


Subject	Year	Month	
Mathematics	10	February	
<b>Topic:</b>			
<b>Stats and sampling</b>			2 lessons
Content (Intent)			
<b>Prior Learning</b> Year 10 Tables November Year 8 Statistics project June		<b>Future Learning</b> Year 10 The averages February	
<b>Objectives</b> <ul style="list-style-type: none"> <li>Specify the problem and:</li> <li>plan an investigation;</li> <li>decide what data to collect and what statistical analysis is needed;</li> <li>consider fairness;</li> <li>Recognise types of data: primary secondary, quantitative and qualitative;</li> <li>Identify which primary data they need to collect and in what format, including grouped data;</li> <li>Collect data from a variety of suitable primary and secondary sources;</li> <li>Understand how sources of data may be biased;</li> <li>Understand sample and population.</li> <li>Explain why a sample may not be representative of a whole population;</li> </ul>			
<b>Pedagogical notes (implementation)</b>		<b>How will understanding be assessed &amp; recorded (Impact)</b>	
<p>Emphasise the difference between primary and secondary sources and remind students about the different between discrete and continuous data.</p> <p>Discuss sample size and mention that a census is the whole population (the UK census takes place every 10 years in a year ending with a 1 - the next one is due in 2021).</p> <p>Specify the problem and planning for data collection is not included in the programme of study but is a prerequisite to understand the context of the topic.</p> <p>Writing a questionnaire is not part of the new specification, but is a good topic to demonstrate bias and ways to reduce bias in terms of timing, location and question types that can introduce bias.</p> <p>Emphasise the importance of being able to convert between decimals and percentages and the use of decimal multipliers to make calculations easier.</p>		<b>End of half term</b> Feb <b>End of Year</b> Year 10 exams in April	
		<b>How can parents help at home?</b>	
		<b>MathsWatch clips</b>  Qualification KS3: S3, S4, S5, S10ab, N39ab, R9b, P4  Qualification KS4: 61, 63, 64, 65, 130ab, 152, 176	
<b>Further reading/discussion</b>			
<b>Reading / Enrichment</b>	<b>Literacy</b>	<b>Numeracy Links</b>	<b>Careers Links</b> Research analyst (medical, educational, market, management, etc.) Economist Actuary