

## Kilgarth School – Mathematics Department Scheme of Learning Links to Careers

	<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<b>Year 7</b>	<p>Calendar and Time – Pupils link this skill to self- management skills</p> <p>Area – how jobs like gardening, decorating, etc, need a solid understanding of area</p> <p>Statistics – how the media / advertising use diagrams to statistics in the way they want them to look</p> <p>Estimation used to calculate pricing a job</p> <p>Angles and how they are used in the building trade</p>	<p>Conversions – linked to factory production and construction measurements/artists/engineering</p> <p>Algebra – links to formula for area, perimeter used by carpet fitters/painters/landscaping</p> <p>Percentage – links to banking/mortgages/wages/retail industry</p> <p>Ratio and proportion – links to catering and preparing food</p>	<p>Statistics – how the media / advertising use diagrams to statistics in the way they want them to look/ persuasive advertising</p> <p>Data representation – contextually linking to various industries and how data is used</p> <p>Plans and elevations linked to architects and cartographers</p>
<b>Year 8</b>	<p>Sequences – links to IT and how sequences can be important</p> <p>Using number and algebra for problem solving – linking to logistics</p> <p>Construction – how this can be used in the construction industry</p> <p>Statistics – linking to croupier/ cruise ships/casinos/betting shops/statistical medical research</p> <p>Perimeter and area – Contextual questions from various construction job scenarios</p>	<p>Statistics – how consumer research would get information about varying things by collecting data.</p> <p>Distance/Time – related to logistic company.</p> <p>Substitution – linked to calculating food quantities.</p>	<p>Construction – how this is used by architects / designers / artists / engineers to draw accurate designs.</p> <p>Fractions used in context in the catering industry.</p> <p>Frequency Tables – linked to the sporting industry</p>

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<b>Year 9</b>	<p>Co-Ordinates – how anything needing the use of maps would link to co-ordinatinates</p> <p>Error Intervals – Engineering and medical research to explain tolerances</p>	<p>Percentage change – how banks calculate the interest in loans / accounts</p> <p>Measures mass etc. linked to science and engineering</p> <p>Presenting data linked to professions that require demonstrations and management jobs</p>	<p>Averages and sampling – medical research and food safety links</p> <p>Statistics – population study</p> <p>Money and measure – job costing/quantity surveyor</p>
<b>Year 10</b>	<p>Graphical representation – understanding and presenting data of all statistical information in different industries/reporter</p> <p>Simple kinematic problems – Engineers/mechanics/drivers</p> <p>Using Ratio and proportion to solve contextual problems in banking/catering/construction/logistics</p>	<p>Pythagoras and Trigonometry – how this is used by architects / designers / engineers to draw accurate designs.</p> <p>Volume and density – Packers/retail producers/engineers/sport</p> <p>Probability – in clinical research</p>	<p>Scale drawing - how this is used by architects / designers / engineers to plan designs</p> <p>Bearings – how pilots use these to navigate</p> <p>Quadratic equations used in basic engineering</p>
<b>Year 11</b>	Standard Form – how this is used in science and engineering to represent very large or very small amounts		



All the above Mathematics Learning, link to the CDI Framework to enrich our pupils.