

Adding: Add two 1-digit numbers / Add any 2 numbers with total up to 20

Objects

<https://www.youtube.com/watch?v=FiepfT-K2sk>(video includes Numicon at the end)

Children should start with objects to allow them to picture the concept that you are working on. Try to use objects that the child is interested in (farm animals, cars, bears etc) in order to make the maths relevant. Remember to still use lots of the mathematical language, even when working with the objects (eg, I have 3 bears and you have 2 bears. Who has more? How many do we have altogether?)

Start by just having two groups of objects, push them together and count them all. Make sure the child is demonstrating 1:1 counting. Use different objects/a mixture of objects to show that it doesn't matter what the objects are, the maths is the same.

To help the child do 1-1 counting, get her/him to move objects into a cup, etc, physically.

Make two sets of cards with single digits written on them, spread the cards on the table; the child picks two and adds them.

School resources that may be available:

Unifix/Multilink/building bricks are great for making towers

Beads are useful for adding them on to a bead string.

Numicon

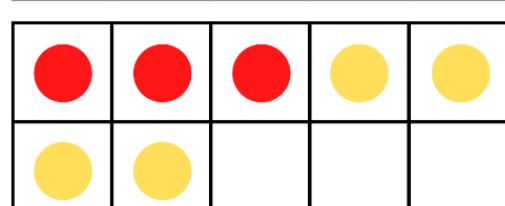
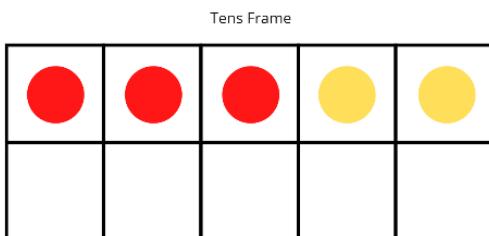
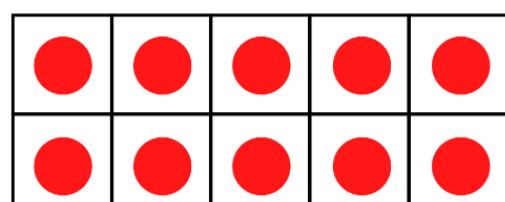
Numicon is a great school resource as you can demonstrate adding two numbers together by layering them onto the total number (eg – layer a 2 and a 3 piece on top of a 5 to show that it is the same).

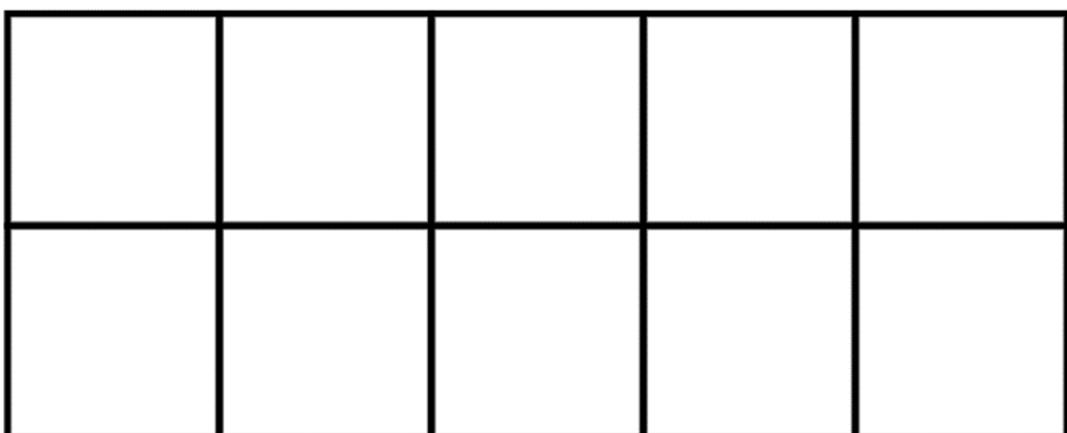
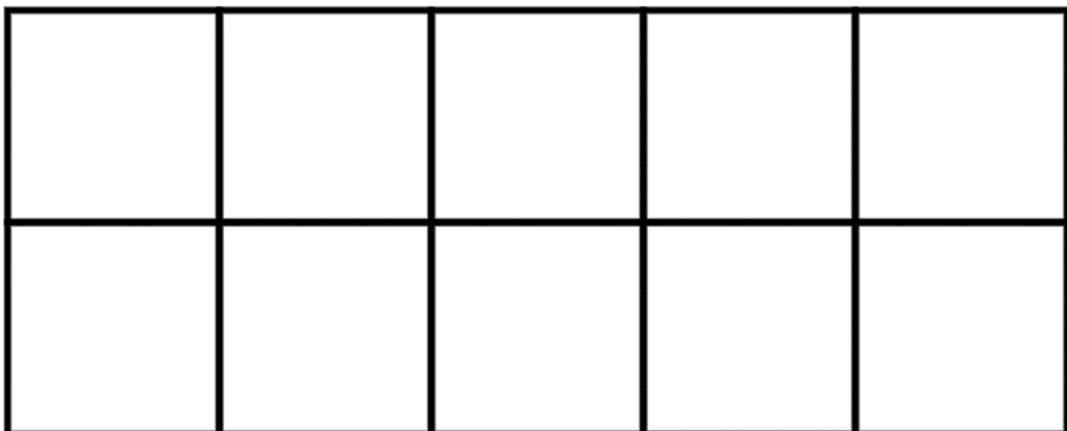
Feely bag Numicon: the child takes out two Numicon pieces from a bag and adds them.

