Partner #1_____

Partner #2_____

Probability
"Rolling Dice" Station

Roll a pair of dice twenty times and create a tally of the sums in the table below. Then use your results to answer the questions.

Sum	1	2	3	4	5	6	7	8	9	10	11	12
Tally												
Total												

1. What is the theoretical probability of rolling a sum of 6?

$$\frac{5}{36} \approx 14\%$$

2. What is the experimental probability of rolling a sum of 6?

Answers will vary

3. What is the theoretical probability of rolling a sum of 5 or less?

$$\frac{10}{36} = \frac{5}{18} \approx 28\%$$

4. What is the experimental probability of rolling a sum of 5 or less?

Answers will vary

5. The sums of 6, 7, and 8 are more theoretically probable than the other sums.

a. Why would these sums be more likely to occur than the others?

Sum of 6 → 5 combinations   Thats 16 combos
Sum of 7 → 6 combinations   out of 36. Almost
Sum of 8 → 5 combinations $\frac{1}{2}$

b. Did your experimental probability show this to be true? Why or why not?

Answers will vary