Diving into Mastery – Diving

Adult Guidance with Question Prompts

Children recognise number bonds from different images. They write the number bond as a calculation in two ways. They also write the calculation with the total at the beginning. Children should be able to use their number bonds within ten to help them work out number bonds within 20. They work systematically to find all the number bonds for 14, using equipment to support them where necessary.

What can you see in the picture?

What is the total?

What are the parts?

Can you use number bonds to ten to help you?

How will you write the calculation?

Are there two ways?

Can we write the total first in an addition calculation?

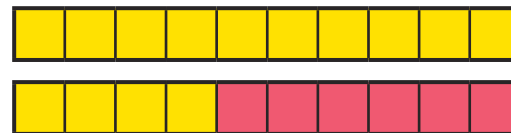How will you find all the number bonds to 14?

What strategy will you use?

How can you be sure you have found them all?
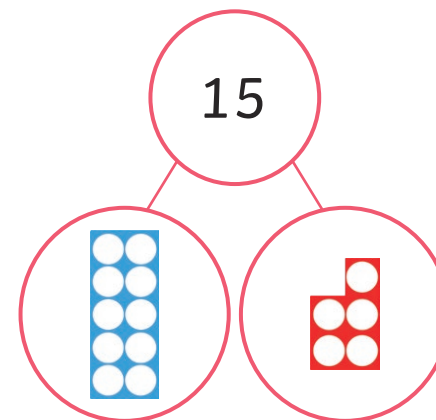
Find and Make Number Bonds

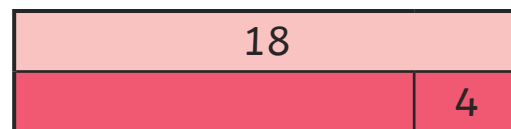What number bonds are shown by the pictures?

____ + ____ = ____

____ + ____ = ____

15

____ = ____ + ____

____ = ____ + ____

18

4

____ + ____ = ____

____ + ____ = ____

Following the pattern of the numbers, can you write all the number bonds to 14?

Diving into Mastery – Deeper
Adult Guidance with Question Prompts

Children work systematically (following the pattern of the numbers) to find all the number bonds to 20. They could use two ten-frames and counters of two colours to help them represent the number bonds.

How could we check if Bob is correct?

Could we write a list of number bonds?

Where should we start?

How can we make sure we don't forget any?

How can we make sure we don't write any twice?

What does systematically mean?

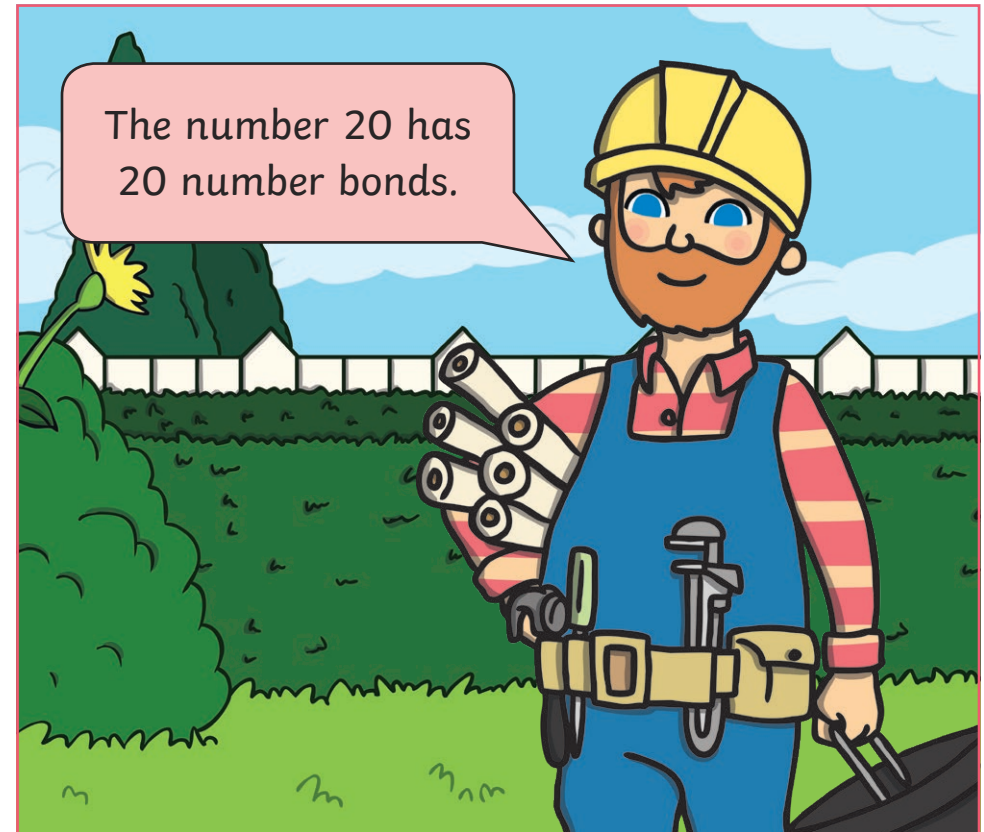If we start with 0 + 20 = 20, which number bond should we write next?

Can you show me with your equipment?

How many number bonds have you found?

Has anyone found any different ones?

Was Bob correct?

Find and Make Number Bonds

The number 20 has 20 number bonds.

Is he correct?

Prove it using equipment.

Diving into Mastery – Deepest

Adult Guidance with Question Prompts

Children read sentences about Bob and write a corresponding number bond to 10 or 20. They then look for number bonds that are related and explain how they are the same and how they are different. They could use counters of two colours and ten-frames to help them see these relationships.

What calculation can you write to represent Bob's items?

Could you write it two ways?

Why have you used the addition symbol?

Can you represent Bob's things with counters on a ten-frame?

Can you see any calculations that are similar?

How are they the same?
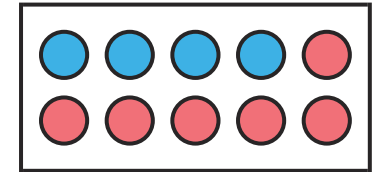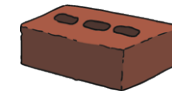
How are they different?

How might this help us?

Find and Make Number Bonds
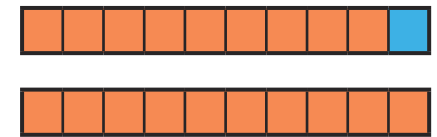
Write calculations to show these number bonds.

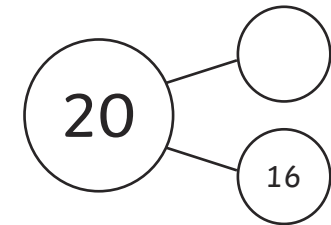| Bob has 20 bricks. 12 are red - the rest are yellow. | |
| Bob has 10 pots of paint. 7 are black - the rest are white. | |
| Bob has 10 buckets. 2 are black - the rest are yellow. | 20, 16 |

Can you see any number bonds that are similar? What's the same? What's different?