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## Objectives

- To count in $2 \mathrm{~s}, 3 \mathrm{~s}$ and 5 s from zero, forwards or backwards.
- To count in 10 s from any number, forwards or backwards.
- To identify and represent numbers using different representations.


## What the children need to know

- How to count in multiples of two, five and ten, recognising patterns in the number system.
- How to identify and represent numbers using objects and pictorial representations.


## NUMBER AND PLACE VALUE Counting and representing number

## Challenge and mastery ideas

- Rehearse counting in $2 s$ from zero. Ask children if any patterns exist in the numbers they count, for example: all the numbers are even, and the 1 s digits always go in the order two, four, six, eight and zero when beginning the count from a multiple of ten. Repeat for counting in $3 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s .
- Children write the next ten numbers they would say when counting forwards in 10s from 37. Repeat for counting backwards in 10s from 123. In both cases, ask children to write down or say what they notice.
- Challenge children to tell you what other steps they can count in if they can count in 2 s . Children working at greater depth should be able to tell you 20s, 200s, 2000s and beyond. Repeat with a count in 20s from zero to 200, in 200s from zero to 2000 and in 2000s from zero to 20,000, then for 5 s and 10 s.
- Give children several types of concrete resources to use to represent 29. They draw what they have built and write something about it. 'Build it, draw it, write it' is a very good strategy to use to develop conceptual understanding and reasoning skills.
- Children choose and draw representations of three numbers between 30 and 60. Encourage children with a deeper understanding of number to draw imaginatively. They then give their drawings to a partner who works out which numbers the representations show.


## Review

- Look out for and challenge children who can apply their knowledge of counting in 2 s to count in 20 s, 200s and 2000s from zero. Ask them to count in these multiples from different starting points, such as four or seven.


## Watch and listen

- Watch for children who use what they know to develop connected skills. For example: if they can count fluently in 3 s , they should be able to count in $30 \mathrm{~s}, 300$ s and 3000s.
- Listen for those who demonstrate depth of understanding by explaining their reasoning verbally to you or their peers.
- Using a variety of manipulatives to represent numbers and make up their own spatial representations indicates depth of understanding.

