How Can We Compare Numbers: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To identify the value of each digit in a two-digit number.	Children to read a number and discuss how many tens and ones it represents. They will be challenged to stick tens and ones cubes onto hundred squares to represent a number and to fill in missing numbers.	• Can children recognise representations of numbers? • Can children identify the value of each digit in a two-digit number? • Can children apply their knowledge of number facts and order to solve two-digit number problems?	• Slides • Hundred Square Cards and Tens and Ones Cards • Bingo Sheet and Missing Number Grids • Target Number Sheet (FSD? activity only) • Follow Me Cards (Plenary only) • Photo Sheet • Base ten blocks, ten-sided dice
Lesson 2	To use place value to order numbers.	Children will be challenged to read numbers or base tens, write them as a numeral and then order them.	• Can children recognise representations of numbers? • Can children identify the value of each digit in a two-digit number? • Can children apply their knowledge of number facts to order two-digit numbers?	• Slides • Number Cards (Input only) • Traffic Cone Cards and Photo Sheet • Letter Sheet A/B and Base ten blocks • House Number Cards A/B/C (FSD? activity only) • Base Ten Sheet (FSD? activity only)
Lesson 3	To use the 'less than', 'greater than' and 'equal to' symbols to compare numbers.	Children to look at pairs of numbers and decide which symbol should go between them. They shall be challenged to explain why using full sentences and mathematical language.	• Can children recognise the '<', '>' and '=' signs? • Can children identify the value of each digit in a two-digit number? • Can children apply their knowledge of number facts to compare two-digit numbers?	• Slides and Photo Sheet • Symbol Fans (Input only) • Tens and Ones Sheet, Statement Cards and Worksheet 3A • Number Grids, Symbols Cards, rulers, base ten resources and dice • Number Chains (FSD? activity only) • Follow Me Cards (Plenary only)
Lesson 4	To use place value and number facts to solve problems.	Children to look at numbers and answer place value questions about it. This shall test their greater depth and understanding of numbers.	• Can children identify the value of each digit in a two-digit number? • Can children apply their knowledge of number facts to compare two-digit numbers? • Can children apply their knowledge of number facts to solve problems?	• Slides • Question Cards • Worksheet 4A/4B • Target Number Sheet (FSD? activity only) • Photo Sheet • Pegs, lego or beads, base ten blocks, ten-sided dice
Lesson 5	To use place value and number facts to solve problems.	Children to solve problems using their place value and number facts understanding. They shall be challenged to give explanations using mathematical language and match statement cards to the correct number.	• Can children identify the value of each digit in a two-digit number? • Can children apply their knowledge of number facts to compare two-digit numbers? • Can children apply their knowledge of number facts to solve problems?	• Slides • Clue Cards A/B/C • Number Cards A/B/C • Colour By Number Sheet A/B/C/D (FSD? activity only) • Photo Sheet

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

Let's learn our times tables : Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To explore the formal layout for the two times table, relating this to repeated addition.	Children will explore the two times table, firstly by using repeated addition on a number line, then solving problems from the two times table, using repeated addition, number lines and visual representations to support. They will become more familiar with a formal layout for the two times table.	• Do children understand that multiplication can be expressed as repeated addition, and vice versa? • Can children solve multiplication problems involving the two times table? • Do children recognise a formal layout for the two times table?	Slides Times Table Cards 1A/1B/1C Worksheet 1A/1B/1C Board Game 1A/1B (FSD? activity only) Game Cards (FSD? activity only) Dice and counters (FSD? activity only)
Lesson 2	To explore the formal layout for the five times table, relating this to repeated addition.	Children will explore the five times table, firstly by using repeated addition on a number line, then solving problems from the five times table, using repeated addition, number lines and visual representations to support. They will become more familiar with a formal layout for the five times table.	• Do children understand that multiplication can be expressed as repeated addition, and vice versa? • Can children solve multiplication problems involving the five times table? • Do children recognise a formal layout for the five times table?	Slides Domino Cards 2A/2B Bingo Grids Blank Bingo Sheet Memory Cards (FSD? activity only) Counting in Fives Number Line (FSD? activity only)
Lesson 3	To explore the formal layout for the ten times table, relating this to repeated addition.	Children will recap some facts from the two and five times tables before looking in more detail at the ten times table. They will become more familiar with a formal layout for the ten times table and carry out a range of activities to help them become more fluent in multiplying by ten.	• Do children understand that multiplication can be expressed as repeated addition, and vice versa? • Can children solve multiplication problems involving the ten times table? • Do children recognise a formal layout for the ten times table?	Slides Challenge Cards Calculation Card Worksheet 3A Spinner (FSD? activity only) Game Cards 3A/3B Multiples of Ten Hundred Square (FSD? Activity only) Number fans (plenary)
Lesson 4	To be able to solve missing number problems for the two, five and ten times tables.	Children will recap their knowledge of the two, five and ten times tables before going on to solve missing number problems. Children are shown several different methods to help them solve such problems before being challenged to work independently.	• Can children recognise multiples of the two, five and ten times tables? • Can children solve missing number multiplication statements? • Can children describe their reasoning?	Slides Missing Number Cards 4A/4B/4C Problem Cards 4A/4B (FSD? activity only)
Lesson 5	To be able to solve problems relating to the two, five and ten times tables.	Children will solve a variety of word problems relating to the two, five and ten times tables. They will learn to pick out important information in a question, identify what the question is asking them to solve, and solving the calculation.	• Can children identify what a word problem is asking them to work out? • Can children use their knowledge of the two, five and ten times tables to solve problems? • Can children express answers to problems as a multiplication statement?	Slides Question Cards 5A/5B Worksheet 5A Hundred Square Statement Cards 5A/5B (FSD? activity only)

