# What is my Number: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To represent numbers to fifty.	Children to read and recognise a number and then represent it by drawing objects, using objects and writing its name. They will be challenged to pick a number card and represent it using objects.	<ul> <li>Can children recognise numbers to 20?</li> <li>Can children recognise numbers to 50?</li> <li>Can children represent numbers using a variety of methods?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards A/B/C/D</li> <li>Photo Sheet</li> <li>Counting objects, e.g. cubes, base ten, compare bears</li> </ul>
Lesson 2	To represent numbers to 100.	Children to read and recognise a number and then represent it by drawing objects, using objects and writing its name. They will be challenged to pick a number card and answer questions related to it.	<ul> <li>Can children recognise numbers to 100?</li> <li>Can children represent numbers using a variety of methods?</li> <li>Are children confident with number sequence?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards A/B/C</li> <li>Question Card A/B/C</li> <li>Clue Cards A/B/C</li> <li>Photo Sheet</li> <li>Counting objects, e.g. cubes, base ten, compare bears</li> </ul>
Lesson 3	To represent numbers to 100.	Children to learn how to represent and say a number using a bead string. They will be challenged to use bead strings to fill in missing information on a number line.	<ul> <li>Can children recognise numbers to 100?</li> <li>Can children represent numbers using a variety of methods?</li> <li>Can children identify tens and ones in a number?</li> </ul>	<ul> <li>Slides</li> <li>Jigsaw Pieces</li> <li>Worksheet 3A/3B</li> <li>Number Cards (FSD? activity only)</li> <li>Place Value Cards (FSD? activity only)</li> <li>Counting objects, e.g. bead strings, base ten blocks</li> </ul>
Lesson 4	To estimate numbers to 100.	Children to learn about estimating using different amounts of objects. They will be challenged to estimate what the number is on a number line, a fifty grid and a hundred square.	<ul> <li>Can children recognise numbers to 100?</li> <li>Can children estimate a number of objects?</li> <li>Can children estimate a number on a number line?</li> </ul>	<ul> <li>Slides</li> <li>Number Lines </li> <li>Fifty Grids</li> <li>Hundred Squares</li> <li>Clue Cards (FSD? activity only)</li> </ul>
Lesson 5	To estimate numbers to 100.	Children to recap what estimating is using different amounts of objects in containers. They will be challenged to make models with blocks and try to estimate how many they will then need to make it twice as big.	<ul> <li>Can children recognise numbers to 100?</li> <li>Can children estimate a number of objects?</li> <li>Can children use problem-solving skills?</li> </ul>	<ul> <li>Slides</li> <li>Object Cards A/B/C</li> <li>Cubes or blocks</li> <li>Containers filled with objects (FSD? activity only)</li> </ul>

## What Is Place Value: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To identify the value of each digit in a two-digit number.	Children to listen carefully and write the correct number from a description, focussing on tens and ones. They will be challenged to match a number and/or word card to base ten cards.	<ul> <li>Can children recognise numbers to 99?</li> <li>Can children represent numbers using a variety of methods?</li> <li>Can children identify the value of each digit in a two-digit number?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards A/B/C/D/E</li> <li>Photo Sheet</li> <li>Base Ten Cards (FSD? activity only)</li> <li>Tens and Ones Cards (FSD? activity only)</li> <li>Base ten blocks</li> </ul>
Lesson 2	To order numbers to one hundred.	Children will learn how to order numbers and discuss any patterns they notice. They will be challenged to match number cards to base ten blocks and then order them.	<ul> <li>Can children recognise numbers to 99?</li> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children order two-digit numbers?</li> </ul>	<ul> <li>Slides</li> <li>Number Sets A/B/C (Input only)</li> <li>Number Cards A/B/C</li> <li>Photo Sheet</li> <li>Base Ten Cards (FSD? activity only)</li> <li>Naughts and Crosses Grids (Plenary only)</li> <li>Base ten blocks</li> </ul>
Lesson 3	To use the language of greater than, less than and equal to.	Children to learn and use the language greater than, less than and equal to. They will be challenged to pick two numbers and using the symbol cards decide the relationship between the numbers.	<ul> <li>Can children recognise numbers to one hundred?</li> <li>Can children use the language of 'greater than'?</li> <li>Can children use the language of 'less than'?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards A/B/C</li> <li>Symbol Cards</li> <li>Photo Sheet</li> <li>Challenge Cards A/B (FSD? activity only)</li> <li>Counting objects: Base ten blocks</li> </ul>
Lesson 4	To use the language of greater than, less than and equal to.	Children to understand and use the language greater than, less than and equal to. They will be challenged fill the missing symbol that describes the two numbers.	<ul> <li>Can children recognise numbers to one hundred?</li> <li>Can children use the symbol 'greater than'?</li> <li>Can children use the symbol 'less than'?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B/4C</li> <li>Character Cards A/B (FSD? activity only)</li> <li>Counting objects: Base ten blocks</li> </ul>
Lesson 5	To solve problems using different number representations.	Children to work out which amount is most and represent it in several different ways. They will be challenged to read statements and work out which picture representation matches it.	<ul> <li>Can children recognise numbers to one hundred?</li> <li>Can children represent numbers using a variety of methods?</li> <li>Can children identify the value of two-digit numbers?</li> </ul>	<ul> <li>Slides</li> <li>Character Card</li> <li>Clue Cards A/B/C (FSD? activity only)</li> <li>Answer Cards A/B/C (FSD? activity only)</li> <li>Sticky notes (FSD? activity only)</li> <li>A variety of counting objects</li> </ul>

## Let's Use Number Bonds: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To find different ways to make twenty.	Children to learn number bonds to twenty and to write them as a number sentence. They will be challenged to make as many number bonds to twenty as they can.	<ul> <li>Can children use objects to match number bond pairs?</li> <li>Can children use their knowledge of number bonds to ten to support them finding number bonds to twenty?</li> <li>Can children find different ways to make twenty?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards</li> <li>Butterfly Cards</li> <li>Worksheet 1A (FSD? activity only)</li> <li>Number Machine (FSD? activity only)</li> <li>Photo Sheet</li> <li>Pendulum, cubes, bead string, counters</li> </ul>
Lesson 2	To explore number bonds to twenty.	Children to use a ten frame and group objects in fives to explore number bonds to twenty. They will be challenged to match ten frames to the correct number sentence.	<ul> <li>Can children match pictorial representations of number bonds to number sentences?</li> <li>Can children use their knowledge of number bonds to ten to support them finding number bonds to twenty?</li> <li>Can children find different ways to make twenty?</li> </ul>	<ul> <li>Slides</li> <li>Ten Frame A/B/C</li> <li>Number Sentences A/B</li> <li>Worksheet 2A (FSD? activity only)</li> <li>Photo Sheet</li> <li>Objects, twenty-sided dice</li> </ul>
Lesson 3	To find number bonds to twenty by counting on.	Children to learn how to solve a number bonds to twenty questions by counting on. They will be challenged to sort number cards into groups by using the counting on method.	<ul> <li>Can children count on from a given number to a set number?</li> <li>Can children use their knowledge of number bonds to ten to support them finding number bonds to twenty?</li> <li>Do children understand addition can be done in any order?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards A/B/C</li> <li>Fish Cards</li> <li>Wheel Sheet A/B (FSD? activity only)</li> <li>Photo Sheet</li> <li>Pegs</li> <li>Sock Cards (Plenary Only)</li> </ul>
Lesson 4	To use a number line to explore number bonds.	Children to solve number bonds to twenty questions using a number line to help. They will be challenged to find the missing number in the number sentence using a variety of differentiated number lines.	<ul> <li>Can children count on using a number line?</li> <li>Can children use their knowledge of number bonds to ten to support them finding number bonds to twenty?</li> <li>Can children partition numbers?</li> </ul>	<ul> <li>Slides</li> <li>Number Fans (Starter only)</li> <li>Number Lines A/B/C (Input only)</li> <li>Worksheet 4A/4B/4C</li> <li>Number Cards (FSD? activity only)</li> <li>Photo Sheet</li> <li>Base ten blocks, A3 paper</li> </ul>
Lesson 5	To use your knowledge of number bonds to solve problems.	Children will be challenged to make different number arrangements to make totals to twenty. They will read problem cards and work out the missing clues.	<ul> <li>Can children use objects to match number bond pairs?</li> <li>Can children use their knowledge of number bonds to ten to support them finding number bonds to twenty?</li> <li>Can children find different ways to make twenty?</li> </ul>	<ul> <li>Slides</li> <li>Ball (Starter only)</li> <li>Problem Cards A/B/C</li> <li>Worksheet 5A/5B (FSD? activity only)</li> <li>Number Cards (Plenary only)</li> <li>Maths resources including counters and bead strings</li> </ul>

# What is multiplication: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To use number patterns to continue sequences.	Children will look at number sequences. They will work out what the numbers are increasing by and continue the sequence. They will be encouraged to explain their answers using mathematical language.	<ul> <li>Can children continue number patterns?</li> <li>Can children identify what a sequence is increasing by?</li> <li>Can children explain their answers?</li> </ul>	<ul> <li>Slides</li> <li>Number Squares A/B/C</li> <li>Number Cards Set A/B/C (FSD? activity only)</li> <li>Question Cards A/B (FSD? activity only)</li> </ul>
Lesson 2	To use and apply the two times table to solve problems.	Children will use the two times table to solve problems. They will look at multiplication number sentences and express them in different ways, including as repeated addition number sentences and arrays.	<ul> <li>Can children count in multiples of two?</li> <li>Can children match different representations of a problem?</li> <li>Can children use the multiplication sign correctly?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards A/B</li> <li>Domino Cards</li> <li>Sorting Cards Set A/B (FSD? activity only)</li> <li>Worksheet 2A/2B (FSD? activity only)</li> </ul>
Lesson 3	To use and apply the five times table to solve problems.	Children will use the five times table to solve problems. They will look at multiplication number sentences and express them in different ways, including as repeated addition number sentences and arrays.	<ul> <li>Can children count in multiples of five?</li> <li>Can children match different representations of a problem?</li> <li>Can children use the multiplication sign correctly?</li> </ul>	<ul> <li>Slides</li> <li>Jigsaw Cards</li> <li>Worksheet 3A</li> <li>Game Sheet</li> <li>Worksheet 3B (FSD? activity only)</li> <li>Ten-sided dice (FSD? activity only)</li> </ul>
Lesson 4	To use and apply the ten times table to solve problems.	Children will use the ten times table to solve problems. They will look at multiplication number sentences and express them in different ways, including matching them in their different forms.	<ul> <li>Can children count in multiples of ten?</li> <li>Can children match different representations of a problem?</li> <li>Can children use the multiplication sign correctly?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards (MOS only)</li> <li>Question Cards</li> <li>Peacock Cards</li> <li>Game Sheet</li> <li>Ten-sided dice</li> <li>Worksheet 4A</li> <li>Game Cards (FSD? activity only)</li> </ul>
Lesson 5	To use multiplication to solve problems.	Children will apply their knowledge of problem solving and multiplication to solve a variety of multiplication-based word problems. They will use information to write multiplication number sentences before solving them.	<ul> <li>Can children count in multiples of two, five and ten?</li> <li>Can children use the multiplication sign correctly?</li> <li>Can children use multiplication to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards A/B/C</li> <li>Worksheet 5A (FSD? activity only)</li> <li>Puzzle Pieces A/B/C/D (FSD? activity only)</li> </ul>

# What is division?: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To share movable objects into groups.	Children will move objects into groups to solve division problems. They will be introduced to the division symbol and have the opportunity to explain what it means in their own words. They will then complete challenges and answer division questions or investigate which numbers can be shared equally into different numbers of equal groups.	<ul> <li>Can children share objects into equal groups?</li> <li>Can children explain their answers?</li> <li>Can children predict their results?</li> </ul>	<ul> <li>Slides</li> <li>Objects (TI and activities)</li> <li>Challenge Cards</li> <li>Picture Cards</li> <li>Worksheet 1A/1B/1C</li> <li>Number Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To share objects into groups to solve division problems.	Children will group pictured objects to solve division problems. They will use number facts they know to predict if a number will share equally into a given number of groups. The children will be encouraged to find different ways that a number can be shared.	<ul> <li>Can children share pictured objects into equal groups?</li> <li>Can children use the division sign?</li> <li>Can children use mathematical terms to explain what they have done?</li> </ul>	<ul> <li>Slides</li> <li>Copies of the slides (TI only)</li> <li>Worksheet 2A/2B/2C</li> <li>Object Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To write number sentences to explain how objects have been grouped.	Children will explain what division number sentences mean and draw pictures to solve them. They will continue to apply problem-solving skills to answer division questions when working independently. There is the opportunity to challenge the children to express their division number sentence as a multiplication problem.	<ul> <li>Can children read and answer questions involving division?</li> <li>Can children use the division sign correctly?</li> <li>Can children explain what they have done?</li> </ul>	<ul> <li>Slides</li> <li>Question Cards A/B/C</li> <li>Party Problem Cards A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To use knowledge of doubles and halves to solve problems involving division.	Children will use their knowledge of doubles and halves to solve division problems. They will continue to consolidate their learning as they write division number sentences. They will make connections relating the doubles and halves number facts they know to division.	<ul> <li>Do children know their doubles and halves facts?</li> <li>Can children solve division number sentences?</li> <li>Can children match different representations of number sentences to each other?</li> </ul>	<ul> <li>Slides</li> <li>Game Board A/B/C S</li> <li>Question Cards A/B</li> <li>Journey Cards A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To solve word problems involving division.	Children will answer and create word problems involving division. They will write and solve division number sentences, proving their answers with a method of their choice. They will be encouraged to use their knowledge of counting in twos, fives and tens or to draw pictures when checking their answers.	<ul> <li>Can children write division number sentences correctly?</li> <li>Can children solve division number sentences?</li> <li>Can children work methodically?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards (MOS only)</li> <li>Building blocks (MOS only)</li> <li>Worksheet 5A/5B/5C</li> <li>Transport Cards A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

