

Patterns in the tables and multiples

MODULE 10 · ALGEBRA — PATTERNS, RULES AND NUMBER SENTENCES

ALGEBRA

HOW TO ANSWER TODAY

- **Find the rule.** Look at how each input changes to its output. Try $\times$ first, then $+$ or $-$.
 $3 \rightarrow 6$, $5 \rightarrow 10$, $7 \rightarrow 14 \rightarrow$ rule is $\times 2$

STRETCH PROBLEMS

- On the walk up to the Cliffs of Moher, Oisín counts the numbers painted on the wooden marker posts along the path: **23**, **28**, **33**, **38**. The numbers keep going up in the same pattern. What number comes next?
- Tadhg counts the pencils in the classroom store baskets. The first four baskets hold **5**, **15**, **25** and **35** pencils, going up by the same amount each time. How many pencils are in the next basket?
- Aoife is pinning bunting flags along the classroom wall for World Book Day. She writes a number on each flag, making the pattern **1**, **7**, **13**, **19**. What number should she write on the next flag?
- On the class noticeboard, Aoife pins up a chart showing how many reading stickers 4th class earned each week: **16**, **28**, **40**, **52**. The pattern keeps going the same way. How many stickers come next?
- Múinteoir has a points machine for lining up quietly before the yard. When **8** pupils line up she gives **32** stars, when **3** pupils line up she gives **17** stars, and when **7** pupils line up she gives **29** stars. What rule turns the number of pupils into the number of stars?

