Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
Year 1 Autumn Block 1- Place Value		Sort Objects	1	To sort objects by attributes such as colour, shape, or size.	Pupils sort objects into groups according to simple criteria such as size, colour, or shape.	Pupils explain different ways of sorting the same set of objects and justify their choices.
		Count Objects	2	To count a group of objects accurately up to 10 and beyond.	Pupils count objects accurately using one-to-one correspondence.	Pupils count objects in different arrangements and explain how they know their count is accurate.
		Count Objects from A Larger Group	3	To count a specific number of objects from a larger group.	Pupils count a given number of objects from a larger group.	Pupils choose efficient strategies for counting from a larger group and explain how they ensured accuracy.
		Represent Objects	4	To represent numbers using objects, pictures, and numerals.	Pupils represent quantities using marks, pictures, or numbers.	Pupils represent the same quantity in different ways and explain the equivalence between them.
		Recognise Numbers as Words	5	To read and match number words to numerals.	Pupils recognise and read number words (e.g. one, two, three) up to 10.	Pupils read and write number words to 20 and use them in context.
		Count on from any Number	6	To count on from any given number up to 20.	Pupils count on from any given number within 20.	Pupils use counting on flexibly to solve addition problems and explain their reasoning.
		1 more	7	To find 1 more than a given number up to 20.	Pupils find one more than a given number within 20.	Pupils predict one more without counting and explain the pattern in consecutive numbers.
		Count Backwards within 10	8	To count backwards from any number within 10.	Pupils count backwards in ones from numbers within 10.	Pupils count backwards confidently from any number within 20 and use it to solve subtraction problems.
		1 less	9	To find 1 less than a given number up to 20.	Pupils find one less than a given number within 20.	Pupils explain patterns when finding one less and use this knowledge to solve problems quickly.
		Compare Groups by Matching	10	To compare two groups by matching objects 1 to 1.	Pupils compare two groups of objects by matching items one-to-one.	Pupils explain why one group is larger or smaller and use alternative strategies for comparison.
		Fewer More Same	11	To use the language of "more", "fewer", and "same" to compare sets.	Pupils describe groups as having fewer, more, or the same number of objects.	Pupils compare and order groups of objects, justifying their comparisons using mathematical language.
		Less than Greater than Equal to	12	To use <, > and = to compare numbers.	Pupils use the language of ‘less than’, ‘greater than’ and ‘equal to’ when comparing numbers.	Pupils apply symbols (<, >, =) accurately and explain their use in comparing numbers.
		Compare Numbers	13	To compare numbers using language such as greater, less and equal.	Pupils compare numbers within 20 and describe which is greater or smaller.	Pupils justify comparisons and explain how they know using number facts and reasoning.
		Order Objects and Numbers	14	To order numbers and groups of objects from smallest to largest.	Pupils order objects and numbers from smallest to largest and vice versa.	Pupils explain patterns in ordered sequences and solve problems that involve ordering.
		The Number Line	15	To count forwards and backwards using a number line.	Pupils use a number line to represent numbers in order and count forwards and backwards.	Pupils use number lines flexibly to solve addition and subtraction problems, explaining their strategies.
		ASSESSMENT				
Year 1 Autumn Block 2 - Addition & Subtraction		Introduce Parts and Wholes	1	To understand that a whole can be split into parts.	To understand that a whole can be made up of parts and represent this relationship using objects, diagrams, and number sentences.	To explore and explain different ways to partition a number into parts, using reasoning to describe patterns and relationships.
		Part- whole model	2	To represent and understand numbers using the part-whole model.	Pupils use the part–whole model to represent numbers and partition them into two parts.	Pupils represent numbers in different ways using the part–whole model and explain the relationship between parts and the whole.

Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
		Write Number Sentences	3	To write addition and subtraction number sentences from models or visuals.	Pupils write simple addition and subtraction number sentences using symbols (+, −, =).	Pupils record and explain a range of number sentences for the same problem and test whether statements are true or false.
		Fact families - Addition Facts	4	To recognise related addition facts and use them to solve problems.	Pupils recognise and record addition fact families for given numbers.	Pupils explain and apply the inverse relationship between addition and subtraction within fact families.
		Number Bonds within 10	5	To recall and use number bonds to 10 fluently.	Pupils recall and use number bonds for numbers within 10 fluently.	Pupils apply number bonds flexibly to missing number problems and reason about patterns.
		Systematic Number Bonds within 10	6	To find number bonds to 10 in a systematic way.	Pupils generate number bonds within 10 systematically and in order.	Pupils justify that all possibilities have been found and identify general patterns in number bonds.
