*Braywood CE First School The Acorn Nursery Maths Programme of Work*

*‘Aspire, Learn, Achieve’*



*‘From tiny acorns, mighty oak trees grow, watered and nurtured by God’*

Maths should not only be taught during discrete maths lessons but throughout the day:

* Calendar - Days of the week and general talking about the day
* General counting e.g. counting how many bananas there are in the fruit box.
* Counting songs
* Use of ordinal numbers e.g. “Sam line up first, Lilly line up second…”
* Maths games such as ‘Lucky Ducky’
* Observing maths in the environment e.g. asking children what they notice about a tree. They may say it is tall, has circles on etc.
* Incorporating maths in daily routines e.g. Counting the number of children who are absent, ‘how many children can play here’ posters.

The curriculum will shadow the Abacus programme that Foundation 2 and the main school follow. It will dip into the NCETM (National Centre for Excellence in the Teaching of Mathematics) materials which uses Numberblocks to gently introduce concepts of number to support early mathematical understanding.

The curriculum also allows for Child initiated activities for example, following on from books chosen by the children, e.g. The Hungry Caterpillar,

Overview

|  |  |
| --- | --- |
| **Autumn Term** | **Areas Covered** |
| 1 | Recognising and naming colours |
| 2 | Patterns (and colour) |
| 3 | Sorting & counting songs |
| 4 | My Day (Time & Days of the week) |
| 5 | Patterns |
| 6 | Measurement - Size & Length |
| 7 | Principles of counting |
| 8 | 2 D Shapes |
| 9 | Comparing amounts |
| 10 | Number 1 |
| **Spring Term** |  |
| 1 | Number 2 |
| 2 | Symmetry. |
| 3 | Number 3 |
| 4 | 2D Shapes |
| 5 | Measurement –Height |
| 6 | Number 4 |
| 7 | Number 5 |
| 8 | Number 6 |
| 9 | Positional language |
| 10 | Counting to 6 |
| **Summer Term** |  |
| 1 | Counting to 6 |
| 2 | 2 & 3D shapes. |
| 3 | Measurement - Capacity |
| 4 | Number 7 |
| 5 | Days of the week & Times of the day |
| 6 | Number 8 |
| 7 | Number 9 |
| 8 | Number 10 |
| 9 | Measurement –weight. |
| 10 | Counting to 10 |

**Autumn Term**

|  |  |
| --- | --- |
| **Autumn Term** | **Areas Covered** |
| 1 | Recognising and naming colours |
| 2 | Patterns (and colour) |
| 3 | Sorting & counting songs |
| 4 | My Day (Time & Days of the week) |
| 5 | Patterns |
| 6 | Measurement - Size & Length |
| 7 | Principles of counting |
| 8 | 2 D Shapes |
| 9 | Comparing amounts |
| 10 | Number 1 |

