

Year 9 Mathematics 5.2

**Assessment Task 2 – 2023**

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| **TOPIC:** Single Variable Analysis | **MARKS: 75** |
| **SUBMISSION REQUIREMENTS:**Term 2 Week 5 – **In class**- Due Friday 26th May 2023 | **Name:** |
| **OUTCOMES TO BE ASSESSED:**MA 5.1-12 SP: **Uses** statistical displays to **compare** sets of data, and **evaluates** statistical claims made in the mediaMA 5.2-1 WM: **Selects** appropriate notations and conventions to communicate mathematical ideas and solutionsMA 5.2-2 WM: **Interprets** mathematical or real-life situations, systematically applying appropriate strategies to solve problemsMA 5.2-15 SP: **Uses** quartiles and box plots to **compare** sets of data and **evaluate** sources of data. |
| **Directional Verbs:****Use:** Apply, utilise, employ in a particular situation**Interpret:** Draw meaning from**Select:** Choose most relevant option**Compare:** Show how things are similar of different**Evaluate:** Make a judgement based on criteria; determine the value of |
| **TASK DESCRIPTION: You will complete a statistical inquiry in class over three weeks using data given. The four parts of the inquiry are listed below****Part 1 - Collecting the data (13 marks)**You will:* Design survey questions
* Determine how bias is introduced into data
* Describe how to collect the data
* Record your data in a frequency distribution table

**Part 2 - Analysing the data (25 marks)**You will:* Calculate the mean and mode of the data from a frequency distribution table
* Find the median from a frequency distribution table, histogram, and dot plot
* Find the quartiles from a frequency distribution table, histogram, and dot plot
* Write a five number summary
* Find the range and interquartile range

**Part 3 - Displaying the data (24 marks)**You will:* Draw a box and whisker plot
* Compare parallel box and whisker plots
* Describe the shape of your distributions
* Determine if the outliers are mathematically significant
* Look at the effects of outliers on data analysis

**Part 4 – Writing a report (13 marks)**You will:* Create an article that sums up your findings
* Draw three conclusions about indigenous health education
* Include a paragraph to explain and support your conclusions
* Submit a final copy of your article on a separate A4 paper or cardboard.
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