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| Phase foci | List of activities  NB Numbers and patterns PDF <http://www.solgrid.org.uk/eyc/resources/learning-and-development/> | Look, listen, note how well children… |  |
| The environment is maths –ready | Complete **environment audit**  The **enabling environment** supports maths across the zones and adults have considered maths vocabulary that can be reinforced during play –**role of the adult**  <https://www.foundationyears.org.uk/.../ten-top-number-rhymes> this site has lots of maths ideas for EYFS | Supporting materials [page 5]  Enabling environments page 1  Observation, assessment and planning page 5  Role of the Adult page 2 |  |
| Early Phases | • Sing number rhymes as you dress or change babies, e.g. ‘One, Two, Buckle My Shoe’.  • Move with babies to the rhythm patterns in familiar songs and rhymes.  • Encourage babies to join in tapping and clapping along to simple rhythms.  • Display favourite things so that a young baby can see them.  • Provide a small group of the same objects in treasure baskets, as well as single items, e.g. two fir cones or three shells.  • Create a mobile, occasionally changing the number of items you hang on it.  • Collect number rhymes which are repetitive and are related to children’s actions and experiences, for example, ‘Peter Hammers with One Hammer’.  • Use song and rhymes during personal routines, e.g. ‘Two Little Eyes to Look Around’, pointing to their eyes, one by one.  • Collect number and counting rhymes from a range of cultures and in other languages. This will benefit all children and will give additional support for children learning English as an additional language.  • Develop an awareness of number names through their enjoyment of action rhymes and songs that relate to their experience of numbers.  • Develop understanding that things exist, even when out of sight.  • Begin to organise and categorise objects, e.g. putting all the teddy bears together or teddies and cars in separate piles.  • Say counting words to take steps, up and down stairs, bouncing a ball, hide and seek, etc whenever you can  [*http://earlyyearsmaths.e2bn.org/resources.html*](http://earlyyearsmaths.e2bn.org/resources.html)  *Review provision :*   * *Notes on the learning environment* * *Working in partnership with mothers, fathers and carers.* * *Stimulating and engaging children in PSRN* * *Problem solving, reasoning and numeracy outdoors* * *Planning for Problem solving, Reasoning and Numeracy* * *Maths toolkit 2* * *Construction toys* * *Recording a recipe-Problem solving, reasoning and numeracy through cooking* | See development matters bands |  |
| **Phase 1** focuses on the development of children’s awareness, understanding and use of the language of number | Key vocabulary  number, order, count, pattern, a lot, more, few, less, same, next, one, two, three…  How many…? Which/what number…? What does this number tell us?   * **We’re going on a number hunt** * **Role-play number talk** * **Happy birthday to you** * **How old are you?** * **One or lots?** * **What comes next?** * **What’s in the box?** * **Skittles see *Numbers and Patterns***   <http://www.bigeyedowl.co.uk/show_songs.php?t=7>  • Use number words in meaningful contexts, e.g. ‘Here is your other mitten. Now we have two’.  • Talk to young children about ‘lots’ and ‘few’ as they play.  • Talk about young children’s choices and, where appropriate, demonstrate how counting helps us to find out how many.  • Talk about the maths in everyday situations, e.g. doing up a coat, one hole for each button.  • Tell parents about all the ways children learn about numbers in your setting. Have interpreter support or translated materials to support children and families learning English as an additional language  • Provide varied opportunities to explore ‘lots’ and ‘few’ in play.  • Equip the role-play area with things that can be sorted in different ways.  • Provide collections of objects that can be sorted and matched in various ways.  • Provide resources that support children in making one to- one correspondences, e.g. giving each teddy a cup.  • Give opportunities for children to select a small number of objects from a group when asked, for example, ‘please give me one’, ‘please give me two’.  • Recite number names in sequence whenever you can.  • Create and experiments with symbols and marks representing ideas of number…. Model maths mark making  • Begin to make comparisons between quantities.  • Use some language of quantities, such as ‘more’ and ‘a lot’.  • ensure children knows that a group of things changes in quantity when something is added or taken away… toys/ snack/ stones/keys/ buttons/ dice.. inside and outside etc  • Encourage parents of children learning English as an additional language to talk in their home language about quantities and numbers.  • Sing counting songs and rhymes which help to develop children’s understanding of number  • Play games which relate to number order, addition and subtraction, such as hopscotch and skittles and target games.  • Make a display with the children about their favourite things. Talk about how many like apples, or which of them watches a particular TV programme at home.  • Provide props for children to act out counting songs and rhymes.  • Provide games and equipment that offer opportunities for counting, such as skittles.  • Plan to incorporate a mathematical component in areas such as the sand, water or other play areas.  