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

Let's Explore 3-D Shapes: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To identify the edges, vertices and faces of 3-D shapes.	Children to describe the differences between 2-D shapes, 3-D shapes and polyhedrons. They will learn to use the language vertices and vertex instead of corners and corner.	• Do children know what vertex/vertices mean? • Can children count the faces/vertices/edges of shapes? • Can children explain differences between shapes in terms of the numbers of faces/vertices/edges?	• Slides • Challenge Cards 1A/1B • Lots of 3-D shapes • Secret Shapes 1A • A thin sheet/tablecloth
Lesson 2	To identify, describe and make 3-D shapes.	Children to listen to descriptions of 3-D shapes and match the correct shape to them. They will be challenged to write the correct number of faces, vertices and edges of the shapes.	• Can children match descriptions to corresponding 3-D shapes? • Can children describe 3-D shapes according to the number of faces/vertices/edges? • Can children use information about the properties of shapes to help when making them?	• Slides • Challenge Cards 2A/2B/2C • Lots of 3-D shapes • 3-D shape-making resources • Photo Sheet
Lesson 3	To identify 2-D shapes on the surface of 3-D shapes.	Children to describe the differences between 3-D shapes using mathematical words and phrases. They will be challenged to describe and match shapes by playing the game Mastermind.	• Do children know what polyhedrons are? • Can children identify the shapes of faces of common 3-D shapes? • Can children draw the faces of common 3-D shapes?	• Slides • Mastermind 3A (slides) • Mastermind Screen 3A • Worksheet 3A/3B • Lots of 3-D shapes • Play dough (FSD? only)
Lesson 4	To describe 3-D shapes according to the shapes and arrangement of their faces.	Children to learn about opposite faces of 3-D shapes. They will be challenged to answer true or false statements about 3-D shapes.	• Do children know what 'opposite faces' are? • Do children know that some common 3-D shapes have identical opposite faces? • Can children think of rules about the faces of common 3-D shapes?	• Slides • Worksheet 4A/4B/4C • Lots of 3-D shapes • True/False Cards 4A • Dowelling/balsa wood, junior hacksaws, bench hooks (FSD? activity only)
Lesson 5	To compare and sort common 3-D shapes and objects.	Children to match similarities of everyday objects with 3-D shapes. They will be challenged to find, draw and label objects that are similar to 3-D shapes.	• Can children identify everyday objects which are the same or similar to common geometric 3-D shapes? • Can children identify everyday objects which are comprised of several common geometric 3-D shapes? • Can children explain why some everyday objects are similar to, but not exactly like common geometric 3-D shapes?	• Slides • Worksheet 5A/5B/5C • Teacher's Notes 5A • 6-sided dice, hoops, mini-whiteboards (FSD? activity only)

