Name: _____   Date: _____

Chapter 1 Test

1. What is the difference between theoretical probability and experimental probability? Use an example in your explanation.

_____

_____

_____

2. What is the theoretical probability of each of the following?

    a) picking a 4 from a deck of cards _____ (fraction)

    b) picking a red card from a deck of cards _____ (decimal)

    c) flipping heads with a coin _____ (percent)

    d) rolling an 8 with 1 die _____ (fraction)

    e) rolling an even number with 1 die _____ (decimal)

    f) rolling a 3 with 2 dice _____ (percent)

3. a) List all of the combinations for rolling 5, 6, or 7 with 2 dice.

_____

_____

    b) Write the probability of rolling a 5 as a fraction of the total. _____

    c) Write the answer to part b) in lowest terms. _____

4. Roll a die 10 times.

    a) How many 4s did you roll? _____

    b) Write the number of 4s that you rolled as a fraction, a decimal, and a percent.

        _____ = _____ = _____

    c) This is _____ probability.

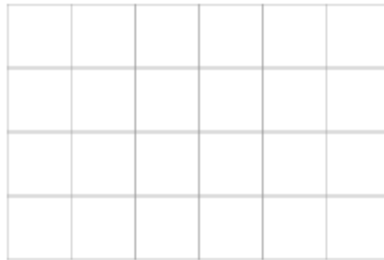Name: _____ Date: _____

5. Complete the table.

Fraction	Decimal	Percent
a) $\frac{3}{4}$		
b) $\frac{2}{5}$		
c)	0.6	
d)	0.05	
e)		80%

6. a) Create and label a bar graph for the "perfect world" results for obtaining each suit when you cut a deck of cards 20 times.

b) The graph above shows _____ probability.

7. a) On the drive to school you pass 2 traffic lights. List all of the possible combinations of lights you could get. Use R for red, G for green, and Y for yellow.

b) What is the probability of getting 2 red lights?

c) What are the odds of getting 2 red lights?