

Pie charts and proportional representation

HOW TO ANSWER TODAY

- **Pie chart.** A full circle = 360° . A segment's angle $\div 360^\circ$ gives its fraction; multiply by 360° to go the other way.

 STRETCH PROBLEMS

- 1 Cian's 5th class records how pupils spent their science lesson on the soil investigation, and the teacher draws a pie chart with three segments: setting up, pouring water, and recording results. The setting-up segment measures 78° and the pouring-water segment measures 118° . The whole pie chart is 360° . What is the angle of the recording-results segment?

- 2 Cian draws a pie chart on the classroom working wall showing the weather over a fortnight. The sunny segment measures 78° and the cloudy segment measures 146° , with rainy days making up the rest of the circle. What is the angle of the rainy segment, remembering that the whole circle is 360° ?

- 3 Mr Ó Briain made a pie chart showing the books read by 5th class in the October Reading Challenge, split into fiction, non-fiction and graphic novels. The fiction segment is 134° and the non-fiction segment is 84° . What is the angle of the graphic novels segment (remember the whole circle is 360°)?

- 4 Ms. Ní Bhriain's 5th class made a pie chart of the books they read during the October reading challenge. The segment for fiction books covers $\frac{3}{5}$ of the pie chart. What angle does that segment cover, out of 360° in total?

In a pie chart of class survey results, $\frac{3}{5}$ of pupils chose option A. What angle does that segment cover, out of 360° in total?

- 5** Ms Ní Bhriain's 5th class made a pie chart of their favourite lunchtime games. $\frac{1}{6}$ of the pupils chose rounders. What angle, out of 360° , does the rounders segment cover on the pie chart?

In a pie chart of class survey results, $\frac{1}{6}$ of pupils chose option A. What angle does that segment cover, out of 360° in total?