# Year 1 Maths in Continuous Provision

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| Number and Place Value: **Counting forwards and backwards from 0 tio 100 and in multiples of twos, fives and tens**.<br><br>Use language equal to, less than, more than, most, least.<br><br>Identify 1 more and 1 less. | • Number lines, 100 square in classroom – can you find a number? What is the missing/covered number?<br>• Practical wooden numbers/items with numbers on to sort.<br>• Dienes, cubes, numicon and counters to make different numbers. Tens frames and part-part-whole models to sort numbers into tens and units. Greater than and less than cards available to use.<br>• Number cards to order and sort (vary these according to topics and interests).<br>• Blank number lines (various sizes) with whiteboard pens and number lines to copy/inspire.<br>• Games like dominoes, snakes and ladders and ludo with a variety of dice (dice 1-6, 1-9 and large dice). |
| | • Number lines and 100 square on playground. Bean bags, quoits and weatherproof number cards or numbers on natural objects. Can you find the number?<br>• Numbers on stones. Natural items to count and sort.<br>• Large washing line with weather-proof numbers and pegs.<br>• Large scale snakes and ladders with large dice. |
| Number and Place Value: **reading and writing numbers to 20 in numerals and words.** | • Wipe-clean folders with numbers to trace and copy.<br>• Dot-to-dot numbers, sand or jelly paper numbers. Making numbers using playdough. |
| | • Large whiteboards and blackboards to practice writing numbers. |
| Addition and Subtraction: Using the **addition, subtraction and equals signs and solving practical problems** to 20 including 0. | • How many children are here today? Display. Count each morning – how many are away?<br>• Tens frames: use 2 different colour counters or objects to add<br>• Tens and units boards: use dienes, numicon, cubes or counters to make numbers and add/subtract.<br>• Laminated tens and units boards to draw number on with whiteboard pens and cross off for subtraction.<br>• Addition and subtraction board games with variety of counters (these are available online for a variety of topics). |
| Use number bonds and related facts within 20. | • Natural items to count, add and subtract.<br>• Large numbers and symbols on weatherproof cards |
| Multiplication and Division. Solving one-step problems involving **multiplication and division by using concrete objects and pictorial representations**. | • Arrays with objects sorted into various trays (chocolate boxes, biscuits, wooden boxes from decorations work well)<br>• Plates, bowls to share objects onto (role play food works well) |
| | • Large scale arrays with objects sorted into wooden boxes, cupcake trays etc.<br>• Draw your own arrays on floor or blackboard with chalk<br>• Plates and bowls to share objects onto (could make these using leaves or other natural items) |
| Fractions: Recognising **a half** as one of two equal parts and **a quarter** as one of four equal parts. | • Plates with half and quarter drawn on. Playdough and objects to share.<br>• Play food that has been cut into halves and quarters to sort.<br>• Halves and quarters on laminated pictures to sort and share interesting items e.g. gems. |
| | • Drawing fractions in chalk on playground. Hoops split into sections for different fractions then share objects |
| Measurement. Solving practical problems that involve **lengths and heights, capacity and volume and mass or weight**. They'll also learn how to **tell the time to the hour and half past** the hour. | • Visual timetable with clocks. Refer to times throughout the day, especially o'clock and half past. Clocks in the classroom, including role play area.<br>• Classroom height chart, if appropriate for your class.<br>• Scales with objects, cubes and numicon. Greater than and less than signs available to use. |
| | • Daily measuring e.g. temperature, rain fall.<br>• Measuring for a purpose, e.g. measuring a distance in the playground.<br>• Making clocks with hula hoops and drawing on the numbers and hands. |
| Geometry - Position and Direction: **describing position, movement and direction**. | • Beebots – programming and deciding on direction and movement. |
| | • Outside games like treasure hunts – directing your partner. Play Simon says (direction focused). |
| Geometry - Properties of Shape: **Naming common 2D and 3D shapes**. | • Construction – especially magnatiles, knex and mobile, although all construction can inspire discussions about shape.<br>• Pictures of 2D and 3D shape near the construction area to encourage language and 2D and 3D shapes in the construction area, especially wooden block 3D shapes..<br>• Graph or squared paper available to draw models. |
| | • Larger scale construction outside, as above.<br>• Using sticks to make 2d shapes (these can be as large as you like – the bigger the better!)<br>• Shape hunts outside with clipboards – what can you see? |

**Year 2 Maths in Continuous Provision**

**Essential Maths Resources**

**Inside:** Dienes, cubes, numicon, counters, small objects, 100 square, number lines (blank, to 20 and to 100), number cardsm clocks, dice, rulers, measuring tape, 2d shape, 3d shape, sorting rings, array trays, graph/squared paper, coins and sorting tray, blank tens and units tables, blank part part whole models, blank fraction plates and fraction tables, greater than and less than cards.

