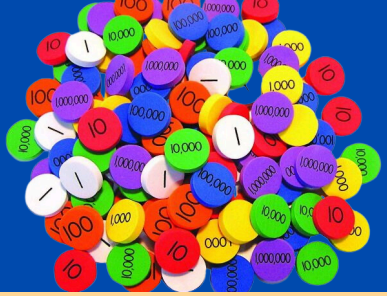

MATHS- PLACE VALUE YEAR 6

RECAP

- Place value to 1,000,000
- Read write and order numbers to 1,000,000
- Flexible partitioning to 1,000,000
- Round numbers up to 100,000
- Read Roman Numerals to 1000

CRUCIAL KNOWLEDGE

- Read write and order nintegers to 10,000,000
- identify integers that are 10, 100, 1,000 times the size, or one-tenth, one-hundredth, one-thousandth the size of other integers.
- Partition numbers to 10,000,000.
- Use number lines to represent numbers to 10,000,000
- Round any integer.
- Use negative numbers in context.
- Order negative numbers.

EXTENDED KNOWLEDGE

- Multi- step problems
- Reasoning problems where there is more than one possible answer.

KEY VOCABULARY

Integers
Whole numbers. These can be positive or negative.
For example, 4, 78, 124, -34

Approximate
Not completely accurate, but close enough to be used.
≈

Multiples
A number that can be divided by another number without a remainder.
Multiples of 5:
5 10 15 20 25 30 35 40

Power of 10
10 multiplied by itself a certain number of times.
10, 100, 1,000, 10,000, 100,000, 1,000,000...
(By definition, the number 1 is a power of 10)

Exchange
Changing one thing for another.
You can exchange:
10 ones for 1 ten
10 tens for 1 hundred
10 hundreds for 1 thousand

Roman Numerals
Numbers that were used in ancient Rome.
Roman numerals are based on these symbols.
I V X L C D M

Negative Numbers
Numbers less than zero.
-5 -4 -3 -2 -1 0 1 2 3 4 5

Estimate
A reasonable guess.
How many?

Sequence
A list of numbers that follow a particular pattern or rule.
Each number in a sequence is called a term of the sequence.
1, 3, 5, 7, 9...

Compare
Looking at the difference between numbers.
Is one greater than the other?
Are they equal to each other?
How do you know?
321,432
321,234

Partition
To split/ separate/ divide numbers into smaller parts.
This can make calculations easier.
3527
3,000 500 20 7
3000 + 200 + 50 + 7
You can also partition smaller numbers.
3
2 + 1

Digit
Any of the ten numbers:
0, 1, 2, 3 ,4, 5, 6, 7 ,8 ,9
The number 23,452 has five digits.

Place Value
The value of a digit, depending on its position.
For example- the numbers 432, 24, 2,004 all have the number 2 in it but the place value of 2 is different in all of them.
432
hundreds tens ones

Millions, Hundred Thousands, Ten Thousands, Thousands, Hundreds, Tens and Ones

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
2	4	1	3	6	2	7

This represents the number: two million, four hundred and thirteen thousand, six hundred and twenty-seven.

Numeral
A numeral is a symbol or name that stands for a number.
For example: 7, ten, 15 and eleven are all numerals.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones • tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths
M	HTh	TTh	Th	H	T	O • t	h	th	tth	hth	m
						•					

100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009

1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII
8	VIII
9	IX
10	X

11	XI
20	XX
30	XXX
40	XL
50	L
60	LX
70	LXX
80	LXXX
90	XC
100	C

111	CXI
200	CC
300	CCC
400	CD
500	D
600	DC
700	DCC
800	DCCC
900	CM
1,000	M