

Introducing letter-symbols as variables

MODULE 10 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

ALGEBRA

HOW TO ANSWER TODAY

- **Letter expressions.** A letter stands for a number. Swap the letter for its value, then work out the answer.

If $n = 3$, then $2n + 5 = 2 \times 3 + 5 = 11$

★ STRETCH PROBLEMS

- Mr Ó Briain hands out pencils from the classroom store. Each table gets $3(n - 1) + 4$ pencils, where n is the number of pupils at the table. If $n = 6$, how many pencils does the table get?
If $n = 6$, what is the value of $3(n - 1) + 4$?
- Saoirse is setting up a sleepover and lays out biscuits on plates for her friends. Each plate gets 3 biscuits for every guest except herself, plus 4 extra biscuits on a sharing plate in the middle. If $n = 5$ is the total number of friends at the sleepover, how many biscuits are there in total when you work out $3(n - 1) + 4$?
If $n = 5$, what is the value of $3(n - 1) + 4$?
- 5th class are planting seedling trays in the school polytunnel. Each row holds $3(n - 1) + 4$ seedlings, where n is the number of pupils planting in that row. If $n = 7$, what is the value of $3(n - 1) + 4$?
- Mr Ó Briain is taking the roll on Monday morning in 5th class. He notices that the number of pupils present is given by $3n - 1$, where n is the number of tables in the room. If $n = 9$, how many pupils are present?
If $n = 9$, what is the value of $3n - 1$?
- On the 5th class school-bag rota, each pupil carries 3 books plus 5 spare copybooks for the group. If n stands for the number of books per pupil and $n = 9$, work out $3n + 5$ to find the total number of items in one pupil's bag.
If $n = 9$, what is the value of $3n + 5$?



x y



ALGEBRA



x y

