify and recall multiples of three?<br>• Can children identify and recall multiples of four?<br>• Can children identify and recall multiples of eight? | • Slides<br>• Worksheet 2A/2B/2C<br>• Multiplication Grid<br>• Sometimes, Always or Never Cards (FSD? activity only) |
| **Lesson 3** | To be able to use multiplication facts to recall division facts. | Children will identify the link between multiplication and division. They will derive division facts from a given multiplication statement. They will focus on rapid recall of both multiplication and division facts for a variety of times tables. | • Do children understand the link between multiplication and division?<br>• Can children use multiplication to solve division questions?<br>• Can children recall division facts? | • Slides<br>• Game Board 3A/3B/3C<br>• Dice and counters<br>• Division Race Cards (FSD? activity only) |
| **Lesson 4** | To be able to recall multiplication facts. | Children will focus on rapid recall of multiplication facts for a variety of times tables. Children will complete differentiated multiplication grids, with higher-ability children deriving missing factors within the grid as well as missing multiples. They can also play games to reinforce times table facts. | • Can children recall facts for the 2, 5 and 10 times tables?<br>• Can children recall facts for the 3, 4 and 8 times tables?<br>• Can children use known times table facts to derive associated facts? | • Slides<br>• Blank Bingo Grids<br>• Worksheet 4A/4B/4C<br>• Take Away Game sheets (FSD? activity only)<br>• Dice and counters (FSD? activity only) |
| **Lesson 5** | To be able to use the grid method to solve multiplication problems. | Children will recap how the grid method works to solve multiplication problems. They will start with two-digit by two-digit calculations, then move on to three-digit by two-digit calculations if appropriate. The independent learning activities give opportunities to practise this method, as well as solving an investigation. | • Can children recall and use multiplication facts?<br>• Can children partition numbers correctly?<br>• Can children use the grid method of multiplication correctly? | • Slides<br>• Worksheet 5A/5B/5C<br>• Multiplication Table<br>• Challenge Cards 5A/5B (FSD? activity only)<br>• Digit Cards (FSD? activity only) |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan*

# Shapes and Angles : Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To be able to recognise right angles as a description of a turn. | Children will identify what a right angle is and identify right angles in 2D shapes. They will then recognise right angles as a description of a turn, using the terms 'clockwise' and 'anti-clockwise' to turn a quarter, half, three-quarter or full turn in both directions. Higher-ability children will use the four compass points to further describe turns. | • Do children know what a right angle is?<br>• Can children recognise right angles as being a description of a turn?<br>• Can children describe a turn using appropriate vocabulary? | • Slides<br>• Worksheet 1A/1B/1C<br>• Clock Cards A/B (FSD? activity only)<br>• Direction Cards A/B (FSD? activity only) |
| **Lesson 2** | To be able to identify angles that are greater than or less than a right angle. | Children will be introduced to acute and obtuse angles, and will find out how to identify if an angle is greater than or less than a right angle. They will identify different types of angles in a variety of 2D shapes and objects around them. They will start to think about how to estimate the size of an angle, based on their knowledge of a right angle as ninety degrees. | • Can children recognise a right angle?<br>• Can children recognise angles that are greater than a right angle?<br>• Can children recognise angles that are less than a right angle? | • Slides<br>• Worksheet 2A/2B<br>• Shape Sheet A/B/C |
| **Lesson 3** | To be able to identify horizontal and vertical lines. | Children will learn what the terms 'horizontal' and 'vertical' mean before identifying horizontal and vertical lines in 2D shapes and objects around them. | • Do children know what a horizontal line is?<br>• Do children know what a vertical line is?<br>• Can children identify horizontal and vertical lines within shapes and objects? | • Slides<br>• Worksheet 3A/3B/3C<br>• Instruction Sheet (FSD? activity only) |
| **Lesson 4** | To identify parallel and perpendicular lines in shapes. | Children will learn what the terms 'parallel' and 'perpendicular' mean before identifying parallel and perpendicular lines in 2D shapes and objects around them. They will also identify shapes being described from clues about its properties, including different types of lines and angles. | • Can children identify parallel lines?<br>• Can children identify perpendicular lines?<br>• Can children identify horizontal and vertical lines? | • Slides<br>• Worksheet 4A<br>• Criteria Cards<br>• Shape Cards<br>• Description Cards (FSD? activity only) |
| **Lesson 5** | To be able to draw 2D shapes accurately according to a description. | Children will learn to draw shapes according to descriptions of their properties, including the number and length of sides, type of angles, type of lines (parallel, perpendicular, horizontal and vertical) and whether it is a regular or irregular shape. Children can also describe a given shape using appropriate vocabulary. | • Can children identify properties of shapes?<br>• Can children describe a 2D shape according to its properties?<br>• Can children draw a 2D shape accurately according to a description? | • Slides<br>• Rulers and/or set squares<br>• Worksheet 5A<br>• Description Cards A/B<br>• Shape Cards (FSD? activity only) |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan*

