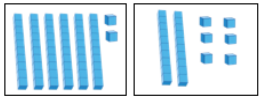
Place value: Overview

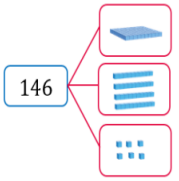
Concepts: Representing, Counting, Comparing, Problem solving and rounding

"One more than three is four"

"15 is one more than 14. 14 is one less than 15."

"Sixty two is greater than twenty six."
62 > 26





"Ten greater than 146 is 156. The tens digit increases by one which makes 5 tens."
146 < 156

Reception

- Develop an understanding of zero
- Develop number sense (one-one correspondence, cardinality, ordinality and conservation of number, subitising and abstraction)
- Identify and represent numbers : 0-10 (progressing to 20)
- Count on and back reliably: 0-50
- Say which number is one more or one less than a given number

Year 1

- Read and write numbers in numerals: 0-100 and words: 0-20
- Identify and represent numbers: 0-20 (progressing to 100)
- Count to and across, forwards and backwards in ones, count in twos, fives, and ten: 0-100
- Identifying one more one less: 0-100

Year 2

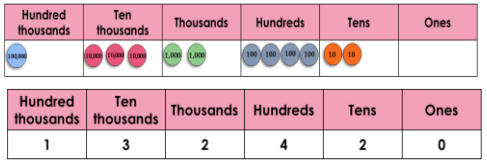
- Read and write in numerals and words; recognise the place value of each digit: 0-100 (0-1000)
- Identify, represent and estimate numbers : 0-100 (progressing to 1000)
- Count in twos, threes, fives and tens; forward and backward: 0-100
- Compare and order number; use <, > and = signs: 0-100 (0-1000)
- Use place value and number facts to solve problems

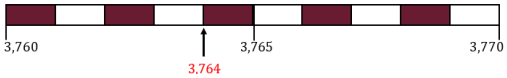
Year 3

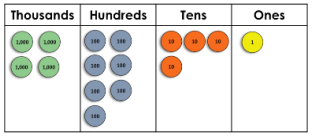
- Read and write in numerals and words; recognise the place value of each digit: 0-1000 (10,000)
- Identify, represent and estimate numbers using different representations: 0-1000 (progressing to 10,000)
- Count from 0 in multiples of 4, 8 50 and 100; find 10 or 100 (1000) more or less than a given number
- Compare and order numbers: 0-1000 (10,000)
- Round numbers to the nearest 10 and 100 (1000)
- Solve number problems and practical problems involving these ideas

3 125 496 ◯ 3 126 954

"My number is less than your number because…"







Year 4

- Recognise the place value of each digit: 0-10,000
- Identify, represent and estimate numbers using different representations: 0-10,000
- Read Roman numerals: 0-100
- Count in multiples of 6, 7, 9, 25 and 1000; find 1000 more or less than a given number
- Count backwards through zero: negative numbers
- Compare and order numbers: beyond 1000
- Round any number to the nearest 10, 100 or 1000
- Solve number and practical problems involving these ideas, with increasingly large positive numbers

Year 5

- Read, write, order and compare numbers; recognise the place value of each digit: 0-1,000,000 and beyond
- Read Roman numerals: 0-1,000
- Count forwards or backwards in steps of powers of 10: 0-1,000,000
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero (calculate intervals across zero)
- Round any number to the nearest 10, 100, 1,000, 10,000 and 100,000: 0-1,000,000
- Solve number problems and practical problems that involve all of the above

Year 6

- Read, write, order and compare numbers; recognise the place value of each digit: 0- 10,000,000
- Use negative numbers in context, and calculate intervals across zero
- Round any whole number to a required degree of accuracy
- Solve number and practical problems that involve all of the above

Place value: Concept breakdown

Notes:
- *Our progression map in Place Value covers **integer** (whole number) place value only, please see the Fractions, Decimals and Percentages progression map for decimal place value.*
- *Statutory Curriculum requirements are in* **bold**

