



Year 7 Mathematics Assessment Task 1 - 2025

TOPIC: Data Classification and Visualisation	MARKS: 40
---	------------------

SUBMISSION REQUIREMENTS:

Term 1 - Week 8 - In Class

TASK DESCRIPTION:

Section 1 – COLLECTING THE DATA /6

1. In groups, you will investigate a SURVEY TOPIC relevant to Year 7 students. Your groups will be created based on your common interests. (Maximum of 7/group)
2. You will create an individual SURVEY QUESTION relevant to your survey topic. Each student will be *responsible for their own survey question* that contains a choice of four answers. Each group should have a mixture of questions that create categorical or nominal data.
3. You will COLLECT DATA by surveying the students and teacher in your own class.

Section 2 - REPRESENTING THE DATA /24

4. You will tabulate the responses in a FREQUENCY DISTRIBUTION TABLE, ensuring all features of the table are included.
5. You will then create a DIVIDED BAR GRAPH, FREQUENCY HISTOGRAM and POLYGON, DOT PLOT, LINE and COLUMN GRAPH and SECTOR GRAPH by using the data from the frequency distribution table and ensuring all features of the graphs are included.

Section 3 – VISUALISING THE DATA /10

6. In groups, will create an INFOGRAPHIC, presenting each individuals question using a different type of graph. This will be done on a separate poster. A draft page has been provided.

*An **infographic** is a way to visually represent survey data. Data should be presented in a way that enhances retention and recall of information through visually compelling **design** and easily understood **format**. It should include all important **data** from the survey using diagrams. A short **analysis** of the survey topic data should be given including an **interpretation, conclusion and prediction**.*

OUTCOMES TO BE ASSESSED:

MAO-WM-01 – develops understanding and fluency in mathematics through **exploring** and **connecting** mathematical concepts, **choosing** and **applying** mathematical techniques to **solve** problems, and **communicating** their thinking and **reasoning** coherently and clearly

MA4-DAT-C-01 – classifies and **displays** data using a variety of graphical representations

DIRECTIONAL VERBS:

Applying – use, utilise, employ in a particular situation

Choose – decide on a course of action

Classifies – arrange or include in classes/categories

Communicate – Connects, explains, relates cause and effect; make the relationships between things evident; provide why and/or how using appropriate terminology, diagram and/or symbols

Develops – grow or cause to grow and become more advanced or elaborate

Displays – show data and/or image

Explore – inquire into or discuss a subject in detail

Reason – think, understand and for judgements logically

Solve – find an answer to, explanation for, or effectively find a solution to a problem