## Activity 3: How much does the candy weigh?

1. Collect the weight of bags of candy data from your group.

   If you did not have a scale, here is a previously-collected set of weights.

Bag Weights									
51.1	48.9	49.3	51.2	50.8	51.4	52.1	52.4	49.9	49
53.5	48.5	52	50.3	50.3	51.3	51.2	50.2	51.7	49.4
52.4	47	50.5	48.4	50.8	49.9	52.4	50.7	51.2	49.5
51	48.2	49.7	53.5	50.4	49.8	50	50.9	51.4	50.9
49	49.4	49.9	50.7	51.4	51.7	50	49.5	50.9	48.2
46.7	49.1	52.8	50.8	54.2	50.2	52.2	53.4	50.5	49.5
50.1	49.7	50.3	51.4	51.3	50	50.2	49.2	51.9	49.9
49	50.2	49.1	50.7	48.7	50.5	49.7	49.5	50.5	48.5
50.7	48.2	49.9	50.9	49.2	51.5	50.5	52.4	51.9	50.3
50	50.6	48	50.5	49.7	49.4	51.9	48.6	51.3	48.9

2. What do you think the data will look like?

3. Enter the data into a list in your calculator.

4. Using your calculator, draw a histogram/boxplot/stemplot of the data. Draw, and label, a basic sketch, of the data.

Frequency
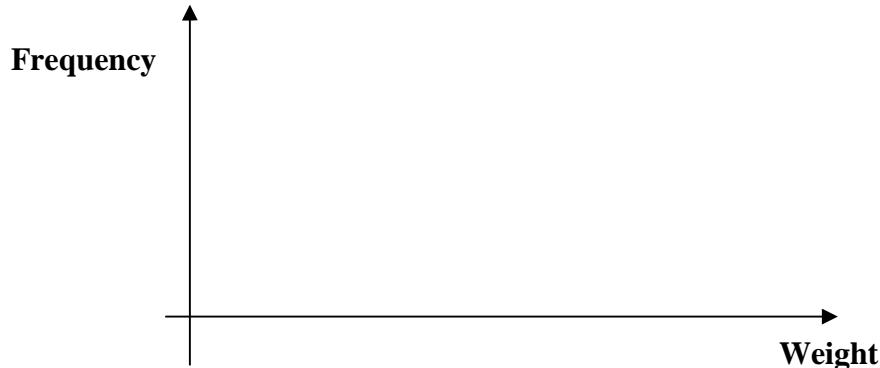
Weight

5. What is the overall shape of the data? What unique features do you notice? Were you surprised by the results?

6. A previously-collected sample of two varieties (Milk Chocolate and Peanut) of **<u>individual</u>** candies of were weighed.

Candy Weights						
Milk Chocolate				**Peanut**		
0.92	0.86	0.86		2.45	2.32	2.47
0.87	0.86	0.84		2.08	2.35	2.19
0.88	0.87	0.84		2.17	2.19	2.11
0.93	0.90	0.81		2.40	1.85	2.02
0.88	0.90	0.82		2.45	2.43	2.50
0.88	0.88	0.88		2.32	2.08	2.05
0.86	0.82	0.89		2.92	2.08	1.99
0.75	0.85	0.80		2.45	1.95	2.02
0.80	0.90	0.82		2.28	2.19	2.14
0.92	0.90	0.83		1.90	2.29	2.15
0.89	0.89	0.82		2.16	2.30	2.18
0.92	0.93	0.88		2.44	1.86	2.18
0.90	0.89	0.89		2.13	1.87	2.04
0.91	0.86	0.84		2.04	2.25	2.34
0.88	0.99	0.90		2.07	2.26	2.40
0.86	0.91	0.88		2.07	2.01	1.90
0.80	0.80	0.89		1.96	2.18	2.58
0.87	0.85	0.89		2.24	2.17	2.33
0.93	0.89	0.85		2.05	2.35	2.40
0.81	0.87	0.80		2.45	2.25	1.90
0.84	0.92	0.83		2.71	2.72	2.58
0.90	0.83	0.86		2.53	2.44	2.33
0.83	0.78	0.86		2.16	1.99	2.31
0.85	0.86	0.79		2.63	2.34	2.38
0.87	0.80	0.83		2.02	2.50	1.88
0.93	0.87	0.96		2.14	2.02	2.69
0.97	0.85	0.89		2.43	1.98	2.16
0.82	0.87	0.80		2.63	2.21	2.58
0.86	0.88	0.87		2.01	2.35	1.59
0.76	0.84	0.85		2.13	2.05	2.18
0.82	0.86	0.92		2.15	2.11	2.25
0.86	0.79	0.90		2.34	2.54	2.10
0.82	0.87	0.94		2.10	2.11	2.33
0.90	0.87	0.91		2.00	2.43	2.02

7. How will the distributions of their weights be similar? How will they be different?