

### **Adding: Use number sentences with + such as $18 = 3 + 15$**

Begin to link number sentences to adding early on – even when you are just using objects, so that the child is familiar with the symbol +. It will also help to make the link between the objects and the numbers clear.

It is also important that the child realises that they already know how to add. Remind them/ask them what resources they already know how to use to work out the answer (tens frames/objects/Numicon/Dienes/part, part, whole diagram). The key is to turn the symbols into language they already know.

#### **Number Sentences**

Use the dice/playing cards to create a number sentence and practise working out the answer using the resources that they know.

- What resources could you use?
- Can you prove your answer is right using another resource/method?
- How many ways of working this out can you show me?

Remember to show them that it doesn't matter which order the added numbers come in the number sentence – the answer will always be the same.

This is a repetitive task so finding different ways to 'create' the number sentences will help engage them. Dice/number cards/playing cards/picking numbers out of a bag/finding numbers on the wall/ close your eyes and point to a number on the 100 square etc.

#### **Challenge**

Ask the child to write some number sentences for you. They can then check your answers using the resources. This will check their understanding.

#### **Picture number sentences**

For the artistic volunteer, a good resource is a counting book such as 'One is a Snail, Ten is a Crab: A Counting by Feet Book' by April Sayre and Jeff Sayre. Eg, you can use the animals in this book to draw addition number sentences. The school should have a library!

#### **Reversed Number Sentences**

Show them number sentences with the answer first. How would we work this out? Always give them time to explore how they would do this with resources.

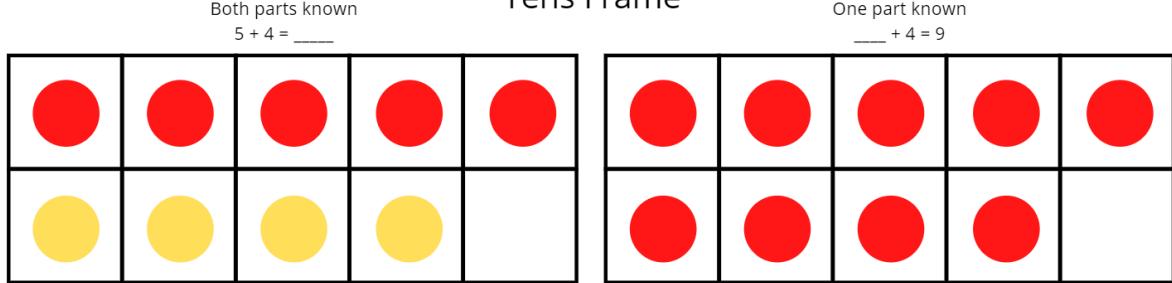
Use the tens frame / part, part, whole diagram to help work out these types of questions – always show them how they can check they are correct by putting it back into the way that they recognise number sentences to show them how it links. It also shows how number families are linked. If you know that  $2+3=5$  then you also know that  $3+2=5$  (and eventually that  $5-2=3$  and  $5-3=2$ ).

The part-part-whole diagram and tens frames are good for this:

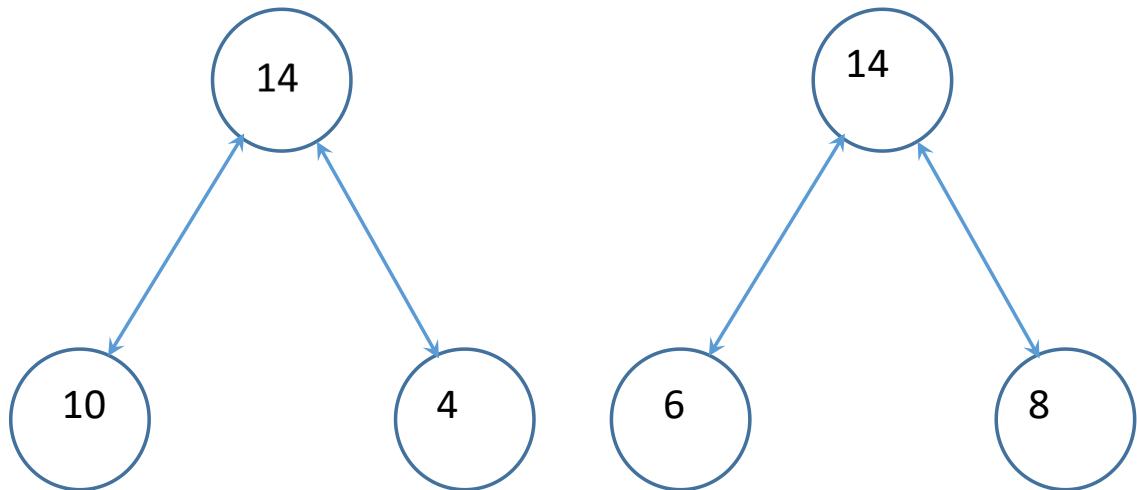
### Part/Part/Whole

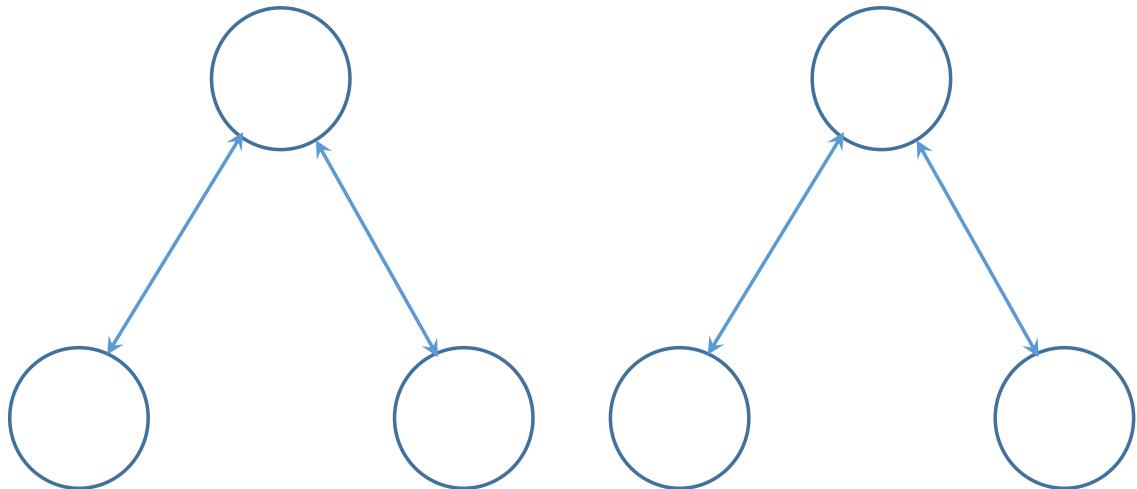


### Tens Frame



Show the whole as one colour. Turn over 4 to the other colour.  
 How many are still red?





### Word Problems

Link adding to word problems as much as possible. This will help with their mastery. Make up a story for the problem and make it relate to them. Remember to use a range of mathematical vocabulary where possible.

Encourage the child to use objects/resources to help work out the answer and turn it into a number sentence. Once they have turned it into a number sentence, they should have the confidence to be able to solve it.

Get the child to challenge you by making up their own problems.

If the child needs prompting, how about: "Milo the dog has a box of treats with biscuits in it. How many biscuits will we put in it?" (Say the child answers '10'.) "His owner gives Milo some biscuits. How many does he give him?" (Say the child answers '8') You now have a word problem. "How many biscuits are left in the box?" It helps to use blocks to represent the biscuits or the child can draw them on their whiteboard.