Yr 5 Number and Place Value Knowledge Organiser

National Curriculum Aims

➢ read, write, order and compare numbers to at least 1 000 000
➢ 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 zero.
➢ round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.
➢ solve number problems and practical problems that involve all of the above.
➢ read Roman numerals to 1000 (M).

Key Vocabulary

Greater than ≥	If one quantity is more than a second quantity, then it is greater than that second quantity.
Less than ≤	If one quantity is less than a second quantity, then it is less than that second quantity.
Equal	If one amount equals the other, then they have the same value.
Ascending order	Going up in order from smallest to largest.
Descending order	Going down in order from smallest to largest.
Positive	A number greater than zero.
Negative	A number less than zero.
Compare	Look for differences and similarities between them.
Consecutive	Means one after the other in order.
Numeral	A word or a figure written down to represent a number.
Round	To give an approximate number and to make it easier to work with.

Home Learning

- Talk about the value of digits in numbers when buying items in the supermarket.
- When cooking it would be useful to discuss weights in both g and kg and discuss the place value of the digits.

Core Knowledge and Representations

M	HTh	TTh	Th	H	T	O

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I = 1
V = 5
X = 10
L = 50
C = 100
D = 500
M = 1000
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This is the same as writing it as: **1,041,312**

It is also the same as: **1,041,312 = 1,000,000 + 40,000 + 1000 + 300+10+2**
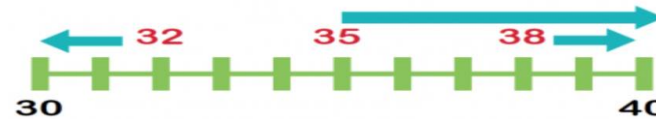
Rounding numbers to the nearest 10,100, 1000

Rounding numbers to the nearest 10:
If the ones digit is less than five, the number needs to be rounded down.
If the ones digit of the number is 5 or above the number needs to be rounded up.

So 32 would be rounded down to 30, 35 would be rounded up to 40 and 38 would also be rounded up to 40.

Rounding numbers to the nearest 100:
So 834 would be rounded down to 800, 851 would be rounded up to 900 and 876 would also be rounded up to 900.

Negative Numbers:
The temperature on Monday morning is -5˚C. The temperature on Friday morning is 1˚C. How much warmer is it on Friday morning than on Monday morning?
Using the number line tells us the difference - the answer is 6˚C.