

Growing and shrinking patterns; predict the next terms

MODULE 10 · ALGEBRA — PATTERNS, RULES AND NUMBER SENTENCES ALGEBRA

★ STRETCH PROBLEMS

- 1 Síle bakes trays of barmbrack for the Halloween sale. The first four trays hold 5, 17, 29 and 41 slices, going up by the same amount each time. How many slices should the next tray hold?
- 2 At the Cumann na mBunscol blitz, the scoreboard adds the same number of supporters through the gates each match. So far it has shown 8, 20, 32 and 44. What number comes next in the sequence?
- 3 Mr Ó Sé stacks worksheets in the photocopier room in a pattern: 23, 33, 43, 53 in each growing pile. If the pattern keeps going, how many worksheets come next?
- 4 For World Book Day, 4th class are stringing up paper bunting flags along the corridor walls. The number of flags on each wall follows the pattern 27, 39, 51, 63. How many flags should go on the next wall?
- 5 Daithí is saving stickers on his reward chart each week. So far he has collected 30, then 39, then 48, then 57 stickers. If the pattern continues, how many stickers will he have next week?

● INVESTIGATE

Invent a pattern

Create a number pattern with a clear rule. Write the first six terms, then challenge a partner to find the **rule** and predict the 10th term. Can you also make a growing pattern where the jump gets bigger each time?



x y



ALGEBRA



x y

