

Classifying triangles and quadrilaterals by properties

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES REVIEW

Shapes are grouped by their **properties** — side lengths, equal angles and parallel sides.

→ Triangles: equilateral (all equal), isosceles (two equal), scalene (none equal).

→ A square is a special rectangle **and** a special rhombus.

HOW TO ANSWER TODAY

- **Name a 2D shape.** Count sides, check which are equal, count right angles, check parallel pairs. Then name it.

4 equal sides, 0 right angles → rhombus · 4 sides, 1 pair parallel → trapezium

MATCH-UP

Match each shape to its defining property.

a. Equilateral triangle

b. Isosceles triangle

c. Square

d. Rectangle

e. Rhombus

1. opposite sides equal, four right angles

2. four equal sides, no right angles

3. three equal sides

4. exactly two equal sides

5. four equal sides and four right angles

PRACTICE

- 1 Oisín is cutting flat panels from cereal boxes for a junk-modelling project in 5th class. One panel has **4** sides with **2** pairs of equal length and **4** right angles. Which 2D shape is the panel?

Which 2D shape has these properties: 4 sides with 2 pairs of equal length and 4 right angles?

- 2 Méabh is cutting card shapes for the 5th class corridor display. Her teacher asks her to find the shape with **3** sides and exactly **2** equal sides for the tessellation pattern. Which 2D shape should she cut?

Which 2D shape has these properties: 3 sides with exactly 2 equal sides?

CHALLENGE

- 1 Tadhg is making a homemade Snakes and Ladders board for 5th class. He draws a special tile in the middle that has **6** equal sides and **6** equal angles. What 2D shape is the tile?

Which 2D shape has these properties: 6 equal sides and 6 equal angles?

- 2 Cian is painting shapes onto a banner for the GAA county finals day. His teacher asks him to add a shape with **6** equal sides and **6** equal angles in the centre. Which 2D shape should Cian paint?

Which 2D shape has these properties: 6 equal sides and 6 equal angles?