NRICH maths - <https://nrich.maths.org/13372>  EYFS Activities - Number   * Tidying-Using tidying up as a context for number work. * Number Rhymes-A counting song activity. * Playing Incey Wincey Spider-Here are ideas for using this well known rhyme as a counting game: who will win, the rain or the sun? * Number Book-Children will love creating their own 'number book'. * Owl's Packing List-Can you help Owl pack to go to his aunty's? * The Box Game-Can you work out how many toys are hidden in the box? * Estimation Station-How many are in the jar? Counting to see who is right.   <https://nrich.maths.org/8331>  Also <https://nrich.maths.org/13373> <https://nrich.maths.org/13374> | Look, listen and note:  • the contexts that promote children’s use of number words;  • children’s spontaneous use of number and quantity words during play;  • instances in which children use a number accurately to describe how many objects there are in a set;  • how well children demonstrate understanding of numbers used as labels; |  |
| The main focus in **Phase 2** is the development of children’s knowledge and use of the number sequence from one to five and recognition of the numerals 1 to 5. | Key vocabulary  number, order, count, after, one, two, three, four, five, forwards, backwards, straight, curved, What number comes next? How many…? What does the number look like?   * **Rhyme time to five** * **Today’s special number** * **Number detectives** * **Zig-zag number** * **Making numbers** * **Envelope number track** * **Number search** * **Ride the bike see *Numbers and Patterns***   <https://www.earlylearninghq.org.uk/numeracy/number-rhymes/>  <http://www.bbc.co.uk/learning/schoolradio/subjects/mathematics/countingsongs>  • Use number language, e.g. ‘one’, ‘two’, ‘three’, ‘lots’, ‘fewer’, ‘hundreds’, ‘how many?’ and ‘count’ in a variety of situations.  • Support children’s developing understanding of abstraction by counting things that are not objects, such as hops, jumps, clicks or claps.  • Model counting of objects in a random layout, showing the result is always the same as long as each object is only counted once.  • Model and encourage use of mathematical language e.g. asking questions such as ‘How many saucepans will fit on the shelf?’  • Help children to understand that one thing can be shared by number of pieces, e.g. a pizza.  • As you read number stories or rhymes, ask e.g. ‘When one more frog jumps in, how many will there be in the pool altogether?’  • Use pictures and objects to illustrate counting songs, rhymes and number stories.  • Encourage children to use mark-making to support their thinking about numbers and simple problems.  • Talk with children about the strategies they are using, e.g. to work out a solution to a simple problem by using fingers or counting aloud.  • Give children a reason to count, e.g. by asking them to select enough wrist bands for three friends to play with the puppets.  • Enable children to note the ‘missing set’, e.g. ‘There are none left’ when sharing things out.  • Provide number labels for children to use, e.g. by putting a number label on each bike and a corresponding number on each parking space.  • Include counting money and change in role-play games.  • Create opportunities for children to separate objects into unequal groups as well as equal groups.  • Provide story props that children can use in their play, e.g. varieties of fruit and several baskets like Handa’s Surprise by Eileen Browne.  Encourage children to subitize – and recognise an arrangement of dots/ objects instantly – dice, dominoes, etc <https://www.yellow-door.net/blog/what-is-subitising/> | Look, listen and note:  • the range of numbers that children spontaneously recite, in order, when counting or in play;  • the range of numbers that children recite backwards as part of a rhyme or ‘countdown’;  • how children demonstrate their knowledge of the order of numbers, for example, through saying that two comes before three or ordering the digits 1, 2, 3;  • which numerals children recognise;  • the personal numbers that children refer to, such as their age or house number. |  |
| The main focus in **Phase 3** is the development of children’s knowledge of the number sequence from one to nine and recognition of the numerals 1 to 9. | Key vocabulary  number, order, count, one, two, three, four, five, six, seven, eight, nine, ten, forwards, backwards, next, before, straight, curved, What number comes next? How many...? What does the number look like?   * **Pit stop** * **Rhyme time to ten** * **Number-plate bingo** * **Treasure track** * **Circle counting** * **Squeeze and squirt** * **Missing number** * **Up my street *see Numbers and Patterns***   • Provide collections of interesting things for children to sort, order, count and label in their play.  • Display numerals in purposeful contexts, e.g. a sign showing how many children can play on a number track.  • Use tactile numeral cards made from sandpaper, velvet or string.  • Create opportunities for children to experiment with a  number of objects, the written numeral and the written  number word. Develop this through matching activities with a range of numbers, numerals and a selection of objects.  <https://www.preschoolrainbow.org/preschool-rhymes.htm> | Look, listen and note:  • the range of numbers that children spontaneously recite, in order, when counting or in play;  • the range of numbers that children recite backwards, as part of a rhyme or ‘countdown’;  • how children demonstrate their knowledge of the order of numbers, for example, through saying that eight comes before nine or ordering the digits 5, 6, 7;  • which numerals children recognise;  • how well children continue number sequences. |  |