

Maths - Year 10F - Term 3 - Averages, Perimeter, Area and Volume

Year group: 10	Subject: Averages, Perimeter, Area and Volume
<p>Prior learning- linked to National curriculum</p>	<p><u>Averages and range</u> Students would have previously seen Averages and range in their KS3 learning, calculating averages and range from raw data should be a simple recap before moving onto grouped data and frequency tables.</p> <p><u>Perimeter, Area and Volume:</u> Perimeter and Area topics should be recapping from KS3 all of the content covered would have been seen across KS3, Volume would have been seen in year 9, but will again be another topic that students historically have found difficult so care will be taken when teaching to ensure enough practise to gain the fluency required.</p>
<p>Rationale</p>	<p>This term covers Aspects of two of the main Maths Units, namely Geometry and Data. This means that by the end of term three students would have covered two units across 5 maths strands taught at GCSE giving them a well rounded understand at this point halfway through the year 10 course.</p> <p>There is a lot of these topic that would have been seen at KS3 but the main aim of these units is to bring them up to a GCSE standard and expose students to questioning that is more akin to a GCSE paper.</p> <p>Furthermore the Perimeter Area and Volume topic set the groundwork for another topic that will be seen later on in the SOW.</p>
<p>Vocabulary:</p>	<p>Keywords</p> <p><u>Averages and range</u> Average, Mean, Median, Mode, Range</p> <p><u>Perimeter, Area and Volume</u> Perimeter, Distance, length, Area, Volume, Parallel, Perpendicular, Surface area,</p>
<p>Cultural Capital:</p>	<p>Averages and range: This topic enables students to understand much of the statistics that are in different media outlets as well as good methods to compare two things, whether its the performance of a TV based or reviews or the reliability of a sports person.</p> <p><u>Perimeter, Area and Volume</u></p>

	<p>A key area in which this topic can be applied is when dealing with decorating or construction problems. Students can explore whether or not they have enough paint to cover a wall, enough fencing to surround a garden or enough cement to build a building. And many more similar problems</p>
<p>Key assessments- name the assessments</p>	<p><u>Average and range</u> Averages and range from raw data Mean and mode from grouped data and tables (some estimates) <u>Perimeter, Area and Volume</u> Area and perimeter of 2d shapes Volume of 3d shapes Surface area of 3d shapes</p> <p>Unit wrapper covering the above topics</p>
<p>What do children know/ can do now (EDSM)</p>	<p>As previously mentioned, students would have seen the basics of these topics, therefore Emerging students will still only be familiar with the basics of calculating averages and range or area/ perimeter.</p> <p>Mastered students will be able to calculate Averages/ Range fluently as well as interpret and analyse the results.</p> <p>Furthermore in Perimeter, Area and Volume, they will be able to solve problems involving each of these measures.</p>