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

Let's Measure Weight: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To order objects by weight using appropriate language.	Children will be reintroduced to the concept of measuring and comparing weight and the key language associated with it. They use their estimating skills to compare and order unknown weights, using balance scales to check their estimations.	• Can children use the vocabulary heavier/lighter? • Are children able to compare two objects' weight using balance scales? • Are children able to compare and order multiple objects using balance scales?	• Slides • Objects to compare weights • Several sets of boxes or containers weighing different amounts • Worksheet 1A/1B/1C • Balance scales • Photo Sheet 1A • Worksheet 1D (FSD? activity only)
Lesson 2	To measure and order weights in grams.	Children will be introduced to using standard units of measure for measuring weight. They will discuss why we use a standard unit and why we use grams to measure lighter weights. The children are challenged to use their estimating skills to think about an object's weight and use digital scales to record the accurate weight of an object. They then use their measurements to order the objects from lightest to heaviest.	• Can children name the units of measure used to measure weight? • Are children able to use a digital scale to measure an object's weight in grams? • Can children order objects based on their measured weights?	• Slides • Various weights: 1g, 10g, 50g, 100g and 200g • Worksheet 2A/2B • Digital scales • Sets of objects less than/around 100g and others to supplement classroom objects • Teacher's Notes 2A • Photo Sheet 2A • Worksheet 2C (FSD? activity only)
Lesson 3	Estimate and compare an object's weight to a measured weight.	Children will look in more detail at kilograms and their relationship to grams. They think about which unit is more suitable for weighing a variety of objects and use the <, > and = symbols to compare different objects to 1kg.	• Can children compare the weight of an object to a measured weight? • Can children use <, > and = symbols to compare weights? • Can children select appropriate units of measure based on their estimation of an object's weight?	• Slides • 1kg object • 100g and 1kg weights • Objects to weigh (some more than 1kg, see Teacher Notes 3A) • Teacher Notes 3A • Worksheet 3A/3B/3C • Worksheet 3D/3E (FSD? activity only) • Photo Sheet 3A
Lesson 4	To read a scale measuring weight to the nearest 100g.	Children are introduced to reading scales on kitchen spring scales. They use their knowledge and understanding of number lines to help them place and identify 100g and 1kg on the scale and count in 100s to 1000. They use their scale-reading skills to read and match scales to their weights or alternatively weigh various shopping items using spring scales.	• Can children read multiples of 100g on a scale? • Are children able to make suggestions about what a scale would look like showing a given weight? • Can children take measurements to the nearest 100g?	• Slides • Sticky notes • Weight Cards 4A/4B • Scale Cards 4A • Scale Sheet 4A • Photo Sheet 4A • Kitchen scales • Worksheet 4A (FSD? activity only) • Shopping items (FSD? activity only)
Lesson 5	To measure amounts in g and kg.	Children are challenged to measure given amounts of objects, watching the scales closely to check for over measuring. They will discuss how to correct any mistakes they make when measuring and make sensible decisions about when a measurement is close enough or needs to be corrected.	• Can children read scales accurately to the nearest 100g? • Are children able to accurately measure given amounts? • Can children make suggestions about how to correct mistakes made when measuring weight?	• Slides • Worksheet 5A/5B • Challenge Cards 5A • Spring scales (kitchen scales) • Objects to measure • Photo Sheet 5A • Cookie Recipe Card 5A (FSD? activity only) • Ingredients (FSD? activity only) • Digital scales (optional) (FSD? activity only)

Can we link addition and subtraction?: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To recall and use addition and subtraction facts to twenty.	Children to recognise and discuss numbers, sharing facts they know about them. Then they will solve missing number sentences to earn pieces of their rocket and find the launch code.	• Do children know addition facts to 20? • Do children know subtraction facts to 20? • Can children use number facts to solve problems?	• Slides • Rocket Parts • Worksheet 1A/1B/1C • Photo Sheet
Lesson 2	To use the inverse to prove and check answers.	Children to complete inversion loops by finding missing numbers. Your class will be challenged to fly to and return back from planets as they travel around space. Alternatively they will organise number sentences into fact families.	• Can children use the inverse to check answers? • Do children understand how addition and subtraction are linked? • Can children explain their methods?	• Slides • Inversion Loops A/B/C • Number Cards A/B (FSD...? activity only) • Photo Sheet
Lesson 3	To derive addition and subtraction facts up to 100.	Children to practise using a hundred square to solve problems. Your class will be challenged to listen to information and write it in a number sentence, before solving it using a hundred square. They will think about the Part Part Whole method when deciding how the problem could be written in number sentences.	• Can children use addition and subtraction to solve problems? • Can children link addition and subtraction? • Can children confidently use different methods to solve problems?	• Slides • Hundred Squares • Question Cards A/B/C • Part Part Whole Cards A/B (FSD...? activity only) • Blank Number Lines (FSD...? activity only) • Photo Sheet • Dienes blocks, paper, light coloured pens
Lesson 4	To use the rounding and adjustment method when adding and subtracting.	Children to understand and use the adjustment method when adding or subtracting. They will be challenged to solve problems by rounding to the nearest ten and then adjusting.	• Do children understand how to round numbers? • Can children use a number line to solve problems by adjustment? • Can children link addition and subtraction?	• Slides • Worksheet 4A/4B/4C • Number Cards A/B (FSD...? activity only) • Spinner A/B (FSD...? activity only) • Rockets (FSD...? activity only) • Photo Sheet
Lesson 5	To solve addition and subtraction problems.	Children to use and apply a variety of methods to solve addition and subtraction word problems. They will be given different word problems and be challenged to select the appropriate information and record it as a number sentence before solving it using a method of their choice.	• Can children solve word problems? • Can children link addition and subtraction? • Can children check their answers?	• Slides • Problem Cards A/B/C • Challenge Posters (FSD...? activity only) • Code Breaker Card (FSD...? activity only) • Photo Sheet

