Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Data Management: Now YOU Do It! ☺**

**We have been looking at graphs, and discussing data collection, and considering bias in surveys and data representation. Now it’s your turn to apply your knowledge!**

**Your job (alone or with a partner) is to choose an issue about which to collect data, and then use that data to persuade.**

**STEP 1 – CHOOSE AN ISSUE**

Think back to our brainstorming session in class. Choose ONE issue you are going to collect data about. Write your issue in the box below:

**STEP 2 – DETAILS REGARDING SAMPLE SIZE**

Describe the representative sample you will survey. Who are they? How many people will you survey? How will you survey them? (Remember to consider all stakeholders!)

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**STEP 3 – SURVEY QUESTION**

1. Create the question(s) you will use to collect information. Remember to include answers in your survey question.
2. Justify that your survey question is not biased. (*Hint:* check the list in your math notebook from our bias lesson!)

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***ONCE YOU HAVE COMPLETED THESE STEPS, PLEASE GET A TEACHER TO INITIAL BEFORE MOVING ON TO STEP 4!***

**STEP 4 – RAW DATA**

Create the table you will use to collect your data so that you can analyze and graph it later.

**Be sure to include the following:**

* descriptive, effective title
* labeled x-axis and y-axis (x-vertical, y-horizontal)
* consistent scale units of measurement in the axis labels
* legend or key if needed
* neat, clear lines - use a ruler or computer!
* colour or shading (to make it easier for the reader to interpret)
* all collected data; nothing missing

**STEP 5 – GRAPH**

1. Graph your data in an unbiased manner. (You can make your
graph digitally, or by hand.) **Attach your graph to this package.**

**STEP 6 – CONCLUSIONS**

1. What conclusions can you draw from your data? (Ask a teacher for help with this if you want/need to.)

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1. Who could use the data you collected, and what argument(s) might they make?

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**Data Management Culminating Task Teacher Observations**:

|  |  |  |  |
| --- | --- | --- | --- |
| **Curriculum Criteria/Descriptor** | **beginning to** | **with some accuracy, confidence & consistency** | **accurately, confidently, consistently** |
| 1. designs an unbiased survey to collect primary data
 |  |  |  |
| 1. finds relevant secondary data and organizes it into charts and tables
 | *(not assessed on this assignment)* |
| 1. displays data accurately by making different kinds of graphs, including *circle graphs and double line graphs* (7) *histograms and scatter plots* (8)
 |  |  |  |
| 1. uses data to make a convincing argument
 |  |  |  |
| 1. recognizes bias when looking at graphs and data displays
 |  |  |  |
| 1. describes the effect on central tendency (i.e., mean, median& mode) of adding or removing a value or values
 | *(not assessed on this assignment)* |

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