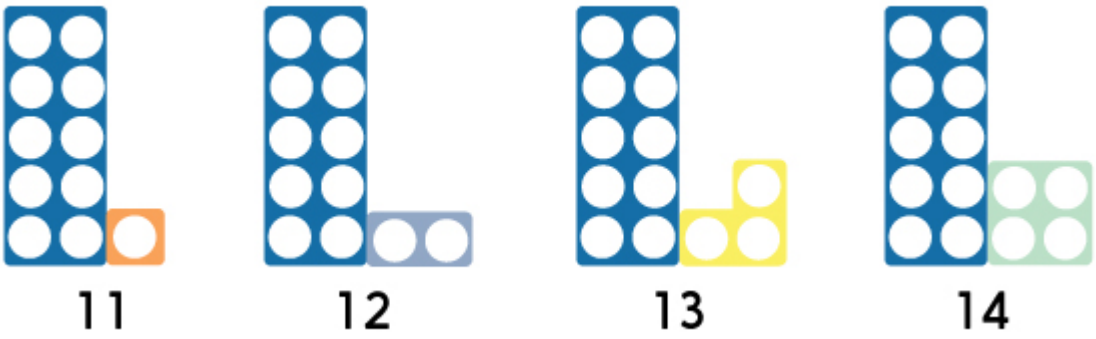
Make the number

Focus of activity: Understanding place value in teens numbers.

Working together: conceptual understanding

- Slide all the beads across to the right on a 20-bead bar as children see it. Slide one bead across to the left at a time as you all count from 1 to 20. Emphasise 5, 10, 15 and 20 as you do so. Repeat several times.
- Spread out a set of number shapes. *We're going to use these shapes to make the number 11.* Show the number card 11. Point out that the biggest number shape only has 10 holes. *So how can we show the number 11?* Draw out that we can put a 1 shape by the side. Ask a child to count all the holes to check that there are 11 altogether. Put the 11 number card underneath.
- Take another 10 shape. Show the number card 12. *This time we're going to show 12 using 10 and another shape.* Ask children if they can see a shape that will go with 10 to make 12. Test out their ideas by counting all the holes if necessary.
- Repeat for 13, 14, 15… 20, placing the number card under each time. *We can make all the numbers from 11 to 20 using a 10 shape and other shape.* Point out how the numbers are written, the 1 to show one 10 and then the second digit to show what other shape is needed.



- Show children how to make numbers 11 to 19 from place value cards. Put a 10 card and a single-digit number card together to make the teen number matching the number shapes each time.

Up for a challenge?

Show 14 made from the 10 and 4 numbers shapes, and using the place value cards. Write the matching addition 10 + 4 = 14. Show 13 using number shapes and place value cards. *What number sentence can we write for this number?*

Now it's the children's turn:

- Children shuffle a set of 11 to 20 cards and place in a pile, face up. They take the top card and make it using a 10 number shape and another shape. They draw round the shapes and holes and write the number at the side.
- Repeat for as many cards as they can.
- Go round the group and mark their work, e.g. initially after two examples. Are children able to look at the number and see which shapes they will need?

S-t-r-e-t-c-h:

If children cope well, ask them to write the addition to go with some of the numbers, e.g. 10 + 4 = 14.

Things to remember

Remember that numbers from 11 to 19 are made from 10 and some more. They all have a 1 as the first digit. Show a number from 11 to 19, and ask a child to make the number using the place value cards. Repeat with a different number for each child.

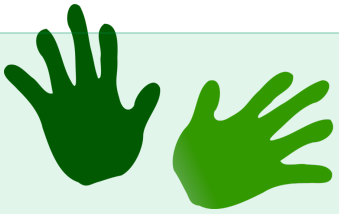
You may want to add something that has emerged from the activity. This may refer to misconceptions or mistakes made.

Resources	**Outcomes**
• 20 bead bar • Number shapes, e.g. Numicon®, or make card shapes (see child instructions) • Place value cards (10 and 1s)	1. Children can make numbers 11 to 20 from 10 and some more. 2. Children begin to understand what each digit in a number from 11 to 19 represents.

Make the number

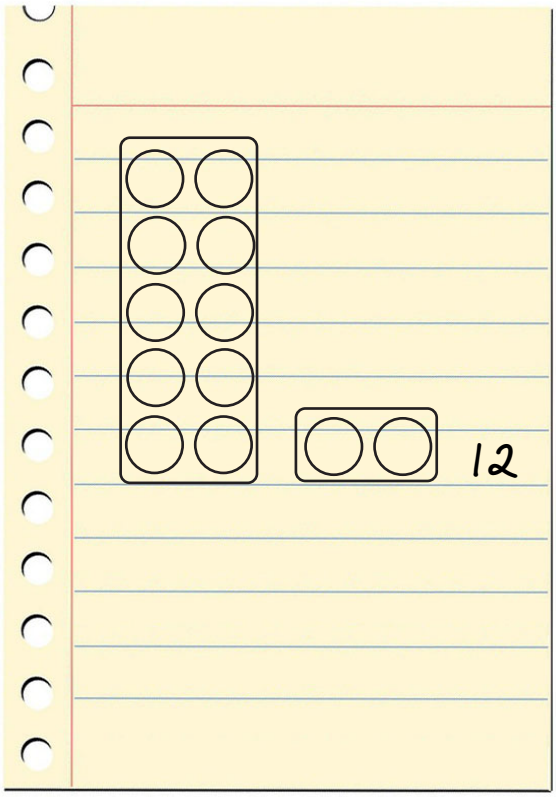
Work in pairs

Things you will need:
- A set of number shapes
- 11 to 20 number cards
- A pencil



What to do:

- Shuffle a set of 11 to 20 cards.
  Place in a pile, face up.
- Take the top card.
  Make this number using a 10 number shape and another shape.
- Draw round the shapes.
  Write the number at the side.
- Repeat for as many cards as you can.



S-t-r-e-t-c-h:

Choose a number and write a sum to go with it. 10 + ☐ = ☐
Repeat for another number.

Learning outcomes:
- I can make numbers 11 to 20 from 10 and some more.
- I am beginning to understand what each digit in a number from 11 to 19 stands for.

Make the number