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

Can we link multiplication and division : Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To use practical and pictorial methods to solve multiplication and division problems.	During this lesson the children will recap what multiplication and division problems are. They will use bead strings to solve problems and be encouraged to talk about what they have done. They will make predictions about the answer to a number sentence, including if the number will be larger, smaller or the same as the numbers in the number sentence.	• Can children explain multiplication? • Can children explain division? • Can children use resources to solve multiplication and division questions?	• Slides • Bead strings (Teaching Input only) • Worksheet 1A/1B/1C • Question Cards 1A/1B (FSD…? activity only) • Bead String Cards 1A/1B (FSD…? activity only) • Arrays Cards 1A/1B (FSD…? activity only) • Answer Cards 1A/1B (FSD…? activity only) • Counting resources: blocks, numicon • Photo Sheet
Lesson 2	To use multiplication and division facts to solve problems.	In this lesson your class will be encouraged to count in multiples and use arrays to check their answers to multiplication and division problems. They will be challenged to predict answers to number sentences using their knowledge of number facts. This lesson concludes by challenging the children to apply their knowledge of numbers to solve missing number problems.	• Do children understand multiplication and division number sentences? • Do children know number facts? • Can children use methods to check their answers?	• Slides • Puzzle Pieces 2A/2B • Number Sheets 2A • Number Cards 2A • Game Sheet 2A/2B (FSD…? activity only) • Question Cards 2A/2B (FSD…? activity only) • Photo Sheet
Lesson 3	To explore which number sentences are commutative.	During this lesson your class will explore what 'commutative' means. They will use bead strings and arrays to check their answers as they rearrange multiplication number sentences to check if they can be done in any order.	• Do children understand multiplication number sentences are commutable? • Can children draw arrays to prove their number sentence answers? • Can children rearrange number sentences?	• Slides • Bead Strings • Worksheet 3A/3B/3C • Number Sentence Cards (FSD…? activity only) • Challenge Cards (FSD…? activity only) • Photo Sheet
Lesson 4	To use multiplication to check answers to division problems.	This lesson begins by recapping what commutative means. Your class will then be challenged to solve a division number sentence, before using multiplication to check their answer. To help your class understand the relationship between multiplication and division number sentences they will come up with a story to illustrate each number sentence.	• Do children understand which number sentences are commutative? • Can the children use multiplication to check their answers? • Can children apply their knowledge of number facts to solve problems?	• Slides • Problem Cards 4A/4B/4C • Domino Cards 4A/4B (FSD…? activity only) • Photo Sheet
Lesson 5	To solve problems involving multiplication and division.	The final lesson in this series challenges children to apply their maths skills when solving multiplication and division word problems. They will read word problems and talk about what they mean before writing them as number sentences and solving them.	• Can children write number sentences? • Can children solve word problems? • Can children check their work?	• Slides • Character Cards 5A/5B/5C • Problem Cards 5A/5B (FSD…? activity only) • Game Sheet 5A (FSD…? activity only) • Counting resources: blocks, numicon, bead strings • Photo Sheet