# Multiplication Problems: Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To recognise and use multiples of three, four and eight. | In this lesson the children will use their knowledge of multiples to investigate and predict different patterns involving the three, four and eight times tables. After refreshing their memories of multiples for each number, the children are asked to spot similarities between multiples and begin to use this understanding to label larger numbers as multiples of other numbers i.e. multiples of two are always even, therefore 246 is a multiple of two. | • Can children recall multiples of three?<br>• Can children recall multiples of four and eight?<br>• Can children recognise similarities between multiples i.e. all multiples of four are even? | • Slides<br>• Challenge Cards 1A/1B/1C<br>• Plain paper<br>• Felt tips<br>• Coloured counters<br>• Spinner (FSD? activity only)<br>• Game Board (FSD? activity only)<br>• Game Instructions (FSD? activity only)<br>• Paper clips (FSD? activity only) |
| **Lesson 2** | To use the expanded short multiplication method. | Using previous knowledge of the grid method the children begin to progress into the use of formal written methods by learning the expanded short multiplication method. They compare the two methods and identify similarities between the two. The children also have the opportunity to evaluate each method and say which they prefer before using the methods to work out ticket sales at the aquarium. | • Can children compare the grid method and the expanded method to find any similarities or differences?<br>• Can children describe the process of using the expanded method?<br>• Can children use the expanded method to solve TO x O calculations? | • Slides<br>• Worksheets 2A/2B/2C<br>• Multiplication Squares<br>• Worksheet 2D (FSD? activity only)<br>• Challenge Cards 2A (FSD? activity only)<br>• Calculation Cards 2A/2B/2C |
| **Lesson 3** | To use systematic and logical methods to solve correspondence problems. | In this lesson the children will be challenged to develop their problem-solving skills when approaching a problem which requires them to think logically and systematically. They must find all the possible combinations of objects from a set, responding to required criteria. They apply these skills to finding solutions to real-life problems based around running an aquarium. | • Can children identify one possible combination within a set of objects?<br>• Can children use a systematic and logical method to solve correspondence problems?<br>• Are children able to find all possible combinations within a set of objects? | • Slides<br>• Worksheets 3A/3B/3C<br>• Counters<br>• Hundred squares<br>• Sticky notes<br>• Challenge Cards 3A/3B/3C (FSD? activity only)<br>• Combination Cards (FSD? activity only) |
| **Lesson 4** | To use known multiplication strategies to solve scaling problems. | This lesson challenges the children to use the language of scaling when solving multiplication problems. They need to use the systematic and logical approaches from previous lessons to solve scaling questions with more than one possible answer. | • Can children recognise which multiplication to use when solving a scaling problem?<br>• Are children able to employ a systematic and logical approach to solving scaling problems?<br>• Are children able to use reasoning to back up their decisions when working through a scaling problem? | • Slides<br>• Worksheets 4A/4B/4C/4D<br>• Worksheets 4E/4F/4G (FSD? activity only) |
| **Lesson 5** | To use multiplying by 10 and 100 to solve a multi-step problem. | In this final lesson the children bring together the learning they have done over the week to solve a larger problem based around the deca-anemone. The children will work in groups to produce representations of the problem as well as having the opportunity to pose their own 'What if..?' questions regarding the previous problem. | • Can children multiply by 10 and 100?<br>• Can children produce a logical thought process when solving a problem?<br>• Can children use their understanding of the four operations to solve a multi-step problem? | • Slides<br>• Game Board<br>• Dice<br>• Coloured counters<br>• Dienes set or objects to model problem.<br>• Large paper<br>• Felt tips |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan* www.planbee.com

