Year 1 Maths Objectives

Place Value

COUNTING	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals; count in multiples of twos, threes, fives and tens. Identify one more and one less than a given number.
COMPARING NUMBERS	Use the language of: equal to, more than, less than (fewer), most, least Begin to recognise odd and even numbers to 20. Compare two familiar numbers, say which is more or less, and give a number that lies between them. Order numbers to at least 20 and position them on a number track.
IDENTIFYING, REPRESENTING & ESTIMATING NUMBERS	Identify and represent numbers using objects and pictorial representations including the number line Understand the vocabulary of estimation and give a sensible estimate of up to 30 objects. Recognise and predict from simple patterns and relationships.
READING & WRITING NUMBERS	Read and write numbers from 1 to 20 in numerals and words.
UNDERSTANDING PLACE VALUE	Start to recognise the place value of each digit in a two-digit number (tens, ones) Partition a 'teens' number into tens and ones. Say the number that is 10 more than any given number to 20.
PROBLEM SOLVING	Begin to use place value and number facts to solve problems Solve mathematical problems or puzzles. Suggest extensions 'What if?' 'What could I try next?' REASONING: Investigate a general statement about familiar numbers by finding examples that satisfy it. Explain methods and reasoning orally.

Addition & Subtraction

NUMBER BONDS	Represent and use number bonds and related subtraction facts within 20 Recall addition doubles up to 5 + 5. Recall addition and subtraction facts up to 5. Recall pairs of numbers which total 10. Identify near doubles using doubles already known.
MENTAL CALCULATION	Add and subtract one-digit and two-digit numbers to 20, including zero Use number facts to add/subtract pair of numbers within range 0 to 20. Understand the operation of subtraction (as take away). Find simple 'differences'. Add more than two numbers. Put the largest number first. Count on in ones, including beyond 10, e.g. 7 + 5. Partition into 5 and a bit when adding 6, 7, 8, or 9. Add 9 to a single–digit number by adding 10 then subtracting 1. Bridge through 10 when adding single-digit numbers. Bridge through 20 when adding a single digit number.

	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (known as a number sentence) Use +, – and = signs to record mental calculations in a number sentence. Understand the operation of addition (as *how many more*) and of subtraction (as difference) and use the related vocabulary.
WRITTEN METHODS	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Understand the operation of addition; recognise that addition can be done in any order. Use patterns of similar calculations.
INVERSE OPERATIONS, ESTIMATING & CHECKING ANSWERS	Begin to recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
PROBLEM SOLVING	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9 Choose and use the appropriate number operation (counting, add, subtract) and mental strategies to solve simple money or 'real life' problems using counting, addition or subtraction, halving or doubling.

Multiplication & Division

MULTIPLICATION & DIVISION FACTS	*Count in multiples of twos, fives and tens*
WRITTEN CALCULATION	Begin to calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×)and equals (=) signs
PROBLEM SOLVING	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

Algebra

EQUATIONS	*solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and* ***missing number problems*** *such as 7 = □ - 9* Recognise and use □ or ∆ to stand for an unknown number. *Represent and use number bonds and related subtraction facts within 20*
SEQUENCES	S*equence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening* Recognise and extend number sequences with differences of 1, 2 or 3.

Fractions (including decimals & percentages)

RECOGNISING FRACTIONS	Recognise, find and name a half as one of two equal parts of an object, shape or quantity

	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity

Geometry: Position & Direction

POSITION, DIRECTION & MOVEMENT	Describe position, direction and movement, including half, quarter and three-quarter turns. Talk about things that turn. Use everyday language to describe position, direction and movement.
PATTERN	Begin to order and arrange combinations of mathematical objects in patterns Make and describe models, patterns and pictures using construction kits. Recognise simple patterns. Use one or more shapes to make patterns, describe repeating patterns. Predict from simple patterns, and suggest extensions.

Geometry: Properties of shape

IDENTIFYING SHAPES & THEIR PROPERTIES	Recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres]. Use everyday language to describe features of familiar 2–D and 3–D shapes, referring to shapes with flat faces, number of faces or corners, number of sides. Begin to relate solid shapes to pictures of them.
DRAWING & CONSTRUCTING	Draw common 2-D shapes Use one or more shapes to make repeating patterns. Make and describe models, patterns and pictures using everyday materials, plasticine. Fold shapes in half, then make them into symmetrical patterns.
COMPARING & CLASSIFYING	Compare and sort common 2-D shapes Investigate general statements about shapes.
ANGLES	Describe position, direction and movement, including whole, half, quarter and three-quarter turns

Measurement

COMPARING & ESTIMATING	Understand and use the vocabulary related to length and time. Compare, describe and solve practical problems for: * lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] * mass/weight [e.g. heavy/light, heavier than, lighter than] * capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] time [e.g. quicker, slower, earlier, later] Cequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] order familiar events
MEASURING &	Measure and begin to record the following:

CALCULATING	* **lengths and heights** Compare two, then more, lengths using direct comparison. Measure lengths using uniform non-–standard units or standard units, e.g. metre sticks. Suggest suitable (non) standard units and measuring equipment to estimate, then measure a length, recording estimates and measurements as '3 and a bit'. * **mass/weight** Understand and use the vocabulary related to mass. Compare two, then more, masses using direct comparison. Measure mass using uniform non-–standard units. Suggest suitable (non) standard units and measuring equipment to estimate, then measure, mass recording estimates and measurement as 'about as heavy as 20 cubes'. * **capacity and volume** Understand and use the vocabulary related to capacity. Compare two, then more, capacities using direct comparisons. Measure capacity using uniform non-standard units or standard units (litre). Suggest suitable uniform non-standard then standard units and measuring equipment to estimate, then measure capacity recording estimates and measurements as 'about 3 beakers full' or 'just under 5 litres'. * **time** (hours, minutes, seconds**)** Solve simple problems involving length, mass, capacity or time. recognise and know the value of different denominations of coins and notes Find totals, give change. Must: Recognise 1p and 2p coins. Find totals up to 10p. Should: Recognise 1p, 2p, 5p and 10p coins and equivalent values. Find totals. Could: Recognise coins of different values up to 20p. Find totals, give change from up to 20p and work out how to pay using smaller coins. Work out how to pay an amount by using smaller coins. Solve simple mathematical money problems or puzzles. Explain methods orally.
TELLING THE TIME	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. On analogue clock. Recognise and use language relating to dates, including days of the week, weeks, months and years Know the seasons of the year

Statistics

INTERPRETING, CONSTRUCTING & PRESENTING DATA	Solve a problem by sorting information using objects or pictures. Discuss and explain results.
SOLVING PROBLEMS	Solve a problem by sorting classifying and organising information in a list or simple table. Solve a problem by sorting information using objects or pictures. Discuss & explain results.