		Number Bonds to 10	7	To recall and apply number bonds to 10 confidently.	Pupils recall and apply number bonds to 10 accurately and with increasing fluency.	Pupils use number bonds to 10 flexibly to solve larger calculations (e.g. bridging to 20).
		Addition - add together	8	To add two or more groups of objects by counting all.	Pupils add two groups of objects and record the total using numbers.	Pupils solve addition problems using different representations and explain why the totals are equivalent.
		Addition - add more	9	To solve addition problems by counting on.	Pupils find a new total when more objects are added to a group.	Pupils predict and explain the new total before adding.
		Addition Problems	10	To solve simple one-step addition problems using objects and pictures.	Pupils solve simple addition problems using concrete objects, drawings, and number sentences.	Pupils represent the same problem in more than one way and explain their reasoning.
		Find A Part	11	To identify a missing part using a whole and known part.	Pupils find a missing part when given the whole and one part.	Pupils explain different strategies for finding the missing part and link this to subtraction.
		Subtraction - Find a Part	12	To find a missing part by subtracting a known part from the whole.	Pupils subtract one part from the whole to find the other part.	Pupils explain and apply the connection between subtraction and addition when solving missing part problems.
		Fact Families - the Eight Facts	13	To explore addition and subtraction fact families.	Pupils recall and write all eight addition and subtraction facts for given numbers.	Pupils explain how the eight facts are related and apply them to solve new problems.
		Subtraction - Take Away - Cross out	14	To subtract by crossing out objects or pictures.	Pupils solve subtraction problems by crossing out objects to show what is left.	Pupils choose and explain the most efficient subtraction strategy depending on the context.
		Subtraction - Subtraction - Take Away (How Many Left?)	15	To solve subtraction problems by counting what is left.	Pupils solve subtraction problems by counting how many are left.	Pupils compare different subtraction strategies and explain why they give the same result.
		Subtraction on A Number Line	16	To use a number line to count back for subtraction.	Pupils use a number line to count back and solve subtraction calculations.	Pupils flexibly decide whether to count on or count back and justify their choice.
		Add or Subtract 1 or 2	17	To add or subtract 1 or 2 using mental strategies or number lines.	Pupils add or subtract 1 or 2 from a given number with fluency.	Pupils use knowledge of number patterns to add or subtract 1 or 2 efficiently and explain links to the number system.
		ASSESSMENT				
Year 1 Autumn Block 3 - Multiplication and		L1 – Count in 2s		To count in 2s using number patterns and objects.	Pupils count forwards and backwards in 2s from 0 to 20.	Pupils recognise and explain patterns when counting in 2s and use this skill to solve problems.

Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
Division		L2 – Count in 10s		To count in 10s confidently using objects or a number line.	Pupils count in multiples of 10 to 100.	Pupils identify and explain number patterns when counting in 10s and apply them in different contexts.
		L3 – Count in 5s		To count in 5s and recognise the pattern.	Pupils count in multiples of 5 to 50.	Pupils recognise and explain patterns in the 5s sequence and use them to solve real-life problems.
		L4 – Recognise Equal Groups		To identify and describe equal groups.	Pupils identify and describe equal groups of objects.	Pupils explain why groups are equal or unequal and use this understanding to make generalisations.
		L5 – Add Equal Groups		To add equal groups using repeated addition.	Pupils add equal groups using repeated addition.	Pupils represent repeated addition in different ways and explain the relationship with multiplication.
		L6 – Make Arrays		To make and use arrays to represent multiplication.	Pupils arrange objects into rows and columns to form arrays.	Pupils create and describe arrays using multiplication and addition, explaining their structure.
		L7 – Make Doubles		To double numbers using objects, images, or number facts.	Pupils recall and use doubles of numbers up to 10.	Pupils use known doubles to solve problems and reason about number relationships.
		L8 – Making Equal Groups Grouping		To group items equally to solve division problems.	Pupils group objects into equal sets and count how many groups there are.	Pupils explore different ways of grouping and explain how grouping helps in division and multiplication.
		L9 – Making Equal Groups Sharing		To share objects equally into groups.	Pupils share objects equally into groups and count how many in each group.	Pupils solve sharing problems and explain when sharing or grouping is the most efficient strategy.
Year 1 Autumn Block 3 - Multiplication and Division		L1 – Unitising		To understand that different coins can have the same total value.	Pupils understand that a group of the same items (e.g. 5p coins) can be treated as a unit when counting money.	Pupils explain how unitising simplifies counting and apply it across different coin denominations.