# Let's Explore 2-D Shapes: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To name and draw lots of different polygons.	Children to recognise, name and describe different polygons. They will be challenged to read descriptions and match or draw the correct shape.	<ul> <li>Can children recognise polygons and non-polygons?</li> <li>Can children match names to a wide variety of 2-D shapes?</li> <li>Can children draw irregular polygons?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 1A/1B/1C/1D/1E</li> <li>Irregular Polygon Cards</li> <li>Drawing/Writing Frame</li> </ul>
Lesson 2	To name and make 2-D shapes, including quadrilaterals.	Children to learn about quadrilaterals and name shapes that are quadrilaterals. They will be challenged to use a shape to make tessellating patterns.	<ul> <li>Can children identify the properties of quadrilaterals?</li> <li>Can children name and explain why squares are special quadrilaterals?</li> <li>Can children make quadrilaterals, or make tessellating patterns using quadrilaterals?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 2A/2B/2C/2D/2E</li> <li>Card</li> <li>Polystyrene tiles (FSD? activity only)</li> <li>Paint (FSD? activity only)</li> </ul>
Lesson 3	To name, compare and describe quadrilaterals.	Children to recap, name, compare and describe quadrilaterals and to learn about rhombuses. They will be challenged to match statements to the correct shape and to draw special quadrilaterals.	<ul> <li>Can children recognise and name some special quadrilaterals?</li> <li>Can children describe some special quadrilaterals in terms of the lengths of their sides?</li> <li>Can children make some special quadrilaterals?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 3A/3B/3C</li> <li>Making Special Polygons 3A</li> <li>Geostrips (if available)</li> <li>Split pins or drawing pins and pin boards</li> </ul>
Lesson 4	To identify vertical lines of symmetry in 2-D shapes.	Children to sort shapes into symmetrical and non- symmetrical groups. They will be challenged to use mirrors to finish drawing symmetrical shapes.	<ul> <li>Can children use a mirror (orientated vertically) to find lines of symmetry in shapes?</li> <li>Can children sort shapes according to whether or not they are symmetrical?</li> <li>Can children find lines of symmetry on everyday objects?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 4A/4B/4C/4D</li> <li>Symmetrical Shapes? 4A</li> <li>Mirrors</li> </ul>
Lesson 5	To compare and describe 2- D shapes according to several properties.	Children to match the descriptions to the different 2-D shapes. They will be challenged to select cards and delete any incorrect statements about the shape before reading the remaining correct ones to their partner.	<ul> <li>Can children identify polygons and non-polygons in a set of shapes?</li> <li>Can children match shapes to given simple descriptions of them?</li> <li>Can children begin to describe shapes according to some properties, including number of sides, lengths of sides and lines of symmetry?</li> </ul>	<ul> <li>Slides</li> <li>Shape Cards 5A/5B/5C</li> <li>Shape Guessing Game</li> <li>Feely bag and shapes (FSD? activity only)</li> </ul>

## Let's Use a Ruler!: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To compare lengths using appropriate vocabulary.	Children begin exploring length by comparing lengths and thinking about the vocabulary they're using when describing different lengths. They become familiar with the lengths of 1m and 30cm by using these to compare other lengths to.	<ul> <li>Can children compare two objects to describe them as longer/shorter?</li> <li>Are children familiar with the length of 1m?</li> <li>Are children able to make reasonable estimates when choosing objects which are longer/shorter than 1m?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 1A/1B/1C</li> <li>30cm rulers</li> <li>Metre rulers</li> <li>Photo Sheet</li> <li>Metre Monster Template 1A/1B (FSD? Activity only)</li> <li>Materials to decorate (FSD? Activity only)</li> </ul>
Lesson 2	To measure and draw lines using a ruler.	Children are taught how to use a ruler to measure lines accurately. They think about the advice they would give to others when using a ruler to measure. More able children are also challenged to use this understanding to draw lines of a specified length and measure curved lines using string.	<ul> <li>Can children explain how to use a ruler to measure?</li> <li>Are children able to use a ruler to measure a line with reasonable accuracy?</li> <li>Can children use a ruler to draw a measured line with reasonable accuracy?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 2A/2B/2C</li> <li>String</li> <li>30cm rulers</li> <li>Photo Sheet</li> <li>Game Cards (FSD? Activity only)</li> </ul>
Lesson 3	To measure to the nearest unit of measure.	Using their learning from the previous lesson the children are presented with the problem of objects not lining up with cm markers exactly. They must observe which marker the length is closest to and measure their object to the nearest cm. They can apply this to measuring classroom objects or begin to use metres to measure the distance they can jump.	<ul> <li>Can children measure accurately using a ruler?</li> <li>Can children measure to the nearest cm using a ruler?</li> <li>Are children able to measure an object larger than the ruler they are using?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards 3A</li> <li>Worksheets 3A/3B/3C</li> <li>30cm ruler (without inches and mm)</li> <li>Photo Sheet</li> <li>Worksheet 3D (FSD? activity only)</li> <li>Metre rulers (FSD? activity only)</li> <li>Chalk (FSD? activity only)</li> </ul>
Lesson 4	To compare lengths using <, > or =.	Children recap on the meanings of <, > and = symbols before beginning to use them to compare the lengths of different objects. They must measure, compare and find different classroom objects to complete comparison sentences with more able children using their measurements, rather than observational comparison, to construct their comparison sentences.	<ul> <li>Can children estimate and measure the length of different objects?</li> <li>Can children identify each of the &lt;, &gt; and = symbols and their meanings?</li> <li>Are children able to accurately use the &lt;, &gt; and = in a comparison sentence?</li> </ul>	<ul> <li>Slides</li> <li>1 to 20 flash cards</li> <li>Symbol Cards 4A</li> <li>Worksheets 4A/4B</li> <li>30cm rulers</li> <li>Photo Sheet</li> <li>Metre rulers (FSD? activity only)</li> <li>Large paper (optional) (FSD? activity only)</li> </ul>
Lesson 5	To choose appropriate equipment to measure with.	Children explore the different pieces of equipment that can be use to measure length, height and distance. They begin to think about which pieces of equipment are more suited to measuring different objects and use their reasoning to explain their choices when measuring.	<ul> <li>Can children measure lengths using different equipment?</li> <li>Are children able to select appropriate equipment when measuring different objects?</li> <li>Can children explain their choice of equipment when measuring different objects?</li> </ul>	<ul> <li>Slides</li> <li>30cm rulers, 1m rulers, tape measures, trundle wheels</li> <li>Worksheets 5A/5B</li> <li>Challenge Card 5A</li> <li>Clipboards</li> <li>Photo Sheet</li> <li>Game Board 5A (FSD? activity only)</li> <li>Game Cards 5A (FSD? activity only)</li> </ul>

# Let's Make A Pictogram: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To interpret and construct simple pictograms	Children will learn how to construct a simple pictogram and understand why they are used. They will interpret the pictogram by answering simple questions related to it. The children will have opportunities to construct their own pictograms as well as construct a whole class autumn leaves pictogram.	<ul> <li>Do the children understand what a pictogram is?</li> <li>Can the children interpret information presented in simple pictograms?</li> <li>Can the children construct simple pictograms?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 1A/1B/1C</li> <li>Splat Cards (Plenary only)</li> <li>Blank Pictogram (Plenary and FSD? activity only)</li> <li>Leaves (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To interpret and construct simple pictograms and tally charts	Children will be taught what a tally chart is and how to use them. They will be challenged to spot mistakes on a tally chart and to correct it. The children will enjoy a fun activity of using a tally chart to count the pets in a pet shop. They will the use their data to create a pictogram.	<ul> <li>Can the children interpret information presented in simple tally charts and pictograms?</li> <li>Can the children construct simple tally charts and pictograms?</li> <li>Can the children answer simple questions using the information on a pictogram?</li> </ul>	<ul> <li>Slides</li> <li>Tally Chart 2A/2B/2C</li> <li>Worksheet 2A/2B</li> <li>Pet Pictures</li> <li>Blank Pictogram (FSD? activity only)</li> <li>Large Pet Pictures (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To interpret and answer questions using simple pictograms.	Children will learn about how a half is represented on a pictogram. They will work through a series of problems involving halves and work together or independently to answer them.	<ul> <li>Can the children interpret information presented in simple pictograms?</li> <li>Can the children answer simple questions using the information in a pictogram?</li> <li>Do the children understand that half a picture on a pictogram represents a half?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B/3C</li> <li>Blank Pictogram (FSD? activity only)</li> <li>Cupcakes (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To ask and answer simple questions related to pictograms and tally charts.	Children to use and apply the knowledge they have acquired to work through a series of problems. They will read statements and use the pictogram or tally chart to see if the statement is true or false. The children will then have opportunities to collect data using tally charts and then use it to create a pictogram. They will also have the opportunity to collect real data on a bug hunt.	<ul> <li>Can the children interpret information presented in simple tally charts and pictograms?</li> <li>Can the children construct simple tally charts and pictograms?</li> <li>Can the children answer simple questions using the information on a pictogram?</li> </ul>	<ul> <li>Slides</li> <li>Tally Chart 4A/4B/4C</li> <li>Worksheet 4A/4B </li> <li>Woodland Animals</li> <li>Bug Tally Chart and Bug Pictures (FSD? activity only)</li> <li>Blank Pictogram (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To ask and answer simple questions related to pictograms and tally charts.	Children to practise creating a pictogram by following a series of instructions. They will then use this to create their own questions for pictograms as well as following given information to create a pictogram. The children will have the opportunity to go on a safari hunt in the classroom and apply all they have learnt about pictograms.	<ul> <li>Can the children interpret information presented in simple tally charts and pictograms?</li> <li>Can the children construct simple tally charts and pictograms?</li> <li>Can the children answer simple questions using the information on a pictogram?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Tally Chart and Safari Animals 5A/5B/5C</li> <li>Safari Animal Picture Cards (FSD? activity only)</li> <li>Safari Tally Chart (FSD? activity only)</li> <li>Pictogram Safari Pictures (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

### Let's Use Number Patterns: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To order numbers and identify the sequence!	Children are to read the numbers in a sequence, decide which comes next and work out how many the numbers are increasing or decreasing by.	<ul> <li>Can children count in twos?</li> <li>Can children count in tens?</li> <li>Can children sequence numbers?</li> </ul>	<ul> <li>Slide</li> <li>Worksheet 1A/1B/1C</li> <li>Number Cards A/B (FSD? activity only)</li> </ul>
Lesson 2	To count groups of two and groups of ten objects.	Children to learn about grouping objects, counting them in 'groups of' and writing the answers as a number sentences. They will be challenged to write the answer as a repeated addition sentence and as a multiplication sentence.	<ul> <li>Can children count in twos?</li> <li>Can children count in tens?</li> <li>Can children count groups of objects?</li> </ul>	<ul> <li>Slide</li> <li>Worksheet 2A/2B</li> <li>Problem Cards</li> <li>Group Cards (FSD? activity only)</li> <li>Question Cards (FSD? activity only)</li> <li>Objects: base ten - ones and tens</li> </ul>
Lesson 3	To count in groups of two, five and ten.	Children to learn about representing numbers by using objects, pictures and as an array.	<ul> <li>Can children count in twos, tens and fives?</li> <li>Can children write and solve repeated addition questions?</li> <li>Can children write and solve multiplication questions?</li> </ul>	<ul> <li>Slide</li> <li>Worksheet 3A/3B/3C</li> <li>Question Cards A/B (FSD? activity only)</li> <li>Answer Cards (FSD? activity only)</li> <li>Representation Cards (FSD? activity only)</li> </ul>
Lesson 4	To count in groups of two, three, five and ten.	Children to learn how to write multiplication questions as repeated addition answers and visa- versa. They will be challenged to use pegs and a peg board to answer questions.	<ul> <li>Can children count in twos, tens, fives and threes?</li> <li>Can children write and solve repeated addition questions?</li> <li>Can children write and solve multiplication questions?</li> </ul>	<ul> <li>Slide</li> <li>Worksheet 4A/4B/4C</li> <li>Array Cards A/B/C/D (FSD? activity only)</li> <li>Peg boards and pegs</li> </ul>
Lesson 5	To identify odd and even numbers when counting in groups of two, three, five and ten.	Children to learn about odd and even numbers and to order numbers into odd and even groups. They will be challenged to count in number patterns and then circle the even numbers.	<ul> <li>Can children count in twos, tens, fives and threes?</li> <li>Can children write and solve repeated addition questions?</li> <li>Can children identify odd and even numbers?</li> </ul>	<ul> <li>Slide</li> <li>Target Card A/B/C/D</li> <li>Number Cards A/B/C/D (FSD? activity only)</li> <li>Question Cards (Plenary Only)</li> </ul>

