

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.

	NC Objectives for counting (other objectives)	Additional guidance based on NC objectives across maths domains	Examples	Resources to support modelling
Foundation	ELG 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. 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  (BSL20 Bead string to 20)  Number track to ten (FNT001 Floor number track)  Number line/track to 20. (NL024 0-20 Number line)
Year 1	Number  Count to and across 100 Forwards backwards Start from 0 and any number.	Talk about place value of digits. What changes, what stays the same? Count modelling as you go adding or taking away dienes or another concrete resource.	0, 1, 2,3  87, 88, 89, 99, 100, 101, 102  109, 110, 111  102, 101, 100, 99	100 plus square  100 square (LG005 Large 100 square)  Number line (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.	$\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , 1 whole	Cuisenaire to show fractions.

	Number count in multiples of twos, fives and tens	Count in 2p, 5p or 10p (**start to change the count step whilst displaying coins to aid addition)	2p, 4p, 6p etc. 10p, 20p ** 25p, 30p	Coins real or models (LC048 Large coin set)
	Measures <i>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</i>	Count in ½ 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 Vocabulary cards showing days of the week/months
Year 2	Addition and subtraction <i>add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens</i>	Count on/back in 10s from any 2 digit number. (supports addition and subtracting tens) Model with dienes	34, 44, 54, 64 etc. Count on 100 square, talking about the patterns. Support through building the numbers using place value equipment.	100 square (LG005 Large 100 square) Base ten/Dienes (DNS001 Starter pack dienes) Place value mat (DN5C002- A3 Laminated calculation mat)
	Multiplication and division recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, <b>including recognising odd and even numbers</b>	Count in odd/even numbers (relate to count in 2s) only.	5, 7, 9, 11 6, 8, 10, 12 28, 26, 24 etc. 15, 20, 25, 30 etc.	Course materials/Primary/County Core Provision/CP Summer18/Multiplication templates.

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

	Measures <i>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</i>	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 8x table are linked.		Course materials/Primary/ County Core Provision/CP Summer18/Multiplication
	Number and place value  find 10 or 100 more or less than a given number  recognise the place value of each digit in a three-digit number (hundreds, tens, ones)  add and subtract numbers mentally, including: <ul style="list-style-type: none"> <li>• a three-digit number and ones</li> <li>• a three-digit number and tens</li> <li>• a three-digit number and hundreds</li> </ul>	Dienes to show 10/100 more/less. Patterns on 100 square.  Change the count from 100s to 10s to 1s to support addition and subtraction.	23, 33, 43 ** 44, 45, 46  125, 115, 105, 95 ** 94, 93  ** Change count	Base ten/Dienes (DNS001 Starter pack dienes)  Place value mat (DN5C002- A3 Laminated calculation mat)

	Fractions count up and down in tenths;		$\frac{1}{10}, \frac{2}{10}, \frac{3}{10}$ etc and backwards through 1 whole.	Cuisenaire to show fractions. <b>(BS100) 100 Bead Strings</b>
	Multiplication and division recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Counting on/back in multiples of 3, 4 and 8.		<b>Course materials/Primary/County Core Provision/CP Summer18/Multiplication</b>
	Fractions add and subtract fractions with the same denominator within one whole [for example,	Count in fractions with small denominators	1/3, 2/3, 3/3 (whole), 4/3 (1 1/3) Interchange mixed number and improper fractional language. Talk about and predict where will 1 whole be on counting stick?  Repeat for other fractions e.g. sevenths, fifths etc.	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  Measures <i>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</i>	Count in 5 minute intervals around the clock (past hour) and to hour (from 12 anticlockwise).  Use a curved number line to represent the clock face or a clock face.  Ask questions such as here is 20 past 3- what if the hand was here, or here? Alter hand to show individual minutes close to a known time e.g. 19 minutes past etc.	5 past, 10 past 15 minutes past (or quarter past) etc.  What if the hand was here? (nearest minute).	Clock face with rotating hands

