Farndon Primary School

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Maths progress model for knowledge and skills

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|  | **Expectations for Nursery** | | | | **Expectations for Reception** | | | | **ELG** | **Links to KS1** |
| **Numerical Patterns**  **Counting** | Says number names in an random order | | Count beyond 3 | Count beyond 5 | Counts forwards beyond 10 | | Counts forwards and backwards beyond 10 | Count on from any number | Verbally count beyond 20, recognising the pattern of the counting system |  |
| Can count in the pattern of 10 | | Can count in the pattern of 2’s | Can count in the pattern of 2’s, 5’s and 10’s. |
| Can give you 1 more or take one away than a group of objects up to 3 | Can give you 1 more or take one away than a group of objects up to 5 | Can give you 1 more and take 1 away than a group of objects up to 10 | | Using a numberline can find 1 more or one less to numbers beyond 10. | can recall one more or one less than numbers up to 20 |
| Says some number names but not for each object | | Counts objects and actions to 3 saying a name for each one. | Count objects and actions to 5+  (understanding the last number tells you how many you have) | | | Counts objects and actions to 10+ | Counts objects and actions beyond 20 |
| **Counting vocab** | Number  Count  More  Less  Same/equal | | | | | | | |
| **Numerical Patterns**  **Number recognition** | Recognise some numbers special to them | | Recognise numbers to 3 | Recognise numbers to 5 | Recognise and write numbers to 5 | | Recognise and write numbers to 10 | Recognise and write numbers to 20 |
| Can order up to 3 | Can order up to 5 | | | Can order up to 10 | Can order up to 20 |
| **Number recognition vocab** | Order  Number name  Numbers | | | | | | | |  |
| **Number**  Number Composition | Know what 1 or 2 objects are and can give you 1 or 2 | | Understand what 3 is and can make with different objects | Understands what 4 and 5 looks like and can make with different objects | | | Understands what numbers 5-10 look like and are able to make using different objects | Able to represent the composition of number through drawings. | Have a deep understanding of numbers to 10 including the composition of number  Subitise (recognise quantities without counting) up to 5.  Automatically recall number bonds up to 5 (including subtraction facts) and some number facts to 10 including doubles. |
| Able to recall the number bonds to make 3 and 4 (including subtractions facts) | | | Knows and can reacall number bonds to 5 (including subtraction facts) | Knows and can recall number bonds to 6, 7, 8 (including subtraction facts) |
| Can subitise (to 1) | | Can subitise (to 2) | Can subitise (to 3) | | | Can subitise (up to 4) | |
| Can combine groups of objects up to 3 to see how many altogether. | | | Can combine groups of objects up to 5 and then 10 and say how many they have altogether. | | | Can add 2 single digit numbers up to 10 representing through drawings and bar model method. | Can add 2 single digit numbers to 20 by counting on. |
| Takes some away and knows that they have ‘less’ | | | Can solve simple subtraction problems up to 5 then 10 using objects | | | Subtracts a single digit number from a number up to 10 using drawings | Subtracts a single digit number from a number up to 20 by counting backwards |
| **Number composition vocab** | Subitise  Combine  More  Altogether  Add  Less  subtract | | | | | | | |  |
| **Numerical Patterns**  **Fractions / Comparison** | Can say which group has more or less up to 3 | | Can identify when they have the same | Can recognise which group has more, less or the same and use the correct language up to 5. | | | Can recognise which group has more, less or the same by counting and use the correct language up to 10 | Can compare groups of objects up to 10 + understanding the difference between size and quantity | 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 to 10, including odd and evens, double facts and how quantities can be distributed equally. |
| Can share out objects sometimes equally | | | Can halve/share objects out equally in practical situations | | | Can halve and share objects out using the part part whole model up to 10 | Can halve and share objects out using the part part whole model up to 20 |
| Knows that even numbers can be shared and that odd numbers can’t | |