# Clock Watching : Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To recap how to tell the time to the nearest minute on analogue and digital clocks. | Children will recap how to tell the time to the nearest minute on analogue and digital clocks. They will match times shown on analogue and digital clocks, as well as times written out in word form. They will recap units of time, such as hour, week day, month and year, and establish how they are linked to one another. | • Can children tell the time to the nearest minute on an analogue clock?<br>• Can children tell the time to the nearest minute on a digital clock?<br>• Can children remember how various units of time relate to one another? | • Slides<br>• Clock Cards 1A/1B/1C<br>• Question Cards 1A/1B (FSD? activity only)<br>• Hour Cards (FSD? activity only)<br>• Analogue clock faces (FSD? activity only) |
| **Lesson 2** | To be able to tell the time on 24-hour clocks. | Children will recap the difference between 'a.m.' and 'p.m.' and learn how to tell the time on a digital 24-hour clock. Children will match p.m. analogue clock times with their corresponding 24-hour digital clocks. They will also consider various daily events and predict whether they think they are happening in the morning or afternoon, expressing the time on a digital clock accordingly. | • Do children know that there are 24 hours in a day?<br>• Can children explain how a 24-hour digital clock works in relation to an analogue clock?<br>• Can children read and tell the time using a 24-hour clock? | • Slides<br>• Worksheet 2A/2B/2C<br>• Help Sheet<br>• Time Bingo Cards (FSD? activity only) |
| **Lesson 3** | To be able to record and compare times using a stopwatch. | Children will estimate, measure and compare the duration of events. They will use stopwatches to time themselves completing a variety of activities, then analyse the results by comparing and order the times. | • Can children accurately measure times on a stopwatch?<br>• Can children order the duration of events accurately?<br>• Can children compare the duration of events? | • Slides<br>• Stopwatches<br>• Worksheet 3A/3B/3C |
| **Lesson 4** | To be able to compare the duration of events. | Children will work out the duration of various journeys, using clocks to support them. They will express the answers using both analogue and digital clocks and reinforce reading the time to the nearest minute. They will compare the duration of journeys by stating which was longest and shortest. | • Can children read and compare times?<br>• Can children compare the duration of events?<br>• Can children work out how long activities take from a given start an end time? | • Slides<br>• Train Timetable 4A/4B/4C<br>• Worksheet 4A/4B/4C<br>• Analogue clock faces if necessary<br>• Clock Cards 4A/4B/4C (FSD? activity only) |
| **Lesson 5** | To be able to solve word problems involving the duration of events. | Children will solve a variety of real-life word problems that involve working out the duration of events. They will establish what the question is asking them and use their knowledge of reading and telling the time to solve problems. | • Can children identify what a word problem is asking them?<br>• Can children use an appropriate method to solve a problem related to time?<br>• Can children check their answers? | • Slides<br>• Clock faces - optional<br>• Worksheet 5A/5B/5C/5D<br>• Cinema Listings sheet (FSD? activity only) |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different…?' activity within the lesson plan*