	<p>Measures Add and subtract lengths.</p>		<p>25cm, 50cm, 75cm, 100cm (1m) 250g, 500g (1/2kg) 750g, (3/4kg) 1kg (1000g) etc.</p> <p>20cm, 40cm, 60cm, 80cm 100cm (1m), 120cm etc.</p> <p>10cm, 20cm, 30cm (link to tenths)</p> <p>1mm, 2mm, 3mm, 4mm up to 1cm (10mm) and beyond. (link to tenths- 1mm is 1/10 of cm)</p> <p>Repeat for g/kg and l/ml. Start to make links with simple conversions of measures.</p>	
Year 4	<p>Number and place value count in multiples of 6, 7, 9, 25 and 1000</p>	<p>Link counting in 25 and 1000 to measures. Use curved counting stick to represent dials on scales. Show counting stick both horizontally and vertically (like a container for capacity). Count on containers.</p> <p>What would this reading be? Use what you know?</p>	<p>25cm, 50cm, 75cm, 100cm (1m) 250g, 500g (1/2kg) 750g, 1kg (1000g) etc.</p>	

	<p>Number and place value find 1000 more or less than a given number</p> <p>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>order and compare numbers beyond 1000</p>	<p>Change the count from 1000s, 100s to 10s to 1s to support addition and subtraction.</p>	<p>2344, 3344, ** 3444, 3544 etc. Change count on/back from 1000s to 100s and 10s, 1s from any number. Show dienes to support understanding initially.</p>	<p>Base ten/Dienes (DNS001 Starter pack dienes)</p> <p>Place value mat (DN5C002- A3 Laminated calculation mat)</p>
	<p>Number and place value count backwards through zero to include negative numbers</p>	<p>Use contextual language at times e.g. degrees.</p> <p>Show both horizontal and vertical number line/counting stick.</p> <p>Talk about pattern from zero as marker point.</p>	<p>5, 4, 3, 2, 1, 0, -1, -2 etc. on and back.</p>	<p>(NL005) -20-20 negative number line.</p>
	<p>Multiplication and division recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></p>		<p>Revise counting in all multiples. The 7s is particularly problematic as it does not have an obvious pattern or relationship like most.</p>	<p>Course materials/Primary/County Core Provision/CP Summer18/Multiplication</p>

	<p>Fractions count up and down in hundredths</p> <p>Number and place value</p> <p>Count in numbers with the same number of decimal places (up to 2 dp)</p>		<p>1/100, 2/100</p> <p>0.01, 0.02 etc.</p> <p>Link to cm (100<sup>th</sup> of m)</p> <p>0.21, 0.22, 0.23</p> <p>Link to money and measures</p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>
	<p>Fractions</p> <p>recognise and write decimal equivalents to <math>\frac{1}{4}</math> <math>\frac{1}{2}</math> <math>\frac{3}{4}</math></p> <p>Solve simple measure and money problems involving fraction and decimals to 2 dp.</p>		<p>Count in <math>\frac{1}{4}</math> <math>\frac{1}{2}</math> <math>\frac{3}{4}</math> 0.25, 0.5, 0.75 etc. (change between them)</p> <p>0.07, 0.08, 0.09, 0.10 (in money and measures context)</p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>
	<p>Measures</p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute]</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</p>		<p>600m, 800m, 1000m (1km) 1200m</p> <p>0.6km, 0.8km, 1km, 1.2km etc.</p> <p>use language km/m interchangeably. Repeat similar counting for mass and capacity units.</p> <p>Time 30mins (1/2hr), 60min (1hr), 90mins (1.5hrs) what would go here in between 1hr and</p>	

