



Mathematics progression of concepts – Year 1
Number and place value

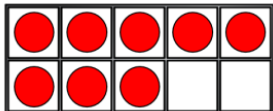
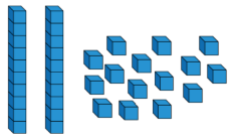
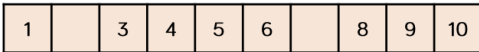
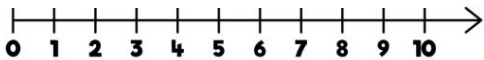
Key vocabulary:

number more than less than count equal to the same as most
least few fewer fewest odd even ones tens digit greater
lesser compare order value between numeral figure

In F2, I have learnt...

- to have a deep understanding of numbers to 10
- to subitise up to 5
- to verbally count beyond 20
- to compare quantities up to 10
- to begin to represent patterns with numbers to 1-, including evens and odds

Representations and manipulatives



In year 1, I am learning...

Counting

- to count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- to count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- to identify one more and one less of a given number

Comparing numbers

- to use the language of: equal to, more than, less than (fewer), most, least

Identifying, representing and estimating numbers

- to identify and represent numbers using objects and pictorial representations including the number line

Reading and writing numbers

- to read and write numbers from 1 to 20 in numerals and words.

In year 2, I will learn...

Counting

- to count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

Comparing numbers

- to compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

Identifying, representing and estimating numbers

- to identify, represent and estimate numbers using different representations, including the number line

Reading and writing numbers

- to read and write numbers to at least 100 in numerals and in words

Understanding place value

- to recognise the place value of each digit in a two-digit number (tens, ones)

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer



Mathematics progression of concepts – Year 2
Number and place value

Key vocabulary:

number more than less than count equal to the same as most
least few fewer fewest odd even ones tens hundreds digit
greater lesser compare order value between numeral figure
greater than less than partition exchange recombine

In year 1, I have learnt...

Counting

- to count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- to count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- to identify one more and one less of a given number

Comparing numbers

- to use the language of: equal to, more than, less than (fewer), most, least

Identifying, representing and estimating numbers

- to identify and represent numbers using objects and pictorial representations including the number line

Reading and writing numbers

- to read and write numbers from 1 to 20 in numerals and words.

In year 2, I am learning...

Counting

- to count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

Comparing numbers

- to compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

Identifying, representing and estimating numbers

- to identify, represent and estimate numbers using different representations, including the number line

Reading and writing numbers

- to read and write numbers to at least 100 in numerals and in words

Understanding place value

- to recognise the place value of each digit in a two-digit number (tens, ones)

In year 3, I will learn...

Counting

- to count from 0 in multiples of 4, 8, 50 and 100
- to find 10 or 100 more or less than a given number

Comparing numbers

- to compare and order numbers up to 1 000

Identifying, representing and estimating numbers

- to identify, represent and estimate numbers using different representations

Reading and writing numbers

- to read and write numbers up to 1000 in numerals and in words

Understanding place value

- to recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

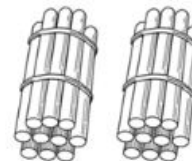
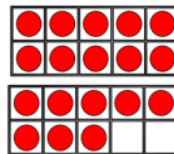
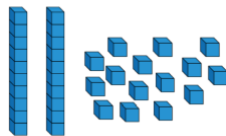
- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

Representations and manipulatives

	15		17	
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1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100





Mathematics progression of concepts – Year 3
Number and place value

Key vocabulary:

more than less than relationship equal to most least few
fewer fewest odd even ones tens hundreds thousands digit
greater lesser compare order value between numeral figure
greater than less than partition exchange Roman numerals

In year 2, I have learnt...

Counting

-to count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

Comparing numbers

-to compare and order numbers from 0 up to 100; use <, > and = signs

Identifying, representing and estimating numbers

-to identify, represent and estimate numbers using different representations, including the number line

Reading and writing numbers

-to read and write numbers to at least 100 in numerals and in words

Understanding place value

-to recognise the place value of each digit in a two-digit number (tens, ones)

Representations and manipulatives

100s	10s	1s
● ● ● ● ●	●	●
● ●		

In year 3, I am learning...