|  |  |  |
| --- | --- | --- |
|  | Areas Covered | Key Vocabulary |
| **1** | **Recognising and naming colours** |  |
|  | Children will be taught to recognise and name colours in a variety of contexts e.g. toys within the classroom, colours in nature, colours in the environment, matching colours, colours on themselves such as hair, skin, clothes. Children should be able to say when objects are and are not the same colour. Work will be linked to expressive art and design through painting. | Colour, red, orange, yellow, green, blue, purple, pink, brown, black, white, grey, lighter, darker, pale, notice, match, same, |
|  | * Geometry - Recognising, naming and matching colours | |
| **2** | **Patterns (and colour)** |  |
|  | The awareness of pattern helps children to notice and understand mathematical relationships. Children will, at first be taught to continue an AB pattern. They will have the opportunity to see a pattern, talk about what they can see and to continue a pattern. At first this will be done one object at a time e.g red cube, blue cube, red cube… verbalising the pattern helps. Children will then be asked to say what they would add next to continue it. | pattern, continue, notice, next, colours, red, orange, yellow, green, blue, purple, pink, brown, black, white, grey |
|  | * Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like ‘pointy’, ‘spotty’, ‘blobs’ etc. * Extend and create ABAB patterns – stick, leaf, stick, leaf. * Notice and correct an error in a repeating pattern. | |
| **3** | **Sorting & counting songs** |  |
|  | Children will be given the opportunity to sort objects by their own rules and taught how to communicate that rule (e.g. I have sorted the buttons by colour). This will be explored in many different contexts such as shapes, different coloured and size objects, different animals, objects found in the environment, appearance of various objects and people. Children should be taught to verbalise what is the same and what is different between sets of objects (e.g these buttons are pink and these buttons are blue/ they are boys and they are girls) | sort, notice, groups, sets, same, different |
|  | • Make comparisons between objects relating to size, length, weight and capacity. | |
| **4** | **My Day (Time & Days of the week)** |  |
|  | Children will explore talking about and ordering the events of their day such as waking up, coming to school, dinner, bed time. **Encourage the vocabulary of first, next, then and possibly last.** | first, next, then, last, after that, days, week, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday |
|  | • Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then... | |
| **5** | **Patterns** |  |
|  | The awareness of pattern helps children to notice and understand mathematical relationships. Children will, at first be taught to continue an AB pattern. They will have the opportunity to see a pattern, talk about what they can see and to continue a pattern. At first this will be done one object at a time e.g red cube, blue cube, red cube… verbalising the pattern helps. Children will then be asked to say what they would add next to continue it. | pattern, continue, notice, next, colours, red, orange, yellow, green, blue, purple, pink, brown, black, white, grey |
|  | * Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like ‘pointy’, ‘spotty’, ‘blobs’ etc. * Extend and create ABAB patterns – stick, leaf, stick, leaf. * Notice and correct an error in a repeating pattern. | |
| **6** | **Measurement - Size & Length** |  |
|  | Children will at this stage only focus on large/big and small/little. Real life examples of objects that are large and small in relation to each other, will be used. Starting with objects that are vastly larger/smaller than each other and move onto objects with a smaller difference in size. Include reasoning e.g. ‘do you think this large tree would fit into my small box?’  In the first stage children should apply the attribute of long, short, to various examples (e.g. a bus is long; worm is short). Adults will be continuously modelling this language. The children then move on to finding objects that are longer/shorter than a given item. They should be encouraged to utilise strategies such as direct comparison (e.g. placing objects side by side to determine which is taller). When comparing length and height verbally children should be encouraged to use language such as ‘longer than/shorter than’. | notice, big, large, small, little, smaller, larger, bigger, long, short, longer, shorter |
|  | • Make comparisons between objects relating to size, length, weight and capacity. | |
| **7** | **Principles of counting** |  |
|  | 1. The one-one principle – this involves children assigning one number name to each objects that is being counted. Children need to ensure that they count each objects that is being counted only once ensuring that they have counted every object. Children will sometimes count objects more than once or miss an object out that needs to be counted. Encourage children to line up objects and touch each one as they count saying one number name for each object. This will also avoid children counting more quickly than they touch the objects which again shows that they have not grasped one-one correspondence. When counting pictures children should use the strategy of drawing a line through each picture as they count it. Children should be taught number names through number songs and general counting.  2. The stable-order principle – children understand when counting that the numbers have to be said in a certain order. Children need to know all the number names for the amount in the group they are counting. Teachers can therefore encourage children to count aloud to larger numbers without expecting them to count that number of objects immediately. The order of numbers should be reinforced through number songs and daily counting activities.  3. The cardinal principle – Children understand that the number name assigned to the final object in a group is the total number of objects in that group. In order to grasp this principle, children need to understand the one-one and stable-order principles. From a larger group, children select a given number and count them out. When asked ‘how many?’ children should be able to recall the final number they said. Children who have not grasped this principle will recount the whole group again.  4. The abstraction principle – this involves children understanding that anything can be counted including things that cannot be touched including sounds and movements. When starting to count many children rely on touching the objects in order to count accurately. Teachers can encourage abstraction on a daily basis by counting claps or clicks.  5. The order-irrelevance principle – this involves children understanding that the order we count a group of objects is irrelevant. There will still be the same number. Encourage children to count objects left to right, right to left, top to bottom, bottom to top. Once children have counted a group, move the objects and ask children how many there are. If they count them all again they have not fully grasped this principle. | count, how many, total, altogether, number, one, two, three, four, five, six, seven, eight, nine, ten |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **8** | **2 D Shapes** |  |
|  | Children will on the properties of shapes. **For example, children should be encouraged to notice and describe shapes in the environment and talk about the properties using words such as ‘straight/flat/round/curved’.** When teaching the names of shapes, wherever possible, real life shapes in the environment should be used. Note that only flat surfaces should be referred to as faces. Include sorting of natural shapes; the children may sort stones, for example, into sets that have straight edges, sets that have curved edges etc. | edge, curve, straight, round, flat, sides, face, corner, smooth, triangle, square, circle, rectangle |
|  | * Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. * Combine shapes to make new ones – an arch, a bigger triangle etc. * Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: ‘sides’, ‘corners’; ‘straight’, ‘flat’, ‘round’. | |
| **9** | **Comparing amounts** |  |
|  | Children need progressive experiences where they can compare collections and begin to talk about which group has more things. When talking about amounts of objects use the language of more and fewer. Children will initially be taught perceptual comparing (comparing without counting). At first the groups will be very obviously different (e.g 2 objects and 7 objects). Move on to collection of small numbers of objects that are similar (e.g 1 and 3 objects) and then move onto different items but same quantity (using language of same or equal). | compare, more, fewer, same, equal |
|  | * Compare quantities using language: ‘more than’, ‘fewer than’. | |
| **10** | **Number 1** |  |
|  | Number 1   * Number blocks episode 1 * Counting to 1 * Finding 1 object * 1 being the first number, its position on a number line, ordinal numbers * Numicon 1 * Dice 1 * Subitising 1 * Representing 1 on a 5 frame * A circle – 1 sides shape (including in the environment) * 1 action e.g. 1 hop, 1 jump, 1 clap * The numeral and formation of 1 * Number 1 in the environment * Representing 1 using marks, pictures and finger * Matching numeral to quantity | One, number, numeral, subitise, represent, how many, count, cardinal, first |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |

