T/I (15%)	APP (35%)	COM (15%)	K/U (35%)
12	60	20	54

Statistics Project – Rubric

Name: _____

Introduction (T/I: 12 marks)

	5 – 6	3 – 4	1 – 2	0
Introduction **/ 6**	Clear, concise. Worthwhile. Intent of report is clearly presented.	Fairly clear intention. Tone appropriate to subject. Relatively engaging.	Not engaging, but present. Limited presentation of intent.	Too short/absent
Topic Question and Hypothesis **/ 6**	An outstanding and unique main topic question with many sub-questions posed that relate well to the topic. A hypothesis is stated with much thought in regards to main topic question.	A good/suitable topic question is developed. Some sub-questions are posed. A hypothesis is stated with some thought in regards to main topic question.	A weak topic question is developed. Poor or too few sub- questions that need to be answered. Little thought put into hypothesis.	No topic question developed. No sub-questions developed. No hypothesis is stated.

Comments:

Calculations & Analysis (App: 42 marks)

Section & Topic	5 – 6	3 – 4	1 – 2	0
1.4 - Central Tendency **/ 6**	Mean, median and mode are all calculated in Excel file. At least two measures of central tendency are discussed with an excellent explanation & purpose in written report.	Mean, median and mode are all calculated in Excel file. At least two measures of central tendency are discussed with some purpose in written report.	At least one measure of central tendency is calculated, but not really connected to main topic question.	Very poor use of central tendency **or** incorrectly calculated **or** Missing.
1.5 - Spread **/ 6**	At least four measures of spread (deviation, standard deviation, variance, IQR, percentile, z-score) are calculated and used for a purpose at least once each and are interpreted well.	At least two measures of spread (deviation, standard deviation, variance, IQR, percentile, z-score) are used for a purpose at least once each and are interpreted.	A measure of spread (deviation, standard deviation, variance, IQR, percentile, z-score) is used, but not interpreted very well.	Very poor use of measures of spread **or** incorrectly calculated **or** Missing
2.1 - Correlation Coefficient, r **/ 6**	At least one line of best fit is used and visually classified and explained well. Correlation coefficient is calculated at least once and used to analytically classify the line of best fit.	At least one line of best fit is used and visually classified. Correlation coefficient is used at least once and is analytically classified.	Line of best fit and/or correlation are used, but not explained well.	Major problems **or** incorrectly calculated **or** scatter plots missing **or** missing.
2.2 - Regression, Interpolation & Extrapolation **/ 6**	At least one interpolation and/or extrapolation is used with least-squares regression equation for a purpose. Numbers explained well and justified.	An interpolation or extrapolation is used with least-squares regression equation.	An interpolation and/or extrapolation is used with least-squares regression equation, but is lacking purpose.	Missing/incomplete **or** calculated incorrectly.
1.1 - Variables	Variables are very well described as discrete, continuous or categorical; independent or dependent. Any	Variables are described as discrete, continuous or categorical; independent or dependent with little	Variables are described as discrete, continuous or categorical; independent or dependent.	Missing.

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/ 6	extraneous variables are identified and explained well.	justification. Any extraneous variables are identified.		
2.3 - Cause and Effect / 6	At least one variable relationship factor is identified and explained well.	At least one variable relationship factor is identified and explained.	At least one variable relationship factor is identified.	Missing.
1.1 - Graphs / 6	Multiple scatter plots and at least one other graph used. Well labeled. Appropriate choices.	Multiple scatter plots and at least one other graph used.	Few graphs included. Some graphs that would be helpful are omitted.	Many more needed **or** completely missing.

Comments:

Conclusion Phase (App: 18 marks)

	5 – 6	3 – 4	1 – 2	0
Conclusion Structure / 6	Concise. Conclusions were well developed throughout the body of the report.	More conclusions necessary. Some conclusions not supported by report.	Few conclusions. Those present are weak and do not follow from the report.	Missing, very brief.
Drawing of Conclusions / 6	Selected and applied relevant criteria to justify and substantiate conclusions.	Selected and applied criteria to justify conclusions.	Provided some justification for conclusions.	Provided little, if any, justification for conclusions.
1.3 - Biases / 6	At least one type of bias is discussed and justified.	At least one type of bias is discussed.	A type of bias is included, but not discussed or explained.	Missing.

Comments:

Overall Analysis (K/U: 42 marks)

	5 – 6	3 – 4	1 – 2	0
Report Structure / 6	Title page and table of contents. Titles and subtitles on pages. Pages in order, numbered. Very neat and professional. Excellent formatting.	Title page and table of contents. Pages in order and neatly presented. Titles on pages. Some basic formatting.	Elements such as title page, table of contents, or subtitles missing. Appear hastily collected.	Little thought appears to have gone into organization and presentation. Missing many structure elements.
Works Cited & References / 6	MLA format works cited present at the end of report. All graphs, pictures, and/or quotes are correctly cited throughout report.	MLA format works cited present at the end of report, with some details missing. Some graphs, pictures, and/or quotes are correctly cited in report.	MLA format works cited present at the end of report, with some details missing.	Many errors **or** completely Missing.
Mathematical Writing / 6	Always or almost always uses correct terminology and notation. Uses technology extremely well.	Generally uses correct terminology and notation. Uses technology well.	Sometimes uses correct terminology and notation.	Rarely uses correct terminology and notation.
Editing, Spelling & Grammar / 6	Extremely well edited. Vivid vocabulary. Near perfect spelling/grammar.	Student has edited the report, ensuring that sentences are forceful and clear. Accurate word choice. Few spelling/grammar mistakes.	Incomplete editing is evident. Ordinary word choices. Many spelling/grammar mistakes.	Faulty editing shows in flawed sequence of ideas. Limited vocabulary. Very inaccurate spelling/grammar.
Command of Topic	Report demonstrates both familiarity with relevant issues and independent thought.	Subject fairly well researched with some independent thought.	Report misses some element of assigned	Poorly researched. Critical issues associated with topic not presented.

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/ 6			topic and/or is too general.	
Understanding **/ 6**	Comprehensive understanding of concepts and key ideas.	Firm understanding of some concepts and key ideas.	Basic understanding of concepts and key ideas with restricted depth.	Little understanding of basic concepts and key ideas.
Use of Class Time **/ 6**	Effective use of teacher's resources. On task behaviour all of the time.	On-task behaviour most of the time.	Frequently needed to be reminded to get back on task.	Little/no work done in class **or** irregular attendance during project.

Comments:

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Data Collection (K/U: 12 marks)

	5 – 6	3 – 4	1 – 2	0
Excel File Appendix **/ 12**	Nicely formatted/organized. Titles. Very Clear.	Basic formatting and organization.	Included but very disorganized.	Missing **or** very weak.

Presentation (Com: 20 marks)

	7 – 10	4 – 6	1 – 3	0
Verbal Summary of Problem & Conclusions **/ 10**	Clear and concise. Overall understanding and presentation of content is excellent.	Some clarity. Overall understanding and presentation of content is good.	Unclear. Overall understanding and presentation of content is weak.	Hard to make any connections with the original problem and information presented.
Visuals Presenting Data **/ 10**	Clear, concise. Large amount of visuals. Very easy to follow.	Fairly clear. Good amount of visuals. Easy to follow.	Not clear, but present. Small amount of visuals. Hard to follow.	Little to no visuals. Hard to make any connections.

Comments: