

Factors, multiples, primes and composites

MODULE 2 · OPERATIONS AND COMPUTATIONAL FLUENCY NUMBER

STRETCH PROBLEMS

- 1 Aoife's 6th class line up at the door before going out to the yard. There are **31** pupils in the line. Is **31** a prime number? Answer yes or no, and give a reason.
- 2 Saoirse and her cousins are at granny's house for Sunday dinner. Granny has **81** apples ready to share into equal groups. List every factor of **81** in order from smallest to largest.
- 3 Méabh is packing **40** sandwiches for the 6th class picnic. She wants to put the same number in each box with none left over. What are all the factors of **40**, listed from smallest to largest?
- 4 Cian is packing the classroom store. He has **99** rulers to share equally into boxes so each box has the same number with none left over. List every factor of **99** in order from smallest to largest.
- 5 Tadhg helps organise the Cumann na mBunscol blitz at the county grounds. There are **88** players taking part and the coaches need every way to split them into equal groups. List every factor of **88** in order from smallest to largest.

INVESTIGATE

Which numbers have the most factors?

List the factors of every number from 1 to 30. Which number has the **most** factors? Do you notice anything about the numbers with many factors? Which numbers have exactly two?



$$\frac{1}{2}$$



$$\frac{1}{2}$$

NUMBER



$$\frac{1}{2}$$