**Spring Term**

|  |  |
| --- | --- |
| **Spring Term** | **Areas Covered** |
| 1 | Number 2 |
| 2 | Symmetry |
| 3 | Number 3 |
| 4 | 2D Shapes |
| 5 | Measurement –Height |
| 6 | Number 4 |
| 7 | Number 5 |
| 8 | Number 6 |
| 9 | Positional language |
| 10 | Counting to 6 |

|  |  |  |
| --- | --- | --- |
|  | Areas Covered | Key Vocabulary |
| **1** | **Number 2** |  |
|  | Number 2   * Number blocks episode 2 * Counting to 2 * Finding 2 objects * 2 being the second number, its position on a number line, ordinal numbers * Numicon 2 * Dice 2 * Subitising 2 * Representing 2 on a 5 frame * 2 actions e.g. 2 hops, 2 jumps, 2 claps * The numeral and formation of 2 * Number 2 in the environment * Representing 2 using marks, pictures and finger * Matching numeral to quantity * Composition of 2 (1 is a part of me, 1 is a part of me and the whole of me is 2) * Separating the group of objects but knowing that the total is the same | One, two, number, numeral, subitise, represent, how many, count, cardinal, first, second |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **2** | **Symmetry** |  |
|  | Developing an awareness of symmetry helps children to notice and understand mathematical relationships. Creating symmetrical patterns requires a different set of rules to those for following a sequence. So, to make a mirror-image of red, blue, blue, green, you start with the green and repeat in reverse. | Match, same, different, symmetrical, compare, pattern, turn, place |
|  | * Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like ‘pointy’, ‘spotty’, ‘blobs’ etc. | |
| **3** | **Number 3** |  |
|  | Number 3   * Number blocks episode 3 * Counting to 3 * Finding 3 objects * 3 being the third number, its position on a number line, ordinal numbers * Numicon 3 * Dice 3 * Subitising 3 * Representing 3 on a 5 frame * 3 actions e.g. 3 hops, 3 jumps, 3 claps * The numeral and formation of 3 * Number 3 in the environment * Representing 3 using marks, pictures and finger * Matching numeral to quantity * Composition of 3 (2 is a part of me, 1 is a part of me and the whole of me is 2) * Separating the group of objects but knowing that the total is the same | One, two, three, number, numeral, subitise, represent, how many, count, cardinal, first, second, third |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **4** | **2D Shapes** |  |
|  | Children will focus on the properties of shapes. For example, children should be encouraged to notice and describe shapes in the environment and talk about the properties using words such as ‘straight/flat/round/curved’. **When teaching the names of shapes, wherever possible, real life shapes in the environment should be used. Note that only flat surfaces should be referred to as faces**. Include sorting of natural shapes; the children may sort stones, for example, into sets that have straight edges, sets that have curved edges etc. | edge, curve, straight, round, flat, sides, face, corner, smooth, triangle, square, circle, rectangle |
|  | * Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: ‘sides’, ‘corners’; ‘straight’, ‘flat’, ‘round’. * Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. * Combine shapes to make new ones – an arch, a bigger triangle etc. | |
| **5** | **Measurement –Height** |  |
|  | Children will at this stage children able to apply the attribute of short, tall etc to various examples (e.g an adult is tall; grass is short). Adults should be continuously modelling this language. The children should then move on to finding objects that are taller/shorter than a given item. They should be encouraged to utilise strategies such as direct comparison (e.g. placing objects side by side to determine which is longer). When comparing height verbally children should be encouraged to use language such as ‘taller than/shorter than’. | notice, big, large, tall, little, short, smaller, larger, bigger, taller, shorter |
|  | • Make comparisons between objects relating to size, length, weight and capacity. | |
| **6** | **Number 4** |  |
