

Computer Lab - Graphing

TO GET STARTED:

Open Internet Explorer and go to the www.medfield.net website. On the left bar, click on **Blake Middle**, then **Sixth Grade**. Click on **Alex Gantos** to open my Quia class web page and scroll down. Click on **Great Graphing Site** in the Useful Links section. Or type the url: <http://nces.ed.gov/nceskids/createAgraph/>

1. Plot the results of a **Candy Survey** in a **Bar Graph**.



Candy Survey: Koalas	
Candy Type	Total
Chocolate candy	19
Fruity candy	21
Sour candy	37
Other candy	11

2. Graph the results of a **Smartie Observation Lab** in a **Pie Graph**.

Smarties Observation Lab						
Color	Pink	Orange	Yellow	Green	Purple	White
Class Totals	3	4	2	1	4	1



3. Graph the results of your **Penny Lab** in a **Horizontal Bar Graph**.



Penny Lab	
Trials	Number of Drops
Trial #1	25
Trial #2	27
Trial #3	19
Trial #4	26
Trial #5	27



4. Graph results from the **More Penny Lab** in an **XY Graph (Scatter Plot)**. There are two groups of data, each having 5 trials (Data Set points). Use the chart below to plot both groups of data.

Results of two More Penny Lab Tests					
TEST A	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
Drops	50	37	60	65	44
Mass (grams)	1.1	1.2	1.3	1.2	1.3
TEST B	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
Drops	16	19	20	21	20
Mass (grams)	1.0	1.2	1.1	1.2	1.1

Graphing on Kids' Zone: Create A Graph

In the **Select a Graph window**

1. Select a GRAPH TYPE: **Bar, Line, Area, Pie, or XY Plot**

In the **Design Tab** (notice the tabs on the right: Design, Data, Labels, Preview, Print/Save)

2. Select DIRECTION (for vertical or horizontal bars)
3. Select SHAPE (for the shape of the bars)
4. Select STYLE (for customizing the color and lines)

Next, in the **Data Tab**

5. Give your graph a **title**
6. **Label** the x axis
7. **Label** the Y axis
8. In the **Source** line, type your full name (**important**)
9. In data set, choose how many **Items** (number of trials or categories), then chose the number of **Groups** (different tests or data sets)
10. In the **Group Label** name your group (i.e. Candy Type, Necco Color, etc.)
11. Fill in the **Item Label** (i.e. Chocolate, Yellow, etc.), then the **Value** (numbers only!)
12. IMPORTANT: **Minimum Value** (usually 0) and **Maximum Value** (greater than your highest number)

Next, in the **Labels Tab**

13. Do not fill in anything on **Data Labels**
14. You may choose a Font, Font Color, and Font Size

Then, **Preview**

If you like what you see, then **Print** (find your name first)

For the creative at heart, you may return to the previous tabs (especially the **Design Tab** and **Labels Tab**) to customize your graph before printing

After your print and collect your printout at the printer, then **Start a new graph** to go on to the next data set.

Date: _____

Name: _____

Class Period: _____

N.C. #: _____

5. Now you have a choice on which type of graph you want to use. Use the Lemonade Survey data in the table below for your values. Remember to think about which graph would be **best** for this data set.

People's Favorite Lemonade Survey			
Type of Lemonade	<i>City Time</i> brand	<i>Lemon Sweet</i> brand	<i>Sour Sipper</i> brand
Number of People	15	30	5

6. For **homework**, graph the results of the How Many Chips in a Chocolate Chip Cookie Survey. The results of the survey are provided below. Choose the type of graph that would be **best** for this data set.

How Many Chips in a Chocolate Chip Cookie Survey	
Brand of Cookie	Number of Chips
<i>Chips Aweigh</i>	30
<i>Mama's Favorite</i>	57
<i>Sugaridge Farms</i>	18
<i>Snackgoods</i>	21
<i>Everyone's Bakery</i>	31

7. For **homework**, create a double line graph to plot the Climate Data Lab. The Data Set will have 10 Items in 2 Groups. The Item Labels will be the minutes. The x axis label will be Time (minutes) and the y axis label will be Temperature (degrees). The minimum value will be 50 and the maximum will be 100.

Climate Cooling Data		
Mins.	Dark Soil (°)	Sea water (°)
5	88	88
10	85	85.5
15	82	84
20	79	82.5
25	76	81.5
30	73	80.5
35	69	79.5
40	65	79
45	60	78.5
50	55	78

For the homework: It is not necessary to print in color.