Prob and Stats Review on Graphing   **Name:**

1) Create a bar graph using the following data

Player	Home Runs		Player	Home Runs
Barry Bonds	762		Sammy Sosa	609
Hank Aaron	755		Frank Robinson	586
Babe Ruth	714		Mark McGwire	583
Willy Mays	660		Alex Rodriguez	583
Ken Griffey Jr.	630		Harmon Killebrew	573

Title:
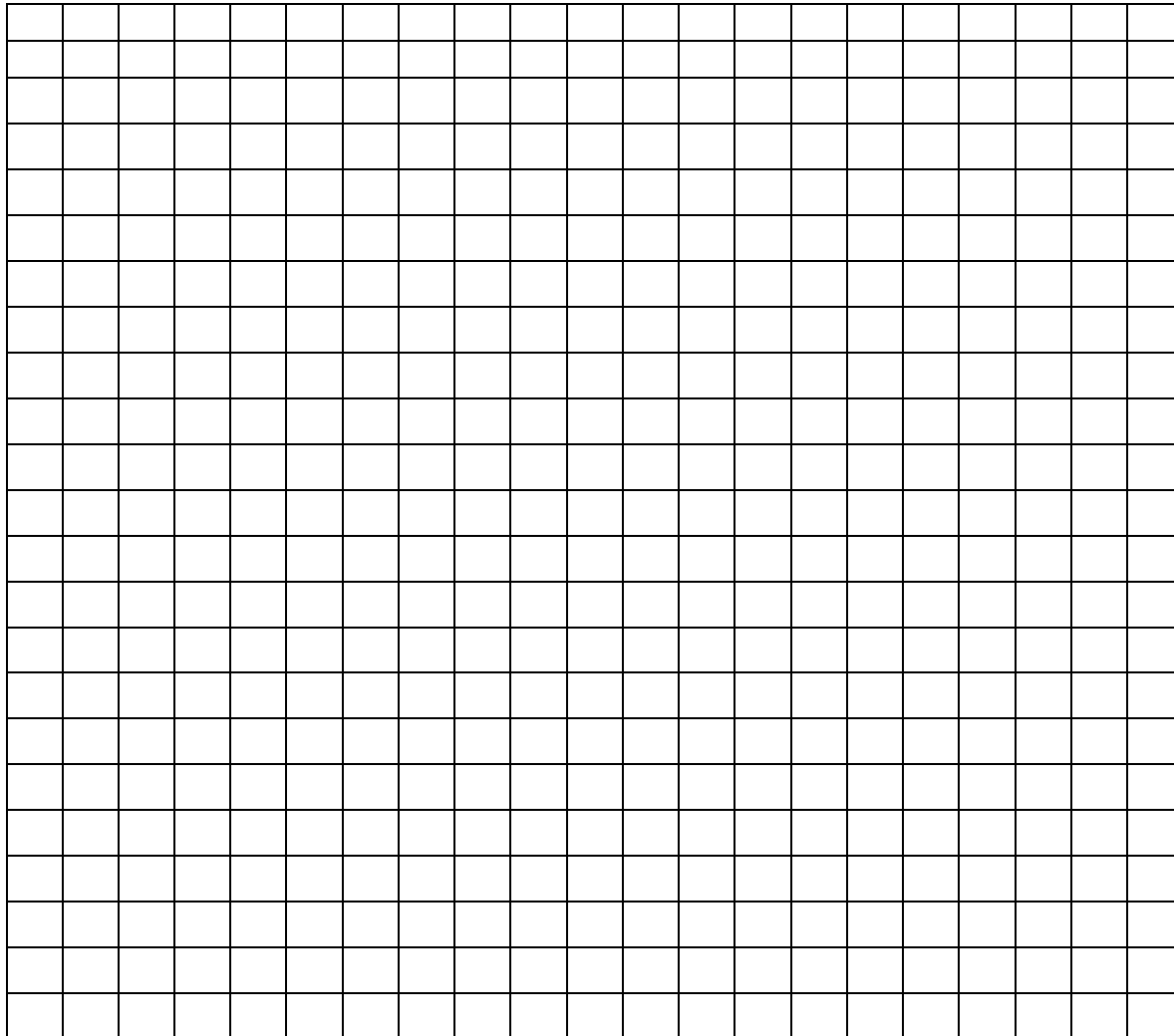
Babe Ruth was considered one of the greatest players of all time. If this is true, what factors could cause him to be third on the list instead of first? (Babe Ruth played ball in the 1920's so you want to consider the differences from then to now)

2) The following table lists the running time (in minutes) of the videotape versions of 22 movies directed by Alfred Hitchcock:

Film	Time	Film	Time
The Birds	119	Psycho	108
Dial M for Murder	105	Rear Window	113
Family Plot	120	Rebecca	132
Foreign Correspondent	120	Rope	81
Frenzy	116	Shadow of a Doubt	108
I Confess	108	Spellbound	111
The Man Who Knew too Much	120	Strangers on a Train	101
Marnie	130	To Catch a Thief	103
North by Northwest	136	Topaz	126
Notorious	103	Under Capricorn	117
The Paradine Case	116	Vertigo	128

Create a split stem and leaf plot of the running times.