|  | Number 4   * Number blocks episode 4 * Counting to 4 * Finding 4 objects * 4 being the forth number, its position on a number line, ordinal numbers * Numicon 4 * Dice 4 * Subitising 4 * Representing 4 on a 5 frame * 4 actions e.g. 4 hops, 4 jumps, 4 claps * The numeral and formation of 4 * Number 4 in the environment * Representing 4 using marks, pictures and finger * Matching numeral to quantity * Composition of 4 (2 is a part of me, 2 is a part of me and the whole of me is 4; 3 is a part of me, 1 is a part of me and the whole of me is 4) * Separating the group of objects but knowing that the total is the same | One, two, three, four, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **7** | **Number 5** |  |
|  | Number 5   * Number blocks episode 5 * Counting to 5 * Finding 5 objects * 5 being the third number, its position on a number line, ordinal numbers * Numicon 5 * Dice 5 * Subitising 5 * Representing 5 on a 5 frame * 5 actions e.g. 5 hops, 5 jumps, 5 claps * The numeral and formation of 5 * Number 5 in the environment * Representing 5 using marks, pictures and finger * Matching numeral to quantity * Composition of 5 (4 is a part of me, 1 is a part of me and the whole of me is 5; 3 is a part of me, 2 is a part of me and the whole of me is 5) * Separating the group of objects but knowing that the total is the same | One, two, three, four, five, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth, fifth |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **8** | **Number 6** |  |
|  | Number 6   * Number blocks episode 6 * Counting to 6 * Finding 6 objects * 6 being the third number, its position on a number line, ordinal numbers * Numicon 6 * Dice 6 * Subitising 6 * Representing 6 on a 6 frame * 6 actions e.g. 6 hops, 6 jumps, 6 claps * The numeral and formation of 6 * Number 6 in the environment * Representing 6 using marks, pictures and finger * Matching numeral to quantity * Composition of 6 (5 is a part of me, 1 is a part of me and the whole of me is 6; 4 is a part of me, 2 is a part of me and the whole of me is 6; 3 is part of me, 3 is part of me and the whole of me is 6) Explain 6 as being 5 and 1 more. * Separating the group of objects but knowing that the total is the same | One, two, three, four, five, six, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth, fifth, sixth |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. * Compare quantities using language: ‘more than’, ‘fewer than’. | |
| **9** | **Positional language** |  |
|  | Children need opportunities to be exposed to and to use the language of position and direction; *Position: ‘in’, ‘on’, ‘under’. Direction: ‘up’, ‘down’, ‘across*’. Children also need opportunities to use terms which are relative: *‘in front of, ‘behind’, ‘on top of’.* Create as many opportunities as possible to explore this language such as hunting for hidden objects with some prompts (e.g. look behind the shed). | in, on, under, up, down, across, in front of, behind, on top of |
|  | * Understand position through words alone – for example, “The bag is under the table,” – with no pointing. * Describe a familiar route. * Discuss routes and locations, using words like ‘in front of’ and ‘behind’. | |
| **10** | **Counting to 6** |  |
|  | Children will count real-life objects. They will start by counting objects that are identical before moving on to counting objects that have slight difference e.g. different colours, different sizes, but the same type. Children will be encouraged to put objects in a line when counting so they have a clear start and end point. The five frame may be used to support children in lining up objects to count. It will also support children to subitise numbers within 5. Numerals may be introduced to children but they are not expected to write them at this stage, instead they may use drawings to represent their numbers. When teaching numbers to 6 consider the counting principles at all times.  Number blocks How to Count & The Whole of Me episodes. | count, how many, total, altogether, number, one, two, three, four, five, six, |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. * Experiment with their own symbols and marks as well as numerals. * Solve real world mathematical problems with numbers up to 5. * Compare quantities using language: ‘more than’, ‘fewer than’. | |