#### How can we add numbers?: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to add two and three groups of objects together.	Children will use pictorial representations and concrete objects to add two groups of objects together. They will add three groups of objects together using the same representations. Children will begin to learn that starting with the larger group is helpful when adding more then one number together.	<ul> <li>Can children add two groups of objects together?</li> <li>Can children add three groups of objects together?</li> <li>Can children use different strategies to add groups of objects?</li> </ul>	<ul> <li>Slides</li> <li>What's Missing Cards</li> <li>Picture Cards</li> <li>Addition Wheels 1A/1B</li> <li>Rolling Game A/B (for FSD? activity only)</li> <li>Dice (for FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To use number lines to add two and three numbers together.	Children will continue to add two and three numbers together, using number lines instead of groups of objects. They will learn how to make jumps to the right along the number line to add numbers together. Children will begin to look at three numbers and choose which one to start with before adding the other two.	<ul> <li>Can children use number lines to add numbers?</li> <li>Do children know how to add three numbers together using number lines?</li> <li>Can children use different strategies to add numbers together?</li> </ul>	<ul> <li>Slides</li> <li>Perfect Partners Cards</li> <li>Number Sentence Cards</li> <li>Number Line Solution Cards</li> <li>Number Line Cards</li> <li>Worksheet 2A</li> <li>Four to Win Game (for FSD? activity only)</li> <li>Green and Red Game Cards (for FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To add ten and twenty to a two-digit number using bead strings.	Children will become familiar with bead strings and how to use them to show groups of ten. They will use bead stings to add ten to a starting number and will be challenged to use the same technique to add twenty to a number. Children will begin to see that the tens column changes when adding ten to a number.	<ul> <li>Can children count in tens?</li> <li>Can children use bead strings to add ten to a number?</li> <li>Do children understand that the tens column changes when adding ten?</li> </ul>	<ul> <li>Slides</li> <li>Match Me Cards</li> <li>Bead String Match Cards</li> <li>Worksheet 3A</li> <li>Game Board, counters and dice (for FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To use Hundred Squares to add multiples of ten to two- digit numbers.	Children will use a hundred square to add ten to two- digit numbers. They will learn that when you add ten to a number, the answer is one square below that number, as each row has ten numbers in it. They will use this pattern to add other multiples of ten to two- digit numbers.	<ul> <li>Can children use a Hundred Square to add ten?</li> <li>Can children see patterns on a Hundred Square?</li> <li>Do children understand that the tens column changes when adding a multiple of ten to a number?</li> </ul>	<ul> <li>Slides</li> <li>Hundred Squares</li> <li>Question Cards 4A/4B/4C</li> <li>Counters</li> <li>Number Puzzles A/B (for FSD? activity only)</li> <li>Photo sheet</li> </ul>
Lesson 5	To be able to add ten to a two-digit number mentally.	Children will consolidate their addition skills in this lesson and will practise answering questions mentally. They will continue to add ten and other multiples of ten to two-digit numbers mentally using speed and number fluency. This lesson allows children to consolidate their knowledge of the tens column changing and the ones column staying the same when adding ten to a number.	<ul> <li>Can children add ten to a two-digit number mentally?</li> <li>Can children add other multiples of ten to a two-digit number mentally?</li> <li>Do children understand the tens column changes when you add a multiple of ten?</li> </ul>	<ul> <li>Slides</li> <li>Photo Sheet</li> <li>Stopwatch</li> <li>Memory Game Cards 5A/5B/5C</li> <li>Colour Me Hundred Squares (for FSD? activity only)</li> </ul>

### How can we subtract numbers? : Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to subtract one or two numbers from a total using objects or pictures.	Children will use objects to help two pet shop owners work out how much stock they have left. They will subtract up to two numbers from a total and be encouraged to use landmark numbers and partitioning to help them.	<ul> <li>Can children subtract objects from a group?</li> <li>Can children subtract two groups of objects from a total?</li> <li>Can children use different strategies to solve subtraction problems?</li> </ul>	<ul> <li>Slides</li> <li>What's Missing Cards</li> <li>Stock Sheet A/B/C</li> <li>Customer Cards A/B/C</li> <li>Game Sheet A/B (FSD? activity only)</li> <li>Number Cards A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To use number lines to subtract numbers from a total.	Children will use number lines to solve subtraction problems. They will discuss the differences between subtracting numbers on a number line and finding the difference. They will subtract up to two numbers from a total and be encouraged to use landmark numbers and partitioning to help them.	<ul> <li>Can children use number lines to subtract numbers?</li> <li>Do children know how to use landmark numbers and partitioning to subtract numbers on a number line?</li> <li>Can children use different strategies to subtract numbers?</li> </ul>	<ul> <li>Slides</li> <li>Perfect Partner Cards</li> <li>Number Sentence Problem Cards A/B</li> <li>Worksheet 2A</li> <li>Four to Win Game (FSD? activity only)</li> <li>Green and Red Game Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To subtract multiples of ten from a two-digit number using bead strings.	Children will use bead strings to solve subtraction problems. They will be encouraged to use partitioning when they take away multiples of ten from a given number.	<ul> <li>Can children count in tens?</li> <li>Can children use bead strings to subtract ten from a number?</li> <li>Do children understand that the tens column changes when subtracting ten?</li> </ul>	<ul> <li>Slides</li> <li>Question Cards A/B/C</li> <li>Game Board (FSD? activity only)</li> <li>Photo Sheet</li> <li>Bead strings</li> <li>Counters and dice</li> </ul>
Lesson 4	To use hundred squares to subtract two-digit numbers.	Children will use hundred squares to subtract multiples of ten and multiples of one from a two-digit number. They will think about the direction they need to move around the hundred square when subtracting.	<ul> <li>Can children use a hundred square to subtract ten/one?</li> <li>Can children see patterns on a hundred square?</li> <li>Do children understand that the tens column changes when subtracting a multiple of ten from a number?</li> </ul>	<ul> <li>Slides</li> <li>Hundred Square</li> <li>Question Cards A/B/C</li> <li>Number Puzzles A/B (FSD? activity only)</li> <li>Photo Sheet</li> <li>Counters</li> </ul>
Lesson 5	To be able to subtract one- digit and two-digit numbers mentally.	Children will use a range of mental strategies to subtract numbers. They will think about and explain how they approached finding the answer to the subtraction problems and then be encouraged to use another method to check their answer.	<ul> <li>Can children subtract ten from a two-digit number mentally?</li> <li>Can children subtract other multiples of ten from a two- digit number mentally?</li> <li>Do children understand which column changes when subtracting two-digit numbers?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Colour Me Hundred Squares A/B/C/D/E (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

#### Let's Use Pounds and Pence: Maths : Year 2 : Autumn Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To recognises coins and notes up to £50	Children will revisit their knowledge of British coins and their values. They are challenged to identify coins from oral descriptions and order the coins according to their value. They then use their own description of British banknotes to recognise them and begin to interpret equivalent amounts between banknotes and £1 and £2 coins.	<ul> <li>Can children recognise coins and their values?</li> <li>Are children able to describe banknotes and recognise their values?</li> <li>Can children identify specific coins or notes from a group?</li> </ul>	• Slides • Coin Fans • Worksheet 1A/1B • Money Cards 1A • Photo Sheet 1A
Lesson 2	To find the total value of a set of coins and/or notes up to £20.	Children will use their knowledge of addition strategies to add together different amounts of coins and notes to find the total. Children can create their own amounts of money to calculate using the money cards or use the coin connect sheets to develop their mental addition skills.	<ul> <li>Can children recognise and use the pounds (£) and pence (p) symbols?</li> <li>Can children find the total value of a group of coins and/or notes?</li> <li>Are children able to record the total value of a set of coins and notes which result in a combination of pounds and pence?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 2A/2B/2C</li> <li>Money Cards 2A</li> <li>Coin Connect Sheets 2A/2B</li> </ul>
Lesson 3	To find different combinations of coins to make equivalent amounts.	Children begin by exploring different ways of using the same kind of coin to make equivalent amounts. They will then progress on to making the same amount in two different ways using coins. They are challenged to use exact change to pay for different items and think about alternative ways they could make an amount when they have a limited choice of coins to use.	<ul> <li>Can children make a specified amount using a variety of coins?</li> <li>Can children find alternative ways to make an equivalent amount?</li> <li>Are children able to understand that each set of coins are of equal value?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B</li> <li>Vending Machine 3A/3B</li> <li>Coin Cards 3A</li> <li>Photo Sheet 3A</li> <li>Shop Sheet 3A (FSD? activity only)</li> <li>Receipt Sheet 3A (FSD? activity only)</li> <li>Bank Label (FSD? activity only)</li> </ul>
Lesson 4	To find change from 20p, 50p, £1 and £2.	Children will need to reflect back on taught subtraction methods to find the correct amount of change when purchasing an object with a higher value coin. They will focus on using a number line to find the difference between the two values of money and reflect on the resources they have used to help them.	<ul> <li>Can children work out the correct change from 20p, 50p, f1 or f2?</li> <li>Can children write a suitable number sentence for their subtractions?</li> <li>Are children able to show their working out?</li> </ul>	<ul> <li>Slides</li> <li>Bead strings, number lines, hundred squares</li> <li>Worksheet 4A/4B/4C</li> <li>Photo Sheet 4A</li> <li>Shop Sheet 4A/4B (FSD? activity only)</li> <li>Coin Cards 4A (FSD? activity only)</li> <li>Worksheet 4D (FSD? activity only)</li> </ul>
Lesson 5	To use reasoning to solve problems involving money.	Children will consolidate their understanding of money by solving problems involving the skills they have learnt throughout the topic. They must use their understanding and knowledge of the different coins to reason and justify their answers and describe how they solved a problem. Children will develop their use of mathematical vocabulary and problem-solving strategies.	<ul> <li>Can children solve reasoning problems involving money?</li> <li>Are children able to show their working out when solving problems?</li> <li>Can children explain their methods and answers clearly?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards 5A</li> <li>Answer Sheet 5A</li> <li>Coin Cards 5A</li> <li>Problem-Solving Sheet 5A</li> <li>Photo Sheet 5A</li> <li>Purse Cards 5A/5B (FSD? activity only)</li> </ul>

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



	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.	<ul> <li>Can children recognise representations of numbers?</li> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts and order to solve two-digit number problems?</li> </ul>	<ul> <li>Slides</li> <li>Hundred Square Cards and Tens and Ones Cards</li> <li>Bingo Sheet and Missing Number Grids</li> <li>Target Number Sheet (FSD? activity only)</li> <li>Follow Me Cards (Plenary only)</li> <li>Photo Sheet</li> <li>Base ten blocks, ten-sided dice</li> </ul>
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.	<ul> <li>Can children recognise representations of numbers?</li> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to order two-digit numbers?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards (Input only)</li> <li>Traffic Cone Cards and Photo Sheet</li> <li>Letter Sheet A/B and Base ten blocks</li> <li>House Number Cards A/B/C (FSD? activity only)</li> <li>Base Ten Sheet (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children recognise the '&lt;', '&gt;' and '=' signs?</li> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to compare two-digit numbers?</li> </ul>	<ul> <li>Slides and Photo Sheet</li> <li>Symbol Fans (Input only)</li> <li>Tens and Ones Sheet, Statement Cards and Worksheet 3A</li> <li>Number Grids, Symbols Cards, rulers, base ten resources and dice</li> <li>Number Chains (FSD? activity only)</li> <li>Follow Me Cards (Plenary only)</li> </ul>
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.	<ul> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to compare two-digit numbers?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Question Cards</li> <li>Worksheet 4A/4B</li> <li>Target Number Sheet (FSD? activity only)</li> <li>Photo Sheet</li> <li>Pegs, lego or beads, base ten blocks, ten-sided dice</li> </ul>
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.	<ul> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to compare two-digit numbers?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Clue Cards A/B/C</li> <li>Number Cards A/B/C</li> <li>Colour By Number Sheet A/B/C/D (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

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



	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.	<ul> <li>Do children understand that multiplication can be expressed as repeated addition, and vice versa?</li> <li>Can children solve multiplication problems involving the two times table?</li> <li>Do children recognise a formal layout for the two times table?</li> </ul>	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.	<ul> <li>Do children understand that multiplication can be expressed as repeated addition, and vice versa?</li> <li>Can children solve multiplication problems involving the five times table?</li> <li>Do children recognise a formal layout for the five times table?</li> </ul>	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.	<ul> <li>Do children understand that multiplication can be expressed as repeated addition, and vice versa?</li> <li>Can children solve multiplication problems involving the ten times table?</li> <li>Do children recognise a formal layout for the ten times table?</li> </ul>	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.	<ul> <li>Can children recognise multiples of the two, five and ten times tables?</li> <li>Can children solve missing number multiplication statements?</li> <li>Can children describe their reasoning?</li> </ul>	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.	<ul> <li>Can children identify what a word problem is asking them to work out?</li> <li>Can children use their knowledge of the two, five and ten times tables to solve problems?</li> <li>Can children express answers to problems as a multiplication statement?</li> </ul>	Slides Question Cards 5A/5B Worksheet 5A Hundred Square Statement Cards 5A/5B (FSD? activity only)

