


Subject	Year	Month	
Mathematics	10	November	
<b>Topic:</b>			
<b>Representing and interpreting data</b>			3 lessons
Content (Intent)			
<b>Prior Learning</b>		<b>Future Learning</b>	
Year 9 Frequency polygons and other bar charts December		Year 10 Scatter graphs November Year 11 Cumulative frequency, box plots, histograms September	
<b>Objectives</b>			
<ul style="list-style-type: none"> <li>Know which charts to use for different types of data sets;</li> <li>Produce and interpret composite bar charts;</li> <li>Produce and interpret comparative and dual bar charts;</li> <li>Produce and interpret pie charts;</li> <li>find the mode and the frequency represented by each sector;</li> <li><b>compare data from pie charts that represent different-sized samples;</b></li> <li>Produce and interpret frequency polygons for grouped data:</li> <li>from frequency polygons, read off frequency values, compare distributions, calculate total population, mean, estimate greatest and least possible values (and range);</li> <li>Produce frequency diagrams for grouped discrete data:</li> <li>read off frequency values, calculate total population, find greatest and least values;</li> <li><b>Produce histograms with equal class intervals</b></li> <li>estimate the median from a histogram with equal class width or any other information, such as the number of people in a given interval;</li> <li>Produce line graphs:</li> <li>read off frequency values, calculate total population, find greatest and least values;</li> <li>Construct and interpret time-series graphs, comment on trends;</li> <li>Compare the mean and range of two distributions, or median or mode as appropriate;</li> <li>Recognise simple patterns, characteristics relationships in bar charts, line graphs and frequency polygons.</li> </ul>			
<b>Pedagogical notes (implementation)</b>		<b>How will understanding be assessed &amp; recorded (Impact)</b>	
<p>Misleading graphs are not mentioned in the specification but are a useful activity to reinforce this unit.</p> <p>When doing time-series graphs, use examples from science, geography.</p>		<p><b>End of half term</b> Assessment in Dec <b>End of Year</b> Mocks in April</p>	
		<b>How can parents help at home?</b>	
		<p><b>MathsWatch clips (Qualification GCSE)</b> 15, 65a, 65b, 128a, 128b, 153,</p>	
<b>Further reading/discussion</b>			
<b>Reading / Enrichment</b>	<b>Literacy</b>	<b>Numeracy Links</b>	<b>Careers Links</b>
			Statistician Data analyst Business Analyst Economist Actuary