Let's Find Fractions: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To find a half and a quarter of a shape.	Children will be reminded of how to find halves and quarters of shapes, including what the different parts of the written fractions mean. They investigate different ways to split a shape into two or four equal pieces and identify when a fraction is not correct, using their reasoning skills.	• Can the children describe what a half and a quarter are? • Are the children able to record halves and quarters as fractions? • Can children identify halves and quarters of a shape?	• Slides • Worksheet 1A • Shape Sheet 1A • Apple • Photo Sheet 1A • Pizza Template 1A/1B (FSD? activity only) • Topping Menu (FSD? activity only)
Lesson 2	To find a half, a quarter and a third of a shape.	Children begin to record their own versions of fractions by shading pieces of shapes. They think about how they can show the same fraction in different ways, beginning to build their understanding of the equivalence between ½ and ²⁄₄.	• Can children show a given unit fraction by shading part of a shape? • Can children identify the shaded fraction of given shapes? • Are children able to shade half of a shape which is split into four pieces?	• Slides • Shape Cards 2A • Worksheet 2A/2B/2C • Photo Sheet 2A • Domino Cards 2A (FSD? activity only)
Lesson 3	To find a half, a quarter and a third of a number.	Children begin to link division strategies to finding fractions of a number by sharing quantities between equal groups. They use their knowledge of how fractions are written to determine how many groups the number needs to be shared into.	• Can the children describe how to find a half and a quarter of a number? • Are the children able to find a half, a quarter and a third of a number or quantity? • Are children able to describe how they can use halving to find a quarter?	• Slides • Worksheet 3A/3B • Counters/cubes/Numicon • Photo Sheet 3A • Challenge Card 3A (FSD? activity only)
Lesson 4	To find a quarter and three quarters of shapes and numbers.	Children build on the previous lessons' learning by finding quarters of numbers by either sharing between four equal groups or halving and halving again. They then use this to help them find three quarters of numbers and shapes, using visual representations to help them.	• Can children find one quarter of a given shape or amount? • Can children find and show three quarters of a shape? • Can children find three quarters of a number?	• Slides • Worksheet 4A/4B/4C • Counters/cubes/Numicon to support division strategies • Photo Sheet 4A • Worksheet 4D (FSD? activity only) • Paper plates (FSD? activity only)
Lesson 5	To solve practical problems involving fractions.	Children apply their learning to different word problems and practical problems in groups or individually. They need to figure out ways to share different numbers of objects equally between groups of people, splitting the objects into fractions when necessary. Alternatively they could investigate fractions of length by working together to draw different lengths with a group.	• Can children find half or a quarter of a shape? • Can children find half or a quarter of a number? • Can children solve practical problems using their knowledge of fractions?	• Slides • Picnic Card 5A/5B • Challenge Card 5A/5B • Food Cards 5A • Worksheet 5A • Photo Sheet 5A • Measurement Card (FSD? activity only) • Large paper/chalk (FSD? activity only) • Worksheet 5B (FSD? activity only)

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

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To read, write, say and draw analogue clock 'o'clock' times.	Children will recap what 'o'clock' means, and practise reading, writing and saying written times as well as reading, saying and drawing clock faces showing 'o'clock' times. They will learn about how the hour hand points to each hour twice per day, think about what they might be doing around certain 'o'clock' times, and work out what one hour earlier/later is than a given time.	• Can children read, write, say and draw 'o'clock' times? • Can children match written times to clock faces? • Can children begin to sequence intervals of time (whole hours)?	• Slides • Blank Clock Faces sheet • Worksheet 1A/1B/1C • O'Clock Cards (FSD…? activity only)
Lesson 2	To read, write, say and draw 'half past', 'quarter past' and 'quarter to' times.	Children will learn how to read, write and draw 'half past', 'quarter past' and 'quarter to' times, both written and shown on analogue clock faces. They may then either continue practising by reading, writing and drawing clock times during a card game, or select appropriate times for events written in a diary entry.	• Can children read, write, say and draw 'half past' times? • Can children read, write, say and draw 'quarter past/to' times? • Can some children find the times a quarter of an hour earlier/later than a given time?	• Slides • Tell The Time 2A/2B/2C game cards • Diary Sheet 1 (FSD…? activity only) • Diary Cards 1 (FSD…? activity only)
Lesson 3	To find times that are five minutes later or earlier than a given time.	Children will learn how to read, say, draw and write times five minutes after 'o'clock' and 'half past' times. Some children may also learn about 'five to' times (e.g. 'five to ten'.)	• Can children read 'five past' times e.g. 'five past two', 'five thirty-five'? • Can children write and draw 'five past' times? • Can some children read, write and draw 'five to' times e.g. 'five to five'?	• Slides • Blank Clock Faces sheet or learning clocks • Five Minutes Earlier/Later card • Worksheets 3A/3B/3C • Five Minute Challenge cards (FSD…? activity only)
Lesson 4	To become more fluent at telling the time, including on analogue clocks.	Children will answer a variety of questions to help them recall prior learning about time, then go on to learn how they may find out the number of minutes between two given times by counting the minutes, in fives, around a clock face. They may then either practise these skills independently, or play a group game to consolidate their learning.	• Can children answer a variety of questions about reading the time on analogue clocks? • Can some children count minutes (in fives) in a quarter of an hour and in half an hour? • Can some children count minutes (in fives) between a greater variety of different times?	• Slides • Worksheets 4A/4B/4C • Time Chain Cards 4 (FSD…? activity only) • Learning clocks (optional)
Lesson 5	To become more fluent at telling the time by listening to clock chimes.	Children will learn about chimes made by some clocks, and consider why public clocks were important in the past. By listening to audio tracks of chimes (just like those of the Elizabeth tower at the palace of Westminster), children will learn to hear the time and interpret it.	• Can children count clock chimes to tell the time? • Can children identify 'quarter past', 'half past' and 'quarter to' times by listening to clock chimes? • Can children listen to clock chimes, then write or draw corresponding clock times?	• Slides • 'Big Ben' Audio Tracks (16 tracks) • Worksheet 5A/5B • Challenge Card 5 (FSD…? activity only) • Tuned musical instruments e.g. keyboards or glockenspiels (FSD…? activity only)

