Carnival Game Tycoon Lecture Notes: Lesson 2
Name:_____
Delta College STEM Explorer
Hour:_____

I. Theoretical Probability vs. Experimental Probability
   A.   _____ Probability: a mathematical calculation of the
         _____ of a chance experiment.
            i.   1. Ex. There is a _____ or _____ chance of a couple having a _____
                    as opposed to a _____.
            ii.   2. Ex. There is a _____ or _____ chance of me picking the correct # from 1
                    to 10.
   B.   _____ Probability: the _____ results of a chance experiment
         when put into practice.
            i.   1. Ex. A couple has ____ girls, and only ____ boy.
            ii.   2. Ex. It takes me only ____ tries to pick the correct number from 1-10.

   ●   Coin Flip Activity #2

   C. Expectations vs. _____
            1. It is expected that a flipped coin coming up heads should have a theoretical
                probability of _____ or _____.
            2. The results of our first 4 flips was _____ or _____.
            3. The results of our 60 flips was _____ or _____.
            4. As the number of trials increases the _____
                _____ gets closer to the _____
                _____.

II. Using Probability Trees to Predict Outcomes
   A. Probability Tree: A _____ representation of the pathways to possible
        outcomes.
            1. What are the chances of rolling H, H?_____ or _____
            2. ...H, T? _____ or _____
            3. ...H,H,H,H? _____ or _____
            4. ...H,T,H,T? _____ or _____
   B. To calculate probabilities of _____events using a probability tree, the
        fractions are_____.
            1. ex. 20 Heads in a row: ½ x ½ x ½ ...(20) = **_____** or
                _____