

Location and transformation investigation

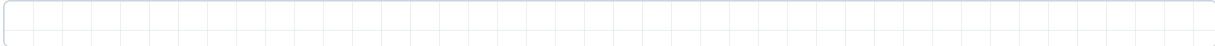
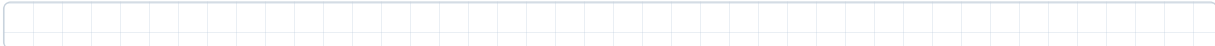
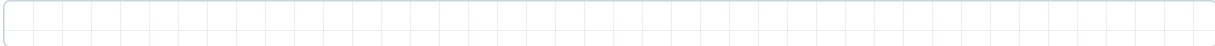
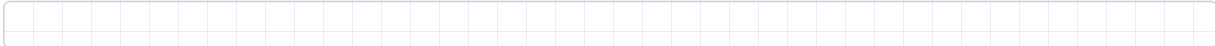
MODULE 8 · SYMMETRY, LOCATION AND TRANSFORMATION

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

- Ms Ní Bhriain draws a grid on the whiteboard to show where each act sits in the school music recital programme. The choir's act is marked **10** squares across and **4** squares up from the corner. Write its position as (across, up).

- 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.)

- Cian draws a treasure map on squared paper for a class game. He marks a kite shape that sits **3** squares across and **8** squares up from the corner. Write the kite's position as (across, up).
On a grid, the kite is 3 squares across and 8 squares up. Write its position as (across, up).

- On the school tour map of the Cliffs of Moher visitor centre, the gift shop is marked **3** squares across and **10** squares up from the entrance. Write the gift shop's position on the grid as (across, up).
On a grid, the house is 3 squares across and 10 squares up. Write its position as (across, up).

- In the after-school crafts club, Aoife sketches her kite design on a grid. The tip of the kite is **10** squares across and **6** squares up. Write the position of the kite tip as (across, up).
On a grid, the boat is 10 squares across and 6 squares up. Write its position as (across, up).
