

# Year 8 - Representations

## Term 2

Stage	Description		
	Section A Prerequisites	Section B Line graphs and scatter graphs	Section C Probability
Emerging	<ul style="list-style-type: none"> <li>Can find a fraction of an amount.</li> <li>Can add and subtract fractions with the same denominators.</li> <li>Can add and subtract fractions with different denominators.</li> </ul>	<ul style="list-style-type: none"> <li>Can find the area and perimeter of a shape counting squares.</li> <li>Can find the area of a shape using a formula.</li> </ul>	<ul style="list-style-type: none"> <li>Can identify the key features of shapes including angle properties.</li> </ul>
Developing	<ul style="list-style-type: none"> <li>Can draw axes and label them.</li> <li>Can plot &amp; interpret coordinates (including shape).</li> <li>Negative numbers – linking to Y7 counters</li> <li>Can define parallel and perpendicular, horizontal and vertical.</li> <li>Complete a venn diagram with different sets.</li> <li>Can use simple probability to list outcomes and find probability of an event occurring.</li> <li>Understand that all probability adds up to 1</li> </ul>	<ul style="list-style-type: none"> <li>Can plot <math>y =</math> and <math>x =</math> lines on a graph.</li> <li>Can plot <math>y = x</math> and <math>y = -x</math>, understanding the impact of gradient.</li> <li>Can recognise and use lines <math>y = kx</math> with focus on gradient.</li> </ul>	<ul style="list-style-type: none"> <li>Can draw and interpret a scatter graphs</li> <li>Can identify linear correlation and the relationship between variables, positive, negative, strong and weak correlations.</li> <li>Draw and use line of best fit with a focus on outliers and risk of extrapolating.</li> </ul>
Secure		<ul style="list-style-type: none"> <li>Can interpret the gradient of a line.</li> <li>Have an understanding of <math>y</math> intercept.</li> <li>Can plot a line using <math>y = mx + c</math></li> <li>Can plot graphs with negative gradients</li> </ul>	<ul style="list-style-type: none"> <li>Can identify non-linear relationships</li> <li>Can compare qualitative and quantitative and discrete vs. continuous data (words, charts)</li> <li>Can present data in two way tables and frequency tables</li> </ul>
Excellence		<ul style="list-style-type: none"> <li>Can identify if a coordinate would fall on the line when give a line in the form of <math>y = mx + c</math>.</li> <li>Students explore plotting non-linear graphs and investigate e.g. <math>y = ax^n</math>.</li> </ul>	<ul style="list-style-type: none"> <li>Can complete sample space diagrams and listing outcomes using set notation.</li> <li>Can find the probability from sample space/two way tables/venn diagrams using <math>P(\text{event})</math> notation.</li> <li>Can represent a probability using venn diagram notation.</li> <li>Can list combinations and use the product rule.</li> </ul>