

Completing symmetrical patterns across a mirror line

WHAT THIS LESSON TEACHES

A mirror line is the straight line a pattern folds along so both halves match exactly. Each coloured square on one side has a mirror square the SAME number of squares out on the other side.

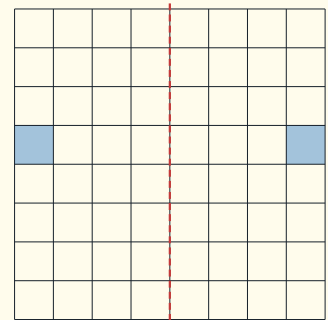
→ A square 3 squares left of the line has its mirror 3 squares right of the line.

→ A square 2 squares from the line has its mirror 2 squares from the line on the other side.

MODEL THIS ON THE BOARD

REFLECTING ONE SQUARE ACROSS THE LINE

- 1 The square on the LEFT of the mirror line is the one we started with.
- 2 Count the squares from the line: it is **4** squares out.
- 3 Count the same **4** squares out on the RIGHT of the line — that is the matching square, coloured here.



DISCUSSION STARTER

REFLECT When you finish one half, how do you check the other half really matches?

ANSWER KEY

Scaffold: visual check on the page

Q1: 3

a) Always — A mirror square is always the same number of squares out on the other side.

b) Always — A square on the line has zero distance to reflect, so it maps onto itself.

c) Sometimes — It is equal apart from any square sitting on the line, which belongs to neither side.

d) Never — A reflected square is never a different distance; it is always exactly the same distance.

EXTENSION SHEET · STRETCH ANSWERS

S1: 0 lines

S2: 8 lines

S3: 1 line

S4: 6 lines

S5: 8 lines