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| **Mathematics: Number: Counting - Developing Knowledge and Skills Sequentially** |
| **Range/Knowledge** | **Positive Relationships** | **Enabling Environments** |
| 1. | • Reacts to changes of amount when those amounts are significant (more than double) | • Notice and mirror children’s reactions to changes in amount.• Add to objects & draw attention to the change in amount, using words like more.• When feeding babies comment on whether they would like more after being winded, e.g. Oh, you want more.• Use feeding, changing and bathing times for finger-play with young babies | • Provide small groups of the same objects intreasure baskets, as well as single items. |
| 2. | • May be aware of number names through their enjoyment of action rhymes and songs that relate to numbers• Looks for things which have moved out of sight  | • Take opportunities during play to sing number rhymes.• During personal care routines make a point of using numbers.• Play peek-a-boo hiding games with toys and people.• Demonstrate counting as children play e.g. when they jump or swing or climb steps – commentate using number words | • Play ‘here and gone’ games with objects and demonstrate ‘one and none’ through playing this game.• Plan to sing number rhymes with actions. Involvefamilies in sharing number rhymes from homecultures – send songs home and teach to parents on dojo for them to sing at home too• Provide lots of objects that look similar for children to count in ad out of baskets |
| 3. | • Says some counting words• May engage in counting-like behaviour, making sounds and pointing or saying some numbers in sequence | • Draw attention to contrasting differences and changes in amounts e.g. adding more bricks to a tower or eating things up.• Model counting things in everyday situations and routines.• Take opportunities to say number words in order with children as they play, e.g. 1,2,3 go!• Use number words in meaningful contexts, e.g. Here is your other mitten. Now we have two. | • Play hiding games so children notice that something has gone.• Provide varied sets of objects for playful opportunities for children to independently explore lots, more, not many and not enough.• Count while engaging in everyday tasks and whilemoving around.• Sing songs with counting strings. |
| 4. | • Begins to say numbers in order, some of which are in the right order (ordinality) | • Include the number sequence in everyday contexts and songs so children experience the order of the numbers (ordinality)• Encourage children to explore the collections they make, comparing amounts and counting some of the items, emphasising the last number, e.g. 1,2,3. There are 3 leaves.• Use opportunities to model and encourage counting on fingers.• When singing number rhymes with props, draw attention to contrasting differences and changes in numbers, checking together How many now?• Point out the number of things whenever possible, e.g. rather than just chairs, say four chairs.• Encourage children to use marks to represent their mathematical ideas in role play.• Help children to give or get two or three items, e.g. during snack time help children to take two pieces of fruit. | • Provide buckets and bags for children to createcollections of objects which they can count.• Provide mark-making materials indoors andoutdoors for children to represent their own ideasin play.• Sing counting songs and rhymes which help to develop children’s understanding of number.• Say the counting sequence going to higher numbers, in a variety of contexts, indoors and out, and sometimes counting backwards. |
| 5. | • 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 – build up to 5 over time.• Uses some number names and number language within play, and may show fascination with large numbers• Begin to recognise numerals 0 to 10 | • Capitalise on children’s fascination with counting by joining in when they count in games.• Enjoy counting forwards and back (sometimes to much higher numbers). Use different voices, e.g. high or growly.• Use opportunities within daily routines to support children’s developing sense of number.• Model and encourage counting and representing numbers within role play, e.g. making a telephone call using a list of numbers.• Value children’s own mathematical representations within their pretend play.• When counting with children, playfully make deliberate mistakes for fun, expecting children to correct themInvite children to count out a number of things from a larger group,e.g. Can you get five crackers?• Encourage children to use their fingers to show an amount e.g. whenasking another child to share resources, to show on their fingers how many they need | • Provide a numeral rich environment, e.g. in roleplayareas, mud-kitchen recipes, numbers on trikes and toilet doors.• Provide numerals that children can pick up and use within all aspects of their play.• Provide resources indoors and outside for childrento explore and talk about higher numbers.• Model using objects to illustrate counting songs, rhymes and number stories, sometimes using pictures and numerals, to enable children to use those resources independently• Provide a variety of mathematical picture booksand share them as part of “warm and cuddly”maths times.• Explore different arrangements of the same number, e.g. partitioning five in different ways; hiding one group and “guessing” the hidden number.• Model counting items rhythmically, includingobjects into a container, claps or drumbeats |
| 6.  | • 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) | • Play games such as hide and seek that involve counting, forwards and backwards.• Discuss the order of numbers in context, e.g. finding a page number• In everyday activities, ask children to count out a number of things from a group (e.g. Could you get seven cups for snacktime?) | • Discuss examples and display large numbers including hundreds, thousands and a million.• Jump with children along a number track, counting each jump or counting on.• Sing counting songs and count together forwardsand backwards, sometimes starting from differentnumbers and in different step sizes. Discuss numbers coming before, after and between and stress patterns.• When counting groups as part of routines, e.g. self-registration with ten-frames, dinner chart etc. record the final total as a label for children to see.• Build counting and ways of representing numbersinto everyday routines.• Provide numeral cards for children to order on awashing line.• Play subitising games which involve quickly revealing and hiding numbers of objects, perhaps showing numeral cards and fingers.• Drop marbles into a tin and ask the children to listen(without looking) to count how many there are.• Provide opportunities for children to match a number of objects to the numeral, including zero, and display number lines to 100 at child height.• Provide dice, board and card games, sometimesinvolving older children, families and members of the local community. |