Data Collection and Graphing Project

You 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:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Materials Needed</th>
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| **Part 1: Create a Question** | • You will need to make a decision on what you want to survey. Limit your choices to no more than 5. (Ex: Favorite colours: red, blue, green, yellow, and purple)  
• 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. (Ex: I am going to survey 50 boys and girls to find out their favorite colour) | Completed form (attached) |
| **Part 2: Organize & graph Data** | • You will need to go to this website: [http://nces.ed.gov/nceskids/createagraph/](http://nces.ed.gov/nceskids/createagraph/)  
• You will create a graph to display your data  
• You will create one graph using this website and one using Microsoft Excel | Computer |
| **Part 3: Create Graph using Online Data Source** | • You will need to do an internet search for “Prince George, B.C weather”  
• Click on the Weather Network website page that displays weather information for the Prince George area  
• Scroll down the page and find the “Long Term Weather Forecast” section  
• Below the “Long Term Weather Forecast” section is a button that says “14 day Trend”, click that button  
• The graph that appears is a prediction of what the next 14 day weather temperatures for the Prince George area will be and there will be two lines on the graph showing the high and low temperature for each day  
• Now, click on the “Table” tab at the top left hand area of the graph and you will see the data for each day showing the date and temperature high/low  
• Using this data input all 14 days of temperature information for the high and the low into a graphing program and create a line graph that looks similar to the one shown under the “Graph” tab |
**Part 1: Data Gathering**

1. What are you going to survey? ________________________________

2. What are the choices you are providing? (no more than 5):
   ________________________________

3. How many people are you going to survey (minimum 50): _____

4. What do you want to find out? ________________________________
   ________________________________

**Part 2: Frequency Chart**

<table>
<thead>
<tr>
<th>Choices</th>
<th>Number of People (tally marks, person’s name, check marks, etc)</th>
<th>Frequency (total)</th>
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Directions for completing graphs at:
http://nces.ed.gov/nceskids/createagrap

Grade 6s will create a line graph
Grade 7s will create a circle graph

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 flavours), 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 favourite ice cream, so your Item Label would be Strawberry and the value would be 11). 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 scale. (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.

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.