			<p>1.5hrs? How many minutes? How do you know?</p> <p>7 days, 14 days 1 week, 2 week (show weeks on counting stick but count in days equivalents)</p> <p>Count in 7s to link weeks to days.</p> <p>Count in 12s to link years and months.</p>	
	<p>Measures read, write and convert time between analogue and digital 12- and 24-hour clocks</p>		<p>Count in digital time.</p> <p>Analogue- count up to 12 o'clock (use am/pm) then count round to 13 o'clock (1pm)</p> <p>12:05, 12:10.....12:50, 13:00 Show equivalent analogue language on counting stick to support conversion.</p>	
Year 5	<p>Number and place value</p> <p>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p> <p>Revise in Y6</p>		<p>Count in 10,000s on and back 100,000s and powers of.</p> <p>e.g. 60000, 80000, 100000, 120000 5000, 10000, 15000 etc. up to 1 million</p>	

	<p>Number and place value</p> <p>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p>		<p>5, 4, 3, 2, 1, 0, -1, -2 etc.</p> <p>10, 0, -10, -20 etc. and other multiples to support calculation with negative numbers in context. E.g. it is 10 degrees and the temperature drops to -10. What is the drop in temperature?</p>	<p>(NL005) -20-20 negative number line.</p>
	<p>Fractions</p> <p>Recognise mixed numbers and improper fractions and convert from one to another.</p> <p>Read, write and order and compare numbers with up to 3 decimal places.</p>		<p><math>2, 1\frac{2}{3}, 1\frac{1}{3}</math></p> <p><math>\frac{6}{3}, \frac{5}{3}</math></p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>
Year 6	<p>Number and place value</p> <p>identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places</p>		<p>0.001, 0.002 etc.</p> <p>0.142, 0.143 etc. Link to place value.</p> <p>0.142, 0.152 what am I counting in?</p>	<p>(BS100) 100 bead strings</p> <p>Each set of ten beads= 1 hundredth.</p>
	<p>Fractions</p> <p>recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>	<p>Show decimals on counting stick- children count in fractions or % and vice versa.</p>	<p>10%, 20%,</p> <p>0.1, 0.2 etc.</p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>

	NC Objectives for counting (other objectives)	Additional guidance based on NC objectives across maths domains	Examples	Resources to support modelling
Foundation	<b>ELG</b> <b>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.</b>	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. 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  (BSL20 Bead string to 20)  Number track to ten (FNT001 Floor number track)  Number line/track to 20. (NL024 0-20 Number line)
Year 1	Number  Count to and across 100 Forwards backwards Start from 0 and any number.	Talk about place value of digits. What changes, what stays the same? Count modelling as you go adding or taking away dienes or another concrete resource.	0, 1, 2,3  87, 88, 89, 99, 100, 101, 102  109, 110, 111  102, 101, 100, 99	100 plus square  100 square (LG005 Large 100 square)  Number line (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.	$\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , 1 whole	Cuisenaire to show fractions.

	Number count in multiples of twos, fives and tens	Count in 2p, 5p or 10p (**start to change the count step whilst displaying coins to aid addition)	2p, 4p, 6p etc.  10p, 20p ** 25p, 30p	Coins real or models (LC048 Large coin set)
	Measures <i>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</i>	Count in ½ 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  Vocabulary cards showing days of the week/months
Year 2	Addition and subtraction <i>add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens</i>	Count on/back in 10s from any 2 digit number. (supports addition and subtracting tens) Model with dienes	34, 44, 54, 64 etc.  Count on 100 square, talking about the patterns.  Support through building the numbers using place value equipment.	100 square (LG005 Large 100 square)  Base ten/Dienes (DNS001 Starter pack dienes)  Place value mat (DN5C002- A3 Laminated calculation mat)
	Multiplication and division  recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, <b>including recognising odd and even numbers</b>	Count in odd/even numbers (relate to count in 2s) only.	5, 7, 9, 11  6, 8, 10, 12  28, 26, 24 etc.  15, 20, 25, 30 etc.	Course materials/Primary/ County Core Provision/CP Summer18/Multiplication templates.

