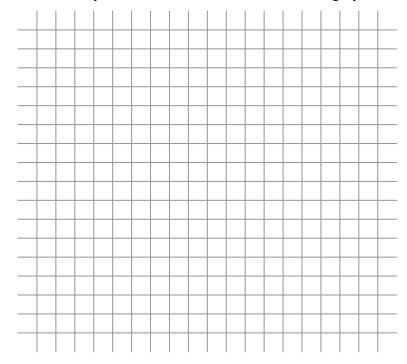
1. Previous inhabitants of Treasure Island apparently used conch shells as a measure of mass. Inscriptions on various polished rocks give their mass in "cshells". Measuring their mass on your handy-dandy gram/kilogram balance give you the following data:

| Rock  | Cshells | Mass    |
|-------|---------|---------|
| Red   | 40      | 860 g   |
| Blue  | 212     | 4.56 kg |
| Brown | 12      | 258 g   |
| Gold  | 100     | 2.15 kg |
| Ochre | 420     | 9.03 kg |

a. Plot a graph with Cshells on the horizontal axis and kg on the vertical axis. Make sure your axes are clearly labeled, and draw a trend line through your data points.

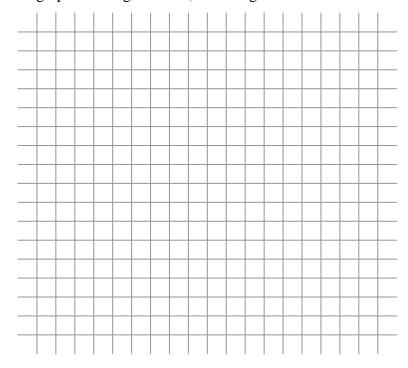


- b. Using your graph, about how many Cshells does it take to make a kilogram?
- c. How many grams is the same as a standard Cshell?
- d. We just found a green rock labeled "150 Cshells". Use your graph to estimate its mass in kg.
- e. If your mass is 40kg, what is your mass in Cshells?

2. The table below shows data from a survey of WHS students that compared their Grade Point Average (weighted) to the number of hours they studied each week.

| GPA | Study hours per week |
|-----|----------------------|
| 3.9 | 12.4                 |
| 4.9 | 15.4                 |
| 3.3 | 9.4                  |
| 4   | 11.6                 |
| 4.7 | 14.8                 |
| 5.7 | 18.0                 |
| 5.7 | 16.8                 |
| 2.9 | 11.6                 |
| 4.4 | 11.8                 |

a. Make a graph showing this data, including a trendline.



b. Using your trendline, about how many hours per week would you estimate you would need to spend studying to earn a 6.0 GPA?