

Learning objective

PNS: Calculating

- Relate addition to counting on; use practical and informal written methods to support the addition of a one-digit number or a multiple of 10 to a one-digit number.

Resources



'Partitioning' Notebook file; photocopiable page 95
'Partitioning', one for each pair; number lines or tracks for less confident learners.

Links to other subjects


History


QCA Unit 2 'What were homes like a long time ago?'


- Invite the children to plan changing the home area into a historical room. They can make a simple plan and decide how many of specific objects they need. Remind them to total the number of objects using the mental strategies they have already learned.

Whiteboard tools

Use a Pen from the Pen tray to write number sentences. Get objects and counters from the Gallery for the Plenary, if necessary.

 Pen tray

 Select tool


 Gallery

Partitioning

Starter

Open page 2 of the Notebook file. Ask the children to suggest addition sentences that will give 6 as the total - for example, $4 + 2$. Write the sentences on the board. Discuss how the children worked out their answers. Repeat the activity for 7, 8 and 9.

Whole-class shared work

- Go to page 3. Ask: *What should I add to 5 to make 6?* Write $5 + 1$ underneath the six strawberries, and demonstrate this partition using the strawberry images. Add another strawberry by dragging one from one of the existing strawberries.
- Go to page 4 and repeat this process for seven strawberries: $5 + 2$.
- Move to page 5. Write $6 + 7 = 5 + 1 + 5 + 2$. Ask: *How can I work out the answer?* Move the white boxes together to encourage the children to combine the 5s in the top halves to make 10, and then add the 1 and 2 in the lower halves. Write $5 + 5 = 10$, $1 + 2 = 3$. $10 + 3 = 13$. Demonstrate, and allow the children to try this using the strawberries.
- Write the total of 13. Say together: *6 add 7 is the same as 5 add 1 add 5 add 2, which is 10 add 3. The total is 13.*
- Repeat for pages 6 and 7 of the Notebook file. Add objects from the Gallery  or drag and drop the object at the top of each page.

Independent work

- Give out copies of the photocopiable sheet.
- In pairs, the children take turns to choose two numbers from the grid, write a number sentence and work out the answer. Remind them to partition each number into '5 and a bit'.
- Decide whether to limit less confident learners to adding 1, 2, 3, 4 to 6, 7, 8, 9. Work together as a group to practise counting on in ones: $6 + 4$. *6 is 5 + 1. So 5 + 1 + 4 is 5 + 5.* If children do not know the answer, they should count on in ones to find it. Alternatively, they can use a number line to help them.
- Challenge more confident learners to total three numbers. For example, $6 + 6 + 7$, using the '5 and a bit' method.

Plenary

- Review some of the number sentences the children have written. Write these on page 8, without the answers. Challenge the other children to say how to work out the answers. Use counters from the Gallery if necessary.
- Divide the class into two teams. Explain that each team can choose two numbers from 5 to 9 for the other team to total. Give a point to each team for a correct answer.