Transformations — translation, reflection, rotation and enlargement

MODULE 6 · 2D AND 3D SHAPE, ANGLES, SYMMETRY 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. In art class, 5th class are making a scale drawing of the school yard. Saoirse draws a shape and its image so that they meet along a fold line and match exactly when the page is folded together. Is the transformation a translation, a reflection or a rotation?

   > Name the transformation described: a shape and its image meet along a fold line and match exactly when folded together. (Choose translation, reflection or rotation.)

2. Saoirse is designing a mosaic for the school library wall. She draws a tile pattern, then flips the shape across the vertical line through its centre to make the next tile. Is this transformation a translation, a reflection or a rotation?

   > Name the transformation described: the shape flips across the vertical line through its centre. (Choose translation, reflection or rotation.)

3. Saoirse is decorating the 5th class door for Seachtain na Gaeilge with a paper shamrock. She finds that when the shape turns **180 degrees** around its centre, it fits the outline perfectly. Name the transformation she has used: translation, reflection or rotation?

   > Name the transformation described: the shape turns 180 degrees around its centre. (Choose translation, reflection or rotation.)