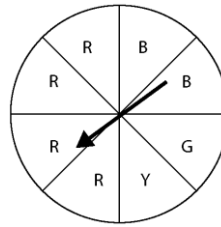Name _____ Group _____ Date _____

Probability Review

1. You mix the letters M, R, S, U, T, H, E, R, S, I, S, C, O, O, and L in a bag. Without looking, you select one letter. What is the probability that you select a vowel? Express your answer as a fraction, percent and a decimal.

2. Suppose you spin the pointer of the spinner once. Find the following probabilities:

   P (yellow) =

   P (red or blue) =

   P (not blue) =

3. You mix the letters S, I, L, V, E, R, T, E, A, and M in a bag. Without looking, you select one letter then replace it. Then you select another letter. What is the probability that you will select an E and S? Express your answer as a percent.

4. You roll two dice. What is the probability that both will land on 1?

5. There are 10 girls and 8 boys in an advisory. All student names are put into a bag. What is the probability that a boy will be chosen?

6. You have two standard dice and two quarters. Find the number of possible outcomes.

7. A recent study was done that found 9 out of 10 dentists recommend Crest toothpaste. If 1,250 dentists were surveyed, how many dentists recommend Crest toothpaste?

8. Lights-A-Lot is a quality inspector that examines strings of lights. They examined a sample of 25 lights and found that 6 were defective.

   a. What is the experimental probability that a string of lights is defective?

   b. If a store receives a delivery of 1,000 strings of lights, how many can they expect to be defective?

9. Annabel has a box with 3 blue, 5 green, 3 pink, and 7 orange colored pencils.

   a. What is the probability that she reaches into the box and pulls out a blue or pink colored pencil?

   b. What is the probability that she reaches into the box and does not choose a blue colored pencil?

   c. What is the probability that she chooses a green and an orange colored pencil?

10. The product dice game is played by rolling two dice at the same time. If the product of the numbers that land face up are greater than 16, you win. Complete the table below.

Faces	1	2	3	4	5	6
1	1	2	3			
2	2	4	6			
3						
4						
5						
6						

   a. What is the probability of winning the game?

   b. What is the probability of rolling a product less than or equal to 16?

   c. What is the probability of rolling a product that is even?