Experimental Probability

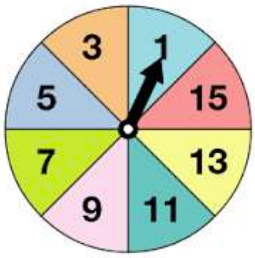
Name _____ Date ___/___/___ Hour ___

I can find the probability of an event.

List the sample space and experimental probability of each event as a simplified fraction, decimal and percent.

1. 

2. 

3. 

4. If you were to flip a coin 20 times, which of the following results is most likely to occur? **Explain why.**

A. 1 head and 5 tails
B. 5 heads and 15 tails
C. 9 heads and 11 tails
D. 13 heads and 7 tails

5. Given the following tally chart, determine the experimental probability of landing on heads.

Heads	Tails
𝍸 𝍸 𝍸 𝍸	𝍸 𝍸 𝍸 𝍸
𝍸 𝍸 𝍸 | | |	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 | |

A. 18%
B. 36%
C. 45%
D. 72%

6. Which of the following experiments will have results closest to those expected?

A. A coin flipped 20 times
B. A die rolled 100 times
C. A card chosen 200 times
D. A ball chosen from a bag of 20 marbles 1,000 times

Refer to the table below for questions 7 – 8. The table shows the results of rolling a standard die **10 times**.

Number on Die	1	2	3	4	5	6
Times Rolled	1	1	3	2	2	1

7. What is the experimental probability of rolling a 4? Write your answer as a simplified fraction, decimal and percent.

8. Based on this experiment, how many times would you predict to roll a 6 if you roll a die 100 times?

A. 6 times
B. 10 times
C. 17 times
D. 25 times

9. Erica is a soccer goalie. If she has 21 out of 23 saves in practice, what is the experimental probability that she will have a save on the next shot on goal? Express your answer as a percent.

10. If Nolan hit the bull's-eye 3 out of 8 times at archery practice, what is the experimental probability that he will hit the bull's-eye on his next try? Express your answer as a fraction and percent.

11. After a movie premier, 99 of the first 130 people surveyed said they liked the movie.
a. What is the experimental probability that the next person surveyed will say he or she **liked** the movie?
Express your answer as a percent.

b. What is the experimental probability that the next person surveyed will say he or she **did not** like the movie? Express your answer as a percent.