Pie charts and proportional representation

MODULE 9 · DATA AND CHANCE REVIEW

HOW TO ANSWER TODAY

- **Pie chart.** A full circle = 360°. A segment's angle ÷ 360° gives its fraction; multiply by 360° to go the other way.
  90° ÷ 360° = 1/4 · 3/5 of 360° = 216°

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?

   > A pie chart has three segments. One segment is 78° and another is 118°. What is the angle of the third segment (remember the whole circle is 360°)?

2. 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 **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, 3/5 of pupils chose option A. What angle does that segment cover, out of 360° in total?

3. Cian and his friends tally the colours of cars leaving the school gate at home time and draw the results as a pie chart. **1/4** of the cars are silver, shown as one segment of the pie chart out of **360°** in total. What angle does the silver segment cover?

   > In a pie chart of class survey results, 1/4 of pupils chose option A. What angle does that segment cover, out of 360° in total?