		L2 – Recognise Coins		To recognise and name UK coins up to £2.	Pupils identify and name coins up to £2 and understand their relative values.	Pupils explain how coins can be grouped or exchanged and use them in practical problem-solving.
		L3 – Recognise Notes		To recognise and name UK notes up to £20.	Pupils recognise and name commonly used notes (£5, £10, £20).	Pupils compare notes and coins by value and explain real-life uses of different denominations.
		L4 – Count In Coins		To count totals using combinations of coins.	Pupils count sets of the same coin (e.g. count in 2p, 5p, 10p) to find a total.	Pupils combine different coins efficiently to make totals and explain different ways of reaching the same amount.
		Assessment				
Year 1 Spring Block 1 - PLace Value Within 20		L1 - Count Within 20	1	Pupils will count forwards and backwards within 20 with accuracy.	Can reliably count to 20, beginning with 0 or 1, or from any given number.	Can count fluently forwards and backwards across 10 and explain patterns when counting.
		L2 - Understand 10	2	Pupils will recognise and represent the number 10 in different forms.	Can identify 10 as 'one ten' and show it with objects, pictures, or numerals.	Can partition 10 into pairs of numbers systematically and explain its importance in place value.
		L3 - Understand 11 12 and 13	3	Pupils will recognise 11, 12, and 13 as '10 and some more'.	Can represent 11–13 with concrete resources, pictorials, and digits.	Can explain the relationship between 10 and these numbers, and compare them confidently to others.
		L4 - Understand 14 15 and 16	4	Pupils will understand numbers 14–16 as 10 + 4/5/6.	Can count, read, and represent these numbers in multiple ways.	Can compose and decompose them (e.g., 14 = 10 + 4, 7 + 7, 8 + 6).
		L5 - Understand 17 18 and 19	5	Pupils will recognise numbers close to 20.	Can build and partition these numbers as 10 + 7/8/9.	Can describe their closeness to 20 and use number facts to solve problems (e.g., '18 is 2 less than 20').

Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
		L6 - Understand 20	6	Pupils will understand 20 as two tens.	Can recognise, count, and represent 20 in objects and digits.	Can explain 20 as 2 groups of 10 and use it as a benchmark in comparison.
		L7 - 1 More and 1 Less	7	Pupils will find one more and one less within 20.	Can say the number that is one more/less than any given number up to 20.	Can explain how '+1' and '–1' affect numbers and apply to problem solving.
		L8 - The Number Line to 20	8	Pupils will use a number line to locate and sequence numbers to 20.	Can place numbers accurately on a number line to 20.	Can reason about the position of missing numbers on a blank or partially completed number line.
		L9 - Use A Number Line to 20	9	Pupils will use the number line to support addition and subtraction.	Can add and subtract by counting jumps on the number line.	Can solve simple word problems using efficient jumps (e.g., bridging 10).
		L10 - Estimate On A Number Line to 20	10	Pupils will estimate positions of numbers on partially labelled lines.	Can make reasonable estimates of missing numbers.	Can justify their reasoning (e.g., '12 is halfway between 10 and 14').
		L11 - Compare Numbers to 20	11	Pupils will compare and order numbers within 20 using <, >, =.	Can compare two numbers and state which is bigger or smaller.	Can order several numbers and justify comparisons using place value language.
		L12 - Order Numbers to 20	12	Pupils will order sets of numbers up to 20.	Can place numbers in ascending and descending order to 20.	Can solve reasoning tasks such as finding missing numbers in sequences or explaining ordering rules.
