Date _____

Chapter 1 Practice Test

Chapter 1

1. Explain the difference between theoretical probability and experimental probability.

_____

_____

_____

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

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

b) picking a spade or a heart from a deck of cards _____ (fraction)

c) flipping tails with a coin _____ (percent)

d) rolling a 7 with 1 die _____ (percent)

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

3. a) How many combinations can you get by rolling 2 dice? _____

b) List all of the combinations for rolling 10, 11, or 12 with 2 dice.

_____

_____

c) Write the probability of rolling a 10 or greater as a fraction of the total.

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

4. Roll a die 20 times.

a) How many 6s did you roll? _____

b) Write the number of 6s that you rolled as a fraction, a decimal, and a percent.

_____ = _____ = _____

fraction decimal percent

c) This is an example of _____ probability.

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5. Complete the table.

Fraction	Decimal	Percent
a) $\frac{1}{4}$		
b) $\frac{1}{5}$		
c)	0.4	
d)	0.65	
e)		80%

6. Create and label a bar graph for the "perfect world" results for rolling 2 dice exactly 36 times. What totals do you get?

7. a) You flip 4 coins at the same time. What different ways can the coins land? List all combinations.

b) What is the probability of getting all heads with 4 coins? Explain how you know.