Algebra 2: Basic Probability Lab 9.2

Name: _____   Date: _____

Our goal is to discover math concepts in a safe, real world environment.

Coin Flipping

Information

Many people use the flip of a coin to make a wide variety of differing decisions and choices. We will discover why they are convenient.
We call the result of an experiment or situation an **outcome**.

Critical Thinking Questions

1. What possible outcomes are you able to get from a coin flip?

2. Is every outcome equally likely?

3. How can you tell if a coin is fair?

Experiment

1. Retrieve 10 coins from the teacher.

2. Flip these 10 coins, 10 times each for a total of 100 attempts.

3. Record your results as you go in the space below:

4. Report your findings on the whiteboard.

Dice Rolling

Information

Dice are used in many popular and unpopular games such as Yahtzee, and Settlers of Catan (I'll let you decide which ones are which). Dice come in all shapes and sizes. Some popular ones include 12-sided die called dodecahedron and 20-sided die called Icosahedron. They are named after the number of sides they have.

Critical Thinking Questions

1. What possible outcomes are you able to get from a dice roll?

2. Is every outcome equally likely?

3. If you were to roll a die 100 times and average all of your outcomes together, what would you expect to get?

Experiment

1. Retrieve a die from the teacher.

2. Roll this die 100 times.

3. Record your results as you go in the space below:

4. Calculate the average of your outcomes in the space below:

5. Compare with a neighbor, is your average outcome the: same, greater, less?

6. Retrieve another die from the teacher.

7. Roll your 2 dice 100 times.

8. Record the sum of your dice as you go in the space below:

9. Calculate the average of your outcomes in the space below:

10. Compare with a neighbor, is your average outcome the: same, greater, less?

How did you like this activity?

0	1	2	3	4	5
Not at all					Best thing since sliced bread

How can this activity be improved?