Finding simple common multiples

Starter

Ask the children for the definition of a *multiple*. Write suggestions on the board and if necessary reveal the prepared definition on page 2 of the flipchart. Discuss any misconceptions at this stage.

Roll two dice using the Dice tool 🎲. Ask the children to put the numbers together in either order (for example, dice rolls 3 and 2 = 32). They should write any multiples of that number on paper or on individual whiteboards.

Review the multiples and then repeat up to three times. Ask: *Did we make any numbers that had no factors?* (For example, 11.) *What are these numbers called?* (Prime numbers.)

Whole-class shared work

● Use Activote devices (or individual whiteboards if you do not have access to this facility) to identify multiples on pages 3 to 12. The children have a choice of four answers (a, b, c, and d). They must click on the number that is a multiple of the number given at the top of the page.
● Allow 15 seconds to answer each question. (It is possible to monitor this using Activote devices. You might also wish to allow the children to view their progress).
● As an alternative, ask the children to vote on each answer by putting their hand up or by writing on their whiteboards. Use the Highlighter tool to highlight each correct answer.
● For each question, ask the children to identify the other number that is required to make the multiple.

Independent work

● Show the children page 13 of the flipchart. Provide them, in groups, with a selection of dice or spinners.
● In their groups, the children use an eight-sided dice or spinner with the digits 2, 3, 4, 5, 6, 7, 8 and 10. Ask them to write the first five multiples for the number they have landed on.
● As a variation, ask them to play as above but to roll the dice/spinner a second time. For example, if a 5 is rolled, the children must start from the fifth multiple of the first number rolled. Ask the children to record the starting numbers and the five multiples on paper.
● For less able learners, limit the activity to a five-sided spinner with the numbers 2, 3, 4, 5 and 10. Again, ask the children to spin the spinner and write the first five multiples for the number they have spun.
● Provide more able learners with an 11-sided spinner with the same numbers as above, plus 9, 11 and 12.

Plenary

● Review the Independent work, focussing on any particular areas of difficulty (review Activote feedback where available). Notes can be made on page 14.
● If time is available, roll two or four dice. Invite the children to put two or more numbers together and write any multiples of that number on whiteboards. Alternatively, they could add or subtract numbers to make their starting numbers for this activity.
● Additional multiples questions for consolidating this work have been given on pages 15 to 24 of the flipchart.