

Trashketball

Name: _____ Date: _____ Hour: _____

1. What is your hypothesis?

2. Identify the following variables:

A. Independent variable

B. Dependent variable

C. Control Variables

3.

Distance (ft.)									
Attempts									
Shots Made									
Shooting Percentage									

4.



Record your class definitions of the following four terms below:

A. Correlation: _____

B. Positive Correlation: _____

C. Negative Correlation: _____

D. Relatively No Correlation: _____

5. What type of correlation does the data have? How do you know?

6. What does your answer from question 5 tell you about the hypothesis you made in question 1? Explain.

7. Define “line of best fit”: _____

8. List three important characteristics of a line of best fit: _____

9. Draw a line of best fit on the scatterplot created in question 4.

10. Determine the equation for the line you drew in question 7. Explain how you determined the equation in the space below.

11. Compare and contrast the line of best fit with the lines the people in your group made. What is similar? What is different?

12. Use technology to find the line of best fit and record the equation for this line.

13. Does this line of best fit have all of the characteristic listed in question 8? Explain.

14. Should the class change its definition of a line of best fit? Explain why or why not.

15. Use the equation of your line of best fit to answer the following questions. Be sure to show how you determined your solution.
- A. The distance of the three point line from a basket in basketball is 19.75 feet. What would you predict for the class shooting percentage in trashketball at this distance?
- B. At what distance would the class shooting percentage in trashketball be 0%? Why does this result make sense?
- C. At what distance would the class shooting percentage in in trashketball be 100%? Why does this result make sense?