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



	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.	<ul> <li>Do children know what vertex/vertices mean?</li> <li>Can children count the faces/vertices/edges of shapes?</li> <li>Can children explain differences between shapes in terms of the numbers of faces/vertices/edges?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards 1A/1B</li> <li>Lots of 3-D shapes</li> <li>Secret Shapes 1A</li> <li>A thin sheet/tablecloth</li> </ul>
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.	<ul> <li>Can children match descriptions to corresponding 3-D shapes?</li> <li>Can children describe 3-D shapes according to the number of faces/vertices/edges?</li> <li>Can children use information about the properties of shapes to help when making them?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards 2A/2B/2C</li> <li>Lots of 3-D shapes</li> <li>3-D shape-making resources</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Do children know what polyhedrons are?</li> <li>Can children identify the shapes of faces of common 3-D shapes?</li> <li>Can children draw the faces of common 3-D shapes?</li> </ul>	<ul> <li>Slides</li> <li>Mastermind 3A (slides)</li> <li>Mastermind Screen 3A</li> <li>Worksheet 3A/3B</li> <li>Lots of 3-D shapes</li> <li>Play dough (FSD? only)</li> </ul>
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.	<ul> <li>Do children know what 'opposite faces' are?</li> <li>Do children know that some common 3-D shapes have identical opposite faces?</li> <li>Can children think of rules about the faces of common 3-D shapes?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B/4C</li> <li>Lots of 3-D shapes</li> <li>True/False Cards 4A</li> <li>Dowelling/balsa wood, junior hacksaws, bench hooks (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children identify everyday objects which are the same or similar to common geometric 3-D shapes?</li> <li>Can children identify everyday objects which are comprised of several common geometric 3-D shapes?</li> <li>Can children explain why some everyday objects are similar to, but not exactly like common geometric 3-D shapes?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Teacher's Notes 5A</li> <li>6-sided dice, hoops, mini-whiteboards (FSD? activity only)</li> </ul>

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



	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.	<ul> <li>Can children use the vocabulary heavier/lighter?</li> <li>Are children able to compare two objects' weight using balance scales?</li> <li>Are children able to compare and order multiple objects using balance scales?</li> </ul>	<ul> <li>Slides</li> <li>Objects to compare weights</li> <li>Several sets of boxes or containers weighing different amounts</li> <li>Worksheet 1A/1B/1C</li> <li>Balance scales</li> <li>Photo Sheet 1A</li> <li>Worksheet 1D (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children name the units of measure used to measure weight?</li> <li>Are children able to use a digital scale to measure an object's weight in grams?</li> <li>Can children order objects based on their measured weights?</li> </ul>	<ul> <li>Slides</li> <li>Various weights: 1g, 10g, 50g, 100g and 200g</li> <li>Worksheet 2A/2B</li> <li>Digital scales</li> <li>Sets of objects less than/around 100g and others to supplement classroom objects</li> <li>Teacher's Notes 2A</li> <li>Photo Sheet 2A</li> <li>Worksheet 2C (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children compare the weight of an object to a measured weight?</li> <li>Can children use &lt;, &gt; and = symbols to compare weights?</li> <li>Can children select appropriate units of measure based on their estimation of an object's weight?</li> </ul>	<ul> <li>Slides</li> <li>1kg object</li> <li>100g and 1kg weights</li> <li>Objects to weigh (some more than 1kg, see Teacher Notes 3A)</li> <li>Teacher Notes 3A</li> <li>Worksheet 3A/3B/3C</li> <li>Worksheet 3D/3E (FSD? activity only)</li> <li>Photo Sheet 3A</li> </ul>
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.	<ul> <li>Can children read multiples of 100g on a scale?</li> <li>Are children able to make suggestions about what a scale would look like showing a given weight?</li> <li>Can children take measurements to the nearest 100g?</li> </ul>	<ul> <li>Slides</li> <li>Sticky notes</li> <li>Weight Cards 4A/4B</li> <li>Scale Cards 4A</li> <li>Scale Sheet 4A</li> <li>Photo Sheet 4A</li> <li>Kitchen scales</li> <li>Worksheet 4A (FSD? activity only)</li> <li>Shopping items (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children read scales accurately to the nearest 100g?</li> <li>Are children able to accurately measure given amounts?</li> <li>Can children make suggestions about how to correct mistakes made when measuring weight?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B</li> <li>Challenge Cards 5A</li> <li>Spring scales (kitchen scales)</li> <li>Objects to measure</li> <li>Photo Sheet 5A</li> <li>Cookie Recipe Card 5A (FSD? activity only)</li> <li>Ingredients (FSD? activity only)</li> <li>Digital scales (optional) (FSD? activity only)</li> </ul>

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



	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.	<ul> <li>Do children know addition facts to 20?</li> <li>Do children know subtraction facts to 20?</li> <li>Can children use number facts to solve problems?</li> </ul>	• 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.	<ul> <li>Can children use the inverse to check answers?</li> <li>Do children understand how addition and subtraction are linked?</li> <li>Can children explain their methods?</li> </ul>	<ul> <li>Slides</li> <li>Inversion Loops A/B/C</li> <li>Number Cards A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children use addition and subtraction to solve problems?</li> <li>Can children link addition and subtraction?</li> <li>Can children confidently use different methods to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Hundred Squares</li> <li>Question Cards A/B/C</li> <li>Part Part Whole Cards A/B (FSD? activity only)</li> <li>Blank Number Lines (FSD? activity only)</li> <li>Photo Sheet</li> <li>Dienes blocks, paper, light coloured pens</li> </ul>
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.	<ul> <li>Do children understand how to round numbers?</li> <li>Can children use a number line to solve problems by adjustment?</li> <li>Can children link addition and subtraction?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B/4C</li> <li>Number Cards A/B (FSD? activity only)</li> <li>Spinner A/B (FSD? activity only)</li> <li>Rockets (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children solve word problems?</li> <li>Can children link addition and subtraction?</li> <li>Can children check their answers?</li> </ul>	<ul> <li>Slides</li> <li>Problem Cards A/B/C</li> <li>Challenge Posters (FSD? activity only)</li> <li>Code Breaker Card (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

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



	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.	<ul> <li>Can children explain multiplication?</li> <li>Can children explain division?</li> <li>Can children use resources to solve multiplication and division questions?</li> </ul>	<ul> <li>Slides</li> <li>Bead strings (Teaching Input only)</li> <li>Worksheet 1A/1B/1C</li> <li>Question Cards 1A/1B (FSD? activity only)</li> <li>Bead String Cards 1A/1B (FSD? activity only)</li> <li>Arrays Cards 1A/1B (FSD? activity only)</li> <li>Answer Cards 1A/1B (FSD? activity only)</li> <li>Counting resources: blocks, numicon</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Do children understand multiplication and division number sentences?</li> <li>Do children know number facts?</li> <li>Can children use methods to check their answers?</li> </ul>	<ul> <li>Slides</li> <li>Puzzle Pieces 2A/2B</li> <li>Number Sheets 2A</li> <li>Number Cards 2A</li> <li>Game Sheet 2A/2B (FSD? activity only)</li> <li>Question Cards 2A/2B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Do children understand multiplication number sentences are commutable?</li> <li>Can children draw arrays to prove their number sentence answers?</li> <li>Can children rearrange number sentences?</li> </ul>	<ul> <li>Slides</li> <li>Bead Strings</li> <li>Worksheet 3A/3B/3C</li> <li>Number Sentence Cards (FSD? activity only)</li> <li>Challenge Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Do children understand which number sentences are commutative?</li> <li>Can the children use multiplication to check their answers?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Problem Cards 4A/4B/4C</li> <li>Domino Cards 4A/4B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children write number sentences?</li> <li>Can children solve word problems?</li> <li>Can children check their work?</li> </ul>	<ul> <li>Slides</li> <li>Character Cards 5A/5B/5C</li> <li>Problem Cards 5A/5B (FSD? activity only)</li> <li>Game Sheet 5A (FSD? activity only)</li> <li>Counting resources: blocks, numicon, bead strings</li> <li>Photo Sheet</li> </ul>

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



	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.	<ul> <li>Can the children describe what a half and a quarter are?</li> <li>Are the children able to record halves and quarters as fractions?</li> <li>Can children identify halves and quarters of a shape?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 1A</li> <li>Shape Sheet 1A</li> <li>Apple</li> <li>Photo Sheet 1A</li> <li>Pizza Template 1A/1B (FSD? activity only)</li> <li>Topping Menu (FSD? activity only)</li> </ul>
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 ¾.	<ul> <li>Can children show a given unit fraction by shading part of a shape?</li> <li>Can children identify the shaded fraction of given shapes?</li> <li>Are children able to shade half of a shape which is split into four pieces?</li> </ul>	<ul> <li>Slides</li> <li>Shape Cards 2A</li> <li>Worksheet 2A/2B/2C</li> <li>Photo Sheet 2A</li> <li>Domino Cards 2A (FSD? activity only)</li> </ul>
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.	<ul> <li>Can the children describe how to find a half and a quarter of a number?</li> <li>Are children able to find a half, a quarter and a third of a number or quantity?</li> <li>Are children able to describe how they can use halving to find a quarter?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B</li> <li>Counters/cubes/Numicon</li> <li>Photo Sheet 3A</li> <li>Challenge Card 3A (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children find one quarter of a given shape or amount?</li> <li>Can children find and show three quarters of a shape?</li> <li>Can children find three quarters of a number?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B/4C</li> <li>Counters/cubes/Numicon to support division strategies</li> <li>Photo Sheet 4A</li> <li>Worksheet 4D (FSD? activity only)</li> <li>Paper plates (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children find half or a quarter of a shape?</li> <li>Can children find half or a quarter of a number?</li> <li>Can children solve practical problems using their knowledge of fractions?</li> </ul>	<ul> <li>Slides</li> <li>Picnic Card 5A/5B</li> <li>Challenge Card 5A/5B</li> <li>Food Cards 5A</li> <li>Worksheet 5A</li> <li>Photo Sheet 5A</li> <li>Measurement Card (FSD? activity only)</li> <li>Large paper/chalk (FSD? activity only)</li> <li>Worksheet 5B (FSD? activity only)</li> </ul>

## How can we tell the time?: Maths : Year 2 : Spring Term Week 8



	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.	<ul> <li>Can children read, write, say and draw 'o'clock' times?</li> <li>Can children match written times to clock faces?</li> <li>Can children begin to sequence intervals of time (whole hours)?</li> </ul>	<ul> <li>Slides</li> <li>Blank Clock Faces sheet</li> <li>Worksheet 1A/1B/1C</li> <li>O'Clock Cards (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children read, write, say and draw 'half past' times?</li> <li>Can children read, write, say and draw 'quarter past/to' times?</li> <li>Can some children find the times a quarter of an hour earlier/later than a given time?</li> </ul>	<ul> <li>Slides</li> <li>Tell The Time 2A/2B/2C game cards</li> <li>Diary Sheet 1 (FSD? activity only)</li> <li>Diary Cards 1 (FSD? activity only)</li> </ul>
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'.)	<ul> <li>Can children read 'five past' times e.g. 'five past two', 'five thirty-five'?</li> <li>Can children write and draw 'five past' times?</li> <li>Can some children read, write and draw 'five to' times e.g. 'five to five'?</li> </ul>	<ul> <li>Slides</li> <li>Blank Clock Faces sheet or learning clocks</li> <li>Five Minutes Earlier/Later card</li> <li>Worksheets 3A/3B/3C</li> <li>Five Minute Challenge cards (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children answer a variety of questions about reading the time on analogue clocks?</li> <li>Can some children count minutes (in fives) in a quarter of an hour and in half an hour?</li> <li>Can some children count minutes (in fives) between a greater variety of different times?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 4A/4B/4C</li> <li>Time Chain Cards 4 (FSD? activity only)</li> <li>Learning clocks (optional)</li> </ul>
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.	<ul> <li>Can children count clock chimes to tell the time?</li> <li>Can children identify 'quarter past', 'half past' and 'quarter to' times by listening to clock chimes?</li> <li>Can children listen to clock chimes, then write or draw corresponding clock times?</li> </ul>	<ul> <li>Slides</li> <li>'Big Ben' Audio Tracks (16 tracks)</li> <li>Worksheet 5A/5B</li> <li>Challenge Card 5 (FSD? activity only)</li> <li>Tuned musical instruments e.g. keyboards or glockenspiels (FSD? activity only)</li> </ul>

