EYFS Maths

CHERRY TREE PRIMARY SCHOOL

Maths

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas.

Maths is taught cross curricular every day during both adult directed and child initiated learning. E.g. maths games on the IWB, maths puzzles and games, playing and building with shapes.

We record Maths through observations which can be seen on Tapestry in Nursery and Reception.   Tapestry is an online learning journal which consists of pictures of children's work, children's voice, moments from home e.g. writing own number sentences, adult led activities, independent activities as well as child initiated learning (this is where children can choose where to work and we scaffold their learning). In Reception we also have a theme and maths folder. In the Maths folder you can see work on writing numbers, adding and subtracting, drawing pictures using shapes. Also work is displayed around the classroom and in the reading corner across EYFS.

Examples of some activities that can be seen across the year in EYFS are:

- Using bead strings to count 1-1
- Individual tens frame and large tens frame for counting
- 3d shapes to build models with
- Completing jigsaw puzzles
- Tap a shape and geo boards to create 2d shapes
- Various objects for sorting
- Role play area with tills for shopping and using money
- Weighing scales for balancing
- Sand and water tray for capacity

Below is the EYFS statements taken from Birth to 5 that children need to meet during Nursery and Reception. You can see the progression from Range 5 to Early Learning Goals (ELG). ELG is where children should be at the end of Reception. Maths is mostly seen in Mathematics (M)

	Mathematics (M)	
Range 5	**Comparison** • Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. *You've got two, I've got two. Same!* **Counting** • May enjoy counting verbally as far as they can go • Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. • Uses some number names and number language within play, and may show fascination with large numbers • Begin to recognise numerals 0 to 10 **Cardinality** • Subitises one, two and three objects (without counting) • Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) • Links numerals with amounts up to 5 and maybe beyond • Explores using a range of their own marks and signs to which they ascribe mathematical meanings **Composition** • Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers • Beginning to use understanding of number to solve practical problems in play and meaningful activities	**Shape** • Chooses items based on their shape which are appropriate for the child's purpose • Responds to both informal language and common shape names • Shows awareness of shape similarities and differences between objects • Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes • Attempts to create arches and enclosures when building, using trial and improvement to select blocks **Pattern** • Creates their own spatial patterns showing some organisation or regularity • Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC)

	• Beginning to recognise that each counting number is one more than the one before • Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same **Spatial Awareness** • Responds to and uses language of position and direction • Predicts, moves and rotates objects to fit the space or create the shape they would like	• Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next **Measures** • In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items • Recalls a sequence of events in everyday life and stories
Range 6	**Comparison** • Uses number names and symbols when comparing numbers, showing interest in large numbers • Estimates of numbers of things, showing understanding of relative size **Counting** • Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0 • Increasingly confident at putting numerals in order 0 to 10 (ordinality) **Cardinality** • Engages in subitising numbers to four and maybe five • Counts out up to 10 objects from a larger group • Matches the numeral with a group of items to show how many there are (up to 10) **Composition** • Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects • Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three • In practical activities, adds one and subtracts one with numbers to 10 • Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-" **Spatial Awareness** • Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints • Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning) • May enjoy making simple maps of familiar and imaginative environments, with landmarks	**Shape** • Uses informal language and analogies, (e.g. *heart-shaped and hand-shaped leaves*), as well as mathematical terms to describe shapes • Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes • Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build **Pattern** • Spots patterns in the environment, beginning to identify the pattern "rule" • Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat **Measures** • Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy • Becomes familiar with measuring tools in everyday experiences and play • Is increasingly able to order and sequence events using everyday language related to time • Beginning to experience measuring time with timers and calendars
ELG	**Statutory ELG: Number** Children at the expected level of development will: - Have a deep understanding of number to 10, including the composition of each number;- Subitise (recognise quantities without counting) up to 5; - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. **Statutory ELG: Numerical Patterns** Children at the expected level of development will: - Verbally count beyond 20, recognising the pattern of the counting system; - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.	