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

	Measures <i>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</i>	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 8x table are linked.		Course materials/Primary/ County Core Provision/CP Summer18/Multiplication
	Number and place value  find 10 or 100 more or less than a given number  recognise the place value of each digit in a three-digit number (hundreds, tens, ones)  add and subtract numbers mentally, including: <ul style="list-style-type: none"> <li>• a three-digit number and ones</li> <li>• a three-digit number and tens</li> <li>• a three-digit number and hundreds</li> </ul>	Dienes to show 10/100 more/less. Patterns on 100 square.  Change the count from 100s to 10s to 1s to support addition and subtraction.	23, 33, 43 ** 44, 45, 46  125, 115, 105, 95 ** 94, 93  ** Change count	Base ten/Dienes (DNS001 Starter pack dienes)  Place value mat (DN5C002- A3 Laminated calculation mat)

	Fractions count up and down in tenths;		$\frac{1}{10}, \frac{2}{10}, \frac{3}{10}$ etc and backwards through 1 whole.	Cuisenaire to show fractions.  (BS100) 100 Bead Strings
	Multiplication and division recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Counting on/back in multiples of 3, 4 and 8.		Course materials/Primary/County Core Provision/CP Summer18/Multiplication
	Fractions add and subtract fractions with the same denominator within one whole [for example,	Count in fractions with small denominators	1/3, 2/3, 3/3 (whole), 4/3 (1 1/3) Interchange mixed number and improper fractional language. Talk about and predict where will 1 whole be on counting stick?  Repeat for other fractions e.g. sevenths, fifths etc.	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  Measures <i>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</i>	Count in 5 minute intervals around the clock (past hour) and to hour (from 12 anticlockwise).  Use a curved number line to represent the clock face or a clock face.  Ask questions such as here is 20 past 3- what if the hand was here, or here? Alter hand	5 past, 10 past 15 minutes past (or quarter past) etc.  What if the hand was here? (nearest minute).	Clock face with rotating hands

		to show individual minutes close to a known time e.g. 19 minutes past etc.		
	Measures Add and subtract lengths.		<p>25cm, 50cm, 75cm, 100cm (1m) 250g, 500g (1/2kg) 750g,(3/4kg) 1kg (1000g) etc.</p> <p>20cm, 40cm, 60cm, 80cm 100cm (1m), 120cm etc.</p> <p>10cm, 20cm, 30cm (link to tenths)</p> <p>1mm, 2mm, 3mm, 4mm up to 1cm (10mm) and beyond. (link to tenths- 1mm is 1/10 of cm)</p> <p>Repeat for g/kg and l/ml. Start to make links with simple conversions of measures.</p>	
Year 4	Number and place value  count in multiples of 6, 7, 9, 25 and 1000	<p>Link counting in 25 and 1000 to measures. Use curved counting stick to represent dials on scales. Show counting stick both horizontally and vertically (like a container for capacity). Count on containers.</p> <p>What would this reading be? Use what you know?</p>	<p>25cm, 50cm, 75cm, 100cm (1m) 250g, 500g (1/2kg) 750g, 1kg (1000g) etc.</p>	

	<p>Number and place value find 1000 more or less than a given number</p> <p>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>order and compare numbers beyond 1000</p>	<p>Change the count from 1000s, 100s to 10s to 1s to support addition and subtraction.</p>	<p>2344, 3344, ** 3444, 3544 etc. Change count on/back from 1000s to 100s and 10s, 1s from any number. Show dienes to support understanding initially.</p>	<p>Base ten/Dienes (DNS001 Starter pack dienes)</p> <p>Place value mat (DNCS002- A3 Laminated calculation mat)</p>
	<p>Number and place value count backwards through zero to include negative numbers</p>	<p>Use contextual language at times e.g. degrees.</p> <p>Show both horizontal and vertical number line/counting stick.</p> <p>Talk about pattern from zero as marker point.</p>	<p>5, 4, 3, 2, 1, 0, -1, -2 etc. on and back.</p>	<p>(NL005) -20-20 negative number line.</p>
	<p>Multiplication and division recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></p>		<p>Revise counting in all multiples. The 7s is particularly problematic as it does not have an obvious pattern or relationship like most.</p>	<p>Course materials/Primary/County Core Provision/CP Summer18/Multiplication</p>

