Continuing a pattern — what comes next?

MODULE 8 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS ALGEBRA

STRETCH PROBLEMS

1. Cian saves his pocket money in a jar. Each week he counts what is left and writes the amount in his copy: **€14**, **€11**, **€8**, **€5**. If the pattern continues, how much will be in the jar next week?

   > What comes next in the sequence: 14, 11, 8, 5, ___ ?

2. The 5th class library tracks how many books are borrowed each week. The first four weeks show **5**, **15**, **25** and **35** books borrowed. If the pattern continues, how many books will be borrowed in the next week?

   > What comes next in the sequence: 5, 15, 25, 35, ___ ?

3. Mr Ó Briain pins up the weekly star chart on the 5th class noticeboard. The total stars after each week so far are **5**, **17**, **29** and **41**. If the pattern continues, how many stars will be on the chart after the next week?

   > What comes next in the sequence: 5, 17, 29, 41, ___ ?