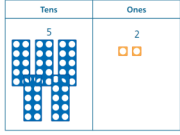# Maths - Year 2

Calculating 10: Mental strategies for near doubles and adding and subtracting 9

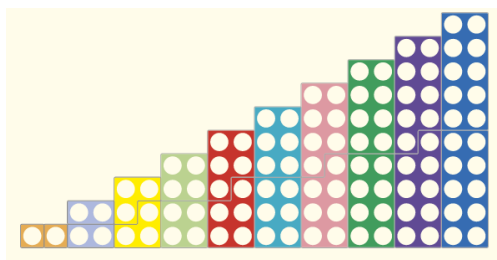| Key Vocabulary	
Subtract	Taking one amount from another.
Add	Combine two or more amounts to make a total.
Tens	Refers to the number of tens in a number e.g. on a place value grid.
Ones	Refers to how many ones in a number e.g. 34 has 3 tens 4 ones.
Double	Multiply a number by 2.
Halve	Divide into two equal parts.
Equals	The same in number or amount.
Whole	The whole of a number or amount.
Part	A part of the whole amount e.g. 5 and 3 are parts of 8.
Half	One of two equal parts.
Adjust	To make a small change to something.

Mathematical Skills

- Recall double facts for each number to 10.
- Derive the related subtracting fact from their knowledge of a double.
- Solve a near double problem because they know the double fact.
- Add 9 by adding 10 and subtracting 1.
- Know when to use the relationship between 9 and 10 to add and subtract.
- Work systematically.
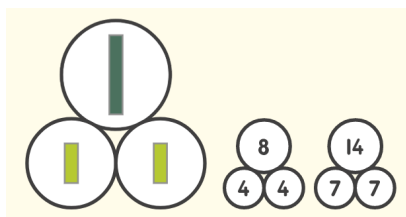- Calculate double facts for higher numbers.

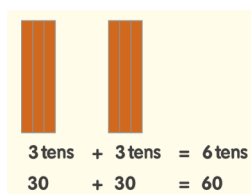## Mathematical Methods

- Doubles with Numicon shapes from 1 - 10.

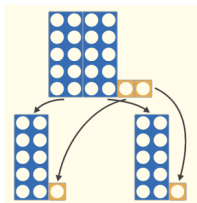- Subtracting from a double and relating this to halving e.g. 2 - 1 = 1; halving 2 = 1.

- Parts and wholes with doubles.

- Doubling higher numbers.

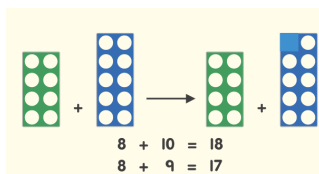3 tens + 3 tens = 6 tens
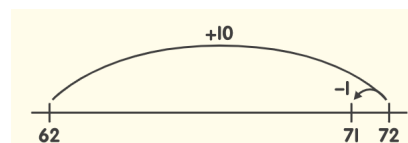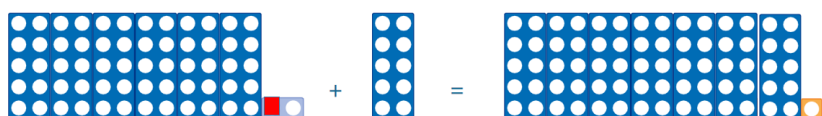30 + 30 = 60

- Halving higher numbers e.g. half of 22.

- Relating 'near doubles' to doubles e.g. knowing 6 + 6 = 12 helps us calculate 6 + 7.

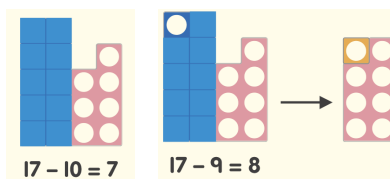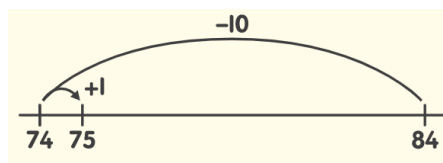- Adding 9 to a 1-digit number e.g. 8 + 9 = 8 + 8 + 1; or 8 + 9 = 8 + 10 - 1.

$$8 + 10 = 18$$
$$8 + 9 = 17$$

- Adding 9 to a 2-digit number e.g. 62 + 9 = 62 + 10 - 1.

- Subtracting 9 from a teen number e.g. 17 - 9 = 17 - 10 + 1.
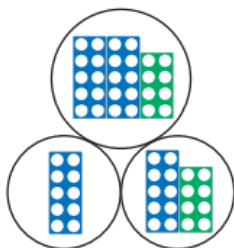
$$17 - 10 = 7$$
$$17 - 9 = 8$$

- Subtracting 9 from a 2-digit number e.g. 84 - 9 = 84 - 10 + 1.

- Adjusting higher numbers e.g. 39 + 7 = 40 + 7 - 1.

Can you..?

- Jodie made this parts and wholes model to find half of 28. Do you think her model is correct? Can you explain your thinking?

- Can you draw a parts and wholes model to show double 11.

- Can you solve 32 + 9?