Rotation: quarter, half and three-quarter turns

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. On the grid-paper plan of the classroom, Oisín draws an arrow pointing east. He turns the arrow through a full turn anticlockwise. Which way is the arrow facing now?

2. Tadhg builds a den in the school orchard. He stands facing north to start, then makes a three-quarter turn clockwise to look at the hedge. Which way is he facing now?

3. Cian stands on the wall-ball court in the yard and starts off facing south. He makes a quarter turn anticlockwise to face his friend. Which way is Cian facing now?

4. Cian stands on the hopscotch squares in the school yard, facing west. He makes a half turn anticlockwise on the spot. Which way is he facing now?

5. In the school garden, Oisín points the wheelbarrow east towards the raised beds. He turns it a quarter turn anticlockwise to reach the shed. Which way is the wheelbarrow facing now?

SHAPE & SPACE