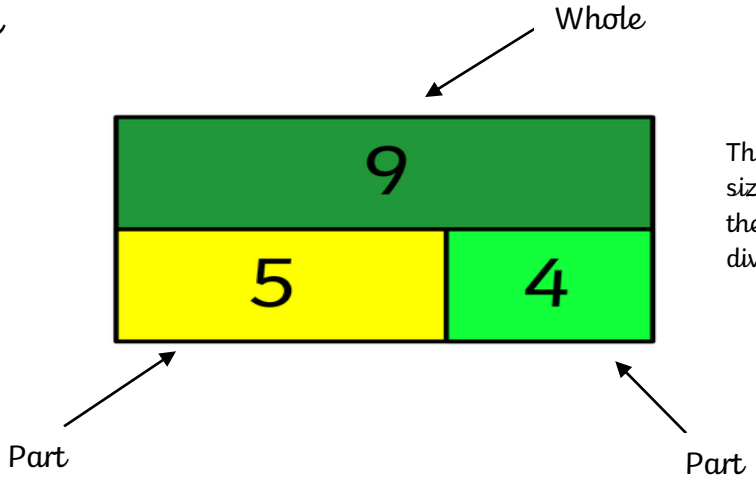
Addition and Subtraction

Bar Model



The size of the parts is relative to the size of the numbers. The more parts there are the more the bottom bar is divided up.

There are 4 calculations for this number family:

5 + 4 = 9

4 + 5 = 9

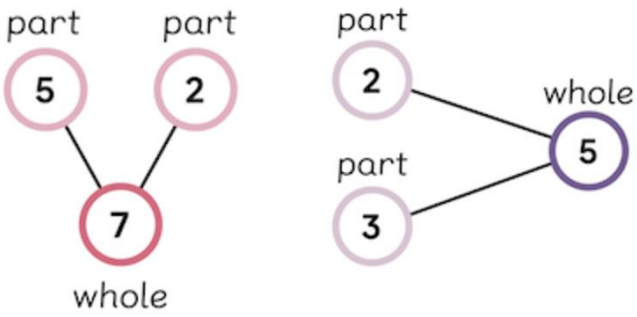
This related addition fact can sometimes be referred to as the **commutative**. You can add in any order.

9 – 5 = 4

9 – 4 = 5

The **inverse** is the opposite operation.

Whole / Part Model



5 + 2 = 7

2 + 5 = 7

7 – 2 = 5

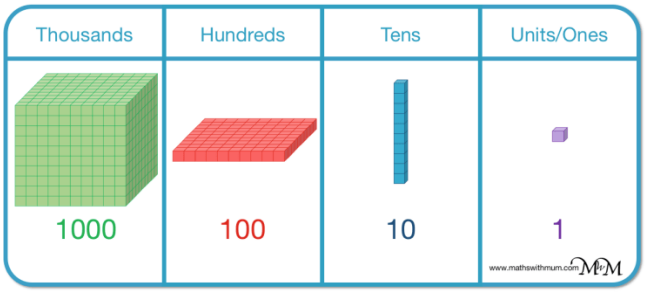
7 – 5 = 2

When subtracting you always subtract a part from the whole.

To add and subtract begin with the concrete.

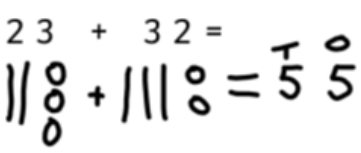
Use any objects in your home. In school we use dienes and counters but you can use any object and rename them to suit the calculation.

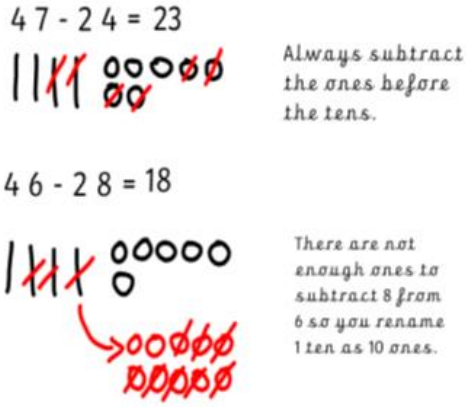
When taking away make the largest number and remove the objects when taking away the second number.



When confident you can use more pictorial methods.

We draw pictures to represent the objects used previously.





When confident you could move on to using more abstract methods.