		Assessment				
Year 1 Spring Block 2 - Addition and Subtraction within 20		L1 – Add by Counting On Within 20	1	To add by counting on from a given number within 20	Counts on to find totals within 20	Explains when and why counting on is efficient
		L2 – Add Ones Using Number Bonds	2	To add ones to a number using number bonds	Adds by using known number bonds within 20	Selects and applies bonds confidently to solve problems
		L3 – Find and Make Number Bonds to 20	3	To find and recall all number bonds to 20	Lists and uses number bonds to 20 fluently	Finds all combinations systematically and explains patterns
		L4 – Doubles	4	To recall and use doubles up to 10 + 10	Recalls simple doubles to 20	Uses doubles flexibly in addition reasoning
		L5 – Near Doubles	5	To use near doubles to solve addition	Adds near doubles by adjusting doubles	Explains adjustments used for near doubles
		L6 – Subtract Ones Using Number Bonds	6	To subtract ones using number bonds	Uses bonds to subtract within 20	Explains inverse relationships using number bonds
		L7 – Subtracting Counting Back	7	To subtract by counting back	Subtracts by counting back on a number line or mentally	Chooses the most efficient counting method and explains why
		L8 – Subtraction Finding the Difference	8	To find the difference between two numbers	Finds the difference using comparison or number lines	Explains ‘difference’ and chooses an efficient method
		L9 – Related Facts	9	To understand the relationship between addition and subtraction	Uses fact families to link operations	Explains how one operation can undo another
		L10 – Missing Number Problems	10	To solve missing number problems using known facts	Solves missing number problems within 20	Explains their process using inverse or number bonds
		Assessment				
Year 1 Spring Block 3 - Length and Height		L1 – Compare Lengths and Heights	1	To compare and describe lengths and heights using appropriate language (e.g., longer, shorter, taller)	Can compare and order objects by length or height using appropriate vocabulary	Justifies comparisons and explains how measurement decisions were made

Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
		L2 – Measure Lengths Using Objects	2	To measure and begin to record lengths using non-standard units (e.g., cubes)	Can measure objects using repeated non-standard units and record findings	Selects the most suitable non-standard unit and explains its use
		L3 – Measure Length in cm	3	To measure lengths using a ruler (standard units – cm)	Can measure accurately using a ruler and record measurements in centimetres	Checks measurement accuracy and explains errors or estimates
		Assessment				
Year 1 Spring Block 3 - Mass and Volume		L1 – Heavier and Lighter	1	To compare and describe the mass of objects using language such as heavier and lighter	Uses comparative language correctly to describe and compare mass	Pupil explains comparisons using real-world reasoning
		L2 – Measure Mass	2	To measure mass using non-standard units (e.g., cubes, blocks)	Measures mass using repeated non-standard units accurately	Selects appropriate units and explains how to ensure fairness in measuring
		L3 – Compare Mass	3	To compare the mass of two or more objects using non-standard and standard units	Compares and records mass using visual or measured methods	Describes patterns or trends in mass comparison
		L4 – Full and Empty	4	To explore and describe capacity using terms such as full, empty, nearly full	Understands and uses basic vocabulary to describe capacity	Applies capacity language to real-life problems
		L5 – Compare Volume	5	To compare the volume of different containers	Compares volume using informal observations (e.g., by pouring)	Justifies comparisons and predicts outcomes of volume changes
		L6 – Measure Capacity	6	To measure and record capacity using non-standard units (e.g., cups, spoons)	Measures and records capacity using consistent units	Explains the importance of using the same measuring unit
		L7 – Compare Capacity	7	To compare the capacity of containers and use comparative language accurately	Can use terms like more, less, most, least to describe capacity	Explains comparisons based on observation and measurement
		Assessment				
Year 1 Spring Block 4 - Shape		L1 – Recognise and Name 3D Shapes	1	To recognise and name common 3D shapes (e.g., cube, sphere, cone, cylinder)	Can identify and name common 3D shapes in the environment	Explains features of 3D shapes using correct vocabulary (faces, edges, vertices)
		L2 – Sort 3D Shapes	2	To sort 3D shapes based on their properties	Sorts 3D shapes by shape, size, or number of faces	Explains sorting choices using shape vocabulary
		L3 – Recognise and Name 2D Shapes	3	To recognise and name common 2D shapes (e.g., square, circle, triangle, rectangle)	Can identify and name common 2D shapes in different orientations	Describes features of 2D shapes using sides and vertices
		L4 – Sort 2D Shapes	4	To sort 2D shapes based on their properties	Sorts 2D shapes by number of sides or vertices	Can describe and justify multiple ways to group shapes
		L5 – Patterns with 2D and 3D Shapes	5	To recognise, create, and describe patterns using 2D and 3D shapes	Can continue and create repeating patterns using shapes	Describes and creates more complex patterns using multiple attributes
		Assessment				
Year 1 Summer Block 1 - Fractions		L1 – Recognise A Half of An Object or Shape	1	To recognise when an object or shape has been split into two equal parts	Can identify a half of simple shapes and objects	Explains why a part is or isn't a half using equal parts language

Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