Counting

-to count from 0 in multiples of 4, 8, 50 and 100
-to find 10 or 100 more or less than a given number

Comparing numbers

-to compare and order numbers up to 1 000

Identifying, representing and estimating numbers

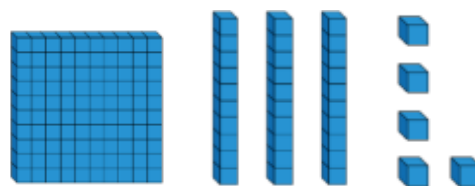
-to identify, represent and estimate numbers using different representations

Reading and writing numbers

-to read and write numbers up to 1000 in numerals and in words

Understanding place value

-to recognise the place value of each digit in a three-digit number (hundreds, tens, ones)



In year 4, I will learn...

Counting

-to count backwards through zero to include negative numbers
-to count in multiples of 6, 7, 9, 25 and 1 000
- find 1000 more or less than a given number

Comparing numbers

-to order and compare numbers beyond 1 000

Identifying, representing and estimating numbers

-to identify, represent and estimate numbers using different representations

Reading and writing numbers

-to read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value

Understanding place value

-to recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

200	300		500			800	
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In my future I can...

Across the curriculum

-science – understanding data
-DT – taking measurements
-PE – keeping score, measuring, angles
-geography – coordinates, maps
-computing – databases, coding

Life skills

-shopping and budgeting
-critical thinking
-playing sport
-map reading
-interpreting statistics
-working with computers

Careers

-shop worker
-bank cashier
-architect
-doctor
-nurse
-teacher
-computer programmer

100s	10s	1s
● 100	● 10 ● 10	● 1 ● 1
	● 10	● 1 ● 1



Mathematics progression of concepts – Year 4

Number and place value

Key vocabulary:

number more than less than count equal to the same as most least few fewer fewest odd even ones tens hundreds thousands ten thousands hundred thousands round digit greater lesser compare order value between positive negative greater than less than partition exchange recombine

In year 3, I have learnt...

Counting

- to count from 0 in multiples of 4, 8, 50 and 100
- to find 10 or 100 more or less than a given number

Comparing numbers

- to compare and order numbers up to 1 000

Identifying, representing and estimating numbers

- to identify, represent and estimate numbers using different representations

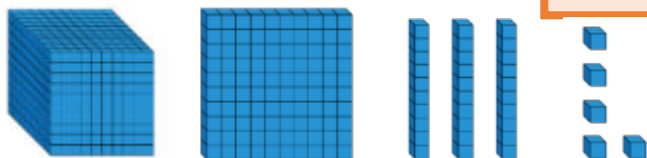
Reading and writing numbers

- to read and write numbers up to 1000 in numerals and in words

Understanding place value

- to recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

Representations and manipulatives



1000s	100s	10s	1s

In year 4, I am learning...

Counting

- to count backwards through zero to include negative numbers
- to count in multiples of 6, 7, 9, 25 and 1 000
- find 1000 more or less than a given number

Comparing numbers

- to order and compare numbers beyond 1 000

Identifying, representing and estimating numbers

- to identify, represent and estimate numbers using different representations

Reading and writing numbers

- to read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value

Understanding place value

- to recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

In year 5, I will learn...

Counting

- to interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- to count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000

Comparing numbers

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)

Reading and writing numbers

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers)

- to read Roman numerals to 1000 (M) and recognise years written in Roman numerals

Understanding place value

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

In my future I can...

