

Probability - Special Project

This project will take you two days to complete. You will be given class time to work on this project. However, some aspects of this project must be completed at home on your own time.

Requirement #1

You must work with a partner (the partners have already been assigned).

You and your partner will perform the following tasks:

- A) Roll a die 100 times and record the results.
- B) Roll two dice 100 times and record the results. **Not the sum** of the results. For example, if you roll a 5 & 4, record that.

Requirement #2

You must answer the following questions **twice**. Once after experiment A and once after experiment B.

- A) What number(s) appeared most often? Least often?
- B) Given your results, write the probability of rolling each number or pair of numbers.
- C) Make a prediction for the 101st roll.
- D) Roll the die/dice again. What was the result?

Requirement #3

After performing the experiments and answering the questions, you must tie your experiments by answering the following questions:

- A) Is probability an exact science? Why or why not?
- B) Why do you think people depend on probability (i.e. - lotteries, games of chance, etc.)?
- C) Are there any good uses for probability?

Requirement #4

Write a 1-2 page typed paper about probability. Include its history and how and where it is used today.

Requirements 1, 2, and 3 may be handwritten, but #4 must be typed. All four requirements should be turned in together in a manila envelope with your name, class, and period written on the front.