

Lesson 73 SHAPE & SPACE

Classifying quadrilaterals – square, rectangle, rhombus, parallelogram and trapezium

WHAT THIS LESSON TEACHES

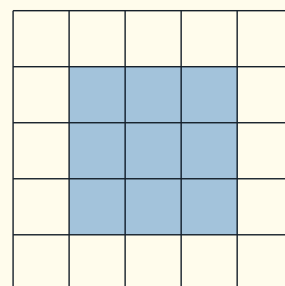
A quadrilateral is a flat shape with exactly four straight sides and four corners. We sort them by looking at their sides and corners: how many sides are equal, how many pairs of sides are parallel, and whether the corners are right angles.

- A square has 4 equal sides and 4 right-angle corners; it is also a special rectangle.
- A parallelogram is a leaned-over rectangle: opposite sides stay parallel but its corners are not right angles.

MODEL THIS ON THE BOARD

NAMING A SQUARE

- 1 The shaded shape has **4** straight sides and **4** corners, so it is a quadrilateral.
- 2 All **4** corners are right angles (square corners).
- 3 All **4** sides are the same length (**3** units each).
- 4 A shape with 4 right angles and 4 equal sides is a **square**.



DISCUSSION STARTER

REFLECT Which property helped you most when sorting — equal sides, parallel sides or right angles?

ANSWER KEY

- a) square
- b) rectangle
- c) rhombus

Q1: 8 sides and 8 corners

- a) Always — A square has 4 right angles and opposite sides equal, so it meets the definition of a rectangle.

- b) Sometimes — Only when the rhombus is also a square; a squashed rhombus has no right angles.
- c) Always — By definition a parallelogram has two pairs of equal opposite sides.
- d) Sometimes — It is a rhombus; it is a square only if the angles are right angles too.

EXTENSION SHEET · STRETCH ANSWERS

- S1:** a parallelogram
- S2:** a kite
- S3:** a regular octagon
- S4:** a regular pentagon

S5: a regular hexagon

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