		L2 – Find A Half of An Object of Shapes	2	To find and shade one half of shapes or objects	Finds one half of a shape accurately	Identifies multiple ways to halve irregular shapes
		L3 – Recognise A Half of Quantity	3	To recognise when a quantity is split into two equal groups	Can identify a half of a small quantity up to 20	Explains why a quantity has not been halved equally
		L4 – Find A Half of A Quantity	4	To find half of a given quantity by sharing	Uses sharing to find half of even numbers to 20	Finds half of larger numbers and justifies answers
		L5 – Recognise A Quarter of An Object or Shape	5	To recognise when an object or shape is split into four equal parts	Identifies a quarter in common shapes	Explains the concept of quarters using real-life examples
		L6 – Find A Quarter of an Object or Shape	6	To shade one quarter of a shape or object	Accurately finds one quarter of a simple shape	Finds and labels multiple quarters and explains reasoning
		L7 – Recognise a Quarter of A Quantity	7	To recognise when a quantity is split into four equal groups	Can identify a quarter of quantities up to 20	Identifies quarters of irregular quantities and explains reasoning
		L8 – Find A Quantity of A Quantity	8	To find one quarter of a given quantity by sharing	Uses sharing to find one quarter of even quantities	Applies reasoning to non-standard or word problems involving quarters
		Assessment				
Year 1 Summer Bloclk 2 - PLace Value Within 50		L1 – Count From 20 to 50	1	To count forward from 20 to 50	Counts accurately from 20 to 50	Explains patterns within the 20–50 number sequence
		L2 – 20 30 40 and 50	2	To recognise and say multiples of 10	Recognises and says multiples of 10	Identifies patterns and positions of 10s on number lines
		L3 – Count By Making Groups of Tens	3	To count in tens using grouped objects	Counts in tens confidently	Explains grouping strategies clearly
		L4 – Groups of tens and ones	4	To identify groups of tens and leftover ones	Identifies tens and ones correctly in numbers to 50	Describes numbers using base-10 understanding
		L5 – Partition into tens and ones	5	To partition two-digit numbers	Partitions numbers accurately into tens and ones	Explains different ways to partition numbers
		L6 – The number line to 50	6	To use number lines up to 50	Places numbers on a number line to 50	Estimates and explains placement on number lines
		L7 – Estimate on a number line to 50	7	To estimate numbers on a blank number line	Makes reasonable estimates to 50	Justifies placement using knowledge of 10s and 1s
		L8 – 1 more 1 less	8	To find one more and one less	Finds 1 more/less of numbers to 50	Explains change in digits when adding/subtracting 1
		Assessment				
Year 1 Summer Block 3 - Postion and Direction		L1 – Describe Turns	1	To describe whole, half and quarter turns	Describes basic turns accurately	Explains clockwise/anticlockwise movement
		L2 – Describe Position Left and Right	2	To use left and right to describe position	Uses 'left' and 'right' correctly	Gives and follows positional instructions confidently
		L3 – Describe Position Forwards and Backwards	3	To describe forwards and backwards movement	Uses positional language confidently	Explains how movement changes position
		L4 – Describe Position Above and Below	4	To use ‘above’ and ‘below’	Correctly uses vertical positional terms	Links position with visuals and diagrams
		L5 – Ordinal Numbers	5	To use ordinal numbers 1st to 10th	Uses ordinal numbers in context	Solves problems involving order and position
		Assessment				
Year 1 Summer Block 4 -		L1 – Count from 50 to 100	1	To count forwards from 50 to 100	Counts fluently from 50 to 100	Identifies tens and ones while counting

Unit		Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
PLace Value Within 100		L2 – Tens to 100	2	To count in multiples of ten to 100	Recognises and says multiples of ten	Explains 10s structure of 100
		L3 – Partition Into Tens and Ones	3	To partition numbers to 100	Identifies and partitions 2-digit numbers	Shows understanding using base-10 or pictorials
		L4 – The Number Line to 100	4	To place numbers on a number line to 100	Uses number line to 100 accurately	Estimates and justifies placement
		L5 – 1 More 1 Less	5	To find 1 more or less to 100	Finds and records 1 more/less of 2-digit numbers	Explains digit change across tens boundaries
		L6 – Compare Numbers With The Same Number of Tens	6	To compare 2-digit numbers with same tens	Compares accurately using ones digit	Justifies comparison clearly
		L7 – Compare Any Two Numbers	7	To compare any numbers to 100	Uses language: more, less, equal	Explains comparisons using place value
		Assessment				
Year 1 Summer Block 5 - Time		L1 – Before and After	1	To describe and order events	Uses before/after appropriately	Applies reasoning to sequence events
		L2 – Days of the Week	2	To name and order the days of the week	Names and sequences days	Applies day knowledge to real life
		L3 – Months of the Year	3	To name and order months	Recites months in order	Links months to seasons/events
		L4 – Hours, Minutes and Seconds	4	To understand and compare time units	Uses vocabulary: hour, minute, second	Describes duration with reasoning
		L5 – Tell The Time to The Hour	5	To read time to the hour	Reads o'clock times accurately	Explains time using hour hand
		L6 – Tell The Time to The Half Hour	6	To read time to the half hour	Reads half past times	Explains time using hour and minute hands
		Assessment				

Reasoning Prompt	Problem-Solving Prompt
Can you explain two different ways to sort these objects? Why did you choose those categories?	Can you find a new way to sort the same group of objects that no one else has used?