| Recognise when they have the same as their friend | | | Recognise when they have the same as their friend and can count to see how many altogether | Can double numbers up to 5 using objects | | Can double numbers up to 10 using objects | Can recall double facts up to 10 |
| **Fractions/ comparison**  **vocab** | More  Less  Same  Double  compare | | | | | | | |  |  |
| **Shape** | Has an interest in shapes in the environment | | Begins to recognise and name basic 2d shapes with support | Can name basic 2d shapes – circle, square, rectangle, triangle | | | Can name oval, pentagon, octagon, hexagon | |  | Recognise and name common 2-D shapes, including rectangles (including squares), circles and triangles  Recognise and name common 3-D shapes, including cuboids (including cubes), pyramids and spheres |
| Uses shapes to make pictures | | Selects shapes appropriately e.g. triangle for a roof | Talks about and explores 2D shapes using some mathematical language e.g. corners, sides | Explores how many corners and sides basic 2d shapes have | | Explores how many corners and sides other 2d shapes have | |
| Has an interest in shapes in the environment | | Can correctly match some 3d shapes | Can correctly recognise and name cones and spheres | | | Can correctly recognise and name sphere, cone, cylinder, cuboid and cube | Is beginning to explore other shapes such as pyramids and triangular prisms |
| **Shape Vocab** | 2D shape  3Dshapes  Shape names  Side  Corner  Vertices  Face  edge | | | | | | | |  |  |
| **Space** | Copies and continues repeated patterns with 2 colours | | | Creates repeated patterns with 2 colours  Notices and corrects errors | Continues, copies and recreates repeated patterns  ABB, AAB | | Continues, copies and recreates repeated patterns  AABB, ABBC | Continues, copies and recreates repeated patterns  AABBB, ABBCA |  | Describe position, direction and movement, including whole, half, quarter and three-quarter turns. |
| Talks about pattern in the environment (spotty, stripy…) | | Can sort items by their colour or pattern | Creates repeated patterns with 2 shapes  Notices and corrects errors |
| Copies and continues repeated patterns with 2 numbers | | | Creates repeated patterns with 2 numbers  Notices and corrects errors |
| Uses gestures to understand positional language | | Can understand position through words alone | Begins to describe locations using words such as ‘in front of’ and ‘behind’ | Can follow instructions using positional language | | Uses vocabulary such as ‘over’, ‘above’, ‘beneath’, ‘beside’ | |  |
| **Space vocab** | Patterns  Repeating patterns  Shapes  colours | | | | | | | |  |  |
| **Measurement** | Uses ‘big’ and ‘small’, ‘short’ and ‘tall to compare size | | | Uses ‘big’ and ‘small’, ‘short’ and ‘tall to compare size | Can order three items by length/height using non-standard measures  Uses ‘biggest’, ‘smallest’, ‘shortest’ and ‘tallest’ | | | Uses standard measures whilst measuring size |  | Compare, describe and solve practical problems for lengths and heights |
| Uses ‘heavy’ and ‘light’ | | | Make simple comparisons using ‘heavier’ and ‘lighter’ | Can order three items by weight using non-standard measures  Uses ‘heaviest’, ‘lightest’ | | | Uses standard measures whilst measuring weight | Compare, describe and solve practical problems for mass/weight |
| Uses ‘full’ and ‘empty’ to compare capacity | | | Make simple comparisons using ‘more’ and ‘less’ | Can order three items by capacity using non-standard measures  Uses ‘full’, ‘empty’, ‘half empty’ | | | Uses standard measures whilst measuring capacity | Compare, describe and solve practical problems for capacity and volume |
| Knows day and night | Knows and talks about the events in a day | | | Can sequence events in the day | Knows days of the week | | Begins to use language before, after, yesterday, today, tomorrow | Recognise and use language relating to dates, including days of the week, weeks, months and years |
| Understands that we need to pay for items in a shop and can talk about what they would like to buy | | | | Talks about the different ways we can pay for things | Recognises that there are different coins | | Can pay for items using 1p coins | Recognise and know the value of different denominations of coins and notes |
| **Measurement vocab** | Sequence  Tallest  Shortest  Big  Small  Weight  Heaviest  Lightest  Longest  Length  Days of the week  Money  Coins | | | | | | | |  |  |