Across the curriculum

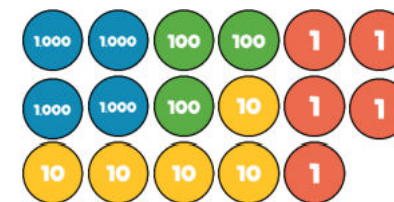
- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer





Mathematics progression of concepts – Year 5
Number and place value

Key vocabulary:

number more than less than count equal to the same as most least few fewer fewest odd even ones tens hundreds thousands ten thousands hundred thousands round digit greater lesser compare order value between positive negative greater than less than partition exchange recombine

In year 4, I have learnt...

Counting

- to count backwards through zero to include negative numbers
- to count in multiples of 6, 7, 9, 25 and 1 000
- find 1000 more or less than a given number

Comparing numbers

- to order and compare numbers beyond 1 000

Identifying, representing and estimating numbers

- to identify, represent and estimate numbers using different representations

Reading and writing numbers

- to read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value

Understanding place value

- to recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

In year 5, I am learning...

Counting

- to interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- to count forwards or backwards in steps of powers of 10 for any given number up to 1000 000

Comparing numbers

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)

Reading and writing numbers

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers)

- to read Roman numerals to 1000 (M) and recognise years written in Roman numerals

Understanding place value

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

In year 6, I will learn...

Counting

- to use negative numbers in context, and calculate intervals across zero

Comparing numbers

- to read, write, order and compare numbers up to

- to compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)

Reading and writing numbers

- to read, write, order and compare numbers up to 10 000 000 and determine the value of each digit

Understanding place value

- to read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

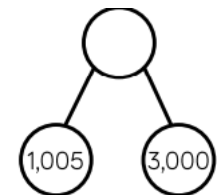
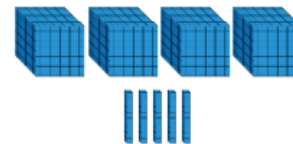
Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

Representations and manipulatives





Mathematics progression of concepts – year 6
Number and place value

Key vocabulary:

number more than less than count equal to the same as most least few fewer fewest odd even ones tens hundreds thousands ten thousands hundred thousands round digit greater lesser compare order value between positive negative greater than less than partition exchange recombine

In year 5, I have learnt...

Counting

- to interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- to count forwards or backwards in steps of powers of 10 for any given number up to 1000 000

Comparing numbers

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)

Reading and writing numbers

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers)

Understanding place value

- to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

In year 6, I am learning...

Counting

- to use negative numbers in context, and calculate intervals across zero

Comparing numbers

- to read, write, order and compare numbers up to
- to compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)

Reading and writing numbers

- to read, write, order and compare numbers up to 10 000 000 and determine the value of each digit

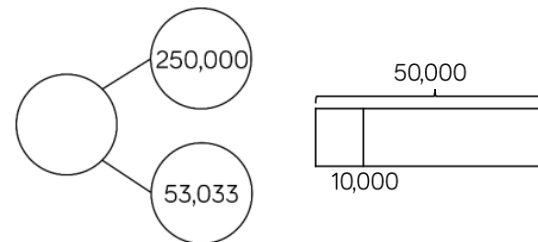
Understanding place value

- to read, write, order and compare numbers up to 10 000 000 and determine the value

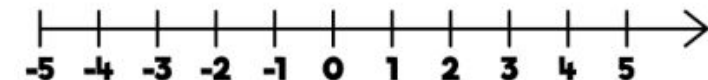
In KS3, I will learn...

- to understand and use place value for decimals, measures and integers of any size
- to order positive and negative integers, decimals and fractions
- to use the number line as a model for ordering real numbers
- to use symbols such as =, ≠, <, >
- to round number and measures to an appropriate degree of accuracy
- to use approximation through rounding to estimate answers
- to appreciate the infinite nature of the sets of integers, real and rational numbers

Representations and manipulatives



M	HTh	TTh	Th	H	T	O
●		● ● ● ●	●	● ● ●	●	● ●



Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

HTH	TTh	Th	H	T	O
10000		1000 1000 1000 1000	100 100 100	10 10	1 1 1 1 1 1 1 1
	10000 10000 10000 10000 10000 10000	1000	100 100 100 100 100 100 100	10 10 10	1



