

## Knowledge Organiser

Year Group	Subject	Topic
5	Maths	Place Value

### The Big Picture

In this unit, children will learn to read Roman numerals to 1000 and the date. They will read, write and partition numbers within 1,000,000, compare and label them on a number line. Children will begin counting in powers of 10 to find more or less than a number and use their knowledge to solve multi step problems. We will explore factors, multiples and prime numbers.

### Enquiry Questions

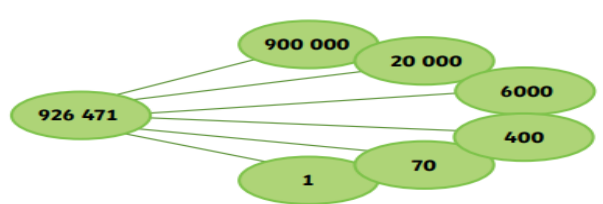
What is the date in Roman numerals? What is the value of 7 in 61,794? What is rounding? When do you round up or down? What are the factors of 20? What are multiples of 6? What are the prime numbers to 20?

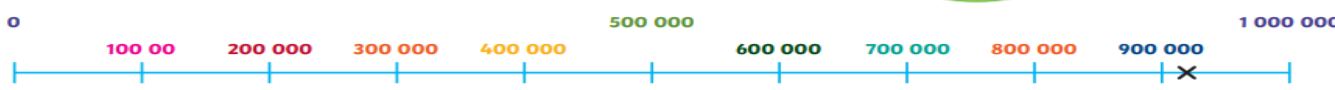
Numbers to One Million

### 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





Roman Numerals

Rounding

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**

20	21	22	23	24	25	26	27	28	29	30
← round down					→ round up					

**Rounding to the nearest 1000**

2000	2499	2500	3000
← round down		→ round up	

**Rounding to the nearest 100 000**

200 000	249 999	250 000	300 000
← round down		→ round up	

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 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 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 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.

### Key Vocabulary

Partition	Splitting numbers e.g. 658 can be partitioned into 600, 50 and 8.
Factors	A number that divides the given number exactly. E.g. 3 and 6 are factors of 12.
Multiples	Example: 4, 8, 12, 16, 20 are multiples of 4.
Prime numbers	Numbers which are only divisible by themselves and 1. E.g. 2, 3, 5, 7, 11, 13, 17, 19