**Summer Term**

|  |  |
| --- | --- |
| **Summer Term** | **Areas Covered** |
| 1 | Counting to 6 |
| 2 | 2 & 3D shapes. |
| 3 | Measurement - Capacity |
| 4 | Number 7 |
| 5 | Days of the week & Times of the day |
| 6 | Number 8 |
| 7 | Number 9 |
| 8 | Number 10 |
| 9 | Measurement –weight. |
| 10 | Counting to 10 |

|  |  |  |
| --- | --- | --- |
|  | Areas Covered | Key Vocabulary |
| **1** | **Counting to 6** |  |
|  | Children will count real-life objects. They will start by counting objects that are identical before moving on to counting objects that have slight difference e.g. different colours, different sizes, but the same type. Children will be encouraged to put objects in a line when counting so they have a clear start and end point. The five frame may be used to support children in lining up objects to count. It will also support children to subitise numbers within 5. Numerals may be introduced to children but they are not expected to write them at this stage, instead they may use drawings to represent their numbers. When teaching numbers to 6 consider the counting principles at all times.  Number blocks How to Count & The Whole of Me episodes. | count, how many, total, altogether, number, one, two, three, four, five, six, |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. * Experiment with their own symbols and marks as well as numerals. * Solve real world mathematical problems with numbers up to 5. * Compare quantities using language: ‘more than’, ‘fewer than’. | |
| **2** | **2 & 3D Shapes** |  |
|  | Children will focus on the properties of shapes. For example, children should be encouraged to notice and describe shapes in the environment and talk about the properties using words such as ‘straight/flat/round/curved’. **When teaching the names of shapes, wherever possible, real life shapes in the environment should be used. Note that only flat surfaces should be referred to as faces.** Include sorting of natural shapes; the children may sort stones, for example, into sets that have straight edges, sets that have curved edges etc. **Focus more on 3D shapes** | edge, curve, straight, round, flat, sides, face, corner, smooth, triangle, square, circle, rectangle, cube, cuboid, pyramid, sphere |
|  | * Talk about and explore 2D and **3D** shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: ‘sides’, ‘corners’; ‘straight’, ‘flat’, ‘round’. * Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. * Combine shapes to make new ones – an arch, a bigger triangle etc. | |
| **3** | **Measurement - Capacity** |  |
|  | Children will be given daily opportunity for sand and water play which can provide lots of opportunities to explore capacity. Children should be able to identify when a container is empty and full, and extend to half full. Initially children should be exposed to the comparison of full, half full, empty using the same container. However this can be moved on by talking about different size containers (e.g. I wonder whose pot will hold the most water?’ When comparing capacities directly children can pour from one container to another to find which holds more or less water. | full, half full, empty, most, least |
|  | • Make comparisons between objects relating to size, length, weight and capacity. | |
| **4** | **Number 7** |  |
|  | Number 7   * Number blocks episode 7 * Counting to 7 * Finding 7 objects * 7 being the third number, its position on a number line, ordinal numbers * Numicon 7 * Dice 7 * Subitising 7 * Representing 7 on a 7 frame * 7 actions e.g. 7 hops, 7 jumps, 7 claps * The numeral and formation of 7 * Number 7 in the environment * Representing 7 using marks, pictures and finger * Matching numeral to quantity * Composition of 7 (6 is a part of me, 1 is a part of me and the whole of me is 7; 5 is a part of me, 2 is a part of me and the whole of me is 7; 4 is part of me, 3 is part of me and the whole of me is 7) Explain 7 as being 6 and 1 more. * Separating the group of objects but knowing that the total is the same | One, two, three, four, five, six, seven, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth, fifth, sixth, seventh |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. * Compare quantities using language: ‘more than’, ‘fewer than’. | |
| **5** | **Days of the week & Times of the day** |  |
|  | Children should explore talking about and ordering the events of their day such as waking up, coming to school, dinner, bed time. **Encourage the vocabulary of days of the week, morning afternoon, evening**, | first, next, then, last, after that, days, week, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, tomorrow, yesterday, morning, afternoon, evening, lunchtime |
|  | • Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then... | |
| **6** | **Number 8** |  |
