## Key concepts and questions

## What are addition facts?

- Addition facts are calculations. One addition fact can be used to help solve many other addition facts.
- If you know $3+7=10$, you also know $30+70=100$


Numicon can be used to help with addition facts. This shows $3+7=10$ but each hole could represent 10 , so this also shows $30+70=100$
How does partitioning help in addition?

| You can add the ones and tens separately then add the totals together. | Tens | Ones |  |
| :---: | :---: | :---: | :---: |
|  | \\| \| | $\square$ | 31 |
| $31+22=53 \quad+$ |  | $\square$ | 22 |
|  | 5 tens | 3 ones | 53 |


| Key Vocabulary |  |  |
| :--- | :--- | :--- |
| count on | Counting forwards from a given number. |  |
| add | To find the total of 2 or more numbers. |  |
| altogether | The total of 2 or more numbers, e.g. the total of $2+2$ is 4 |  |
| total | How many there are altogether |  |
| addition calculation | An addition number sentence using the + sign <br> e.g. $12+5=17$ |  |
| ones | The number of 1s in a <br> number | $\mathbf{1 0 s}$ |
| tens | The number of 10s in a <br> number |  |
| partition | To split a number into smaller parts. |  |
| number bond | A pair of numbers. |  |
| commutative | Addition can be done in any order. 12+6=18 and 6+12=18 |  |



Bar models -we add parts to find the whole
12
7

$$
7+5=12
$$

5


## Making connections

Addition can be done in any order
If we know
$15+5=20$
20
We also know

Addition and subtraction are linked
If $15+5=20$
Then $20-5=15$
And $20-15=5$

