**Which Job would you rather have?**

**Problem**: An employer offers you two equal jobs of one hour each for fourteen days. The first job(Job A) pays $10/h. The second (Job B) pays only 1 cent the first day, but the rate doubles each day.

**Hypothesis**: If I accept Job \_\_\_\_ I will make \_\_\_\_\_\_\_\_ money over the next fourteen days than if I accepted Job \_\_\_\_\_.

**Procedure**:

1. Each person in your group records the pay rate per day for all 14 days for one of the jobs, so that the data is plotted for both jobs. In other words, one person construct data for Job A and one for Job B. Organize your data in a chart.
   1. Don’t forget to label.
   2. i.e. Job A

|  |  |  |
| --- | --- | --- |
| Day | Daily Pay in $$ | Total $$ Earned |
| 1 | 10 | 10 |
| 2 | 10 | 20 |
| 3 | 10 | 30 |

1. Using your information from question #1 construct a graph for total earnings over the 14 days.
   1. Don’t forget to label.
2. Answer the questions in the Analysis and Conclusion of the lab.

**Data and Graphs**

**Analysis and Conclusion**

1. What is the dependent variable? Independent Variable?
2. What is the daily pay rate for Job B on day 9?
3. Which job paid more on day 3? How about Day 7? How about Day 12?
4. Using the graphs compare the two rates of growth? Do they show linear growth, exponential growth, or logistic growth?
5. Which Job would you rather have and why? Use data to support your answer.