**Activity**: Conduct the following experiments to find the **theoretical** and **experimental** probability of the following

1 point - find the theoretical probability 1 point - calculate as a fraction and decimal 2 point - choose 1 theoretical experiment to do an experimental probability with table 1 point - highlighted answer

Example:

Exp 1: Tossing a coin

1. What is the sample space?

2. P(heads) = ?

## **Theoretical**

Sample Space = (heads, tails) P(heads) =  $\frac{1}{2}$  or 0.5

## **Experimental**

Try	1	2	3	4	5	6	7	8	9	10
Outcome	h	t	t	t	h	t	t	h	h	h

P(heads) = 5/10 (1/2) or 0.5

Exp 2: Tossing a die 1. What is the sample space? 2. P(5) = ? 3. P(even) = ? 4. P(prime) = ? 5. P(7)= ?	Exp 5: Rock, Paper, Scissors (opponent) 1. What is the sample space? 2. P(rock or scissors) = ? 3. P(not scissors) = ?				
	Exp 6: Picking a card out of a				
Exp 3: Spinner (colors)	deck of 52 cards				
1. What is the sample space?	1. What is the sample space?				
2. P(blue) = ?	2. P(5) = ?				
3. P(red & green) = ?	3. P(even) = ?				
	4. P(red) = ?				
Exp 4: Spinner (numbers)	5. P(10 of hearts)= ?				
1. What is the sample space?					
2. P(5) = ?	Exp 7: Make one of your own				
3. P(even) = ?	1. What is the sample space?				
4. P(prime) = ?	2. P(?) = ?				
5. P(7)= ?	3. P(?) = ?				
	4. P(?) = ?				