

Completing symmetrical pictures across a mirror line

WHAT THIS LESSON TEACHES

A mirror line is the fold line that lets both halves of a picture land exactly on top of each other. To complete the missing half, count how many squares each part sits from the line and shade its match the same number of squares away on the other side.

- A square 2 squares left of a vertical mirror line matches a square 2 squares right of the line.
- A square that touches the mirror line stays put in the reflection.

MODEL THIS ON THE BOARD

REFLECTING A PLAY TOKEN

- 1 Find the shaded token sitting 2 squares left of the vertical mirror line.
- 2 Count the same 2 squares out to the right of the line.
- 3 Shade the matching square so the token pattern is symmetrical.

DISCUSSION STARTER

REFLECT

When you finish a mirror picture, what do you check first — matching distance from the line, or matching each square?

ANSWER KEY

Scaffold: visual check on the page

Q1: 1 square

a) Always — Matching halves keep the same distance from the mirror line.

b) Never — Any part on the line stays on the line in the reflection.

c) Always — Equal counts from the line keep the picture symmetrical.

d) Never — You still count the same number of squares away on the opposite side.

EXTENSION SHEET · STRETCH ANSWERS

S1: reflection

Investigation: Design a mirror creature — open-ended; scan pupils' working for valid solution paths rather than a single answer.