**Outside:** Chalk, hoops, washing line, pegs, number cards, bean bags and quoits, natural objects, large dice, large construction, blackboard, whiteboard, whiteboard pens, thermometer, rulers and measuring wheel, coins and till, blank tens and units tables, blank part part whole models, blank fraction plates and fraction tables, greater than and less than cards.

| NUMBER AND PLACE VALUE | |
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| Count in 2s, 3s, 5s from 0.<br>Count in 10s.<br><br>Identify, represent, estimate and compare numbers to 100.<br><br>Read and write numbers to 100.<br><br>Use place value and number facts to solve problems.<br><br>Arrange mathematical objects in patterns and sequences. | • Number lines, 100 square in classroom – can you find a number? What is the missing/covered number? Number of the day on a display: what do we know about this number?<br>• Practical wooden 100 square to sort. Which number is missing today? How do you know?<br>• Number cards to order and sort (vary these according to topics and interests).<br>• Dienes, cubes, numicon and counters to make different numbers. Tens frames and part-part-whole models to sort numbers into tens and units. Greater than and less than cards available to use.<br>• Games like dominoes, snakes and ladders and ludo.<br>• Wipe-clean folders with numbers to trace and copy.<br>• Sensory items like sand paper or jelly numbers.<br>• Making numbers using playdough.<br>• Numbers represented in different ways e.g. pictures for subitising, domino pictures or natural object pictures. |
| | • Number lines and 100 square outside. Play games like throw the quoit on a number, what is 10 more/10 less or 1 more/1 less? Can you find a number with 5 tens? Can you jump to an odd number?<br>• Drawing large number lines on playground.<br>• Numbers on stones. Natural items to count and sort.<br>• Large washing line with weather-proof numbers and pegs. Can you order the numbers by size? Can you find all the numbers in the 2 times table?<br>• Large scale snakes and ladders with large dice.<br>• Large whiteboards and blackboards to practice writing numbers. |
| ADDITION AND SUBTRACTION | |
| Solve addition and subtraction problems using concrete and pictoral methods applying mental and written methods.<br><br>Recall and use + - facts to 20.<br>Derive and use facts to 100.<br><br>+ and – 2-digit and 1-digit<br>+ and – 2-digit and 2-digit<br>+ and – 2-digit and 10s<br>+ and subtract 3 1-digit numbers<br><br>Know that + can be done in any order but – cannot<br><br>Know the inverse between + and – and use it for missing number problems | • How many children are here today? Display. Count each morning – how many are away?<br>• Tens frames: use 2 different colour counters or objects to add<br>• Tens and units boards: use dienes or counters to make numbers and add/subtract.<br>• Laminated tens and units boards to draw number on with whiteboard pens and cross off for subtraction.<br>• Laminated 'fact families' to practice inverse<br>• Addition and subtraction board games with variety of counters (these are available online for a variety of topics).<br>• Make your own board game (templates for children to design their own) |
| | • Natural items to count, add and subtract. What can we use to represent ten? What represents one?<br>• Large numbers and symbols on weatherproof cards<br>• Tens and units drawn on the floor – add natural items or dienes, or write the numbers in chalk. |
| MULTIPLICATION AND DIVISION | |
| Recall x and ÷ for 2, 5 and 10 times tables<br><br>Recognise odd and even<br><br>Calculate x and ÷ for 2, 5 and 10 times tables<br><br>Know that x can be done in any order and ÷ cannot<br><br>Solve problems with x and ÷ using arrays, repeated addition, mental methods and known facts. | • Arrays with objects sorted into various trays (chocolate boxes, biscuits, wooden boxes from decorations work well)<br>• Plates, bowls to share objects onto (role play food works well)<br>• Odd and even display (fairy even, monster odd – could use puppets or toys)<br>• 2s, 5s and 10s using body parts (5 fingers – drawing around hands, 10 toes-drawing around feet) |
| | • Large scale arrays with objects sorted into wooden boxes, cupcake trays etc.<br>• Draw your own arrays on floor or blackboard with chalk<br>Plates and bowls to share objects onto (could make these using leaves or other natural items) |