Tens Frames

Tens Frames are popular in schools to help children to visualise adding. Add 2 different coloured counters together (you could use playing cards/dice to select the numbers) and place them in the tens frames. The children will start to learn that 1 row = 5 and 2 rows = 10 which will allow them to work out the answer quicker. You can then use two tens frames to add numbers to 20.

For a 3D tens frame you can use an egg box!

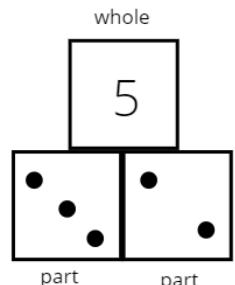
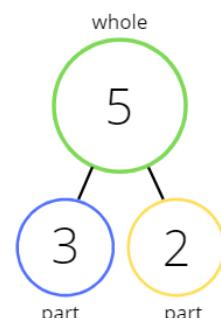
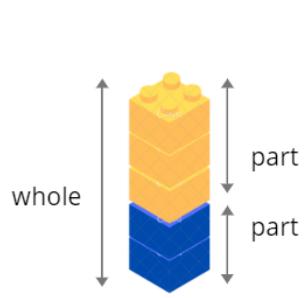




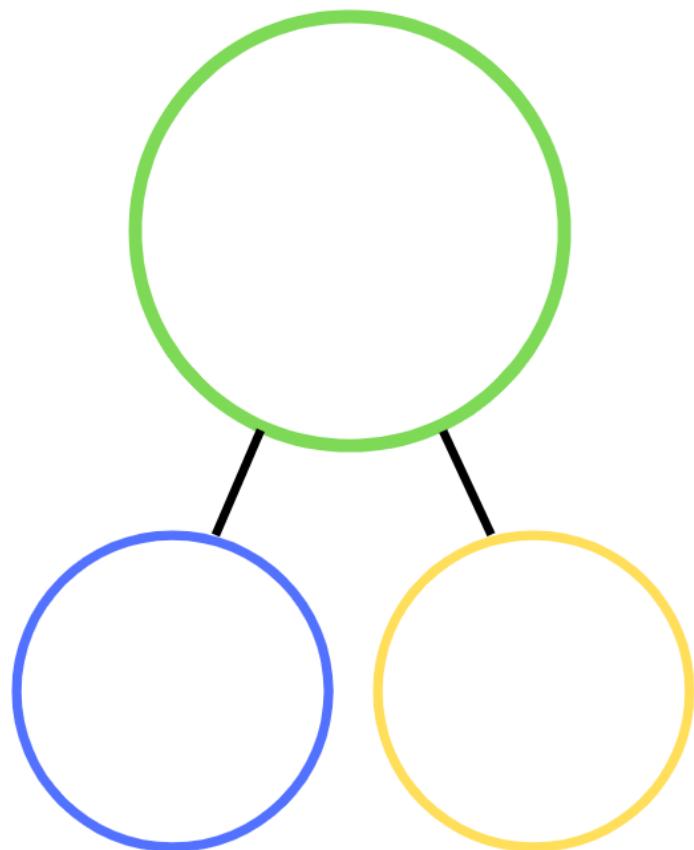
Part/Part/Whole diagrams (templates at the end of the document)

<https://www.ncetm.org.uk/resources/50719>

Part/part/whole also helps to visualise adding. It will also help children to begin to see a link between adding and subtracting and number bonds. You can use objects to begin with this method and then move on to recording it as digits.



Part/Part/Whole



$$\text{blue circle} + \text{yellow circle} = \text{green circle}$$
$$\text{yellow circle} + \text{blue circle} = \text{green circle}$$

Part/Part/Whole

