

## Maths - Year 4

### Numbers and the Number System 1: Understanding place value in 4-digit numbers

#### Key Vocabulary

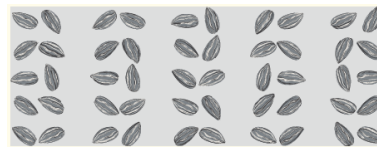
Estimate	A good guess, close to the actual.
Place value	Relates to the value of each digit in a number e.g. hundreds, tens and ones.
Zero has a place holder	Zero has a place holder changes the value of other digits e.g. 52 could become 502 or 520.
Base-ten	Small cubes, sticks of ten cubes, flat squares of 100 cubes, and large cubes of 1000 small cubes used to show ones, tens, hundreds and thousands.

#### Mathematical Skills

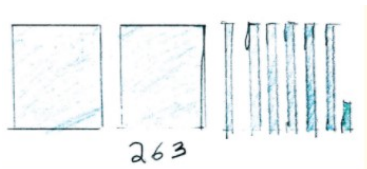
- Make reasonable estimates of amounts over 100.
- Can explain 0 as a place holder.
- Can explain the column value and quantity value of numbers e.g. the quantity value is three hundred and we write this as three hundreds, zero tens and zero ones.
- Know that multiples of 10 and 100 are useful 'staging posts' for finding numbers on a number line.
- Represent numbers with different kinds of apparatus, including place value grids and calculators, and by writing and drawing.
- Use knowledge of number when measuring grams and kilograms and with other units of measure.
- Recognise which numbers fall within a range.
- Can explain that other number systems which may be written differently still use the base-ten system.

#### Mathematical Methods

- Estimating beyond 100 e.g. by spotting patterns of 10.



- Making a 0 - 1000 number line.



- Visualising numbers to 1000.

- Exploring quantity value with a counters game.

- 1000 points
- 100 points
- 10 points
- 1 point

$$2000 + 100 + 30 + 4 = 2134$$

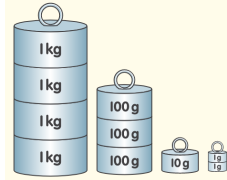
- Making connections between quantity and column values.

9000	900	90	9
8000	800	80	8
7000	700	70	7
6000	600	60	6
5000	500	50	5
4000	400	40	4
3000	300	30	3
2000	200	20	2
1000	100	10	1

4000
500
30
2

$$4000 + 500 + 30 + 2 = 4532$$

- Exploring place value with masses.



- Exploring number systems used by other cultures.

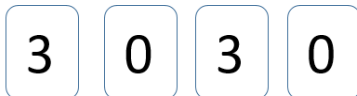
	2	20	200	2000
Roman numerals	II	XX	CC	MM
Ancient Egyptian numerals		∩∩	☉☉	👤👤👤👤

### Can you..?

- Estimate the number of seeds.



- How many different numbers can you make using all four digit cards? Can you write your numbers in order from smallest to largest?



- How much does the parcel weigh?

