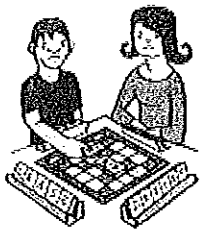

Name _____

Let's play Scrabble

In Scrabble, each player chooses 7 letter tiles. The 100 tiles of the original game are in the distribution shown below. (There is a newer, deluxe version from 2004 that uses 200 tiles, but we will be using the 100 tile version.)

- 2 blank tiles (scoring 0 points)
- *1 point*: **E** ×12, **A** ×9, **I** ×9, **O** ×8, **N** ×6, **R** ×6, **T** ×6, **L** ×4, **S** ×4, **U** ×4
- *2 points*: **D** ×4, **G** ×3
- *3 points*: **B** ×2, **C** ×2, **M** ×2, **P** ×2
- *4 points*: **F** ×2, **H** ×2, **V** ×2, **W** ×2, **Y** ×2
- *5 points*: **K** ×1
- *8 points*: **J** ×1, **X** ×1
- *10 points*: **Q** ×1, **Z** ×1

A	A	A	A	A	A	A	A	A	B
B	C	C	D	D	D	D	E	E	E
E	E	E	E	E	E	E	E	E	F
F	G	G	G	H	H	I	I	I	I
I	I	I	I	I	J	K	L	L	L
L	M	M	N	N	N	N	N	N	O
O	O	O	O	O	O	O	P	P	Q
R	R	R	R	R	R	S	S	S	S
T	T	T	T	T	T	U	U	U	U
V	V	W	W	X	Y	Y	Z	_	_

This distribution of letters has not changed since Alfred Butts invented the game in 1938.

Now, answer the following questions (give answers as fractions, decimals and percents):

1) What is the probability of choosing an E if no tiles have been chosen?
2) What is the probability of choosing an "M" if 28 tiles have been chosen and 1 of them was an M?
3) What is the probability of choosing an "X" if 42 tiles have been chosen and 1 of them was an X.