|  | Number 8   * Number blocks episode 8 * Counting to 8 * Finding 8 objects * 8 being the third number, its position on a number line, ordinal numbers * Numicon 8 * Dice 8 * Subitising 8 * Representing 8 on a 8 frame * 8 actions e.g. 8 hops, 8 jumps, 8 claps * The numeral and formation of 8 * Number 8 in the environment * Representing 8 using marks, pictures and finger * Matching numeral to quantity * Composition of 8 (7 is a part of me, 1 is a part of me and the whole of me is 8; 6 is a part of me, 2 is a part of me and the whole of me is 8; 5 is part of me, 3 is part of me and the whole of me is 8; 4 is part of me, 4 is part of me and the whole of me is 8) Explain 8 as being 7 and 1 more. * Separating the group of objects but knowing that the total is the same | One, two, three, four, five, six, seven, eight, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth, fifth, sixth, seventh, eighth |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **7** | **Number 9** |  |
|  | Number 9   * Number blocks episode 9 * Counting to 9 * Finding 9 objects * 9 being the third number, its position on a number line, ordinal numbers * Numicon 9 * Dice 9 * Subitising 9 * Representing 9 on a 9 frame * 9 actions e.g. 9 hops, 9 jumps, 9 claps * The numeral and formation of 9 * Number 9 in the environment * Representing 9 using marks, pictures and finger * Matching numeral to quantity * Composition of 9 (8 is a part of me, 1 is a part of me and the whole of me is 9; 7 is a part of me, 2 is a part of me and the whole of me is 9; 6 is part of me, 3 is part of me and the whole of me is 9; 5 is part of me, 4 is part of me and the whole of me is 9) Explain 9 as being 8 and 1 more. * Separating the group of objects but knowing that the total is the same | One, two, three, four, five, six, seven, eight, nine, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth, fifth, sixth, seventh, eighth, ninth |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. | |
| **8** | **Number 10** |  |
|  | Number 10   * Number blocks episode 10 * Counting to 10 * Finding 10 objects * 10 being the third number, its position on a number line, ordinal numbers * Numicon 10 * Dice 10 * Subitising 10 * Representing 10 on a 10 frame * 10 actions e.g. 10 hops, 10 jumps, 10 claps * The numeral and formation of 10 * Number 10 in the environment * Representing 10 using marks, pictures and finger * Matching numeral to quantity * Composition of 10 (9 is a part of me, 1 is a part of me and the whole of me is 10; 8 is a part of me, 2 is a part of me and the whole of me is 10; 7 is part of me, 3 is part of me and the whole of me is 10; 6 is part of me, 4 is part of me and the whole of me is 10; ; 5 is part of me, 5 is part of me and the whole of me is 10) Explain 10 as being 9 and 1 more. * Separating the group of objects but knowing that the total is the same | One, two, three, four, five, six, seven, eight, nine, ten, number, numeral, subitise, represent, how many, count, cardinal, first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. * Compare quantities using language: ‘more than’, ‘fewer than’. | |
| **9** | **Measurement –weight.** |  |
|  | Children will, initially begin with identifying objects they think may be heavy – use lots of adult modelled language. Move on to comparing weights. One way to identify this is to identify that a heavier object creates a greater downwards pull. Ask children to hold a carrier bag; encourage them to notice if it feels as though their hand is being pulled down when something heavy is put in it. Place a carrier bag in each hand and identify which one is heavier by discussing which arm feels more pulled down. Explore the link to the balance scales to show that the heavier side goes down. Exemplify this with a see-saw ‘What can we do to make this side of the see-saw go down?’. Ensure that children are presented with large but light objects and small but heavy objects to prevent the generalisation that big means heavy and small means light. | Heavy, heavier than, light, lighter than, balanced |
|  | • Make comparisons between objects relating to size, length, weight and capacity. | |
| **10** | **Counting to 10** |  |
|  | Recap Numbers 1 to 10. Children will count real-life objects. They will start by counting objects that are identical before moving on to counting objects that have slight difference e.g. different colours, different sizes, but the same type. Children will be encouraged to put objects in a line when counting so they have a clear start and end point. The five frame may be used to support children in lining up objects to count. It will also support children to subitise numbers within 5. Numerals may be introduced to children but they are not expected to write them at this stage, instead they may use drawings to represent their numbers. When teaching numbers to 10 consider the counting principles at all times.  Number blocks Just Add one & Blast off episodes. | count, how many, total, altogether, number, one, two, three, four, five, six, seven, eight, nine, ten |
|  | * Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). * Recite numbers past 5. * Say one number for each item in order: 1,2,3,4,5. * Know that the last number reached when counting a small set of objects tells you how many there are in total (‘cardinal principle’). * Show ‘finger numbers’ up to 5. * Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. * Experiment with their own symbols and marks as well as numerals. * Solve real world mathematical problems with numbers up to 5. * Compare quantities using language: ‘more than’, ‘fewer than’. | |