

Completing symmetrical pictures across a mirror line

MODULE 8 · SYMMETRY, LOCATION AND TRANSFORMATION

SHAPE & SPACE

★ STRETCH PROBLEMS

- 1 Áine's finished symmetrical picture has **14** shaded squares, and none of them touch the mirror line. How many shaded squares are on each side of the line?
- 2 A mirror line goes straight down the page. Pól shades a square in the 2nd row from the top, **3** squares to the left of the line. Where must its match go?
- 3 Darragh shades a square **4** squares to the left of the mirror line. He shades its match **3** squares to the right of the line. What has he done wrong?
- 4 A mirror line goes straight across the page. Niamh shades one square **1** square above the line and another square **3** squares above the line, in the same column. Where do their matches go?
- 5 Eimear's game board is **8** squares wide, with the mirror line straight down the middle. She shades the square at the very left end of a row. How many squares to the right of the mirror line must its match be?

● INVESTIGATE

Design a mirror creature

On squared paper draw a vertical mirror line. Invent one half of a creature using whole squares only, then complete the matching half so the whole picture is **symmetrical**. How many squares did you colour altogether? Try a second creature with a horizontal mirror line.



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