



Year 5 Number and Place Value

Prior Knowledge






- Count from 0 in multiples of 4, 8, 50 and 100 (Y3); Count in multiples of 6, 7, 9, 25 and 1,000 (Y4)
- Compare and order numbers beyond 1000; use <, > and = signs (Y1-4)
- Read and write numbers to at least 100 in numerals and in words (Y2). Read and write numbers up to 1,000 in numerals and in words (Y3)
- Find 10 or 100 more or less than a given number (Y3); Find 1000 more or less than a given number (Y4).
- Recognise the place value of each digit in a 4-digit number; (Y3) (Y2 = 2 digit number, Y3 = 3 digit number)
- Identify, represent and estimate numbers using different representations (Y3&4)
- Solve number problems and practical problems involving these ideas (Y2-4)
- Count backwards through 0 to include negative numbers (Y4)
- Round any number to the nearest 10, 100 or 1000 (Y4)
- Read Roman Numerals to 100 and know that over time, the numeral system changed to include the concept of 0 and place value (Y4, including History)

Number		Working Towards	Within	Expected	Above
	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit				
	Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000				
	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0				
	Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000				
	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.				
	Solve number problems and practical problems that involve all of the above				
Highlights: _____ _____					




Glossary

vocabulary	word class	definition
number	noun	a symbol or word that tells you how many of something there are; a numeral or figure
place value	noun	the numerical value that a digit has by virtue of its position in a number
multiples	noun	a number that may be divided by another a certain number of times without a remainder
more >		a greater or additional amount of something
less <		a smaller amount or quantity of something
equal (to) =	adjective	being the same in quantity, size, degree, or value
estimate	verb/noun	roughly calculate or judge the value, number, quantity
numerals	noun	a figure, symbol, or group of figures or symbols denoting a number
negative number	noun	less than zero
round	verb	alter (a number) to one less exact but more convenient for calculations
Roman Numeral	noun	any of the letters representing numbers in the Roman numerical system.
zero	number	no quantity or number; nought; the figure 0
digit	noun	any of the numerals from 0 to 9, especially when forming part of a number
powers of 10		any of the integer powers of the number ten
integer	noun	a number which is not a fraction; a whole number

M Millions 1 000 000	Hth Hundred Thousands 100 000	Tth Ten Thousands 10 000	Th Thousands 1000	H Hundreds 100	T Tens 10	O Ones 1	t Tenths 0.1	h Hundredths 0.01	th Thousandths 0.001
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- millions
- thousands
- hundreds
- tens
- ones
- zero
- place value
- greater than
- less than
- order
- round
- rounded
- negative number
- partition
- digit
- interval
- sequence
- linear sequence

	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

Rounding to the nearest 10



Rounding to the nearest 1000



Rounding to the nearest 100 000



equals

$$26 + 38 = 8 \times 8$$

Both calculations have the value 64.

greater than

$$23\ 873 > 8256$$

The number on the left has 2 ten thousands and the number on the right has 0 ten thousands.

less than

$$901\ 198 < 1\ 091\ 098$$

The number on the right has 1 million and the number on the left has 0 millions.

smallest

898

6735

6835

7019

9002

11 235

greatest

Counting in Powers of 10

Counting in 10s

365	375	385	395	405	415
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The tens increase until 9 tens becomes one more hundred and 0 tens.

Counting in 100s

2841	2941	3041	3141	3241	3341
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The hundreds increase until 9 hundreds becomes one more thousand and 0 hundreds.

Counting in 10 000s

276 109	286 109	296 109	306 109
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The ten thousands increase until 9 ten thousands become one more hundred thousand and 0 ten thousands.

Counting in 100 000s

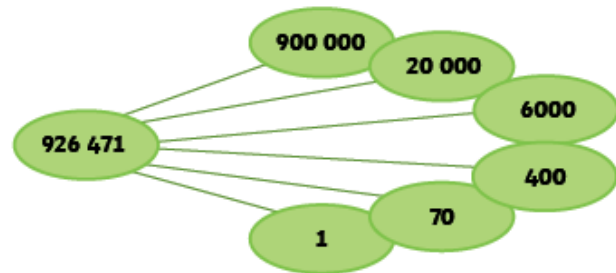
2 972 151	3 072 151	3 172 151	3 272 151
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The hundred thousands increase until 9 hundred thousands becomes one more million and 0 hundred thousands.

926 471

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	2	6	4	7	1

nine hundred and twenty-six thousand, four hundred and seventy-one



Future Learning

Year 6

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