

Tessellation – shapes that fit together

MODULE 8 · SYMMETRY, LOCATION AND TRANSFORMATION

REVIEW

HOW TO ANSWER TODAY

- **Name a 2D shape.** Count sides, check which are equal, count right angles, check parallel pairs. Then name it.
4 equal sides, 0 right angles → rhombus · 4 sides, 1 pair parallel → trapezium
- **Transformations.** Slide without turning → translation. Flip (mirror) → reflection. Turn → rotation.
Triangle slid left → translation · Letter flipped → reflection

STRETCH PROBLEMS

- Aoife is cutting a shape for the front of her papier-mâché mask for the school play. Her shape has 6 equal sides and 6 equal angles. What 2D shape is she cutting?
Which 2D shape has these properties: 6 equal sides and 6 equal angles?
- Aoife is sewing letters onto bunting for the school summer fair. When she stitches a letter d but holds the fabric the wrong way round, the letter d looks like a letter b after the move. Is this transformation a translation, a reflection or a rotation?
Name the transformation described: the letter d looks like a letter b after the move. (Choose translation, reflection or rotation.)
- Tadhg helps build a wooden name-sign for the school garden raised beds. The sign has 3 sides with exactly 2 equal sides. Which 2D shape is the sign?
Which 2D shape has these properties: 3 sides with exactly 2 equal sides?
- Cian is drawing a homemade Snakes and Ladders board on a sheet of card. He folds the card along the middle and notices that the shape flips across the horizontal line of symmetry. Is this transformation a translation, a reflection or a rotation?
Name the transformation described: the shape flips across the horizontal line of symmetry. (Choose translation, reflection or rotation.)
- For an art lesson, Aoife is making a scale drawing of the school yard. She sketches a flower bed that has 4 sides with 2 pairs of equal length and 4 right angles. Which 2D shape is the flower bed?
Which 2D shape has these properties: 4 sides with 2 pairs of equal length and 4 right angles?