OAK Multi Academy Trust
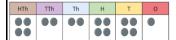
What should I already know?

- count in multiples of 6, 7, 9, 25 and 1,000
- find 1,000 more or less than a given number
- count backwards through 0 to include negative numbers
- recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)
- order and compare numbers beyond 1,000
- identify, represent and estimate numbers using different representations
- round any number to the nearest 10, 100 or 1,000
- solve number and practical problems that involve all of the above and with increasingly large positive numbers
- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value

Key Vocabulary and definitions

Ascending	Numbers increasing in size.
Descending	Numbers decreasing in size.
Gategno chart	A type of place value chart to help understand powers of 10.
Hundred thousand	100 000 is one hundred 1000s.
Million	1 000 000 is one thousand 1000s.
Negative number	Less than zero with a minus sign in front of it.
Power of 10	The number 10 multiplied by itself a certain number of times e.g. $10^2 = 10 \times 10 = 100$.
Round	Replacing a number with an approximate value which is easier to work with.
Ten thousand	10 000 is ten thousands.

Key Knowledge

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

456 214 = 400 000 + 50 000 + 6000 + 200 + 10 + 4
456 214 = 300 000 + 150 000 + 4000 + 2200 + 10 + 4 etc,,,
The value of 4 in 346 231 = 40 000;   3 = 300 000; 6 thousand = 6000.

422 442 four hundred and 22 thousand four hundred and forty two.

Compare:

equals   greater than   less than

26 + 38 = 8 × 8   23 873 > 8256   901 198 < 1 091 098

Order:

| 557,450 | 575,540 | 755,540 | 455,705 |

455 705 < 557 450 < 575 540 < 755 540

Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

Gategno Chart:

58 000 is 10 times the size of 5 800; 270 000 is 100 times the size of 2700
6 700 is one tenth the size of 67 000
$10^2 = 10 \times 10 = 100$; $10^3 = 10 \times 10 \times 10 = 1000$

Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0

-25 -24 -23 -22 -21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 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   Also show vertically.

Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000

345 679 to the nearest 100 000 is 300 000; 245 231 to the nearest 10 000 is 250 000; 156 387 to the nearest 1000 is 156 000.

Solve number problems and practical problems that involve all of the above

Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals

CCXLVIII = 248   DCCLXXXIV = 784   MMXIX = 2019

	I = 1	II = 2	III = 3	
IV = 4	V = 5	VI = 6	VII = 7	VIII = 8
IX = 9	X = 10	XI = 11	XX = 20	XXX = 30
XL = 40	L = 50	LX = 60	LXX = 70	LXXX = 80
XC = 90	C = 100	CL = 150	CC = 200	CCC = 300
CD = 400	D = 500	DC = 600	DCC = 700	DCCC = 800
CM = 900	M = 1000	MC = 1100	MD = 1500	MM = 2000