Services
HIAS SCHOOL IMPROVEMENT

## HIAS MOODLE+ RESOURCE

## Counting Progression

Doing It Daily Counts!

HIAS Maths Team Maths 2019
Final version
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## Overview

## In this document

This serves to guide teachers to count daily with their classes to improve fluency and as a basis for number work.
Counting is a child's first experience of Maths at an early age and this document highlights how you can keep counting right through the National Curriculum in all domains to help children retain many number facts and use for calculation.

It may stand alone outside of and within a maths lesson and should support the main teaching. It is important to also work with children to understand the concept through explicit modelling using concrete resources where possible.

The references in red are items that can be purchased from the Hampshire Mathematics Advisory Centre to support the modelling.

## Points to consider when using this resource

See Article "Doing it daily counts" in HANSTMATHS Summer 2016 for information and guidance about the importance of counting.
Counting should be supported with visual images and concrete resources.
\(\left.\left.$$
\begin{array}{|l|l|l|l|l|}\hline & \begin{array}{l}\text { NC Objectives for counting } \\
\text { (other objectives) }\end{array} & \begin{array}{l}\text { Additional guidance based } \\
\text { on NC objectives across } \\
\text { maths domains }\end{array} & \text { Examples } & \begin{array}{l}\text { Resources to support } \\
\text { modelling }\end{array} \\
\hline \text { Foundation } & \begin{array}{l}\text { ELG } \\
\text { Children count reliably with } \\
\text { numbers from one to 20, } \\
\text { place them in order and say } \\
\text { which number is one more } \\
\text { or one less than a given } \\
\text { number. }\end{array} & \begin{array}{l}\text { Count forwards and } \\
\text { backwards from 0 to 20. }\end{array} & \begin{array}{l}\text { Count objects. Show me how } \\
\text { to make number 5 etc. using } \\
\text { different objects. Show objects } \\
\text { with numbers on a number } \\
\text { track. } \\
\text { Make sure children know teen } \\
\text { numbers and the pattern. } \\
\text { Order consecutive numbers } \\
\text { and random numbers. } \\
\text { Recognise numerals. } \\
\text { Count from any number. } \\
\text { Which number comes } \\
\text { next/before-1 more/less } \\
\text { (fewer). }\end{array} & \begin{array}{l}\text { Counting objects }\end{array} \\
\text { (BSL20 Bead string to 20) }\end{array}
$$\right\} \begin{array}{l}Number track to ten <br>
(FNT001 Floor number track) <br>

(NL024 0-20 Number line)\end{array}\right]\)| $0,1,2,3$ |
| :--- |


|  | Number count in multiples of twos, fives and tens | Count in $2 \mathrm{p}, 5$ p or 10 p (**start to change the count step whilst displaying coins to aid addition) | $\begin{aligned} & 2 p, 4 p, 6 p \text { etc. } \\ & 10 p, 20 p \text { ** } 25 p, 30 p \end{aligned}$ | Coins real or models (LC048 Large coin set) |
| :---: | :---: | :---: | :---: | :---: |
|  | Measures tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. | Count in $1 / 2 \mathrm{hr}$ intervals using language of time. Progress to quarter hours Days of week / Months of year | Half past 3, 4 o clock, half past 4 etc. | Clock face with rotating hands <br> Vocabulary cards showing days of the week/months |
| Year 2 | Addition and subtraction add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <br> a two-digit number and ones a two-digit number and tens | Count on/back in 10s from any 2 digit number. (supports addition and subtracting tens) Model with dienes | $34,44,54,64 \text { etc. }$ <br> Count on 100 square, talking about the patterns. <br> Support through building the numbers using place value equipment. | 100 square <br> (LG005 Large 100 square) <br> Base ten/Dienes <br> (DNS001 Starter pack dienes) <br> Place value mat (DNSC002- A3 Laminated calculation mat) |
|  | Multiplication and division recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | Count in odd/even numbers (relate to count in 2s) only. | $\begin{aligned} & 5,7,9,11 \\ & 6,8,10,12 \\ & 28,26,24 \text { etc. } \\ & 15,20,25,30 \text { etc. } \end{aligned}$ | Course materials/Primary/ County Core Provision/CP Summer18/Multiplication templates. |


