Name: _____ Class: _____ Date: _____ Points

Unit 12: Probability

Chapter 1: Experimental Probability

1. Sam tossed a coin 8 times and recorded the results in the table.
H stands for heads and T stands for tails.

Experiment	1	2	3	4	5	6	7	8
Outcome	T	H	H	T	H	T	T	T

(a) Find the experimental probability that the outcome was a head.

(b) What is the probability that the 9th toss is a tail?

2. The table shows the people standing in line at a theater box office.

Person		Person	
1	Man	11	Man
2	Man	12	Boy
3	Woman	13	Girl
4	Boy	14	Man
5	Man	15	Woman
6	Boy	16	Man
7	Woman	17	Man
8	Man	18	Girl
9	Woman	19	Boy
10	Woman	20	Man

(a) Find the experimental probability that a person standing in line is a boy. Give your answer as a percent.

(b) Find the experimental probability that a person standing in line is an adult. Give your answer as a percent.

(c) What is the probability that the 21st person standing in line is a girl? Give your answer as a percent, correct to 1 decimal place.

3. A bag contains a black ball and a white ball. John conducts an experiment by randomly picking a ball from the bag and then putting it back. The table shows the results of the experiment.

Trial	Color	Trial	Color
1	Black	6	White
2	White	7	Black
3	White	8	White
4	White	9	Black
5	Black	10	White

(a) Find the experimental probability that a white ball is picked? Give your answer as a decimal.

(b) What is the probability that a black ball is picked on the 11th trial? Give your answer as a decimal, correct to 2 decimal places.

(c) If a black ball is picked on the 11th trial, what is the probability that a black ball is picked on the 12th trial? Give your answer as a decimal.

(d) What is the probability that a red ball is picked?

Refer to the information below to answer Questions 4 & 5.

A survey was conducted to find out the number of languages spoken by students in a class. The results are shown in the table.

Student	Languages	Student	Languages
A	2	F	1
B	2	G	2
C	1	H	3
D	2	I	2
E	1	J	1

4. Find the experimental probability that a particular student speaks only one language.

A 0.25 **C** 0.6

B 0.4 **D** 0.75

5. Find the experimental probability that a particular student speaks at least two languages.

A 0.1 **C** 0.5

B 0.2 **D** 0.6