

Constructing angles with a protractor

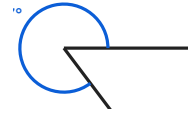
MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES SHAPE & SPACE

HOW TO ANSWER TODAY

- **Classify an angle.** Acute $< 90^\circ$ · right = 90° · obtuse $90^\circ - 180^\circ$ · straight = 180° · reflex $> 180^\circ$.
 $75^\circ \rightarrow$ acute · $120^\circ \rightarrow$ obtuse · $220^\circ \rightarrow$ reflex
- **Read a protractor.** Protractors have two scales. Pick the one that reads 0° on the side the angle's first arm sits on.
 First arm on outer $0^\circ \rightarrow$ use the outer scale to read the second arm

STRETCH PROBLEMS

- 1 Aoife is pinning a tricolour streamer across the class door for Seachtain na Gaeilge. The streamer turns through an angle of 307° from its starting position. Is this angle acute, right, obtuse, straight or reflex?

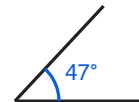


- 2 Saoirse is making a scale drawing of the school yard for art class. One of the corners between the wall and the fence measures 126° on her protractor. Is this angle acute, right, obtuse, straight or reflex?



- 3 Saoirse is building a kite in the after-school crafts club and measures one of its corner angles with a protractor. The angle looks obtuse, and the protractor shows 136° on one scale and 44° on the other scale. Which reading is the correct one for her kite's corner?

- 4 Aoife is designing a tile pattern for the new mosaic on the school library wall. One of the tiles in her sketch has a pointed corner measuring 47° . Is this angle acute, right, obtuse, straight or reflex?



- 5 Saoirse is using a protractor to mark an angle on her scale drawing of the school yard for art class. One scale on the protractor reads 69° and the other reads 111° . If the angle looks acute, which reading is the correct one?



SHAPE & SPACE