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



	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.	<ul> <li>Can children talk about the information in a pictogram?</li> <li>Can children use a tally chart to complete a pictogram?</li> <li>Can children answer questions about a pictogram?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards 1A/1B/1C</li> <li>Picture Cards 1A/1B (FSD? activity only)</li> <li>Worksheet 1A/1B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children compare pictograms and block diagrams?</li> <li>Can children create block diagrams?</li> <li>Can children ask and answer questions about block diagrams?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 2A/2B/2C</li> <li>Extension Cards 2A/2B/2C</li> <li>Graph Cards 2A/2B (FSD? activity only)</li> <li>Statement Cards 2A/2B (FSD? activity only)</li> <li>Squares of paper - 4/5 colours (Plenary only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children compare tally charts and tables?</li> <li>Can children complete block diagrams and tables?</li> <li>Can children ask and answer questions about tables and block diagrams?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B/3C</li> <li>Odd One Out Cards 3A/3B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children complete block diagrams?</li> <li>Can children ask and answer questions?</li> <li>Can children use mathematical language to talk about their graphs?</li> </ul>	<ul> <li>Slides</li> <li>Blank Block Diagram Sheet 4A/4B (Teaching Input)</li> <li>Worksheet 4A/4B/4C</li> <li>Challenge Cards 4A/4B (FSD? activity only)</li> <li>Question Cards 4A (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children create block diagrams?</li> <li>Can children generate information for tables and diagrams?</li> <li>Can children ask and answer questions about block diagrams?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Character Cards 5A/5B (FSD? activity only)</li> <li>Worksheet 5D/5E (FSD? activity only)</li> <li>Trays of coloured blocks</li> <li>Photo Sheet</li> </ul>

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



	Learning Objective	Overview	Assessment Questions	Resources
Lesson <sup>2</sup>	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.	<ul> <li>Can children describe patterns?</li> <li>Can children identify what the next object in a sequence should be?</li> <li>Can children explain their choices and reasoning?</li> </ul>	<ul> <li>Slides</li> <li>Shape Cards (Teaching Input)</li> <li>Worksheet 1A/1B/1C</li> <li>Pattern Strips (FSD? activity only)</li> <li>Pattern Identification Sheet (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Can children identify what the next object in an increasing range of sequences should be?</li> <li>Can children identify what a missing object within a sequence should be?</li> <li>Can children explain their choices and reasoning?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 2A/2B/2C</li> <li>Sequence Strips (FSD? activity only)</li> <li>Missing Object Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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.	<ul> <li>Do children understand that objects can be arranged into many different patterns and sequences?</li> <li>Can children make and describe their own patterns and sequences?</li> <li>Can children identify errors in patterns?</li> </ul>	<ul> <li>Slides</li> <li>Shape Cards (Teaching Input)</li> <li>Worksheet 3A/3B/3C</li> <li>Blank Sequence Strips and Cover Cards (FSD? activity only)</li> <li>Object Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
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'.	<ul> <li>Do children know and understand the words associated with direction and movement?</li> <li>Can children follow the vocabulary of direction to move around a grid?</li> <li>Can children use vocabulary to give directions for movement around a grid?</li> </ul>	<ul> <li>Slides</li> <li>Zoo Map</li> <li>Directions Cards</li> <li>Directions Sheet</li> <li>Challenge Cards &amp; Route Cards</li> <li>Help Cards</li> <li>Zoo Animals Help Sheet</li> <li>Cops &amp; Robbers Game Board (FSD? activity only)</li> <li>Cops &amp; Robbers Cards and Counters (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson !	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.	<ul> <li>Do children understand the terms 'clockwise' and 'anticlockwise'?</li> <li>Can children turn themselves and objects a whole turn, half turn, quarter turn and three quarter turn?</li> <li>Can children describe movement using the language of turns?</li> </ul>	<ul> <li>Slides</li> <li>Movement Square and Pointer, split pins</li> <li>Question Sheet</li> <li>Worksheet 5A/5B</li> <li>Insect Cards (FSD? activity only)</li> <li>Which Insect? Challenge Sheet (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

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



	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.	<ul> <li>Can children generates some of the vocabulary used to describe temperature?</li> <li>Can children compare the feeling of different temperatures and describe them?</li> <li>Can children sort objects depending on their temperature?</li> </ul>	<ul> <li>Slides</li> <li>Hot water bottle</li> <li>Cold pack (one frozen/activated, one unfrozen)</li> <li>Object Cards 1A</li> <li>Worksheet 1A/1B</li> <li>Photo Sheet 1A</li> <li>Challenge Cards 1A (FSD? activity only)</li> <li>Selection of objects to measure temperature e.g. covered mug of warm water, ice, refrigerated water, hot water bottle, etc. (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children name the unit used to measure temperature?</li> <li>Can children read a simple scaled used to measure temperature?</li> <li>Can children measure temperature using a scale with unmarked increments?</li> </ul>	<ul> <li>Slides</li> <li>Thermometers</li> <li>Worksheet 2A/2B/2C</li> <li>Photo Sheet 2A</li> <li>Template 2A/2B (FSD? activity only)</li> <li>Flashcards 2A/2B (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children describe what each of the &lt;, &gt; or = symbols mean?</li> <li>Can children make a comparison between two temperatures?</li> <li>Are children able to use the comparison symbols &lt;, &gt; or = accurately?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B/3C</li> <li>Temperature Cards 3A</li> <li>Symbol Cards 3A</li> <li>Photo Sheet 3A</li> </ul>
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.	<ul> <li>Can children find the difference between two similar temperatures?</li> <li>Are children able to find the difference between tow temperatures below 100°C?</li> <li>Can children describe their methods for finding the difference?</li> </ul>	<ul> <li>Slides</li> <li>Map Card 4A/4B</li> <li>Worksheet 4A/4B</li> <li>Photo Sheet 4A</li> <li>Thermometer Cards 4A</li> <li>Worksheet 4C (FSD? activity only)</li> <li>Different containers to hold water (FSD? activity only)</li> <li>Warm water (FSD? activity only)</li> <li>Thermometers (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children compare and order temperatures?</li> <li>Are children able to use reasoning to justify their choices?</li> <li>Can children find the difference between two temperatures?</li> </ul>	<ul> <li>Slides</li> <li>Photo Sheet 5A</li> <li>Challenge Cards 5A</li> <li>Thermometer Cards 5A</li> <li>Worksheet 5A</li> <li>Challenge Cards 5B/5C (FSD? activity only)</li> <li>Worksheet 5B (FSD? activity only)</li> </ul>

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



	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.	<ul> <li>Can children use their knowledge of number bonds to help pair numbers to a familiar total?</li> <li>Are children able to derive other number facts from a known calculation?</li> <li>Can children add two or more numbers to result in a given total?</li> </ul>	<ul> <li>Slides</li> <li>Triangle Tarsia Puzzle 1A/1B</li> <li>Photo Sheet 1A</li> <li>Challenge Card 1A/1B (FSD? activity only)</li> <li>Animal Cards 1A (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children find different ways of using addition to make an amount?</li> <li>Are children able to find the inverse addition or subtraction calculation?</li> <li>Can children use the inverse calculation to check or solve a problem?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 2A/2B</li> <li>Physical objects e.g. counters</li> <li>Photo Sheet 2A</li> <li>Challenge Card 2A (FSD? activity only)</li> <li>Large paper (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children input numbers into a bar model to represent an addition problem?</li> <li>Are children able to draw a bar model to represent an addition problem?</li> <li>Can children derive inverse calculations from a bar model representation?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B/3C</li> <li>Photo Sheet 3A</li> <li>Challenge Cards 3A/3B (FSD? activity only)</li> <li>Multi-link cubes (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children find missing numbers from a bar model by finding the difference?</li> <li>Are children able to draw a bar model for a subtraction problem?</li> <li>Can children derive all known calculations from a bar model?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B/4C</li> <li>Photo Sheet 4A <sup>(</sup></li> <li>Bar model pieces 4A (FSD? activity only)</li> </ul>
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.	<ul> <li>Can children choose resources to effectively support their calculations?</li> <li>Are children able to apply their methods of addition and subtraction in different contexts?</li> <li>Can children determine when they are able to use a mental method?</li> </ul>	<ul> <li>Slides</li> <li>Teacher Notes 5A</li> <li>Game Board 5A/5B</li> <li>Physical resources e.g. counters, number lines, hundred squares, bead strings etc.</li> <li>Dice</li> <li>Photo Sheet 5A</li> <li>Strike-Out Cards 5A/5B (FSD? activity only)</li> </ul>

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# Let's multiply and divide! Maths : Year 2 : Summer Term, Week 1



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To show that multiplication of two numbers can be done in any order.	Children will use arrays to visually represent how multiplication is commutative, and may be solved in any order. They will then identify times tables which they find easier/have already learnt, and change the order of multiplication calculations to take advantage of these.	<ul> <li>Can children use resources to help show and solve multiplication calculations?</li> <li>Can children draw arrays to show and solve multiplication calculations?</li> <li>Can children change the order of multiplication calculations, making them easier to solve?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 1A/1B/1C</li> <li>Multiplication Problem cards (FSD? activity only)</li> <li>Maths cubes, counters, peg boards etc.</li> </ul>
Lesson 2	To create fact families to show relationships between multiplication and division calculations.	Children will use number lines or bead strings to determine that although multiplication may be done in any order, division may not. After that they may either use resources to help them solve division calculations and make 'fact families', or undertake a group 'fact family' sorting challenge.	<ul> <li>Can children use maths resources to help solve and show multiplication calculations?</li> <li>Can children explain, in their own words, why divisions cannot be solved in any order?</li> <li>Can children use known facts from a simple multiplication number sentence to make 'fact families'?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards 2A/2B/2C</li> <li>Fact Family Challenge 2A/2B/2C</li> </ul>
Lesson 3	To solve multiplication calculations using a number line.	Children will recap using physical resources to solve multiplications by making rectangular arrays. They will go on to learn how number lines may also be used to solve multiplication calculations.	<ul> <li>Can children relate multiplication to repeated addition?</li> <li>Can children use number lines to solve multiplication calculations (two, five and ten times tables)?</li> <li>Can some children use number lines to solve multiplication calculations (including the three times table as well)?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B</li> <li>Number Lines to 30/100</li> <li>Multiplication Statements cards</li> </ul>
Lesson 4	To solve division calculations using a number line.	Children will recap using physical resources to solve divisions by making rectangular arrays. They will go on to learn how number lines may also be used to solve division calculations.	<ul> <li>Can children solve division calculations using physical resources?</li> <li>Can children relate dividing or sharing physical resources to repeated subtraction?</li> <li>Can children use number lines to solve division calculations?</li> </ul>	<ul> <li>Slides</li> <li>Worksheets 4A/4B/4C</li> <li>Challenge Card 4</li> <li>Unifix/Multifix cubes, bead strings</li> <li>Blank Number Lines to 30 sheet</li> </ul>
Lesson 5	To solve a variety of multiplication and division word problems using physical resources or a number line.	Children will practise and consolidate the skills learnt during this week by solving multiplication and division word problems, either using physical resources or number lines to help them.	<ul> <li>Can children compare methods for solving multiplication calculations?</li> <li>Can children compare methods for solving division calculations?</li> <li>Can children use number lines to solve multiplication and division word problems?</li> </ul>	<ul> <li>Slides</li> <li>Number Lines to 30/100</li> <li>Word Problems 5A/5B</li> <li>Audio recorders, laptops and/or tablets (all optional; FSD? activity only)</li> </ul>

## Let's Add Big Numbers: Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know how to partition two- and three-digit numbers	In this first lesson, children will discuss and understand the value of each digit in two- and three-digit numbers. They will use this knowledge to partition each number into tens and ones, or hundreds, tens and ones. Children will then apply this understanding in their independent activities.	<ul> <li>Do children understand what the different digits in two- and three-digit numbers represent?</li> <li>Can children partition two-digit numbers into tens and ones?</li> <li>Can children partition three-digit numbers into hundreds, tens and ones?</li> </ul>	<ul> <li>Slides</li> <li>Whiteboards (Mental Oral Starter &amp; FSD? activity)</li> <li>Triple Up! Cards</li> <li>Worksheet 1A/1B</li> <li>What's My Number? Card Set A/B (FSD? activity only)</li> <li>Instructions Card (FSD? activity only)</li> <li>Sentence Prompt Card A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To use partitioning to add a multiple of ten to a two-digit number	In this lesson, children will use their partitioning skills to add a two-digit number to a multiple of ten. They will explore and practise the steps needed to solve different addition number sentences, and then apply them in their independent activities.	<ul> <li>Can children partition a two-digit number?</li> <li>Can children use partitioning to help them add a two-digit number to a multiple of ten?</li> <li>Can children explain how they use partitioning to solve addition number sentences?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 2A/2B/2C</li> <li>Dienes/Place Value Blocks</li> <li>Farmer Giles and Farmer Joan Cards (FSD? activity only)</li> <li>How Many Altogether? Worksheet (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To use partitioning to add two two-digit numbers together	Children will progress to using their partitioning skills to add two two-digit numbers together, by first partitioning each number and then recombining them as tens and ones, before adding these two numbers together to find the final answer. The independent activities give children further opportunities to practise this method of addition.	<ul> <li>Do children know how to partition numbers?</li> <li>Can children solve number sentences involving the addition of two two-digit numbers?</li> <li>Can children explain how they can use partitioning to add two two-digit numbers?</li> </ul>	<ul> <li>Slides</li> <li>Jigsaw Cards Set A/B/C/D</li> <li>Help Cards</li> <li>Worksheet 3A/3B</li> <li>Balloon Challenge Cards (FSD? activity only)</li> <li>Balloon Challenge Worksheet (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To add two two-digit numbers in the context of money word problems	Children will apply their knowledge and understanding of partitioning to help them solve addition word problems involving money. They will learn how to bridge through ten in order to add together a wider range of numbers. In their independent activities, children find the total amounts spent during a trip to several shops. In the FSD? activity, children work as a group and use trial and improvement to decide what two items can be bought for a given price.	<ul> <li>Can children explain how they can use partitioning to add two two-digit numbers?</li> <li>Can children add two two-digit numbers involving bridging through ten?</li> <li>Can children solve addition problems involving money using partitioning?</li> </ul>	<ul> <li>Slides</li> <li>Whiteboards (optional - for Teaching Input)</li> <li>Coin Cards</li> <li>Shopping Trip Sheet 4A/4B/4C</li> <li>Fruit &amp; Veg Price List (FSD? activity only)</li> <li>Puzzle Cards Set (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To be able to add two two-digit numbers mentally	In this final lesson, children will focus on adding two two- digit numbers mentally. They will first work in pairs to partition and then recombine the separate tens and ones totals, and then will be challenged to solve number sentences mentally by themselves. In their independent activities, children will generate their own number sentences for others to answer.	<ul> <li>Can children partition two-digit numbers mentally?</li> <li>Can children add two two-digit numbers mentally?</li> <li>Can children explain the steps they took to solve an addition number sentence mentally?</li> </ul>	<ul> <li>Slides</li> <li>Number Cards</li> <li>Worksheet 5A/5B/5C</li> <li>Sellotape (optional)</li> <li>Number Sentence Strips (FSD? activity only)</li> <li>Blu-Tack (FSD? activity only)</li> <li>Worksheet 5D (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

