

# How to write Excellent Evaluations - 1

		Yr7 Emerging	Yr7 Developing	Yr7 Securing - Yr8 Emerging	Yr7 Mastery - Yr8 Developing
Test		Point	Evidence	Explain	Implication
Number of Repeats	Are there at least 3 DV measurements of the same IV Value?	Yes There is a suitable number of repeats...	... as there are __ repeats.	This allows anomalies to be identified and a mean to be calculated.	By calculating a mean, the effect of random error was reduced.
	No There is not a suitable number of repeats...	... as there is only __ repeats. OR ... there are no repeats.	This does not allow anomalies to be identified or a mean to be calculated.	The effect of random error was therefore not reduced by calculating a mean.	
Anomalies (Data)	Are there any repeats <u>significantly</u> different from the others?	Yes There was an anomaly...	...for repeat [REPEAT NUMBER] when the [IV] was [IV VALUE].	This was significantly different to the other repeats.	... so the control variables must not have been tightly controlled. For example, this could have been because...
	No There are no anomalies...	<b>Explain:</b> ...as none of the repeats are significantly different to each other.	<b>Evidence:</b> For example the repeats when [IV] was [IV VALUES] were... They are all within 10% of the mean.	... so the control variables must have been tightly controlled.	
Anomalies (Trend)	Are there any points <u>significantly</u> further from the line of best fit than the others?	Yes There was an anomaly...	... at the data at point ( x, y ).	This point was significantly further away from the line of best fit than the others.	... so the control variables must not have been tightly controlled for this reading. For example, this could have been because...
	No There are no anomalies...	...as all of the points are close to the line of best fit.	Therefore none were significantly further away than the others. They all fit the overall trend.	... so the control variables must have been tightly controlled.	

# How to write Excellent Evaluations - 2

		Yr7 Developing	Yr7 Securing - Yr8 Emerging	Yr7 Mastery - Yr8 Developing	Yr8 Securing
Test		Point	Evidence	Explain	Implication
Number of IV Values	Are there at least 5 IV Values?	Yes There is a suitable number of IV Values...	... as there are ___ IV Values.	This allowed a line of best fit to be drawn with confidence.	Therefore there is a greater degree of confidence in the conclusion.
	(And no more than 11 IV Values )	No There is not a suitable number of IV Values...			
Repeatability	When <u>you</u> repeated the experiment did you get roughly the same results?	Yes The repeatability of the data is good.	<b>Explain:</b> ... because when the experiment was repeated, similar results were obtained.	<b>Evidence</b> For example the repeats when [IV] was [IV VALUE] were... .. they are all within [RANGE / MEAN x 100] % of each other.	... so the control variables must not have been tightly controlled for this reading. For example, this could have been because...
		No The repeatability of the data is poor.	<b>Explain:</b> ... because when the experiment was repeated, the results obtained were quite different.		... so the control variables must have been tightly controlled.
Accuracy	In general (and ignoring any anomalies) are the points close to the line of best fit?	Yes The accuracy of the data is good.	... because the points are close to the line of best fit.	The distance from line represents random error, so the errors are small.	Therefore it is likely that the results are close to the true value, excluding systematic error.
		No The accuracy of the data is poor.	... because the points are spread about the line of best fit.	The distance from line represents random error, so the errors are large.	Therefore it is unlikely that the results are close to the true values.

# How to write Excellent Evaluations - 3

		Yr7 Securing - Yr8 Emerging	Yr7 Mastery - Yr8 Developing	Yr8 Securing	Yr8 Mastering
Test		Point	Evidence	Explain	Implication
Range	Could a clear pattern be seen on the graph?	Yes There is a suitable range...	... as the range was from [LOWEST IV VALUE] to [HIGHEST IV VALUE] [UNITS].	This allowed a clear pattern to be seen. The lowest IV Value was doubled	Therefore there is a greater degree of confidence in the conclusion.
	Was double the lowest IV Value tested?	No There is not a suitable range...			
Reproducibility	When <u>other people</u> did the same experiment, did they get roughly the same results?	Yes The reproducibility of the data is good.	<b>Explain</b> : ... because compared to another group, the obtained results were similar. For example...	<b>Evidence</b> For example when [IV] was [IV VALUE], I measured [YOUR VALUE] and the other group measured [THEIR VALUE].	It is likely that my conclusion can be trusted.
		No The reproducibility of the data is poor.	<b>Explain</b> : ... because compared to another group, the obtained results were very different.		It is likely that my conclusion can not be trusted.
Precision	Are the repeats close to the mean value?	Yes The precision of the data is good.	... because there is very little spread about the mean.	... this shows there is little random error	... so the control variables must have been tightly controlled.
		No The precision of the data is poor.	... because there is a large spread about the mean.	... this shows there is a large degree of random error	... so the control variables must not have been tightly controlled.