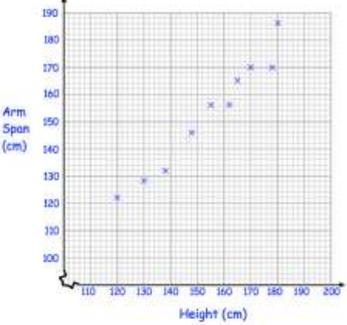
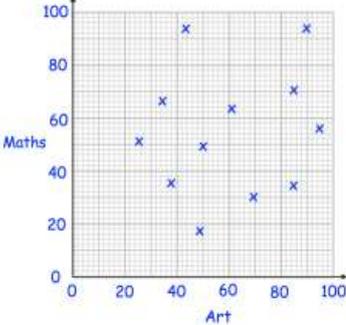


Subject	Psychology
Context / relevance	Numeracy is an essential skill for learning Psychology. Numeracy in Psychology is essentially mathematical thinking; this is not just the use of numbers, but more how the use of mathematics can help us improve understanding of behaviour and thinking. Psychology lessons provide many opportunities for developing your mathematical understanding and applying it to real-world situations.
Measures of central tendency (Averages)	<p>Averages:</p> <p>a) Find the mode of the following data: 4, 2, 7, 3, 4, 3, 5, 3, 2, 7, 3</p> <p>b) Find the median of the following data: 1, 4, 5, 6, 8, 14</p> <p>c) Find the mean of the following data: 2, 5, 3, 8, 2, 5, 3</p>
Measures of dispersion (Range and standard deviation)	<p>Range:</p> <p>a) Find the range of the following data: 12, 5, 7, 5, 19, 12, 8, 6</p> <p>b) Find the range of the following data: 209, 307, 496, 19, 584</p>
Interpreting tables and graphs	<p>Scattergrams:</p> <p>What type of correlation does each scatter graph show?</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>a)</p>  </div> <div style="text-align: center;"> <p>b)</p>  </div> </div> <p>Estimate the correlation coefficient for (a).</p>
Percentages	<p>Percentages:</p> <p>a) Mohammad takes the penalties for his local football team. Altogether he has scored 34 penalties and missed 6 penalties. Work out the percentage of penalties that Mohammad has missed.</p> <p>b) Last season he scored 5 penalties. This season he has scored 9 penalties. Work out the percentage increase in goals between seasons.</p>
Data Handling	<p>Data Handling:</p> <p>a) Time taken to complete a card sort task: Is the data quantitative or qualitative? Give a reason.</p> <p>b) Anna is collecting the times taken for her friends to complete a lap of a bike circuit. This data is (circle the correct type for each): Discrete/Continuous Primary/Secondary Qualitative/Quantitative</p>

Subject	Psychology
Context / relevance	Numeracy is an essential skill for learning Psychology. Numeracy in Psychology is essentially mathematical thinking; this is not just the use of numbers, but more how the use of mathematics can help us improve our understanding of how the world works. Psychology lessons provide many opportunities for developing your mathematical understanding and applying it to real-world situations.
Averages	<p>Averages:</p> <p>a) Find the mode of the following data: 4, 2, 7, 3, 4, 3, 5, 3, 2, 7, 3</p> <p>b) Find the median of the following data: 1, 4, 5, 6, 8, 14</p> <p>c) Find the mean of the following data: 2, 5, 3, 8, 2, 5, 3</p> <p>a) 3</p> <p>b) 5.5</p> <p>c) 4</p>
Ranges	<p>Range:</p> <p>a) Find the range of the following data: 12, 5, 7, 5, 19, 12, 8, 6</p> <p>b) Find the range of the following data: 209, 307, 496, 19, 584</p> <p>a) 14</p> <p>b) 19</p>
Scatter Graphs and Correlation	<p>Scatter Graphs:</p> <p>What type of correlation does each scatter graph show?</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="319 884 662 1209"> </div> <div data-bbox="694 884 1037 1209"> </div> </div> <p>a) Strong positive correlation Between +0.80 and +0.99</p> <p>b) No correlation</p>
Percentages	<p>Percentages:</p> <p>a) Mohammad takes the penalties for his local football team. Altogether he has scored 34 penalties and missed 6 penalties. Work out the percentage of penalties that Mohammad has missed.</p> <p>$6/34 \times 100 = 17.6\%$</p> <p>b) Last season he scored 5 penalties. This season he has scored 9 penalties. Work out the percentage increase in goals between seasons.</p> <p>$((9-5)/5) \times 100 = 80\%$ (Change/Original) x 100</p>
Data Handling	<p>Data Handling:</p> <p>a) Birth rates in a country by year: Is the data quantitative or qualitative? Give a reason.</p> <p>Quantitative - can be measured and expressed as a number.</p> <p>b) Anna is collecting the times taken for her friends to complete a lap of a bike circuit: This data is (circle the correct type for each):</p> <p>Discrete/Continuous</p> <p>Primary/Secondary</p> <p>Qualitative/Quantitative</p>