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## Let's Subtract Big Numbers: Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To partition two- and three- digit numbers.	Children will be challenged to partition up to three- digit numbers in different contexts through active and challenging games. Children will have the opportunity to increase their fluency and speed in partitioning bingo or use their teamwork to partition numbers in a more active setting.	<ul> <li>Can children partition two-digit numbers accurately?</li> <li>Can children partition three-digit numbers accurately?</li> <li>Are children able to read, name and write three-digit numbers?</li> </ul>	<ul> <li>Slides</li> <li>Bingo Cards</li> <li>Place Value Grid 1A</li> <li>Number Cards 1A /1B</li> <li>Photo Sheet 1A</li> <li>Place Value Cards 1A (FSD? activity only)</li> <li>Hoops (FSD? activity only)</li> </ul>
Lesson 2	To subtract multiples of ten from a two- or three-digit number.	Children will investigate the place value columns and describe what happens when a number is subtracted and which digits change and how they change. They use their place value understanding to help them solve simple subtractions of multiples of ten from two- or three-digit numbers.	<ul> <li>Can children identify the values of each place value column?</li> <li>Can children partition and represent a number using physical place value equipment or drawings?</li> <li>Are children able to subtract ten from a two- or three-digit number?</li> </ul>	<ul> <li>Slides</li> <li>Dienes</li> <li>Worksheet 2A/2B/2C</li> <li>Place Value Grid 2A</li> <li>Photo Sheet 2A</li> <li>Subtraction Cards 2A/2B (FSD? activity only)</li> </ul>
Lesson 3	To subtract TO from TO or HTO numbers without bridging ten.	In this lesson the children will be introduced to subtracting TO from HTO or TO using partitioning. They will represent numbers using place value counters before taking them away (crossing out) to simulate subtraction. They will tackle subtraction calculations which do not involve bridging over ten.	<ul> <li>Are children able to partition a number?</li> <li>Can children represent a partitioned number visually?</li> <li>Can children use partitioning to solve a TO – TO subtraction problem?</li> </ul>	<ul> <li>Slides</li> <li>Subtraction Cards 3A</li> <li>Place Value Counters 3A</li> <li>Worksheet 3A/3B</li> <li>Photo Sheet 3A</li> <li>Number Cards 3A (FSD? activity only)</li> <li>Worksheet 3C (FSD? activity only)</li> </ul>
Lesson 4	To subtract TO from two- digit numbers, bridging ten when necessary.	Children progress with their understanding of using partitioning to subtract by moving on to solving calculations which involve exchanging tens for ones. The children are shown how to exchange within a number to obtain a useable amount of ones counters and are challenged to think carefully about when it is necessary to exchange and when they don't need to.	<ul> <li>Can children calculate a TO – TO calculation?</li> <li>Are children able to explain the process of using partitioning to solve a TO – TO calculation?</li> <li>Can children explain when they need to exchange ten for ten ones?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B</li> <li>Place Value Counters 4A</li> <li>Dienes</li> <li>Photo Sheet 4A</li> <li>Spinner 4A (FSD? activity only)</li> <li>Game Sheet 4A (FSD? activity only)</li> </ul>
Lesson 5	To solve subtraction problems involving money.	Children will apply their understanding of partitioning as a subtraction method to the context of spending amounts of money. They will revisit their knowledge of making a total of a set of coins before using this in their subtraction calculations.	<ul> <li>Can children find the total of a set of coins?</li> <li>Are children able to partition an amount of money?</li> <li>Can children use partitioning to subtract amounts of money?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Coin Sheet 5A</li> <li>Place Value Counters 5A</li> <li>Photo Sheet 5A</li> <li>Shop Sheet 5A (FSD? activity only)</li> <li>Spending Cards 5A (FSD? activity only)</li> </ul>

## Can we find fractions of numbers? : Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to recognise, find and name fractions.	Children will identify what fractions are at the start of this lesson. They will then go on to explore which visual representation out of a choice of three represents a written fraction. In their independent learning, children will undertake a variety of challenges to refresh their knowledge and understanding of fractions.	<ul> <li>Can children recognise fractions?</li> <li>Can children find fractions of numbers, shapes and objects?</li> <li>Can children identify and name fractions?</li> </ul>	Slides Counters, cubes or similar Yellow Challenge Cards Blue Challenge Cards Green Challenge Cards Fair Farmers 1A/1B (FSD? activity only) Sharing Cards 1A/1B (FSD? activity only) Animal Stock Sheets 1A/1B (FSD? activity only)
Lesson 2	To be able to write fractions.	Children will explore how to write fractions to reflect a visual representation of a fraction. Children will be shown how to work out what fraction of a set of objects is shaded when there are e.g. three circled and nine not circled, using manipulatives to support them if necessary.	<ul> <li>Can children recognise fractions of shapes and objects?</li> <li>Do children understand what the numerator and denominator represent in a fraction?</li> <li>Can children write fractions accurately?</li> </ul>	Slides Shape Cards Picture Cards 2A Worksheet 2A/2B Example Card Question Cards 2A/2B (FSD? activity only)
Lesson 3	To be able to find fractions of numbers.	Children will explore how to find fractions of numbers, learning how to solve fraction number sentences, e.g. $1/_3$ of $18 = ?$ Children will be shown some different strategies for how to solve problems such as these. In their independent learning, they can play a fun board game to help practise this process.	<ul> <li>Can children understand what a fraction calculation is asking them to solve?</li> <li>Can children solve a fraction calculation with the support of manipulatives?</li> <li>Can children solve some simple fraction calculations mentally?</li> </ul>	Slides Cubes, counters or similar Game Board 3A/3B/3C Game Sheet 3A/3B/3C Fraction Cards 3A/3B (FSD? activity only) Worksheet 3A/3B
Lesson 4	To be able to solve fraction problems in context.	In this lesson, children will consolidate what they have learnt so far about fractions to solve a variety of word problems. The slides go through several examples together before challenging children to solve problems independently.	<ul> <li>Do children understand what a word problem is asking them to find out?</li> <li>Can children use their understanding of fractions to solve simple word problems?</li> <li>Can children use reasoning to explain their answers to fraction problems?</li> </ul>	Slides Worksheet 4A/4B/4C/4D Picture Cards (FSD? activity only)
Lesson 5	To be able to count in steps of one half and one quarter.	This lesson starts by teaching children to identify the equivalence between one half and two quarters. They then go on to look at how numbers can be split into fractions. They will explore number lines where numbers are split into halves and quarters, then look at how to find the difference between two fractions, counting up and down on the number line as they do so.	<ul> <li>Do children know that <sup>2</sup>/<sub>4</sub> and <sup>1</sup>/<sub>2</sub> are equivalent fractions?</li> <li>Can children count in steps of a quarter and a half?</li> <li>Do children know that fractions can add up to more than one?</li> </ul>	Slides Fraction Cards Number Line 5A/5B/5C/5D Number Cards 5A/5B Game Cards (FSD? activity only) Game Board (FSD? activity only)

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# Let's Measure Capacity : Maths : Year 2 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson	To compare the capacities of different containers.	Children will look at the shapes of different containers and use adjectives to describe and compare them. They will then use pourable solids or water to compare the capacities of different containers, using <, > or = symbols to compare them.	<ul> <li>Are children able to describe different containers based on their capacity?</li> <li>Can children use &lt;, &gt; or = symbols to compare capacities?</li> <li>Are children able to order containers based on their capacity?</li> </ul>	<ul> <li>Slides</li> <li>Pourable solid e.g. rice/lentils</li> <li>Worksheet 1A/1B/1C</li> <li>Various containers for measuring</li> <li>Photo Sheet 1A</li> <li>Water tray or buckets of water, outside (FSD? activity only)</li> </ul>
Lesson	2 To compare the capacity of various containers using simple multiples.	Children will use pourable solids such as rice or lentils to compare the capacities of various containers. They will use simple multiples to compare the capacities e.g. four times bigger, half as big, etc.	<ul> <li>Can children use comparison language to compare containers?</li> <li>Are children able to use rough comparisons to compare capacities?</li> <li>Can children use simple multiples to compare capacities?</li> </ul>	<ul> <li>Slides</li> <li>Capacity Cards 2A/2B</li> <li>Comparison Cards 2A/2B</li> <li>Worksheet 2A</li> <li>Photo Sheet 2A</li> <li>Pourable solids e.g. rice/lentils (FSD? activity only)</li> <li>Various containers of different sizes (FSD? activity only)</li> </ul>
Lesson	To read and measure volumes using measuring jugs or measuring cylinders.	Children will be reminded of how to read a scale, focusing particularly on scales to show volumes of liquids. They will be shown volumes in multiples of 50 to determine and add together.	<ul> <li>Can children read numbered scales on measuring jugs?</li> <li>Can children work out capacities that are marked, but not numbered, on measuring jugs?</li> <li>Can children add volumes in millilitres?</li> </ul>	<ul> <li>Slides</li> <li>Bingo Pairs Cards 3A</li> <li>Bingo Game Cards 3A/3B/3C</li> <li>Mocktail Cards 3A (FSD? activity only)</li> <li>Measuring jugs and cups (FSD? activity only)</li> <li>Juice, carbonated water (FSD? activity only)</li> </ul>
Lesson	4 To measure and order capacities and volumes.	Children use and apply their learning from the previous lesson to measure and order volumes of liquid. They have the opportunity to use <, > and = symbols to compare measured volumes as well as exploring measuring scales with different intervals.	<ul> <li>Can children accurately measure volumes of liquid using the given scale?</li> <li>Can children distinguish between volume and capacity?</li> <li>Are children able to order volumes of liquid based on their own measurements?</li> </ul>	<ul> <li>Slides</li> <li>Container Cards 4A/4B/4C</li> <li>Worksheet 4A</li> <li>Various product containers with labelled volumes (see below) (FSD? activity only)</li> <li>Capacity measuring equipment (FSD? activity only)</li> <li>Worksheet 4B (FSD? activity only)</li> </ul>
Lesson	To accurately measure and add small volumes of water.	Children will have the opportunity to add and measure small volumes to find the capacity of small containers. Alternatively they can investigate what happens when small amounts of coloured liquids are added together and the amounts of new mixtures that they make.	<ul> <li>Can children measure small capacities using regular measurements (such as 5 ml/teaspoon)?</li> <li>Can children count in fives to work out the capacity of very small containers?</li> <li>Can children write addition number sentences using the correct unit of measure (ml)?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Photo Sheet 5A</li> <li>Teaspoons or 5 ml measuring spoons</li> <li>Small containers e.g. jam-jar lids, shampoo-bottle tops, empty make-up containers</li> <li>Plastic pipettes</li> <li>Worksheet 5D (FSD? activity only)</li> <li>Food dyes (FSD? activity only)</li> </ul>