One of these movies is unusual in that all of the action took place in one room and was filmed without editing. Explain how you might be able to identify this unusual film based on the stem and leaf plot you made.

3) In 1798, Henry Cavendish estimated the density of the earth by using a torsion balance. The "Cavendish" dataset contains his 29 measurements of the density of the Earth in grams per cubic centimeter (g/cm^3).

5.5	5.61	4.88	4.07	5.26	5.55	5.36	5.29	5.58	5.65
5.57	5.53	5.62	5.29	5.44	5.34	5.79	5.1	5.27	5.39
5.42	5.47	5.63	5.34	5.46	5.3	5.75	5.86	5.85	4.35

Range	Frequency
4.00 – 4.29	
4.30 – 4.59	
4.60 – 4.89	
4.90 – 5.19	
5.20 – 5.49	
5.50 – 5.79	
5.80 – 6.09	

Fill out the frequency table and produce a histogram of the data.

Describe the frequency of the earth's density measurements using your SOCS.

4) According to a study done by the APPA (American Pet Products Association) the number of pets owned in the U.S. can be broken down as follows.

Total Number of Pets Owned in the U.S. (millions)
Bird 20.6
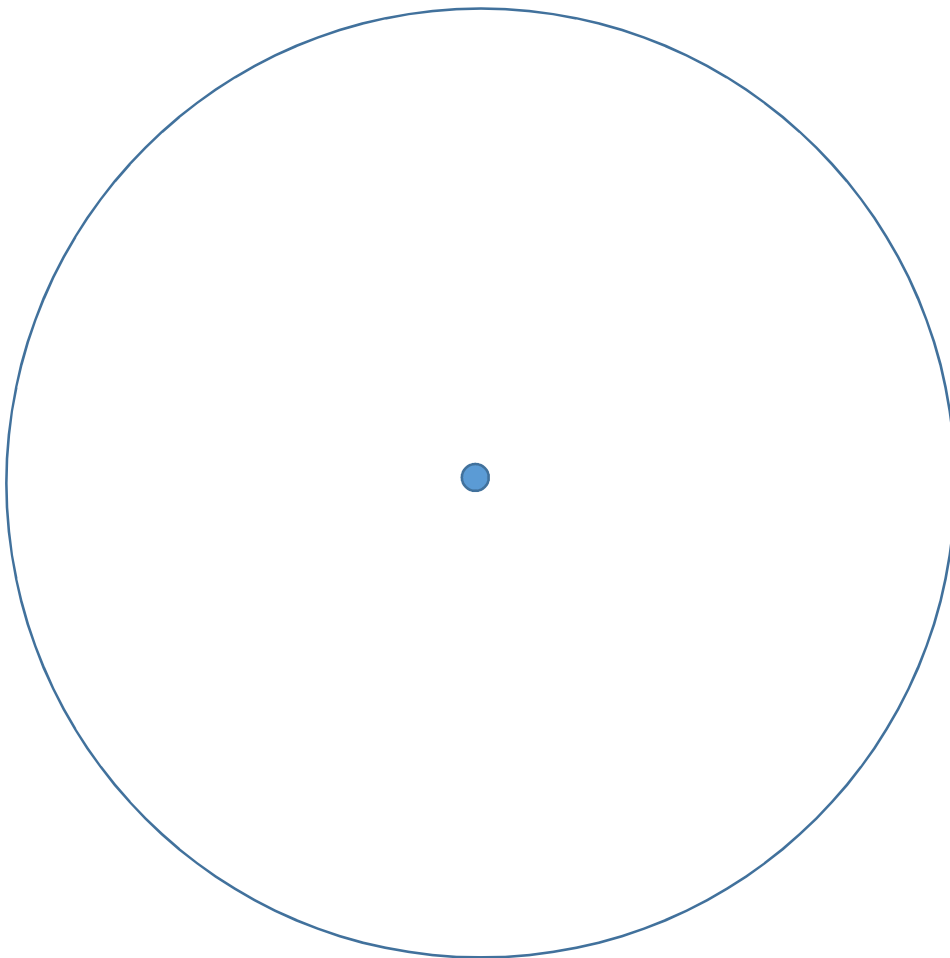Cat 95.6
Dog 83.3
Horse 8.3
Freshwater Fish 145.0
Saltwater Fish 13.6
Reptile 11.5
Small Animal 18.1

Create a circle graph of this information that shows the percent breakdown by pet. Be sure to write down the percent and degree amounts with the data above.

State one explanation for the fact that the largest wedge is for freshwater fish.