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| FRACTIONS | |
| Recognise, find, name and write ½ 1/3 2/4 and ¾<br><br>Know equivalence of 2/4 and 1/2 | • Plates with half and quarter drawn on. Playdough and objects to share. Fractions on cards as prompts – can you make ½, 1/3, 2/4 or ¾?<br>• Play food that has been cut into halves and quarters to sort.<br>• Halves and quarters on laminated pictures to sort and share interesting items e.g. gems. |
| | • Drawing fractions in chalk on playground<br>• Hoops split into sections for different fractions then share objects<br>• Make a fraction wall with large lego or blocks (looking at equivalence) |
| MEASUREMENT | |
| Use appropriate units to estimate and measure: length, height, mass, temperature, capacity.<br><br>Compare and order using < > =<br><br>Recognise and use £ p. Combine amounts, find different combinations of coins and solve simple + - problems with money.<br><br>Compare and sequence time intervals. Tell the time to 5 minute intervals, including quarter past/to and half past/to.<br><br>Know the number of minutes in an hour and hours in a day. | • Rulers, measuring tape in the construction area. How big is your model? Whose is the tallest?<br>• Visual timetable with clocks. Refer to times throughout the day, especially o'clock and half past. Teaching clock and smaller clocks in the maths area, with times on cards for children to find. Clock and calendar in the role play area.<br>• Classroom height chart or foot measuring chart, if appropriate for your class.<br>• Scales with objects, cubes and numicon. Greater than and less than signs available to use.<br>• Money, till, sorting trays for coins. Items to purchase, blank price labels/tags and |
| | • Daily measuring e.g. temperature, rain fall.<br>• Measuring for a purpose, e.g. measuring a distance in the playground.<br>• Making clocks with hula hoops and drawing on the numbers and hands.<br>• Sand timers and other timers.<br>• Outdoor shop with till and real money. Price labels, shopping lists and objects to buy. |
| POSITION AND DIRECTION | |
| Use vocabulary to describe position, direction and movement (quarter, half and three quarter turns, clockwise and anti-clockwise) | • Beebots – programming and deciding on direction and movement. |
| | • Outside games like treasure hunts – directing your partner.<br>• Play Simon says (direction focused). |
| SHAPE | |
| Identify and describe properties of 2d shapes (number of side and line of symmetry) and 3d shapes (number of edges, vertices and faces, which 2d shape is on the face)<br><br>Sort and compare shapes | • Construction – especially magnatiles, knex and mobile, although all construction can inspire discussions about shape.<br>• Pictures of 2D and 3D shape near the construction area to encourage language.<br>• 2D shapes in creative area to use as stencils or to draw around.<br>• Display of 2D and 3D shape in 'real' life e.g. different shaped boxes and shapes in nature (honeycomb in bees nest)<br>• Graph or squared paper available to draw models.<br>• 2D and 3D shapes in the construction area, especially wooden block 3D shapes.<br>• Sorting trays or sorting hoops to sort shapes in different ways. Cards as prompts e.g. 3 sided shapes. |
| | • Larger scale construction outside, as above.<br>• Using sticks to make 2d shapes (these can be as large as you like – the bigger the better!)<br>• Shape hunts outside with clipboards – what can you see?<br>• Hula hoops to sort shapes |
| STATISTICS | |
| Interpret and construct pictograms, tally charts, block diagrams and tables.<br>Ask and answer questions. | • Ipads and interactive screen to create online pictogram, tally and block charts.<br>• Make small block charts using lego bricks. |
| | • Gather information from the school grounds to present in a chart or pictogram.<br>• Make a large scale pictogram or chart using objects or lego blocks.<br>• Draw large scale charts on the floor or blackboards using chalk. |