Why is it important to count each object only once? What could go wrong if you don’ t?	If you have a box of toys and only want to count the cars, how will you make sure you don’t count the wrong ones?
How can you be sure you counted only the red counters and not any others?	From a group of 20 counters, how can you quickly and accurately find and count 7 yellow ones?
Why might a tens frame help us show numbers clearly? What other tools could we use?	Can you show the number 6 in three different ways using different objects or pictures?
How do you know that the word 'seven' means the same as the number 7?	Can you match number words with digits in a number hunt around the room?
Why is counting on from 5 different from starting at 1? How does it help us?	If you’re on number 7, how can you find the next 3 numbers quickly without starting at 1?
Can you explain what happens when we find one more than a number?	You are on number 8. Can you jump to 9 on the number line? What happens if you do it again?
Why might counting backwards be useful in real life?	Start at 10. Count backwards to 4. Can you write or show the numbers you said?
What does it mean to have one less than a number? Can you explain with cubes?	You have 7 sweets. You eat 1. How many are left? Can you show it on your fingers?
How does matching help us see if groups are the same size?	Use string or lines to match apples and oranges. Which group has more?
What does it mean if you have fewer pencils than someone else? How do you know?	You have 6 blocks and your friend has 4. Who has more? Can you prove it?
How can you tell if one number is greater than another without counting both?	Use the <, >, or = symbols to compare 7 and 9. Can you create your own example?
What clues help you know which number is bigger?	Pick two numbers between 1 and 10. Can you say which is bigger and explain why?
What does it mean to put numbers in order? Why is it useful?	Can you line up number cards from 1 to 10? What happens if you get one wrong?
How does a number line help you see which numbers are bigger or smaller?	Place number cards on an empty number line. Can you explain where each one goes?
Can you explain what a 'whole' means when we talk about numbers?	If the whole is 6 and one part is 4, what could the other part be? Can you find more than one way?
Why do we use part-whole models in maths? How do they help us understand numbers?	You have 7 as the whole. Can you split it into two parts in three different ways?

Reasoning Prompt	Problem-Solving Prompt
How does a number sentence show what is happening in a picture or model?	Look at the cubes. Can you write a number sentence to match them? Can you write another one that's different but still correct?
What is the same and what is different about these two addition number sentences: 3 + 4 = 7 and 4 + 3 = 7?	You know 5 + 2 = 7. Can you find the other addition facts that use the same three numbers?
Why is it helpful to know number bonds off by heart?	If you know 6 + 3 = 9, what other number bonds can you find that make 9?
What does it mean to find number bonds ‘systematically’? Why is that useful?	Can you find all the number bonds to 8 without missing any? How do you know you have them all?
How can knowing number bonds to 10 help us with bigger numbers later?	You have 4. What do you need to make 10? Can you show it in a part-whole model and a number sentence?
What happens to the total when we add two groups together?	You have 5 blue cubes and 3 red cubes. How many cubes altogether? Can you show this in different ways?
How is ‘add more’ different from ‘add together’? Can you explain?	You have 6 apples. You get 2 more. How many now? Can you show the change using objects or drawings?
What clues in a word problem tell you it’s an addition question?	Tom has 4 cars. He buys 3 more. How many does he have now? Can you draw a picture and write a number sentence?
If we know the whole and one part, how can we find the missing part?	The whole is 9 and one part is 5. What’s the other part? Can you check in two different ways?
How is subtraction linked to the part-whole model?	The whole is 10. One part is 6. What is the other part? Can you write a subtraction sentence to match?
Why are there 8 facts in a full fact family using 3 numbers?	If 6, 2, and 8 are your numbers, can you write all 8 facts in the fact family?
How does crossing out help us understand subtraction?	Draw 9 apples. Cross out 4. How many are left? Can you write a matching subtraction sentence?