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

Let's explore charts and tables : Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To use tallies and pictograms to share information.	Children will explore pictograms and tally charts. They will ask and answer questions about the data being conveyed. The children also will use given information to complete tally charts and pictograms.	• Can children talk about the information in a pictogram? • Can children use a tally chart to complete a pictogram? • Can children answer questions about a pictogram?	• Slides • Challenge Cards 1A/1B/1C • Picture Cards 1A/1B (FSD…? activity only) • Worksheet 1A/1B (FSD…? activity only) • Photo Sheet
Lesson 2	To compare pictograms and block diagrams.	Children will compare pictograms and block diagrams, discussing how they are the same and how they are different. They will use the two graphs to answer questions and discuss the different methods used. During their independent activities the children will use tally charts to complete block diagrams and match them to the corresponding pictogram.	• Can children compare pictograms and block diagrams? • Can children create block diagrams? • Can children ask and answer questions about block diagrams?	• Slides • Worksheet 2A/2B/2C • Extension Cards 2A/2B/2C • Graph Cards 2A/2B (FSD…? activity only) • Statement Cards 2A/2B (FSD…? activity only) • Squares of paper - 4/5 colours (Plenary only) • Photo Sheet
Lesson 3	To organise, compare and sort data.	Children will recap what a tally chart, pictogram and block diagram are. They will check the graphs have been filled correctly using the information in the tally chart, then they will have a go completing block graphs independently.	• Can children compare tally charts and tables? • Can children complete block diagrams and tables? • Can children ask and answer questions about tables and block diagrams?	• Slides • Worksheet 3A/3B/3C • Odd One Out Cards 3A/3B (FSD…? activity only) • Photo Sheet
Lesson 4	To sort information into block diagrams.	Children will complete block diagrams using information given. They will discuss similarities and differences between their graphs and the one on the slide, addressing misconceptions that arise. They will go on to ask and answer questions about block diagrams they have completed.	• Can children complete block diagrams? • Can children ask and answer questions? • Can children use mathematical language to talk about their graphs?	• Slides • Blank Block Diagram Sheet 4A/4B (Teaching Input) • Worksheet 4A/4B/4C • Challenge Cards 4A/4B (FSD…? activity only) • Question Cards 4A (FSD…? activity only) • Photo Sheet
Lesson 5	To generate information and input it into tables and block diagrams.	Children will collect data and then input it into a table and then a block diagram. They will ask and answer questions about the information they have generated.	• Can children create block diagrams? • Can children generate information for tables and diagrams? • Can children ask and answer questions about block diagrams?	• Slides • Worksheet 5A/5B/5C • Character Cards 5A/5B (FSD…? activity only) • Worksheet 5D/5E (FSD…? activity only) • Trays of coloured blocks • Photo Sheet

