



Task Number	1	Task Name	Data Cycle
Course	Year 11 Numeracy	Faculty	Mathematics
Teacher	Ms Cabot	Head Teacher	Ms Humphries
Issue date	Friday (12/3/25) Week 7	Due date	Friday (28/3/25) Week 9
Focus (Topic)	N6-2.3 chooses and applies efficient strategies to analyse and solve everyday problems involving data, graphs, tables, statistics and probability.	Task Weighting	30%

Outcomes

- identify the purpose of various representations of data used in everyday contexts and the media.
- identify key features and symbols in tables and graphs used in everyday contexts and the media.

Task description

What do you notice, what do you wonder? You will create a data representation that is engaging and easily understood by your peers. You will ask a question regarding an activity in your daily life and then collect data to answer this question within a 24-hour period. You will organise, analyse, and interpret this data before creating a visual display of your data. You will be marked on:

- How clear your question is;
- How you collect and organise data;
- Your reasoning for each choice you make;
- Your utilisation of statistical analysis techniques; and
- How innovative and engaging your data is presented is and how clearly the information within can be accessed.

Name:

Marking Guidelines

Task	Criteria	Marks
Step 1	Formulate statistical investigative questions. <ul style="list-style-type: none"> Showing your ideas and how and why you decided on your final question. (3) Question is clear and concise. (2) 	/5
Step 2	Collect and consider the data. <ul style="list-style-type: none"> Identify the strategy you used to collect your data and why. (4) Identify how you will organise the data and why. (4) Collect the data. (2) 	/10
Step 3	Analyse <ul style="list-style-type: none"> Identify and utilise a variety of statistical analysis techniques (Range, Mode, Median, Mean, graph types) (5) Identify what data to include in your final representation and why. (5) 	/10
Step 4	Interpret and Communicate <ul style="list-style-type: none"> Is your data representation innovative and/or engaging? (7) (2 from class, 5 from teacher) Is your data representation clearly communicating your question and answer? (8) 	/15
Total		/40

From Cathy: How I use water in a day



Name: _____

TERM 1 ASSESSMENT TASK

Data Cycle Assessment Task 1 Completed

Step 1:	Investigative question	<input type="checkbox"/>
Step 2:	Data collection	<input type="checkbox"/>
Step 3:	Data analysis	<input type="checkbox"/>
Step 4:	Interpret and communicate	<input type="checkbox"/>

Introduction

More and more people are accessing their information through social media. To capture an individual's attention this information needs to be presented in an innovative, engaging, and clear visual representation. In this assessment you will be gathering data to answer a question about your daily life. You will create a data representation that captures the attention of your audience, your peers.

You will ask a question regarding an activity in your daily life and then collect data to answer this question within a 24-hour period. You will organise, analyse, and interpret this data before creating a visual display of your data.

Step 1: Investigation question

Brainstorm some ideas and ask questions.

- What every day activity can you collect data on?
- Can you observe this activity within a 24-hour period?
- What is the question you will be answering?

Select an idea and explain why you choose this idea over the others.

Step 2: Data collection

- How will you collect the data and organise your data?
 - Are you using a device to collect data?
 - Are you using a Frequency Table?

- Hard copy or excel?
- Will you use video footage?
- What of the data you collected is useful and what isn't? What data can you use to answer your question?

Step 3: Data analysis

- Look for patterns and meaning.
- What techniques (mean, mode, median, range) might you use to answer your question? Make any relevant calculations.

Step 4: Interpret and communicate

- How will you present your data?
 - Poster
 - Slideshow
 - Video
 - Data story
- What conclusion does your data support, what is the answer to your question?
- Have you displayed your data in an engaging or innovative way?
- Have you displayed your data clearly, is it easily understood?