| Subject | Year | Month |  |
| :---: | :---: | :---: | :---: |
| Mathematics | 10 | December |  |
| Topic: |  |  |  |
| Pie Charts |  |  | 2 lessons |
| Content (Intent) |  |  |  |
| Prior Learning <br> Year 10 Charts and graphs November | Future Learning <br> Year 10 Scatter graphs January |  |  |

## Objectives

- Draw circles and arcs to a given radius and measure and draw angles, to the nearest degree;
- Know there are 360 degrees in a full turn, 180 degrees in a half turn, and 90 degrees in a quarter turn;
- Construct pie charts for categorical data and discrete/continuous numerical data;
- Interpret simple pie charts using simple fractions and percentages; $\frac{1}{2}, \frac{1}{4}$ and multiples of $10 \%$ sections and find the mode and the total frequency from a pie chart;
- Understand that the frequency represented by corresponding sectors in two pie charts is dependent upon the total populations represented by each of the pie charts.

Pedagogical notes (implementation)

Relate $\frac{1}{4}, \frac{1}{2}$, etc to percentages.
Practise dividing by $20,30,40,60$, etc.
Compare pie charts to identify similarities and differences.
Angles when drawing pie charts should be accurate to $2^{\circ}$.

How will understanding be assessed \&
recorded (Impact)
End of half term Dec
End of Year Year 10 exams in April
How can parents help at home?
MathsWatch clips
Qualification KS3: G2, G10abc, S9

Qualification KS4: 46ab, 128a, 116, 167

Further reading/discussion

| Reading / Enrichment <br> http://passyworldofmathematics.com/real-world- | Literacy | Numeracy <br> Links | Careers Links <br> Research analyst <br> (medical, educational, <br> market, management, <br> etc.) |
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| charts-and-graphs/ |  | Economist <br> Geotechnology |  |