# What is Capacity? : Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To know the relationship between litres and millilitres and choose appropriate units of measurement to measure capacity. | Children will list different units of measurement and identify which can be used to measure capacity. They will explore the relationship between litres and millitres and start to think about which would be most appropriate to measure the capacity of a variety of different containers. | • Do children know which units of measurement are used to measure capacity?<br>• Can children select appropriate units of measurement?<br>• Can children convert litres to millilitres and vice versa? | • Slides<br>• Worksheet 1A/1B/1C<br>• Capacity Cards (FSD? activity only)<br>• Answer Sheet (FSD? activity only) |
| **Lesson 2** | To be able to estimate and measure capacity. | Children will learn to use measuring jugs to measure the capacity of a variety of containers. They will use their understanding to make reasonable estimates, and check these using measuring jugs. They can also try pouring target amounts into a container, then measure to see how close they were. | • Can children give reasonable estimates?<br>• Can children measure capacity accurately?<br>• Can children find the difference between their estimates and the actual measurements? | • Slides<br>• Worksheet 2A/2B/2C/2D<br>• Variety of containers to measure (e.g. yogurt pots, cups, bowls, cans, etc.)<br>• Measuring jugs<br>• Funnels<br>• Water jugs<br>• Measurement Cards (FSD? activity only) |
| **Lesson 3** | To be able to compare and measure the capacity of a variety of objects. | Children will order and compare the capacity of a variety of everyday containers. They will estimate the order of containers, then measure their actual capacity to see how close their estimates were. | • Can children compare the capacity of different containers?<br>• Can children order containers based on an estimate of their capacity?<br>• Can children order containers based on an actual measurement of their capacity? | • Slides<br>• Worksheet 3A/3B/3C<br>• Variety of containers<br>• Measuring jugs<br>• Water jugs<br>• Capacity Labels (FSD? activity only) |
| **Lesson 4** | To be able to read scales that are numbered or partially numbered. | Children will read numbered scales to the nearest division, some of which are partially numbered, to measure capacity. They will also mark given capacities on blank measuring jugs. | • Can children read scales to the nearest division?<br>• Can children draw scales to the nearest division?<br>• Can read partially numbered scales accurately? | • Slides<br>• Worksheet 4A/4B/4C/4D/4E/4F<br>• Monster Cocktail Cards (FSD? activity only) |
| **Lesson 5** | To be able to use addition and subtraction to solve problems involving capacity. | Children will solve a variety of addition and subtraction problem relating to capacity using both litres and millilitres. Children will work out how much more liquid needs to be added to reach a particular capacity, the capacity of a container after a certain amount of liquid has been removed, and other similar problems. | • Can children add in millilitres and litres?<br>• Can children subtract in millilitres and litres?<br>• Can children solve a variety of problems involving capacity? | • Slides<br>• Worksheet 5A/5B/5C<br>• Game Cards A/B/C (FSD? activity only) |

# Collecting and Sorting Data : Maths : Year 3 : Summer Term

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To interpret data presented in bar charts, pictograms and tables. | Children will read and interpret data presented in a variety of ways, including tables, pictograms, block diagrams and bar charts. | • Can children suggest ways of presenting data given in a written statement?<br>• Can children identify key features of tallies, pictograms and bar charts?<br>• Can children begin to interpret data in bar charts by asking and answering questions? | • Slides<br>• Worksheet 1A/1B/1C<br>• Statement 1A/1B/1C/1D/1E/1F (FSD? activity only)<br>• Blank writing/maths frames |
| **Lesson 2** | To consider how to collect data when doing a survey. | Children will consider how best to write questions with choices of answers when collecting data to be presented using pictograms and bar charts. They will then either generate questions for a survey, or decide on the most appropriate way of presenting given sets of data. | • Can children think of detailed survey questions to ask that are related to a broader statement?<br>• Can children write or improve questions so that they produce data that can be presented in tables and charts?<br>• Can children plan a simple survey? | • Slides<br>• Checklist 2A/2B/2C<br>• Worksheet 2A<br>• Blank maths frame |
| **Lesson 3** | To make tables or questionnaires which can be used to collect survey data. | Children will use mind maps to help with planning a survey, then either draw tally charts to help them collect data or design simple questionnaires. | • Can children identify questions which are not helpful when collecting data?<br>• Can children improve questions to help them collect useful data?<br>• Can children design tallies or simple questionnaires to help them collect data? | • Slides<br>• Worksheet 3A<br>• Challenge Card 3A/3B<br>• Questionnaire 3A/3B/3C<br>• Blank maths/writing frames |
| **Lesson 4** | To present data using bar charts with an appropriate scale. | Children will read and interpret data presented in bar charts with a variety of scales, then present given (or previously collected) sets of data using bar charts with appropriate scales. | • Can children identify some choices regarding presenting and sorting data when making a bar chart?<br>• Can children suggest appropriate scales for bar charts?<br>• Can children present data using a bar chart? | • Slides<br>• Challenge Card 4A/4B<br>• Bar Chart (1:1, 2:1, 3:1, 4:1, 5:1, 10:1) sheets<br>• Blank maths frame<br>• Spreadsheet software (FSD? activity only) |
| **Lesson 5** | To write and answer questions using bar charts. | Children will learn strategies to help solve two-step problems about data presented in bar charts. They will then write and solve their own word problems about given sets of data. | • Can children work methodically when answering questions using bar charts?<br>• Can children correctly identify the data in a bar chart required to answer a question?<br>• Can children write statements to show what they have learned by asking and answering questions about data in bar charts? | • Slides<br>• Worksheet 5A/5B<br>• Survey Report 5A/5B<br>• Bar Chart Challenge 5A/5B |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan*