|  | Fractions <br> Pupils should count in fractions up to 10, starting from any number and using the and equivalence on the number line e.g. $1 / 2$ or $2 / 4$ <br> This reinforces the concept of fractions as numbers and that they can add up to more than one. $1^{11 / 4}, 1 \frac{112}{2} 1 \frac{3}{4}$, 2, (nonstatutory guidance) | Count in halves and quarters over 1 whole- relate to measures. | $1 / 4,1 / 2,3 / 4$, 1 whole <br> $31 / 4,31 / 2,33 / 4,4$ etc. <br> $25 \mathrm{~cm}, 50 \mathrm{~cm}, 75 \mathrm{~cm}, 100 \mathrm{~cm}$ <br> (1m) and beyond | Number/Counting stick. <br> Cuisenaire to show fractions. |
| :---: | :---: | :---: | :---: | :---: |
|  | Number and place value count in steps of 2,3 , and 5 from 0 , and in tens from any number, forward and backward <br> Measures recognise and use symbols for pounds $(£)$ and pence (p); combine amounts to make a particular value | Count in coins of different values, changing the counting to support counting of money. | Count in steps of 2p, 5p, 10p Relate counting in 2 s to counting in 20 p, or 5 s to 50 p. 20p, 40p, 60p etc. 50p, £1, £1.50, £2 <br> Adapting the counting to help add e.g. 10p, 20p, 30p, ** 35p, 40p, 45p (**shown coins to signify change in count step) | MCP48001 Magnetic coins |
|  | Number and place value count in steps of 2, 3, and 5 from 0 , and in tens from any number, forward and backward | Count in 5 minute intervals around the clock (past hour) and to hour (from 12 anticlockwise). | 5 past, 10 past 15 minutes past (or quarter past) etc. | Clock faces with rotating hands |


|  | Measures tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times | Use a curved number line to represent the clock face. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 3 | Number and place value count from 0 in multiples of 4 , 8,50 and 100 ; | Teach patterns of multiples of 4 and 8 and 50 and 100s. Draw an image to show how 4 and 8 x table are linked. |  | Course materials/Primary/ County Core Provision/CP Summer18/Multiplication |
|  | Number and place value <br> find 10 or 100 more or less than a given number <br> recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <br> add and subtract numbers mentally, including: <br> - a three-digit number and ones <br> - a three-digit number and tens <br> - a three-digit number and hundreds | Dienes to show 10/100 more/less. Patterns on 100 square. <br> Change the count from 100s to 10 s to 1 s to support addition and subtraction. | $\begin{aligned} & 23,33,43 \text { ** } 44,45,46 \\ & 125,115,105,95 * * 94,93 \end{aligned}$ <br> ** Change count | Base ten/Dienes <br> (DNS001 Starter pack dienes) <br> Place value mat (DNSC002- A3 Laminated calculation mat) |


|  | NC Objectives for counting (other objectives) | Additional guidance based on NC objectives across maths domains | Examples | Resources to support modelling |
| :---: | :---: | :---: | :---: | :---: |
| Foundation | ELG <br> Children count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. | Count forwards and backwards from 0 to 20 . | Count objects. Show me how to make number 5 etc. using different objects. Show objects with numbers on a number track. <br> Make sure children know teen numbers and the pattern. Order consecutive numbers and random numbers. Recognise numerals. Count from any number. Which number comes next/before- 1 more/less (fewer). | Counting objects <br> (BSL20 Bead string to 20) <br> Number track to ten (FNT001 Floor number track) <br> Number line/track to 20. (NL024 0-20 Number line) |
| Year 1 | Number <br> Count to and across 100 <br> Forwards backwards <br> Start from 0 and any number. | Talk about place value of digits. What changes, what stays the same? <br> Count modelling as you go adding or taking away dienes or another concrete resource. | $\begin{aligned} & 0,1,2,3 \\ & 87,88,89,99,100,101,102 \\ & 109,110,111 \\ & 102,101,100,99 \end{aligned}$ | 100 plus square <br> 100 square <br> (LG005 Large 100 square) <br> Number line <br> (NL001-4 to 105 number line) |
|  | Fractions recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | Count in halves and halves and quarters over 1 whole. | 1/4, $1 / 2,3 / 4,1$ whole | Cuisenaire to show fractions. |


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