# Let's Go Shopping: Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To combine coins to make a given total	In this first lesson, children will recap on the value of different coins, and how to use the symbols for pounds and pence. They will then be challenged to identify and explain which coins, from a given selection, can be combined in order to pay exactly for an item. Children will continue to practise this skill in their independent work. In the FSD? activity, children will play a game of dominoes, combining different amounts of coins to see if they match given totals.	<ul> <li>Can children recognise and name each coin?</li> <li>Can children use their addition skills to combine coins to make a given total?</li> <li>Can children explain their reasoning?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 1A/1B/1C</li> <li>Shopping Dominoes Set A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To explore how different combinations of coins can make the same total	Children will learn that different combinations of coins can be used to make the same total. They will work in pairs or small groups to see how many different combinations of coins they can find to make a given total. In their independent activities, children will find different ways to pay for items of different prices. In the alternative activity, children will be challenged to find all of the possible combinations of 1p, 2p and 5p coins to make either 6p, 7p, 8p, 9p or 10p.	<ul> <li>Do children understand that different combinations of coins can make the same total?</li> <li>Can children find different combinations of coins to make a given total?</li> <li>Can children explain their reasoning?</li> </ul>	<ul> <li>Slides</li> <li>Which Coins? Cards (Teaching Input)</li> <li>Ways to Pay Jigsaw Cards</li> <li>Ways to Pay Cards Set</li> <li>Coin Cards (or plastic/real coins)</li> <li>Money Bags Challenge Card A/B/C/D/E (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To buy items using a budget	In this lesson, children will find out what a budget is. They will learn that they can spend less than their budget, but they cannot spend more than it. They will use the 'MathDonalds' menu to discuss what can be bought with different budgets. In their independent activities, children will use their mental addition skills of multiples of five and ten to buy lunch items, without exceeding the given budget. In the FSD? activity, children will explore all of the different ice creams they could make with a given budget.	<ul> <li>Do children understand what a budget is?</li> <li>Can children reason which items to buy using a given budget?</li> <li>Can children use their mental addition skills to add together the prices of different items?</li> </ul>	<ul> <li>Slides</li> <li>Budget Cards (Teaching Input)</li> <li>Make a Meal Sheet A/B</li> <li>Worksheet 3A/3B/3C</li> <li>Ice Cream Challenge Cards (FSD? activity only)</li> <li>Ice Cream Price List (FSD? activity only)</li> <li>Ice Cream Cut-outs (FSD? activity only)</li> <li>Ice Cream Design Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To solve problems involving money, including giving change	Children will learn what change is in the context of a purchase. They will use the counting on method and a number line to find the change for a range of different purchases. In their independent activities, children will indicate how much change is needed for different purchases by circling the correct coins. In the FSD? activity, children will work in small groups to match trios of cards showing a purchase, the coins paid with, and the change given.	<ul> <li>Do children understand the concept of change?</li> <li>Can children explain how to solve a problem involving money?</li> <li>Can children use their addition and subtraction skills to find totals and work out the change needed?</li> </ul>	<ul> <li>Slides</li> <li>What I Bought on Holiday Sheet</li> <li>Blank Number Lines</li> <li>Worksheet 4A/4B/4C</li> <li>Puzzle Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To solve missing number problems involving money	In this final lesson, children will use their knowledge of addition and subtraction, as well as their reasoning skills, to find the value of a missing coin or coins in a number sentence or word problem. In their independent activities, children will identify the 'lost' coin or coins from a given total amount. In the alternative activity, children will generate their own missing coin problems for a partner to solve.	<ul> <li>Can children explain how to solve a problem?</li> <li>Can children solve one- and two-step problems involving money?</li> <li>Can children use their knowledge of addition and subtraction to solve missing number problems?</li> </ul>	<ul> <li>Slides</li> <li>Pocket Money 5A/5B/5C</li> <li>Blank Number Lines Sheet</li> <li>Challenge Cards A/B/C (FSD? activity only)</li> <li>Challenge Strips A/B/C (FSD? activity only)</li> <li>Coin Cards (FSD? activity only)</li> </ul>



#### Let's Make Charts: Maths : Year 2 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To investigate and draw pictograms with many-to- one symbols.	Children will be introduced to pictograms which have symbols representing multiple pieces of data. They will be challenged to interpret and draw their own pictograms using keys to guide how much their symbols are work.	<ul> <li>Can children interpret a many-to-one pictogram?</li> <li>Can children use tallied data to complete a pictogram?</li> <li>Can children use data displayed in a pictogram to complete a tally chart?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 1A/1B</li> <li>Picture Cards 1A</li> <li>Photo Sheet 1A</li> <li>Tally Chart Cards 1A (FSD? activity only)</li> <li>Pictogram Cards 1A (FSD? activity only)</li> </ul>
Lesson 2	To investigate and draw pictograms with many-to- one symbols.	Children will investigate many-to-one pictograms further by interpreting and drawing charts where half symbols are needed to show the data correctly. They have the opportunity to collect their own data and present it in a 2:1 pictogram.	<ul> <li>Can children read and interpret pictograms with half symbols?</li> <li>Can children complete pictograms with half symbols?</li> <li>Are children able to choose an appropriate many-to-one scale for a set of data?</li> </ul>	<ul> <li>Slides</li> <li>Counters (optional)</li> <li>Worksheet 2A/2B</li> <li>Picture Cards 2A</li> <li>Photo Sheet 2A</li> <li>Picture books (FSD? activity only)</li> <li>Worksheet 2C (FSD? activity only)</li> <li>Chart Sheet 2A (FSD? activity only)</li> </ul>
Lesson 3	To use reasoning to prove our answers.	Children are challenged to use their learning about many-to-one pictograms to spot mistakes and answer questions about various pictograms. They must decide who they agree with when characters make statements about a chart and provide explanations for their answers.	<ul> <li>Can children spot mistakes made in a pictogram or table?</li> <li>Are children able to decide if a statement is correct or not?</li> <li>Can children use effective reasoning to prove if an answer is correct or not?</li> </ul>	<ul> <li>Slides</li> <li>Challenge Cards 3A/3B/3C</li> <li>Pictogram Card 3A</li> <li>Photo Sheet 3A</li> <li>Worksheet 3A (FSD? activity only)</li> <li>Special marking pens (optional) (FSD? activity only)</li> </ul>
Lesson 4	To interpret and draw block diagrams with ratios of one, two, five and ten.	Children are re-introduced to block diagrams and are challenged to interpret them when the blocks represent multiple pieces of data. They have the opportunity to compare them to pictograms and think about the use of half squares in order to show data accurately. Children will tackle challenging interpretation questions where they must take note of the keys for each diagram.	<ul> <li>Can children interpret a block diagram where the blocks represent two, five or ten?</li> <li>Can children draw a block diagram where the blocks represent two, five or ten?</li> <li>Are children able to read data from a block diagram to input into a simple table?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 4A/4B/4C</li> <li>Photo Sheet 4A</li> <li>Block Diagram Sheet 4A (FSD? activity only)</li> <li>Statement Cards 4A (FSD? activity only)</li> </ul>
Lesson 5	To collect and present data.	Children are challenged to collect their own data using a tally chart after discussing the most effective way to lay out their categories in a tally chart to make it clear and easy to read. They will collect their data and then use this to draw a pictogram and a block diagram from the data.	<ul> <li>Can children use tallies to effectively collect their data?</li> <li>Are children able to use data to produce a clear pictogram or block diagram?</li> <li>Can children present what they have found through their survey and investigation?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 5A/5B/5C</li> <li>Photo Sheet 5A</li> <li>Tally Chart 5A (FSD? activity only)</li> <li>Chart Sheet 5A (FSD? activity only)</li> <li>PE equipment (FSD? activity only)</li> </ul>

#### Let's Solve Place Value Problems: Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To count in steps of 2, 3, 5 and 10.	Children will learn about Venn diagrams and missing number grids. They will explore sorting numbers into them as well as explaining the rules. Additionally the children can be challenged to add their own numbers to the Venn diagrams.	<ul> <li>Can children count in steps of 2, 3, 5 and 10?</li> <li>Can children apply their knowledge of number sequences to solve problems?</li> <li>Can children think of their own rules for number sequence problems?</li> </ul>	<ul> <li>Slides</li> <li>Missing Number Grids A/B/C</li> <li>Venn Diagrams A/B/C (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To recognise and use the place value of digits to solve problems.	Children to read or listen to clues and solve them to reveal the number being described. They will be challenged to write their own clues for partners to solve.	<ul> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> <li>Can children apply their knowledge of number representations to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Question Cards A/B/C</li> <li>Jigsaw Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To use the place value of digits to solve problems.	Children to learn how to represent numbers using coins and beads. They will solve problems of making as many one-digit and two-digit numbers as they can using a certain amount of given beads.	<ul> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> <li>Can children apply their knowledge of number representations to solve problems?</li> </ul>	<ul> <li>Slides</li> <li>Worksheet 3A/3B/3C</li> <li>Number Cards (FSD? activity only)</li> <li>Coin Cards (FSD? activity only)</li> <li>Photo Sheet</li> <li>Counters, mini whiteboards</li> </ul>
Lesson 4	To use place value to order two-digit numbers.	Children will be challenged to use their knowledge of place value to order a variety of numbers portrayed in different ways, such as by date, by age, by temperature or by money.	<ul> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> <li>Can children apply their knowledge of the value of each digit in a two-digit number when ordering numbers?</li> </ul>	<ul> <li>Slides</li> <li>Age Cards A/B/C</li> <li>Worksheet 4A/4B/4C</li> <li>Temperature Cards A/B (FSD? activity only)</li> <li>Number Cards Set A/B (Plenary only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To use place value and number facts to solve problems.	Children to use the one hundred square to work out what the number is by reading the clues provided. They will be challenged to find this number in a variety of different representations.	<ul> <li>Can children identify the value of each digit in a two-digit number?</li> <li>Can children apply their knowledge of number facts to solve problems?</li> <li>Can children apply their knowledge of the value of each digit in a two-digit number when ordering numbers?</li> </ul>	<ul> <li>Slides</li> <li>Market Stall Cards A/B/C</li> <li>Fifty Grids (FSD? activity only)</li> <li>Hundred Squares (FSD? activity only)</li> <li>Clue Cards A/B/C (FSD? activity only)</li> <li>End of Unit Quiz</li> <li>Photo Sheet</li> </ul>



#### What time is it?: Maths : Year 2 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To revise reading, saying and drawing o'clock, half past, quarter to and quarter past times.	The children will be reintroduced to telling the time to the nearest 15 minutes as they recognise o'clock, half past, quarter past and quarter to times. They will have the opportunity to use reasoning to tell the time, despite having clocks with missing hands.	<ul> <li>Can children identify how many minutes are in an hour, half an hour and quarter of an hour?</li> <li>Are children able to correctly identify the minute and hour hands on a clock?</li> <li>Can children correctly identify times for o'clock, half past, quarter past and quarter to?</li> </ul>	<ul> <li>Slides</li> <li>Loop Cards 1A</li> <li>Worksheet 1A/1B</li> <li>Photo Sheet 1A</li> <li>Challenge Cards 1A (FSD? activity only)</li> <li>Time Cards 1A (FSD? activity only)</li> <li>Individual clocks/Clock Face 1A</li> </ul>
Lesson 2	To tell the time to the nearest five minutes on an analogue clock (minutes past).	Children will discover how to tell the time to the nearest five minutes using just the right half of the clock face. They will discuss how five-minute intervals are marked on a clock face and use this to help them count round the clock face to tell the time. They will also have the opportunity to develop and use their reasoning skills whilst sorting times according to different headings.	<ul> <li>Can children identify intervals of five minutes on a clock face?</li> <li>Are children able to read times between 'o'clock' and 'half past' to the nearest five minutes?</li> <li>Are children able to draw times between 'o'clock' and 'half past' to the nearest five minutes?</li> </ul>	<ul> <li>Slides</li> <li>Clock Face Cards 2A</li> <li>Time Cards 2A</li> <li>Blank Clock Face 2A</li> <li>Photo Sheet 2A</li> <li>Hoops (FSD? activity only)</li> <li>Heading Cards 2A (FSD? activity only)</li> <li>Worksheet 2A/2B (FSD? activity only)</li> </ul>
Lesson 3	To tell the time to the nearest five minutes on an analogue clock.	This lesson begins by recapping telling the time to the nearest five minutes up to half past. The children will then be introduced to telling the time using minutes to. They discuss the use of the next hour when the minute hand is on the left of the clock face. They then use all they have learnt to solve puzzles and loop cards.	<ul> <li>Can children identify the 'minutes to' side of the clock?</li> <li>Are children able to correctly identify times which show minutes to the next hour?</li> <li>Can children accurately tell the time to the nearest five minutes?</li> </ul>	<ul> <li>Slide</li> <li>Tarsia Puzzle 3A (photocopied to A3)</li> <li>Loop Cards 3A</li> <li>Time Poster 3A</li> <li>Individual clocks</li> <li>Photo Sheet 3A</li> <li>Time Cards 3A (FSD? activity only)</li> </ul>
Lesson 4	To find five minutes/one hour earlier/later than a given time.	Children will use their knowledge of telling time to the nearest five minutes to describe what happens to the hands on a clock face as an hour goes by. They will be challenged to find times which are one hour earlier or later than a given time before moving on to find five minutes earlier or later.	<ul> <li>Can children describe what happens to a clock's hands as one hour passes by?</li> <li>Are children able to identify times one hour earlier/later than a given time?</li> <li>Are children able to identify times five minutes earlier/later than a given time?</li> </ul>	<ul> <li>Slides</li> <li>Folding Clock Sheet 4A</li> <li>Blank Clock Face 4A</li> <li>Photo Sheet 4A</li> <li>Mechanical class clock (optional)</li> <li>Bingo Cards 4A</li> <li>Game Cards 4A/4B/4C</li> <li>Time Hunt Cards 4A (FSD? activity only)</li> <li>Answer Cards 4A (FSD? activity only)</li> </ul>
Lesson 5	To plan a school day to the nearest five minutes.	Children are encouraged to use what they have learnt about telling the time to the nearest five minutes to plan a timetable for a school day. They will have the opportunity to plan another child's school day or personalise their timetable to their own school day.	<ul> <li>Can children draw the times on the clocks according to a worded time?</li> <li>Are children able to identify key events in a school day?</li> <li>Can children order events according to given times?</li> </ul>	<ul> <li>Slides</li> <li>Individual clocks</li> <li>Blank Clock Faces 5A</li> <li>Worksheet 5A</li> <li>Challenge Card 5A/5B/5C</li> <li>Photo Sheet 5A</li> <li>Time Poster 5A</li> <li>Clock Cards 5A (FSD? activity only)</li> <li>Timetable Cards 5A (FSD? activity only)</li> <li>Information Sheet 5A (FSD? activity only)</li> </ul>

