Shape and angle construction review

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES SHAPE & SPACE

HOW TO ANSWER TODAY

- **Triangle facts.** Equilateral = all 3 sides equal. Isosceles = 2 equal. Scalene = all different. A triangle works only if the two shorter sides ADD UP TO MORE than the longest.
  5, 5, 7 → isosceles 2, 3, 9 → impossible (2 + 3 = 5 < 9)
- **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
- **Triangle angles.** Triangle angles add to 180°. Add the two you know, then subtract from 180°.
  45° + 60° = 105°. 180° − 105° = 75°

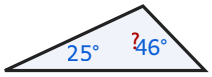
STRETCH PROBLEMS

1. 6th class are designing a tessellation pattern for the corridor display. Saoirse constructs a triangle with sides **12 cm**, **13 cm** and **18 cm**. What kind of triangle is it (equilateral, isosceles, right-angled or scalene)?

2. Cara is cutting shapes for a tessellation pattern on the corridor display. She needs a shape with **3** sides all of different lengths. Which 2D shape has these properties?

3. Cian is designing a mosaic for the school library wall. He constructs one triangle tile with sides **4 cm**, **4 cm** and **3 cm**. What kind of triangle is it (equilateral, isosceles, right-angled or scalene)?

4. 6th class are building a triangular frame for their den in the school orchard. Two angles of the triangle measure **25°** and **46°**. What is the third angle?



5. Cian is drawing a tessellation of triangles for the corridor display. He lays his protractor on one angle and sees **31°** on one scale and **149°** on the other. Which reading is correct if the angle looks acute?

SHAPE & SPACE