

Name _____

Theoretical Probability

Solve the problems below using your knowledge of probability. Write fractions in lowest terms.

1. What is the probability of choosing a king from a standard deck of playing cards?
2. What is the probability of choosing a green marble from a jar containing 5 red, 6 green and 4 blue marbles?
3. What is the probability of choosing a marble that is not blue in problem 2?
4. What is the probability of getting an odd number when rolling a single 6-sided die?
5. What is the probability of choosing a jack or a queen from a standard deck of 52 playing cards?
6. What is the probability of landing on an odd number after spinning a spinner with 7 equal sectors numbered 1 through 7?
7. What is the probability of getting a 7 after rolling a single die numbered 1 to 6?
8. What is the probability of choosing a queen, a king or an ace from a standard deck of playing cards?
9. What is the probability of choosing the letter i from the word probability?
10. What is the sample space for choosing a letter from the word probability?

What is the difference between theoretical probability and experimental probability? Develop a short activity that illustrates both.