Names: _____   Final Project Due Date: _____

Data Collection and Graphing Project

You and a partner will choose something you want to collect data for (ex: favorite food, favorite color, etc). Think about some of the categories we discussed in class. Here is what you will need to do:

Item	Description	Materials Needed	Due Date	Points
Create a question	You will need to make a decision on what you want to survey. You will need to write a statement (3-5 sentences) telling how many people you want to survey (at least 50) and what you want to find out.	Microsoft Word	Tuesday, November 13th	4
Frequency Chart	You will need to fill out the frequency chart attached. Your frequency chart must include the following information: • *Options/choices* • *Data for Group 1 (including frequency)* • *Data for Group 2 (including frequency)* Record the data in your chart using one of the following methods: tally marks, check marks, or person's name). You will need to retype your frequency chart for your final display (or write neatly)	Frequency chart attached, Microsoft Excel	Friday, November 16th	4
Organize & Graph Data	✓ You will need to go to this website: http://nces.ed.gov/nceskids/createagraph/ ✓ You will create 3 different graphs to display your data from the options provided. ✓ You will create **two graphs using this website or Microsoft Excel and the other graph will be drawn**. One of your graphs must be **a double bar graph**. ✓ Your graphs will represent the results from your frequency chart. ✓ Follow the instructions attached	Internet, Microsoft Excel & various art supplies	Monday, November 19th	12 (4 points for each graph)

	to complete the online graph of your choice. <u>Types of Graphs:</u> • circle/pie graph (p.132) • pictograph (pictures) (p.118) • bar graph (and double bar graph) (p.120) • line graph (p.109) • stem and leaf plot (p.109)			
Data Explanation	✓ Write an explanation of what you learned from collecting this data. ✓ After you have completed your graphs, write 3 paragraphs telling how you went about doing your survey and what you have learned from the data collected. ✓ *First paragraph:* Tell how you went about doing your survey ✓ *Second Paragraph:* Tell **3** things you have learned from the data collected…support your findings and use your graph as evidence. ✓ *Third Paragraph:* Choose one of the following to write about: - Out of the three graphs you created, which graph is the best to display your data? Why? - If you surveyed 50 more people, how would your data change? - Who would find this data useful? How could they use it?	Microsoft Word	Tuesday, November 20th	6
Project Display/ Poster	You will be given a large piece of construction paper to display your frequency chart, graphs, and your typed explanation. Your display can be set up similar to the one attached.	Art supplies	Tuesday, November 20th	4
			TOTAL POINTS:	**/30**

Frequency Chart:

Choices	Number of People (tally marks, person's name, check marks, etc)	Frequency (total)

Directions for completing graphs at:
http://nces.ed.gov/nceskids/createagraph/

1. Under the **Design** tab, follow the instructions to select the style and design of your graph.

2. Select the next tab, **Data.** Fill in the title and the labels for your graph. Depending on the number of items you surveyed *(ex: 5 ice cream flavors),* you will choose the same number of items for your 'data set.' The value is the number of people surveyed that selected each item. *(Ex: 11 people chose strawberry as their favorite ice cream, so your Item Label would be Strawberry and the value would be 11.)*

   a. The values should add up to the total number of people surveyed (50 people). If you are given the option for minimum and maximum values, these numbers will end up being your <u>scale</u>.
      i. *(If you surveyed 50 people, your minimum value would be 0 and your maximum value would probably be 50 or 60 if you wanted to go a little higher).*

3. Select the next tab, **Labels.** For the 'type,' you want to decide if your label will be the # of people *(11),* the label name *(strawberry),* the % of total *(11 out of 50 would be 22%, and the computer calculates this for you automatically),* or a combination of one or more of these. You will also choose the font type and the size/color.

4. You will now select the **Preview** tab, to see what your graph looks like. You can select a tab again if you want to change something. If you are happy with the graph you created, select the **Print/Save** tab and be sure to save the graph and print it to the color printer.

As you choose each tab, there are further explanations provided to the left, under the 'help' section. Refer to these descriptions if you are unsure what to do.