Nov. 5 Worksheet

1. What is an experiment?

An occurrence with a result that is uncertain before the experiment takes place.

2. What is the sample space?

where all of the solutions are found

$S\{1,2,3,4\}$

3. What is a simple event? Compound event?

Simple event → contains <u>only</u> 1 element (ex. flipping a coin)

Compound events → more than 1 element (ex. spinning for prime #)

4. What is the theoretical approach?

<u>assuming</u> equally likely outcomes

5. What is the empirical approach?

assigning results based on Simulations or experiments

Now time to conduct an experiment!

a) Using the theoretical approach, what <u>should</u> the probability/frequency be?

50/50 chance

Roll the die 10 times, noting each time it is even/odd. Make it into a frequency table.

4-4

1	2	3	4	5	6	7	8
E	O	E	E	E	O	O	E

Even 5 **Odd** 3

b) Now for the table

Outcome	Frequency	Relative Frequency
Even	5	5/8 → 0.625
Odd	3	3/8 → 0.375
total =	8	1