Define the following words using this online website.

http://www.mathematicsdictionary.com/math-vocabulary.htm

Theoretical Probability:

Experimental Probability:

Sample Space:

Name:_____   Date:_____

Probability

Roll the dice 25 time and record the data in the table below. Also record the data from your partners 25 rolls.

Number	# of times you rolled a...	# of times your partner rolled a..	Total
1			
2			
3			
4			
5			
6			
Total	25	25	50

Answer the following questions base on the data you collected:

What is the experimental probability of rolling a (using your 25 rolls)...

1=   2=   3=

4=   5=   6=

What is the experimental probability of rolling a (using the combined 50 rolls)...

1=   2=   3=

4=   5=   6=

Now use the calculator to generate the data of rolling a dice 50 times and record the data below.

Number	# of times rolled
1	
2	
3	
4	
5	
6	
Total	50

Name:_____   Date:_____

What is the experimental probability of rolling a…

1=   2=   3=

4=   5=   6=

What is the sample space of rolling a normal dice?_____

Now calculate the theoretical probability of rolling a…

1=   2=   3=

4=   5=   6=

Compare the probabilities from the experimental data and the simulated data to the theoretical probabilities you calculated.

If the probabilities are not the same what do you think you could do to get the probabilities closer to the theoretical probabilities?