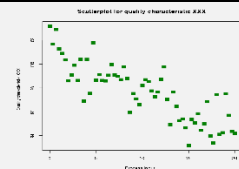
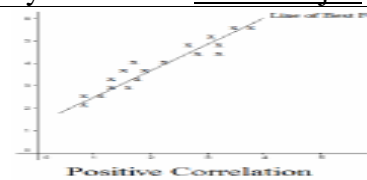
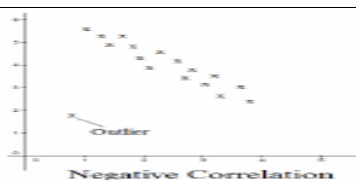
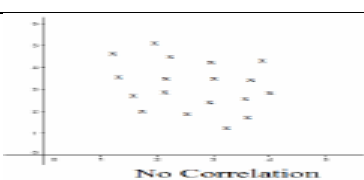
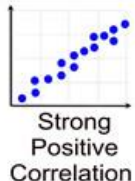
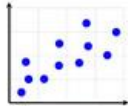
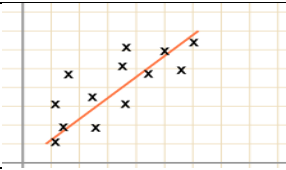
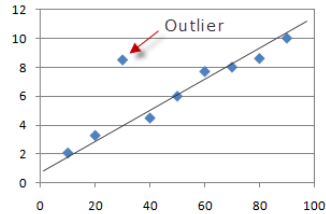
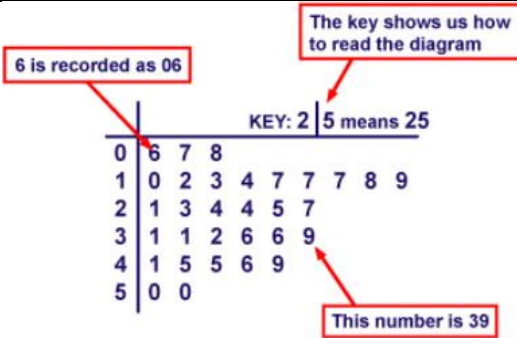


Year 9 Strand 5

Topic/Skill	Definition/Tips	Example																				
Mean from grouped data	<p>We can estimate the mean from a grouped frequency table.</p> <p>This is only an estimate because we do not know the exact values of the data within the groups.</p> <p>1. Find the midpoints (if necessary) 2. Multiply Frequency by values or midpoints 3. Add up these values 4. Divide this total by the Total Frequency</p>	<table><tr><th>Height in cm</th><th>Frequency</th><th>Midpoint</th><th>F × M</th></tr><tr><td>$0 < h \leq 10$</td><td>8</td><td>5</td><td>$8 \times 5 = 40$</td></tr><tr><td>$10 < h \leq 30$</td><td>10</td><td>20</td><td>$10 \times 20 = 200$</td></tr><tr><td>$30 < h \leq 40$</td><td>6</td><td>35</td><td>$6 \times 35 = 210$</td></tr><tr><td>Total</td><td>24</td><td>Ignore!</td><td>450</td></tr></table> <p>Estimated Mean height: $450 \div 24 = 18.75\text{cm}$</p>	Height in cm	Frequency	Midpoint	F × M	$0 < h \leq 10$	8	5	$8 \times 5 = 40$	$10 < h \leq 30$	10	20	$10 \times 20 = 200$	$30 < h \leq 40$	6	35	$6 \times 35 = 210$	Total	24	Ignore!	450
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Scatter Graphs	A graph in which values of two variables are plotted along two axes to compare them and see if there is any connection between them.																					
Correlation	Correlation between two sets of data means they are connected in some way.	There is correlation between temperature and the number of ice creams sold.																				
Causality	When one variable influences another variable.	The more hours you work at a particular job (paid hourly), the higher your income <u>from that job</u> will be.																				
Positive Correlation	As one value increases the other value increases .																					
Negative Correlation	As one value increases the other value decreases .																					
No Correlation	There is no linear relationship between the two.																					
Strong Correlation	When two sets of data are closely linked .																					

Year 9 Strand 5

Weak Correlation	When two sets of data have correlation, but are not closely linked .	 Weak Positive Correlation
Line of Best Fit	A straight line that best represents the data on a scatter graph.	
Outlier	A value that 'lies outside' most of the other values in a set of data. An outlier is much smaller or much larger than the other values in a set of data.	
Stem and Leaf diagrams	An efficient method of ordering and representing data by grouping numbers that have the same digit in their first or second place value digit	
Money Calculations	Money calculations should always be represented in £'s and pence	E.g. Sixteen pounds and twenty pence should be written as £16.20 not 16.2, 16.20 or £16.2
Wages	This is money that earned either per day, week, month or year.	
Tax	Tax is added onto the price of goods or services. Alternatively, it can be taken off wages or other income.	
VAT	Value added tax is added onto the price of goods or services. Currently the rate of VAT is 20%.	The cost of a fridge is £200 + VAT. What is the total cost? £200 x 1.2 = £240 The total cost is £240
APR	Annualised Percentage Rate – This is the interest charged on a loan or credit card.	A £12000 loan is taken out at a rate of 11% APR. If the loan is paid back after one year that total amount to be paid back would be £12000 x 1.11.