## Activity type

Group

## Learning objective

Calculating: use practical and informal written methods to support the addition of a one-digit number or a multiple of 10 to a one-digit or two-digit number

## Activity type

Paired assessment

## Learning objective

Knowing and using number facts: count on or back in tens

## Big numbers

## What to do

- Open the ' 2 spikes' screen. Explain to the children that they are going to be writing addition number sentences. Make sure they know what an addition sign looks like and write it on the board if necessary. Ask them how they would write down 'three add twenty-four'.
- Choose a one-digit number and write it on the board. Ask the children how many beads that number represents.
- Click the 'random' button to create a two-digit number. Explain that the one-digit number and the two-digit abacus number are two parts of a number sentence; demonstrate how to set it out. Ask: What can we do with the abacus to help us complete the number sentence?
- Repeat with new numbers.
- When the children are confident, change the one-digit number to a multiple of 10 .


## Key questions

- Have you checked with your partner that you have written your number sentences correctly?
- What happens when you have more than nine beads on the abacus?


## Assessment for learning

Do the children have a strategy when using the abacus to add?

## New beads from old

## What to do

- Open the '3 spikes' screen. In the options menu, select random type 'beads'.
- Explain to the children that they are going to change an abacus number by a multiple of 10 to create 30 more or 30 less.
- Click the 'random' button to generate a two-digit number of beads (or simply make a number between 31 and 69 using the abacus beads). Ask the children to create the two new numbers by adding or taking away three beads.
- Hand out copies of photocopiable page 12 for the children to keep a record of both new numbers, as well as the bead patterns on the abacus.
- Once they have done this, repeat the exercise with a new two-digit number. Tell the children to complete the lower half of the photocopiable sheet to make a note of the new numbers and patterns.


## Key questions

- What happens when you have more than nine beads on the abacus? 99 beads?
- What happens when you add ten beads to the abacus? 20 beads?


## Assessment for learning

Do the children have useful strategies for counting in tens?

