Name: _____   Date: _____

Data Jam Graphing Brainstorm Worksheet

Step 1: Priming your brain
1. What is your topic?
2. Make a list of things that you know about your topic, and questions you have about your topic.

Things I know	Questions I have

Step 2: Getting to know your dataset
Use the background information on the Data Jam website and the metadata contained within the linked dataset to complete this part.

3. In the space below, please do the following:
   - Describe the dataset.
   - Describe the metadata in your own words. Metadata includes:
     - Methods used to collect the data.
     - Who collected the data.
     - Where and when it was collected.

Step 3: Preparing to graph your dataset

4. Take a look at your data. What is your independent variable(s)? (AKA the thing the scientists manipulated.)
   The independent variable(s) is (are): _____

   _____

5. What is your dependent variable(s)? (AKA the thing the scientists measured.)
   The dependent variable(s) is (are): _____

   _____

6. Which type of graph do you think would be best for your dataset? Why? (Hint: If you're not sure, check out the tutorial from the National Center for Education Statistics. Go to https://nces.ed.gov/ and search for "What type of graph")
   I will use a _____ style graph because: _____

   _____

   _____

7. In the space below, draw a rough sketch of what you think your graph might look like. ***Start by labeling the axes, and then sketch the data. Give a general shape of the graph, but you don't need to plot each point.

Step 4: Create and analyze your graph:

Create a polished copy of your graph, either by hand or with a program like Excel or Google Sheets. Then, please answer the following questions.

8. Can you make any claims about what your graph is showing? For instance, do you see any trends or significant differences between groups? Make sure to support your claims with evidence and reasoning. If you don't see any significant trends in your graph make a note of that instead of trying to describe something that really isn't there.

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9. Brainstorm 3 questions you have about your graph that might require further investigation. For example, if you draw a line graph, you might ask "What caused the large peak in 2007?"

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