	Reception →	Year 1 →	Year 2 →	Year 3 →	Year 4 →	Year 5 →	Year 6
Understanding and representing number							
Representing numbers	**Identify and represent numbers 1-10** Unit 2 (1-3); Unit 3 (1-6); Unit 7 (1-10)	**Identify and represent numbers using objects and pictorial representations including the number line: 0-20** Unit 1 (within 10);Unit 4 (within 20)	**Identify, represent and estimate representations: 0-100** *(progressing to 1000)* Unit 1; Unit 12 (within 1000)	**Identify, represent and estimate numbers using different representations: 0-1000** *(progressing to 10,000)* Unit 2; Unit 13 (4-digit numbers)	**Identify, represent and estimate numbers using different representations: 0-10,000** Unit 1		
Using numerals		**Read and write numbers 0-20 in numerals and words: (progressing to 100 in numerals)** Unit 1 (within 10);Unit 4 (within 20) ; Unit 8 (within 50); Unit 12 (within 100)	**Read and write in numerals and words (0-100)** Unit 1	**Read and write in numerals and words (0-1000)** Unit 2;		**Read and write in numerals and words: 0-1,000,000 and beyond** Unit 1	**Read, write, order and compare numbers; 0-10,000,00** Unit 1
Roman numerals					**Read Roman numerals: 0-100** Unit 13	**Read Roman numerals: 0-1,000** Unit 1	
Understanding value	**Develop understanding of numbers to 0-10; Subitise to 5** Unit 2 (1-3); Unit 3 (1-6); Unit 4 (zero); Unit 7 (1-10)		**Recognise the place value of each digit: 0-100** *(progressing to 0-1000)* Unit 1; Unit 12 (within 1000)	**Recognise the place value of each digit: 0-1000** *(progressing to 10,000)* Unit 2; Unit 13 (4-digit numbers)	**Recognise the place value of each digit: 0-10,000** Unit 1	**Recognise the place the value of each digit: 0-1,000,000 and beyond** Unit 1	**Recognise the place value of each digit: 0- 10,000,000** Unit 1
Counting							
Counting in ones	**Count on and back reliably: 0-20 and beyond** Unit 2 (1-3); Unit 3 (1-6); Unit 7 (1-10); Unit 11 (1-15); Unit 15 (1-20)	**Count to and across, forwards and backwards in ones: 0-100** Unit 1 (within 10);Unit 4 (within 20)			**Count backwards through zero: negative numbers** Unit 13		

	Reception →	Year 1 →	Year 2 →	Year 3 →	Year 4 →	Year 5 →	Year 6
Counting (continued)							
Skip-counting		**Count in twos, fives and ten: 0-100** Unit 1 and Unit 4 Do Nows and Transitions (2s and 5); Unit 8; Unit 15 (application)	**Count in twos, threes, fives and tens; forward and backward: 0-100** Unit 1 (during transitions)	**Count from 0 in multiples of 4, 8 50 and 100; find 10 or 100 (1000) more or less than a given number** Unit 2 (50 and 100 during transitions); Unit 6 (4s); Unit 7 (8s)	**Count in multiples of 6, 7, 9, 25 and 1000; find 1000 more or less than a given number** Unit 1 (powers of 10, 50s and 25s in transitions); Unit 3	**Count forwards or backwards in steps of powers of 10: 0-1,000,000** Unit 1 (during transitions)	
Negative numbers					**Count backwards through 0 to include negative numbers** Unit 13	**Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero** Unit 9 (coordinates context); Unit 14	**Use negative numbers in context, and calculate intervals across zero** Unit 6 (coordinates context) Additional resources
Comparing							
Compare and order	**Say which number is one more or one less than a given number within 10** Unit 3; Unit 7	**Identifying one more one less: 0-100; use the language of: equal to, more than, less than (fewer), most, least** Unit 1 ; Unit 4; Unit 8	**Compare and order number; 0-100 (progressing to 0-1000); use <, > and = signs** Unit 1; Unit 12 (within 1000)	**Compare and order numbers: 0-1000** *(progressing to 10,000)* Unit 1 (to 100); Unit 2; Unit 13 (4-digit numbers)	**Compare and order numbers: beyond 1000** Unit 1	**Compare and order numbers; 0-1,000,000 and beyond** Unit 1	**Compare numbers: 0- 10,000,000** Unit 1
Problem solving and rounding							
Rounding				**Round numbers to the nearest 10 and 100** *(progressing to nearest 1000)* Unit 2; Unit 13 (nearest 100)	**Round any number to the nearest 10, 100 or 1000** Unit 1	**Round any number to the nearest 10, 100, 1,000, 10,000 and 100,000: 0-1,000,000** Unit 1	**Round any whole number to a required degree of accuracy** Unit 1
Practical problems			**Use place value and number facts to solve problems** Unit 1; Unit 12	**Solve number problems and practical problems involving these ideas** Unit 2	**Solve number and practical problems involving these ideas, with increasingly large positive numbers** Unit 1	**Solve number problems and practical problems that involve all of the above** Unit 1	**Solve number and practical problems that involve all of the above** Unit 1