What’s the difference between taking away and finding how many are left?	You had 10 sweets and ate some. Now there are 6. How many did you eat? Can you draw and explain?
How does jumping back on a number line help with subtraction?	Start at 9 on the number line. Jump back 3. Where do you land? Can you show your thinking?
What patterns do you notice when we add or subtract 1 or 2?	You are on number 7. What happens if you add 1? Subtract 2? Can you explain the pattern?
Why do we skip some numbers when we count in 2s? What pattern do you notice?	Can you count 2s up to 20 using objects? What if you start at 4 instead of 2?

Reasoning Prompt	Problem-Solving Prompt
What do all the numbers we say when counting in 10s have in common?	Can you count in 10s to 100 using bundles of straws or sticks? How do you keep track?
How is counting in 5s similar to counting in 10s? How is it different?	Can you use your hands to help count in 5s? How many fingers in 4 groups of 5?
What makes a group ‘equal’? How can you tell if two groups are equal or not?	Look at these groups of counters. Which are equal? Can you make your own equal and unequal groups?
How is adding equal groups different from just adding random numbers?	You have 3 groups of 2 apples. How many apples altogether? Can you draw or model this?
Why are arrays useful for showing equal groups? What do rows and columns mean?	Can you make an array with 3 rows of 4? How many altogether? What if you turned it sideways?
What does it mean to ‘double’ a number? How is it different from just adding?	You have 5 sweets. You get double that amount. How many now? Can you show with pictures or cubes?
How does grouping help us count faster or more accurately?	You have 12 counters. Can you group them into 3s? How many groups do you get?
What’s the difference between grouping and sharing? Can you explain with examples?	You have 15 biscuits to share between 5 children. How many does each child get? Can you show your thinking?
Why might we count objects in groups rather than one by one? What’s the benefit?	You have 3 jars with 10 marbles each. How many marbles altogether? Can you explain your method?
How can you tell the difference between coins of the same size but different value?	You have a 1p, 2p, and 5p coin. Can you sort them and explain which is worth the most and least?
What clues help you tell one note from another?	Can you match each note to its value? What would happen if someone gave you the wrong note when shopping?
Why is counting in coins different from counting in ones?	You have four 10p coins. How much money do you have? Can you use other coins to make the same amount?
How do you know how to count within 20?	Can you solve a problem where you need to count within 20?
How do you know how to understand 10?	Can you solve a problem where you need to understand 10?
How do you know how to understand 11 12 and 13?	Can you solve a problem where you need to understand 11 12 and 13?
How do you know how to understand 14 15 and 16?	Can you solve a problem where you need to understand 14 15 and 16?
How do you know how to understand 17 18 and 19?	Can you solve a problem where you need to understand 17 18 and 19?

Reasoning Prompt	Problem-Solving Prompt
How do you know how to understand 20?	Can you solve a problem where you need to understand 20?
How do you know how to 1 more and 1 less?	Can you solve a problem where you need to 1 more and 1 less?
How do you know how to the number line to 20?	Can you solve a problem where you need to the number line to 20?
How do you know how to use a number line to 20?	Can you solve a problem where you need to use a number line to 20?
How do you know how to estimate on a number line to 20?	Can you solve a problem where you need to estimate on a number line to 20?
How do you know how to compare numbers to 20?	Can you solve a problem where you need to compare numbers to 20?
How do you know how to order numbers to 20?	Can you solve a problem where you need to order numbers to 20?
Why is it quicker to count on from the bigger number?	There are 7 apples. If you pick 5 more, how many do you have? Use counting on to solve.
How can knowing 6 + 4 help you solve 6 + 5?	Use number bonds to solve: 8 + ___ = 13
How many ways can you make 20? Can you explain how you know you've found them all?	You have 12. How many more to make 20? Can you find 3 different ways to show it?
Is 7 + 7 the same as 6 + 8? Why or why not?	Solve this: I have 6 pencils in one box and 6 in another. How many in total?
How does knowing 7 + 7 help you solve 7 + 8?	Ben says 6 + 7 = 13 because 6 + 6 = 12 and he added 1. Is he correct?
If 9 – 4 = 5, what else do you know?	You have 13 sweets and eat 4. Use number bonds to find out how many are left.
What's the difference between counting back and counting on?	There were 15 frogs. 6 jumped away. How many are left?
Is finding the difference the same as taking away? When?	Jack has 11 marbles, Ella has 7. Who has more and how many more?
If 8 + 2 = 10, what subtraction facts can you write?	Write all 4 number sentences using 7, 3, and 10.