#### What's the Answer? : Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To solve problems involving addition and subtraction	In this first lesson, children will begin by looking at the range of vocabulary used in addition and subtraction word problems. They will then discuss different problems, identifying the operation needed, and choosing a method to solve each one with. Children will continue to apply this skill in their independent activities. In the FSD? activity, children will be challenged to create their own word problems for others to solve, based on given information.	<ul> <li>Can children identify which operation is needed to solve a problem?</li> <li>Can children write an appropriate number sentence to solve a problem?</li> <li>Can children explain and express their answers in relation to the context given?</li> </ul>	<ul> <li>Slides</li> <li>Animal Checks List A/B/C</li> <li>Worksheet 1A/1B/1C</li> <li>Comparing Creepy Crawlies Sheet (FSD? activity only)</li> <li>Creepy Crawly Calculation Cards (FSD? activity only)</li> <li>Addition and Subtraction Vocabulary Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To solve problems involving multiplication and division	Children will use and apply their knowledge of multiplication and division in order to solve a variety of word problems with a zoo- theme, using methods of their choice. Children will continue to apply these skills in their independent activities. In the alternative activity, children will be challenged to make up their own multiplication and division word problems based on given images.	<ul> <li>Can children identify which operation is needed to solve a problem?</li> <li>Can children write an appropriate number sentence to solve a problem?</li> <li>Can children explain and express their answers in relation to the context given?</li> </ul>	<ul> <li>Slides</li> <li>Feeding Time! Sheet 2A/2B/2C</li> <li>Whiteboards (optional)</li> <li>What's the Question? Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To solve one- and two-step word problems involving money	Children will use their knowledge and understanding of all four operations to discuss and solve one- and then two-step word problems involving money. In their individual activities, children will calculate the cost of different customer's purchases. In the FSD? activity, children will work in pairs to solve word problems step - by - step, checking each other's answers.	<ul> <li>Can children identify the correct operation/s needed to solve a word problem?</li> <li>Can children use their knowledge of the four operations to solve word problems?</li> <li>Can children check their answers?</li> </ul>	<ul> <li>Slides</li> <li>Zoo Gift Shop Sheet</li> <li>Worksheet 3A/3B/3C</li> <li>'A Problem Shared is a Problem Solved' Cards Set A/B (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To solve word problems involving time	In this lesson, children will apply their knowledge of reading time to the nearest five minutes to solve a range of word problems. They will learn how to find the duration, start or finish time of an event using given information by counting on or back in lots of five around a clock face. Children will apply this skill in their independent activities by calculating the times of animal shows. In the FSD? activity, children will be challenged to complete the missing times on a zookeeper's task list.	<ul> <li>Can children use their knowledge of reading analogue clocks and the five times table to solve related word problems?</li> <li>Can children calculate the duration of an activity given the start and finish time?</li> <li>Can children calculate the start/finish time when given the duration and finish/start time?</li> </ul>	<ul> <li>Slides</li> <li>Mini-clock faces (optional)</li> <li>Showtime! worksheet 4A/4B/4C</li> <li>Zookeeper Task Sheet (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To solve problems and puzzles	In this final lesson, children will use their knowledge of all four operations. As a class, they will discuss their approaches and methods when asked to identify which two numbers from a given set have been added/subtracted/divided/multiplied to produce a given answer. In their independent activities, children will work out what numbers different animals represent in a series of linked number sentences.	<ul> <li>Can children confidently use their knowledge of the four operations to solve number sentences?</li> <li>Can children choose and use appropriate written or mental methods to solve number sentences?</li> <li>Are children beginning to clearly explain their reasoning?</li> </ul>	<ul> <li>Slides</li> <li>Animal Values worksheet5A/5B/5C</li> <li>Animal Cards</li> <li>Alphabet Strips (FSD? activity only)</li> <li>Challenge Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

## Let's Sort Shapes and Objects : Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To identify and describe 2-D shapes	In this first lesson, children will recap on the names and properties of some common 2-D shapes. They will understand and use terms such as: sides, corners, regular, irregular, polygon and quadrilateral to help describe and distinguish between different shapes. In their independent activities, children will use their knowledge of 2-D shapes to play a game in pairs. The FSD? activity challenges children to match up descriptions to the correct shapes.	<ul> <li>Can children name a range of 2-D shapes?</li> <li>Can children identify different 2-D shapes according to descriptions of their properties?</li> <li>Can children use the correct vocabulary to describe the properties of different 2-D shapes?</li> </ul>	<ul> <li>Slides</li> <li>Spin-a-Shape Game Board A/B/C</li> <li>Spinner A/B/C</li> <li>Coloured pencils</li> <li>What Shape Am I? Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To identify and describe 3-D shapes	Children will recap on the vocabulary used to describe the properties of 3-D shapes and to differentiate between them. In their independent activities, children will play games where they need to use this vocabulary to describe the properties of 3-D shapes to others, who then try to identify the shape from the description given.	<ul> <li>Can children name a range of 3-D shapes?</li> <li>Can children identify different 3-D shapes according to descriptions of their properties?</li> <li>Can children use the correct vocabulary to describe the properties of different 3-D shapes?</li> </ul>	<ul> <li>Slides</li> <li>3-D Shape Grid A/B</li> <li>Description Card</li> <li>Vocabulary Card</li> <li>Set of 3-D Shapes (optional)</li> <li>Guess the Shape Game Cards (FSD? activity only)</li> <li>Question List (FSD? activity only)</li> <li>Strips of card, sticky back velcro or tape</li> <li>Photo Sheet</li> </ul>
Lesson 3	To use reasoning to sort 2-D and 3-D shapes	In this lesson, children will apply their knowledge and understanding of the properties of both 2-D and 3-D shapes in order to identify and sort them. They will learn how to use and create a simple identification key for a set of shapes. They will apply this in their independent activities, where they are given a set of shapes to create an identification key for. In the alternative activity, children will sort shapes into grids according to given labels.	<ul> <li>Do children choose and use the correct vocabulary when talking about 2-D and 3-D shapes?</li> <li>Can children use a key to identify different shapes?</li> <li>Can children use reasoning to explain their answers to various questions about 2-D and 3-D shapes?</li> </ul>	<ul> <li>Slides</li> <li>Shape Identification Key (Teaching Input)</li> <li>Shape Cards Set A/B/C</li> <li>Question Cards</li> <li>A3 sheets of paper (optional)</li> <li>2-D &amp; 3-D Shape Sorting Grids (FSD? activity only)</li> </ul>
Lesson 4	To use reasoning skills to compare and discuss 2-D and 3-D shapes	Children will first apply their knowledge and understanding of 2-D and 3-D shapes to compare the similarities and differences between the properties of different shapes. They will then explore and discuss statements about different shapes. In their independent activities, children will sort or write their own statements about different shapes. In the FSD? activity, children decide in groups whether a statement is always, sometimes or never true for the chance to win points.	<ul> <li>Can children identify the similarities and differences between two shapes?</li> <li>Can children identify whether a statement about a shape is true or false (or sometimes true)?</li> <li>Can children explain their reasoning clearly?</li> </ul>	<ul> <li>Slides</li> <li>True or False? Cards</li> <li>2-D and 3-D Shape Sheets</li> <li>Shape Cards</li> <li>Shape Statements Sheet (FSD? activity only)</li> <li>Decision Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To explore 3-D shapes in real-life objects	In this final lesson, children will apply their knowledge to identifying 3-D shapes in real-life objects. They will be encouraged to give reasons for their answers and use the correct shape vocabulary. In their independent activities, children will discuss, sort and label real-life objects according to what 3-D shapes they are similar to. In the alternative activity, children will be challenged to list as many real-life objects as they can which are similar to given 3-D shapes.	<ul> <li>Can children recognise 3-D shapes in real-life objects?</li> <li>Can children use the correct shape vocabulary to describe what they see?</li> <li>Can children give their own examples of 3-D shapes in real-life objects?</li> </ul>	<ul> <li>Slides</li> <li>Object Cards Set A/B</li> <li>Sorting Sheet</li> <li>Label Cards</li> <li>3-D Shaped Objects Sheets (FSD? activity only)</li> <li>Photo Sheet</li> </ul>

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

#### What is Your Position? : Maths : Year 2 : Summer Term



	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know and use the language of position	In this first lesson, children will familiarise themselves with positional language. They will use it to describe and identify the positions of shapes on a grid. Children will use their knowledge and understanding of this vocabulary in their independent activities, to orally explain and follow instructions for organising people into different seating positions. In the FSD? activity, children will be challenged to follow written instructions to accurately place shapes in a grid.	<ul> <li>Do children understand the positional vocabulary used to describe the location of objects or people?</li> <li>Can children choose and use the appropriate positional vocabulary to describe the location of object or people?</li> <li>Can children follow instructions which use positional vocabulary?</li> </ul>	<ul> <li>Slides</li> <li>Who Sits Where? Card Set A/B/C</li> <li>Grid A/B/C</li> <li>Instructions Card</li> <li>Positional Language Word Card</li> <li>Grid and Shape Cards (FSD? activity only)</li> <li>Challenge Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 2	To know and use the language of movement and direction	To begin, children will share tips for remembering how to distinguish between left and right. They will then practise following directional instructions to move around a grid. In their independent activities, children will find the answers to riddles by moving around a grid of letters. In the FSD? activity, children will follow a route around a game grid to collect stars of different values.	<ul> <li>Do children know and understand the words associated with direction and movement?</li> <li>Can children follow the vocabulary of direction to move around a grid?</li> <li>Can children use vocabulary to give directions for movement around a grid?</li> </ul>	<ul> <li>Slides</li> <li>Letter Grids (Teaching Input)</li> <li>Spell It Out! Worksheet 2A/2B/2C</li> <li>Star Player Game (FSD? activity only)</li> <li>Star Player Moves Cards (FSD? activity only)</li> <li>Star Player Challenge Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 3	To describe movement as part of a turn	In this lesson, children will combine their knowledge and understanding of direction and movement with their knowledge and understanding of turns. They will learn that a person's body has to be facing the way they need to travel before they can walk forward, and use this knowledge to direct a character around a grid to collect stars. Children will continue to apply this understanding in their independent activities, following and planning routes for a robot, or, in the alternative activity, playing the physical game of 'The Spider and the Fly'.	<ul> <li>Do children understand the terms 'clockwise' and 'anti-clockwise'?</li> <li>Can children turn themselves and objects a whole turn, half turn, quarter turn and three-quarter turn?</li> <li>Can children describe movement using the language of turns?</li> </ul>	<ul> <li>Slides</li> <li>Robot Routes 3A/3B/3C</li> <li>Robot Pop-Up Card</li> <li>Factory Floor A/B</li> <li>Masking tape or chalk (FSD? activity only)</li> <li>Spider and Fly Labels (FSD? activity only)</li> <li>Teacher Instructions Sheet (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 4	To know how to identify patterns and continue sequences	Children will recap on their understanding of what sequences and patterns are, before using this knowledge to identify and use repeating patterns to predict the next object in a sequence. They will be further challenged to identify the <i>n</i> th object in a sequence. In their independent activities, children will become pattern detectives and apply their knowledge, understanding and reasoning skills.	<ul> <li>Can children identify a repeating pattern in a sequence?</li> <li>Can children identify what further objects within a sequence should be?</li> <li>Can children explain their choices and reasoning?</li> </ul>	<ul> <li>Slides</li> <li>Pattern Detective Sheet 4A/4B/4C</li> <li>Which Sequence is This? Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>
Lesson 5	To discuss and complete patterns and sequences	In this final lesson, children will apply their knowledge and understanding by identifying and discussing patterns on different sequences of dominoes. In their independent activities, children will draw the dots of the missing dominoes in different sequences. In the FSD? activity, children will create their own sequence of dominoes.	<ul> <li>Can children describe and explain patterns and sequences?</li> <li>Can children continue and complete patterns in a sequence?</li> <li>Can children explain their reasoning clearly?</li> </ul>	<ul> <li>Slides</li> <li>Domino Dilemmas 5A/5B/5C</li> <li>Domino &amp; Cover Cards (FSD? activity only)</li> <li>Photo Sheet</li> </ul>