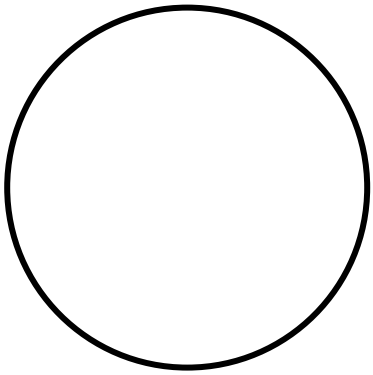
Name _____
Theoretical vs. Experimental Probability

Go to the following website: http://nlvm.usu.edu/en/nav/vm1_asid_186.html

Your experiment will involve the spinner the way it appears on the screen with the colors red, orange, green, yellow and purple.

1. Draw the spinner that you see on your screen and determine the theoretical probability that the spinner will land on each color.



Red _____

Orange_____

Green _____

Yellow_____

Purple _____

2. ***Explain*** whether or not the spinner is fair.

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3. Press the button that says "Record Results." On the spinner screen, change the number of spins from 1 to 10. Then press spin (Each spin represents 10 spins now).
4. Write the number of times the spinner landed on each color. Then, press spin again and write down the number of times the colors were landed on.

	Red	Orange	Green	Yellow	Purple
After 10 spins					
After 20 spins					
After 30 spins					
After 40 spins					
After 50 spins					

5. How does the theoretical probability differ from the experimental probability in your experiment?

6. What is the mean number of times that the spinner landed on each color? Show your work?

7. How does the mean number relate to the theoretical probability? Why?