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

Let's Explore Position and Direction: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know how to describe and continue patterns and sequences	Children will begin by describing simple patterns within sequences. They will then use these patterns to identify what the next object in a sequence would be. In their independent work, children will continue sequences by identifying the correct shape from a given choice of three. Alternatively, children will work in pairs to describe and identify sequences.	• Can children describe patterns? • Can children identify what the next object in a sequence should be? • Can children explain their choices and reasoning?	• Slides • Shape Cards (Teaching Input) • Worksheet 1A/1B/1C • Pattern Strips (FSD? activity only) • Pattern Identification Sheet (FSD? activity only) • Photo Sheet
Lesson 2	To know how to continue sequences and identify missing objects in sequences	In this lesson, children will further their knowledge and understanding of patterns by looking at more complex sequences involving a wider range of objects, colours and orientations. They will also learn how to identify missing objects within a sequence. Children will practise and consolidate this learning in their independent activities.	• Can children identify what the next object in an increasing range of sequences should be? • Can children identify what a missing object within a sequence should be? • Can children explain their choices and reasoning?	• Slides • Worksheet 2A/2B/2C • Sequence Strips (FSD? activity only) • Missing Object Cards (FSD? activity only) • Photo Sheet
Lesson 3	To know how to create and describe sequences	Children will begin by identifying and discussing repeating patterns in a variety of sequences. They will then use their knowledge and understanding to create and describe sequences containing repeating patterns of different lengths.	• Do children understand that objects can be arranged into many different patterns and sequences? • Can children make and describe their own patterns and sequences? • Can children identify errors in patterns?	• Slides • Shape Cards (Teaching Input) • Worksheet 3A/3B/3C • Blank Sequence Strips and Cover Cards (FSD? activity only) • Object Cards (FSD? activity only) • Photo Sheet
Lesson 4	To use vocabulary to describe direction and movement	In this lesson, children will use simple vocabulary to describe direction and movement. They will begin by reinforcing their knowledge and understanding of the terms up, down, left and right, before using them to describe various routes around grids. In their independent activities, children will describe and follow instructions using a map of a zoo. In the alternative activity, children will use their knowledge of direction and movement to play a game of 'Cops and Robbers'.	• Do children know and understand the words associated with direction and movement? • Can children follow the vocabulary of direction to move around a grid? • Can children use vocabulary to give directions for movement around a grid?	• Slides • Zoo Map • Directions Cards • Directions Sheet • Challenge Cards & Route Cards • Help Cards • Zoo Animals Help Sheet • Cops & Robbers Game Board (FSD? activity only) • Cops & Robbers Cards and Counters (FSD? activity only) • Photo Sheet
Lesson 5	To understand and describe movement as part of a turn	In this final lesson, children will recap on their knowledge of quarter, half, three-quarter and full turns, including clockwise and anticlockwise movements. In their independent activities, children will follow instructions to find out what shape is being pointed to after completing a given movement. In the alternative activity, children will move their bodies through different turns in order to find the answers to the challenges set.	• Do children understand the terms 'clockwise' and 'anticlockwise'? • Can children turn themselves and objects a whole turn, half turn, quarter turn and three quarter turn? • Can children describe movement using the language of turns?	• Slides • Movement Square and Pointer, split pins • Question Sheet • Worksheet 5A/5B • Insect Cards (FSD? activity only) • Which Insect? Challenge Sheet (FSD? activity only) • Photo Sheet

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

How hot is it?: Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know and use some vocabulary associated with temperature.	Children will explore the language associated with feeling and measuring temperature. They are encouraged to draw on their experiences of hot and cold weather and objects in order to compare temperatures.	• Can children generates some of the vocabulary used to describe temperature? • Can children compare the feeling of different temperatures and describe them? • Can children sort objects depending on their temperature?	• Slides • Hot water bottle • Cold pack (one frozen/activated, one unfrozen) • Object Cards 1A • Worksheet 1A/1B • Photo Sheet 1A • Challenge Cards 1A (FSD? activity only) • Selection of objects to measure temperature e.g. covered mug of warm water, ice, refrigerated water, hot water bottle, etc. (FSD? activity only)
Lesson 2	To read the scales on thermometers to measure temperature.	Children are introduced to the equipment and units of measure for measuring temperature. They will explore the different types of thermometers that can be used to measure temperature in different ways before focusing on mercury thermometers and reading various scales on them. The scales they investigate will be in steps of one, two, five or ten.	• Can children name the unit used to measure temperature? • Can children read a simple scaled used to measure temperature? • Can children measure temperature using a scale with unmarked increments?	• Slides • Thermometers • Worksheet 2A/2B/2C • Photo Sheet 2A • Template 2A/2B (FSD? activity only) • Flashcards 2A/2B (FSD? activity only)
Lesson 3	To compare temperatures using <, > and =.	Children recap using the comparison symbols <, > and = to compare numerical amounts which have been represented in different ways. They then move on to using these symbols to compare different temperatures which they have to read from various thermometer scales.	• Can children describe what each of the <, > or = symbols mean? • Can children make a comparison between two temperatures? • Are children able to use the comparison symbols <, > or = accurately?	• Slides • Worksheet 3A/3B/3C • Temperature Cards 3A • Symbol Cards 3A • Photo Sheet 3A
Lesson 4	To find the difference between two temperatures.	Children recap their mental and written methods for subtraction before applying these to finding the difference between different temperatures. They will find small differences between two two-digit numbers, using the thermometers scales as number lines to help their calculations.	• Can children find the difference between two similar temperatures? • Are children able to find the difference between tow temperatures below 100°C? • Can children describe their methods for finding the difference?	• Slides • Map Card 4A/4B • Worksheet 4A/4B • Photo Sheet 4A • Thermometer Cards 4A • Worksheet 4C (FSD? activity only) • Different containers to hold water (FSD? activity only) • Warm water (FSD? activity only) • Thermometers (FSD? activity only)
Lesson 5	To use reasoning and problem solving skills.	Children are challenged to apply what they have learnt about measuring and calculation with temperature in a variety of problem solving situations. They must use their reasoning skills to justify any choice they make when problem solving.	• Can children compare and order temperatures? • Are children able to use reasoning to justify their choices? • Can children find the difference between two temperatures?	• Slides • Photo Sheet 5A • Challenge Cards 5A • Thermometer Cards 5A • Worksheet 5A • Challenge Cards 5B/5C (FSD? activity only) • Worksheet 5B (FSD? activity only)