	<p>Fractions count up and down in hundredths</p> <p>Number and place value</p> <p>Count in numbers with the same number of decimal places (up to 2 dp)</p>		<p>1/100, 2/100</p> <p>0.01, 0.02 etc.</p> <p>Link to cm (100<sup>th</sup> of m)</p> <p>0.21, 0.22, 0.23</p> <p>Link to money and measures</p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>
	<p>Fractions</p> <p>recognise and write decimal equivalents to <math>\frac{1}{4}</math> <math>\frac{1}{2}</math> <math>\frac{3}{4}</math></p> <p>Solve simple measure and money problems involving fraction and decimals to 2 dp.</p>		<p>Count in <math>\frac{1}{4}</math> <math>\frac{1}{2}</math> <math>\frac{3}{4}</math> 0.25, 0.5, 0.75 etc. (change between them)</p> <p>0.07, 0.08, 0.09, 0.10 (in money and measures context)</p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>
	<p>Measures</p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute]</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</p>		<p>600m, 800m, 1000m (1km) 1200m</p> <p>0.6km, 0.8km, 1km, 1.2km etc.</p> <p>use language km/m interchangeably. Repeat similar counting for mass and capacity units.</p> <p>Time 30mins (1/2hr), 60min (1hr), 90mins (1.5hrs) what would go</p>	

			<p>here in between 1hr and 1.5hrs? How many minutes? How do you know?</p> <p>7 days, 14 days 1 week, 2 week (show weeks on counting stick but count in days equivalents)</p> <p>Count in 7s to link weeks to days.</p> <p>Count in 12s to link years and months.</p>	
	<p>Measures read, write and convert time between analogue and digital 12- and 24-hour clocks</p>		<p>Count in digital time.</p> <p>Analogue- count up to 12 o'clock (use am/pm) then count round to 13 o'clock (1pm)</p> <p>12:05, 12:10.....12:50, 13:00 Show equivalent analogue language on counting stick to support conversion.</p>	
Year 5	<p>Number and place value count forwards or backwards in steps of powers of 10 for any given number up to 1000000 Revise in Y6</p>		<p>Count in 10,000s on and back 100,000s and powers of. e.g. 60000, 80000, 100000, 120000 5000, 10000, 15000 etc. up to 1 million</p>	

	<p>Number and place value</p> <p>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p>		<p>5, 4, 3, 2, 1, 0, -1, -2 etc.</p> <p>10, 0, -10, -20 etc. and other multiples to support calculation with negative numbers in context. E.g. it is 10 degrees and the temperature drops to -10. What is the drop in temperature?</p>	<p>(NL005) -20-20 negative number line.</p>
	<p>Fractions</p> <p>Recognise mixed numbers and improper fractions and convert from one to another.</p> <p>Read, write and order and compare numbers with up to 3 decimal places.</p>		<p><math>2, 1\frac{2}{3}, 1\frac{1}{3}</math></p> <p><math>\frac{6}{3}, \frac{5}{3}</math></p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>
Year 6	<p>Number and place value</p> <p>identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places</p>		<p>0.001, 0.002 etc.</p> <p>0.142, 0.143 etc. Link to place value.</p> <p>0.142, 0.152 what am I counting in?</p>	<p>(BS100) 100 bead strings</p> <p>Each set of ten beads= 1 hundredth.</p>
	<p>Fractions</p> <p>recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>	<p>Show decimals on counting stick- children count in fractions or % and vice versa.</p>	<p>10%, 20%,</p> <p>0.1, 0.2 etc.</p>	<p>Cuisenaire to show fractions.</p> <p>(BS100) 100 Bead Strings</p>

# HIAS Maths Team

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