



# YEAR 6 - MATHS- NUMBER AND PLACE VALUE KEY KNOWLEDGE ORGANISER

## Key Vocabulary

**Decimal point** - This is an important symbol that separates the whole numbers from the part numbers.

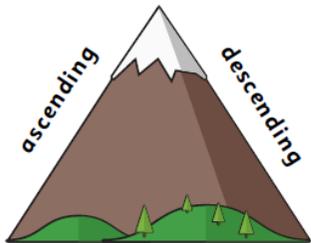
**Rounding** - This means making a number simpler but keeping its value close to what it was.

**Ascending order** - This means ordering numbers from the lowest to highest value.

**Descending order** - This means ordering numbers from the highest to the lowest value.

**Digit** - any of the numerals from 0 to 9

**Negative number** - A number less than zero



<b>Write it!</b>	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	tenths	hundredths	<b>Write it another way!</b>	
	5	7	3	4	1	8	6	.	2	3	
<b>Partition it!</b>	500000	70000	3000	400	100	80	6	0.2	0.03	$0.2 = \text{two tenths}$ $0.2 = \frac{2}{10}$ $0.03 = \text{three hundredths}$ $0.03 = \frac{3}{100}$	
	five million, seven hundred and thirty-four thousand, one hundred and eighty-six, two tenths and three hundredths						<b>Say it!</b>	<b>Mathematical Symbol</b>	This is a decimal point. It is an important symbol that separates the whole numbers from the part numbers.		

**Negative numbers**

numbers decreasing ←      → numbers increasing

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

+1 +1 +1      -1 -1 -1

**Say it!** negative 6      **Add it!**  $-5 + 3 = -2$       **Subtract it!**  $2 - 3 = -1$       **Mathematical symbols** < is less than   > is more than   = is equal to

**Round it!**

2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000

200      800

**Round to the nearest 1000**  
 2200 is 200 more than 2000.  
 2200 is 800 less than 3000.  
 2200 is closest to 2000.  
 2200 rounded to the nearest 1000 is 2000.

**Round to the nearest 10000**  
 47000 is 7000 more than 40000.  
 47000 is 3000 less than 50000.  
 47000 is closest to 50000.  
 47000 rounded to the nearest 10000 is 50000.

40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000

7000      3000

**Roman Numerals**

I	=	1
V	=	5
X	=	10
L	=	50
C	=	100
D	=	500
M	=	1000

**Temperature**

°C

numbers increasing ↑

numbers decreasing ↓

**Problem solving**

**What is the number?**

- The number has five digits.
- The ten thousands digit is the same as the hundreds digit, and it is an odd number which can be divided by 3 to make 3.
- The thousands digit is bigger than 8.
- The ones digit is half the number of months in a year.
- The tens digit is smaller than 1.

**R**ead  
**N**umber  
**C**alculation  
**A**nswer