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

Let's Solve Problems! : Maths : Year 2 : Spring Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To find different ways of using addition and subtraction to result in a given number.	Children use their knowledge of number bonds to 20 and 100 to explore different ways that they can use addition, and a few subtraction calculations to reach a target number. They use Tarsia puzzles to practise quick recollection of number bonds.	• Can children use their knowledge of number bonds to help pair numbers to a familiar total? • Are children able to derive other number facts from a known calculation? • Can children add two or more numbers to result in a given total?	• Slides • Triangle Tarsia Puzzle 1A/1B • Photo Sheet 1A • Challenge Card 1A/1B (FSD? activity only) • Animal Cards 1A (FSD? activity only)
Lesson 2	To determine different ways that numbers can be split and record this using addition and subtraction calculations.	Children investigate the different ways in which numbers can be split. They look at the calculations that can be made from the way they have split the numbers and how these calculations can be built with two or more numbers.	• Can children find different ways of using addition to make an amount? • Are children able to find the inverse addition or subtraction calculation? • Can children use the inverse calculation to check or solve a problem?	• Slides • Worksheet 2A/2B • Physical objects e.g. counters • Photo Sheet 2A • Challenge Card 2A (FSD? activity only) • Large paper (FSD? activity only)
Lesson 3	To use bar models to help represent and solve addition calculations.	Children revisit using bar models to represent a problem in different ways. They explore how the different parts of the model relate to one another and use them to derive the four inverse addition and subtraction calculations for each problem.	• Can children input numbers into a bar model to represent an addition problem? • Are children able to draw a bar model to represent an addition problem? • Can children derive inverse calculations from a bar model representation?	• Slides • Worksheet 3A/3B/3C • Photo Sheet 3A • Challenge Cards 3A/3B (FSD? activity only) • Multi-link cubes (FSD? activity only)
Lesson 4	To use bar models to represent and solve subtraction problems.	After investigating bar models in the previous lesson, the children will see how bar models can help them represent and solve subtraction word problems. They are challenged to input and draw information into a bar model before writing a subtraction calculation for each.	• Can children find missing numbers from a bar model by finding the difference? • Are children able to draw a bar model for a subtraction problem? • Can children derive all known calculations from a bar model?	• Slides • Worksheet 4A/4B/4C • Photo Sheet 4A • Bar model pieces 4A (FSD? activity only)
Lesson 5	To apply our understanding of addition and subtraction methods in different contexts.	Children have the opportunity to apply their understanding of written and mental methods for addition and subtraction in an engaging context. The children learn the game Strike-Out and use this to calculate small sums or differences. They also have the opportunity to play Snakes and Ladders with a small twist in order for them to calculate sums and differences as they play.	• Can children choose resources to effectively support their calculations? • Are children able to apply their methods of addition and subtraction in different contexts? • Can children determine when they are able to use a mental method?	• Slides • Teacher Notes 5A • Game Board 5A/5B • Physical resources e.g. counters, number lines, hundred squares, bead strings etc. • Dice • Photo Sheet 5A • Strike-Out Cards 5A/5B (FSD? activity only)

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

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