# Fractions in Action : Maths : Year 3 : Summer Term

**PlanBee**

| | Learning Objective | Overview | Assessment Questions | Resources |
|---|---|---|---|---|
| **Lesson 1** | To be able to identify, record and calculate eighths. | Children will explore what eighths are and how they relate to halves and quarters. They will learn the terms 'numerator' and 'denominator' and start thinking about how fractions with the same denominator can be added and subtracted. They will identify what fraction of a shape is shaded, and shade shapes to reflect a given fraction. | • Can the children shade in eighths on shapes?<br>• Can the children record eighths?<br>• Can they add and subtract in eighths? | • Slides<br>• Worksheet 1A/1B/1C<br>• Fraction Cards (FSD? activity only) |
| **Lesson 2** | To be able to compare halves, quarters and eighths and recognise simple equivalences. | Children will learn what equivalent fractions are and start to identify equivalences between halves, quarters, eighths and sixteenths. Children will use fraction walls to support their learning. They will also recap how to add fractions with a common denominator and compare fractions with different denominators. | • Can the children recognise simple fractions?<br>• Can the children recognise simple equivalent fractions?<br>• Can the children add simple fractions? | • Slides<br>• Worksheet 2A/2B/2C<br>• Fractions Cards (FSD? activity only)<br>• Fraction Wall (FSD? activity only) |
| **Lesson 3** | To be able to identify and order fractions and simple equivalences. | Children will use their knowledge of fractions and their equivalents to compare and order fractions. They will place fractions on a number to show their value and will think about ways fractions are used in everyday life. | • Can the children recognise simple fractions?<br>• Can the children recognise simple equivalent fractions?<br>• Can the children order fractions? | • Slides<br>• Worksheet 3A/3B/3C<br>• Fraction Bingo sheets (FSD? activity only) |
| **Lesson 4** | To be able to solve problems involving fractions. | Children will use their knowledge of fractions to solve a variety of problems, including finding fractions of numbers and objects, ordering fractions and answering true or false questions. | • Can the children recognise equivalent fractions?<br>• Can the children order fractions?<br>• Can the children solve simple fraction problems? | • Slides<br>• Worksheet 4A/4B/4C/4D<br>• Domino Cards A/B (FSD? activity only) |
| **Lesson 5** | To be able to add and subtract fractions with a common denominator. | Children will learn how to add and subtract fractions with the same denominator. They will learn how to convert an improper fraction into a mixed number fraction and vice versa in order to make addition and subtraction calculations easier to solve. They can also convert an addition or subtraction calculation using their knowledge of equivalent fractions. | • Can the children order fractions?<br>• Can the children solve simple fraction problems?<br>• Can the children add and subtract simple fractions? | • Slides<br>• Worksheet 5A/5B/5C/5D<br>• Question Cards (FSD? activity only) |

*NB: 'FSD? Activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan*

www.planbee.com