Line symmetry: finding lines of symmetry

MODULE 8 · SYMMETRY, LOCATION AND TRANSFORMATION SHAPE & SPACE

HOW TO ANSWER TODAY

- **Transformations.** Slide without turning → translation. Flip (mirror) → reflection. Turn → rotation.
  Triangle slid left → translation Letter flipped → reflection

STRETCH PROBLEMS

1. Before the soccer match, Tadhg tips the pitch-marking wheel on its side, marks one spoke with chalk and spins the wheel by hand. The wheel spins one full revolution and the chalk spoke returns to its starting place. Is this move a translation, a reflection or a rotation?

2. Oisín paints a plant label with the letter d for a raised bed in the school garden. When he holds the label up to the shiny watering can, the d looks just like a letter b. Which move does this show: translation, reflection or rotation?

3. The big clock on the classroom wall shows Cian that the minute hand sweeps through a quarter turn during maths. Is this movement a translation, a reflection or a rotation?

4. For Seachtain na Gaeilge, 3rd class slide a paper shamrock across the class door to a new spot. It stays the same size and the same way up, just moved along. Is this move a translation, a reflection or a rotation?

5. Cian is decorating the classroom art wall with a stencil pattern. The same motif repeats across the wall, sliding along so every shape is identical to the next. Is this transformation a translation, a reflection or a rotation?