

# Glossary of terms for counting

| Glossary of terms          | Explanation                                                                                                                                                                                                                                                                                                | When might my child come across this term? |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Subitising                 | This is to tell at a glance, without counting, the number of items in a set. Counting without counting.                                                                                                                                                                                                    | Foundation (EYFS framework)                |
| Number bonds               | Pairs of numbers that make up a given number. $6+4=10$ . 6 and 4 are number bonds of 10.                                                                                                                                                                                                                   | Foundation (EYFS framework)                |
| Place value                | Place value is the value of each digit in a number. For example, the 6 in 360 represents 6 tens, or 60                                                                                                                                                                                                     | Year 1                                     |
| Partitioning               | Partitioning is a useful way of breaking numbers up so they are easier to work with. Partitioning links closely to place value: a child will be taught to recognise that the number 54 represents 5 tens and 4 ones, which shows how the number can be partitioned into 50 and 4.                          | Year 2                                     |
| Commutative                | This is a property of the number operations addition and multiplication. In addition $1 + 2 = 2 + 1$ , i.e. it works both ways, it is commutative. In subtraction or division it does not work both ways, e.g. $6-7 \neq 7-6$ .                                                                            | Year 2                                     |
| Bridging to the nearest 10 | A mental method of adding two numbers whose total is greater than 10. Pupils are taught to count on to 10 and then add the remainder of the number to 10. For example: $7 + 9$ – bridging from 7 to 10 requires 3, which leaves 6 (from the original 9), $10 + 6 = 16$ .                                   | Year 3                                     |
| Compensating/ Adjusting    | Compensation is a way of adding or taking away numbers that you find easier.<br><b><math>23 - 9 = ?</math></b> Try taking away <b>10</b> instead.<br><b><math>23 - 10 = 13</math></b> . You have taken away <b>1</b> too many ( <b>10</b> is <b>1</b> more than <b>9</b> )<br>So add the <b>1</b> back on. | Year 3                                     |

# Models and representations to support the teaching of number bonds

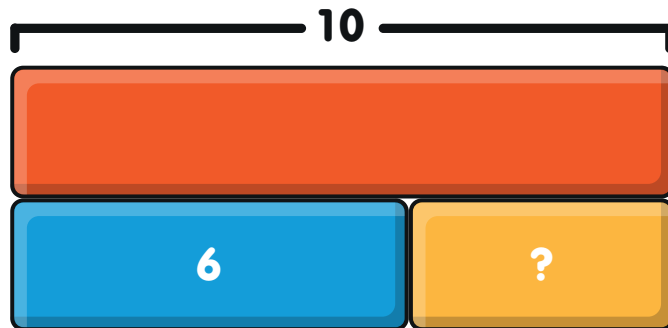
## Ten Frames

Makes counting values simpler. We can use them to make and split numbers in relation to 5 and 10. They help form the basis for understanding place value in the future.



## Bar Model

Remove a number for problem solving opportunities across all operations (+ - x ÷)



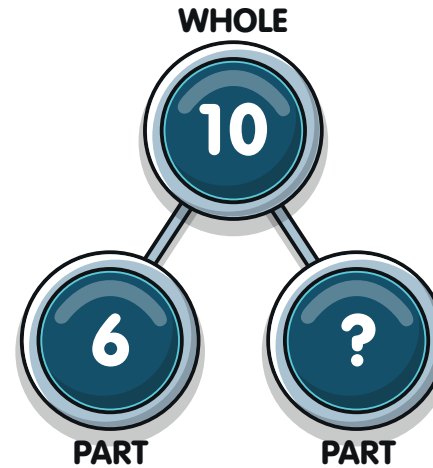
## Bead Strings

Usually consists of 10, 20 or 100 beads on a string, grouped by colour. They allow children to move the beads whilst counting and visualising groups of ten.



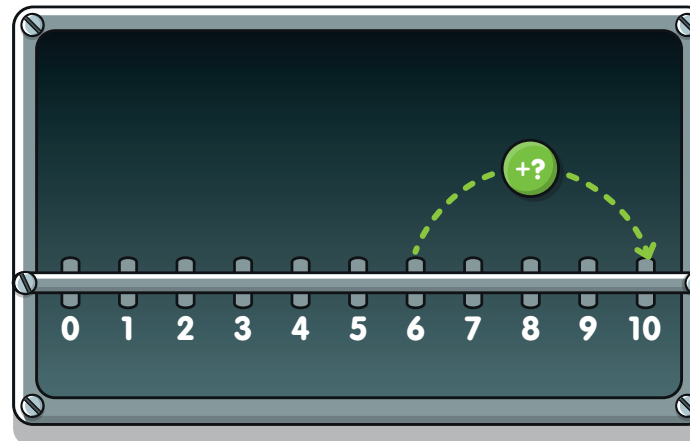
## Part Part Whole Model

Within the part whole model, you can use real objects, concrete objects, pictures or numbers. The two parts combine to make the whole and can support with addition and subtraction



## Number Line

Can be used to count forwards and backwards or to identify number bonds and patterns.



## Dienes/Base 10

Can be used practically or drawn to support addition and subtraction.