If 6 + ? = 9, how can you find the missing number?	There are some apples in a basket. 5 are added and now there are 12. How many were there to begin with?
How do you know which is taller? Can you explain your thinking?	You have a pencil and a pen. Which is longer? What if you lie them both flat?

Reasoning Prompt	Problem-Solving Prompt
Why is it important to use the same object when measuring?	Use cubes to measure a book and a shoe. Which is longer? How do you know?
Why do you start measuring from the ‘0’ on the ruler?	Find 3 classroom items and measure them in cm. Can you order them from shortest to longest?
How do you know which object is heavier?	You have a feather and a book. Which is heavier? How do you know without weighing?
Why should we use the same type of cube to measure mass?	Which object is heavier: a toy car or a glue stick? Use cubes to measure and explain.
Can something look heavier but be lighter?	Order 3 objects from heaviest to lightest. Explain how you found out.
How can you tell if something is nearly empty?	Sort these containers into full, half full, and empty. How do you know?
Does a taller container always hold more?	You have 3 cups of different shapes. Which holds the most? How can you test it?
Why is it important to pour carefully and use the same container?	Measure how many cups of water fill each container. Which has the greatest capacity?
Which container holds the least? How do you know?	You have a jug and two cups. Which holds the most? Try and explain why.
How do you know this is a cube and not a cuboid?	Can you find objects in the classroom that match each 3D shape?
Why did you put these shapes in the same group?	Can you find two shapes that are different but have something in common?
Can a triangle have one curved side?	Find different objects shaped like a circle, square, and triangle around you.
How else could you group these shapes?	Group shapes by number of corners and explain your thinking.
What shape will come next in this pattern? Why?	Create a pattern using 2D and 3D shapes and explain how it repeats.
Why is this not a half?	Draw a shape and show one half. Can you do it in more than one way?

Reasoning Prompt	Problem-Solving Prompt
Can a shape have more than one half?	Shade half of a triangle. Can you show a different way?
Is 5 a half of 10? Why?	You have 12 counters. Show half in two different ways.
Why can't we halve 7 equally using whole numbers?	Share 16 counters equally. How many in each half?
What makes this a quarter and not just a part?	Can you fold paper to show a quarter? How do you know it's correct?
What do all quarters have in common?	Shade ¼ of the shape. Is there another way?
If 1 group is 3, how many is a whole?	Split 12 counters into 4 equal groups. What is one quarter?
Why must quarters be equal?	You have 16 sweets. What is one quarter? What is three quarters?
What do you notice about the tens in this count?	Can you start from 23 and count to 50?
Which number is missing: 20, 30, ___, 50?	Find all the numbers between 20 and 50 that end in 0.
Why is counting in tens helpful?	Can you group these 40 counters into tens?
What does the 4 represent in 43?	Can you show 36 with tens and ones?
How many ways can you partition 42?	If 42 = 40 + 2, can it be written any other way?
Where would 37 go on a number line between 30 and 40?	Draw a number line from 20 to 50. Add number 27.
How did you know 46 is closer to 50?	Estimate where 34 would go on this line.
What changes when we add one to 29?	Start at 37, subtract 1. What's your answer?
How many quarter turns make a whole turn?	Stand and do a half turn. Where are you facing now?
Which hand is your left?	Give instructions to move left then right.
If you move 2 steps forward from 5, where are you?	Draw arrows to show forwards and backwards.
What is above the table?	Draw two shapes, one above the other.
Who finishes 2nd in a race with 4 children?	Put 5 animals in a row. Who is 3rd?
What comes after 79?	Count in ones from 56 to 72.

Reasoning Prompt	Problem-Solving Prompt
What is 4 tens? What is 7 tens?	Count in 10s to 100. What comes before 80?
How is 94 partitioned?	Show 76 as tens and ones.
Is 83 closer to 80 or 90?	Place 67 on a number line.
What's 1 less than 60?	Is 1 less than 70 more or less than 68?
Which is greater: 43 or 47?	Compare 35 and 38.
How do you know 92 is more than 89?	Sort numbers from smallest to largest.
What comes after lunch?	Order these 3 parts of the day.
What day comes after Tuesday?	What day is 2 days before Saturday?
What month is your birthday in?	Which month comes before July?
Which is longer: 1 hour or 1 minute?	Estimate how long brushing teeth takes.
What time is this: ?	Draw a clock showing 6 o'clock.
What time is this: ?	Draw a clock showing half past 10.