

Name: _____ Date: _____ Period: _____

Chapter 2: Designing an Experiment

The Experiment:

- Get into groups of 6 or less.
- Each person in the group will take 20 free-throw shots in the gym – 10 with and 10 without distractions.
- Record the data

The Write up:

- Define the hypotheses.
- Put together a two way table of the data
- Make a bar chart and a segmented bar chart comparing the information collected.
- Define the equation used to find the test statistic
- Perform a simulation with 100 trials using the applet to see which hypothesis the data supports.
- Plot the information on a dotplot
- Find the p-value and clearly define what it is.

Conclusion:

- State the conclusion and which hypothesis the data supports

Cause and Effect:

- Include the potential cause and effects for the result of the experiment