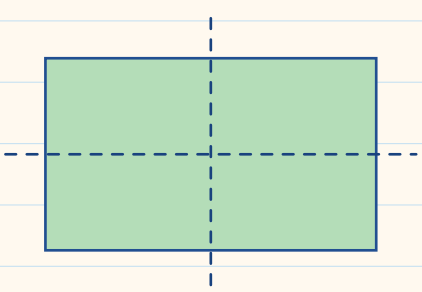
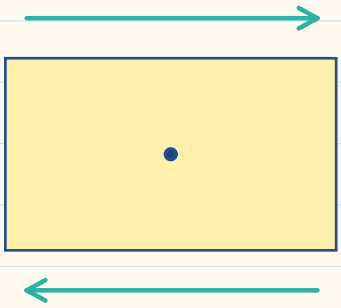
Symmetry

Space · VC2M4SP04

Symmetry means a shape matches itself after a flip or turn.



2 mirror lines



Half turn: matches

☆ Line symmetry: fold and match

A mirror line makes two matching halves.
Fold along the line: the halves fit exactly.
A square has 4 lines of symmetry.

☆ Rotational symmetry: turn and match

Turn a shape around its centre.
It matches before a full turn if it has rotational symmetry.
A rectangle matches after a half turn.

☆ Count matches and find the turn

Order = number of matches during one full turn.
Smallest turn = 360° ÷ order: a square has 360° ÷ 4 = 90°.
Equilateral triangle: order 3, 120°; regular hexagon: order 6, 60°.

☆ Make a symmetrical pattern

From each point, cross the mirror at 90°; go the same distance.
For a turning pattern, repeat a shape around a centre.
In a geometry app, create a picture by flips or turns; test it.

Remember...

A scalene triangle has no match before a full turn.
Include the final full turn; do not count the starting position twice.