Name: _	Per: Date:
	Scientific Inquiry and Skills Lab
<u>Introduc</u>	<u>tion</u>
experime must be in tables between the effect and than every day one that independed decided	and analyzing data is a critical step in the scientific method. Your ntal conclusion should be based on data collected. When collecting data, it organized so individuals can understand your work. Data is usually organized. After organizing your data, you must analyze it to find a relationship your variables. For example, a student performed an experiment to see ct of fertilizer on plant growth. The student organized her data in a table graphed her data accordingly. She measured the height of her plants y for thirty days. She had one group of plants that received fertilizer and did not. She then analyzed her data by graphing her results. What is the ent variable in this experiment? Dependent variable? The experimenter to measure the plants every day for thirty days and the height of the dependent on the day.
<u>Purpose</u> :	The purpose of this lab is to learn how to collect, organize, and analyze data in tables and graphs.
<u>Scenario</u>	
	work with a partner to collect data based on coin tosses. Every coin has s, heads and tails. For every toss of the coin there is a 50% chance of

getting heads and a 50% chance of getting tails. Your goal is to see if there is a relationship between the # of tosses and the percent of heads tossed.

<u>Hypothesis</u> :	 	 	 	

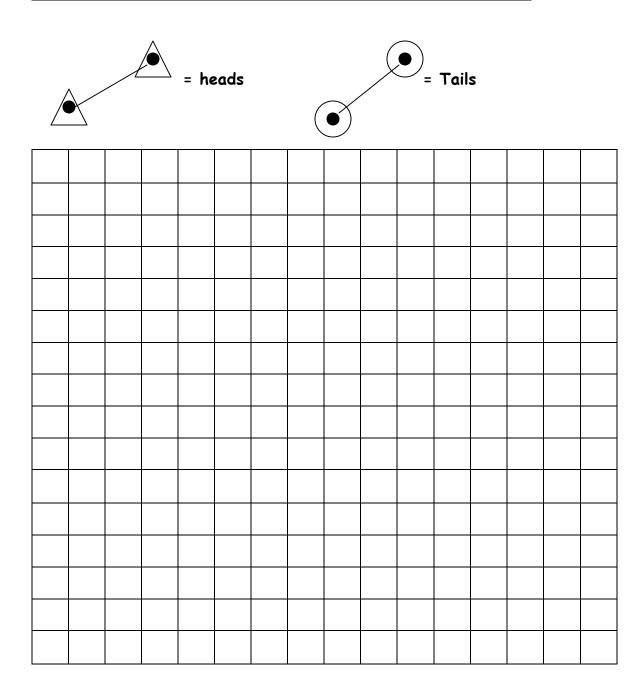
## Procedure

- 1. Working with a partner, you will toss a coin a certain number of times based on the data table. You will record the number of heads tossed and the number of tails tossed for each trial.
- 2. For each trial you will calculate the percentage of heads and tails tossed. For example, if you toss 6 heads out of a total of 10 tosses you have tossed heads 60% of the time for that trial.
- 3. Lastly, you will graph your data. Your graph must show the relationship between the percentage of heads and the percentage of tails tossed.

## Data Table

What is the effect of the number of coin tosses on the percent of heads tossed?

# of	# of Heads	% of Heads	# of Tails	% of Tails
Tosses	Tossed	Tossed	Tossed	Tossed
5				
10				
20				
30				
40				
50				



<u>Directions</u>: Answer the following questions in complete sentences on a separate sheet of paper.

## Questions

- 1. What is the independent variable in this experiment? Dependent Variable?
- 2. What was the relationship between the number of tosses and the percentage of heads tossed?
- 3. Describe what happened as the number of tosses increased.
- 4. What is a good title for your graph?
- 5. Write a conclusion based on the data collected in your experiment.