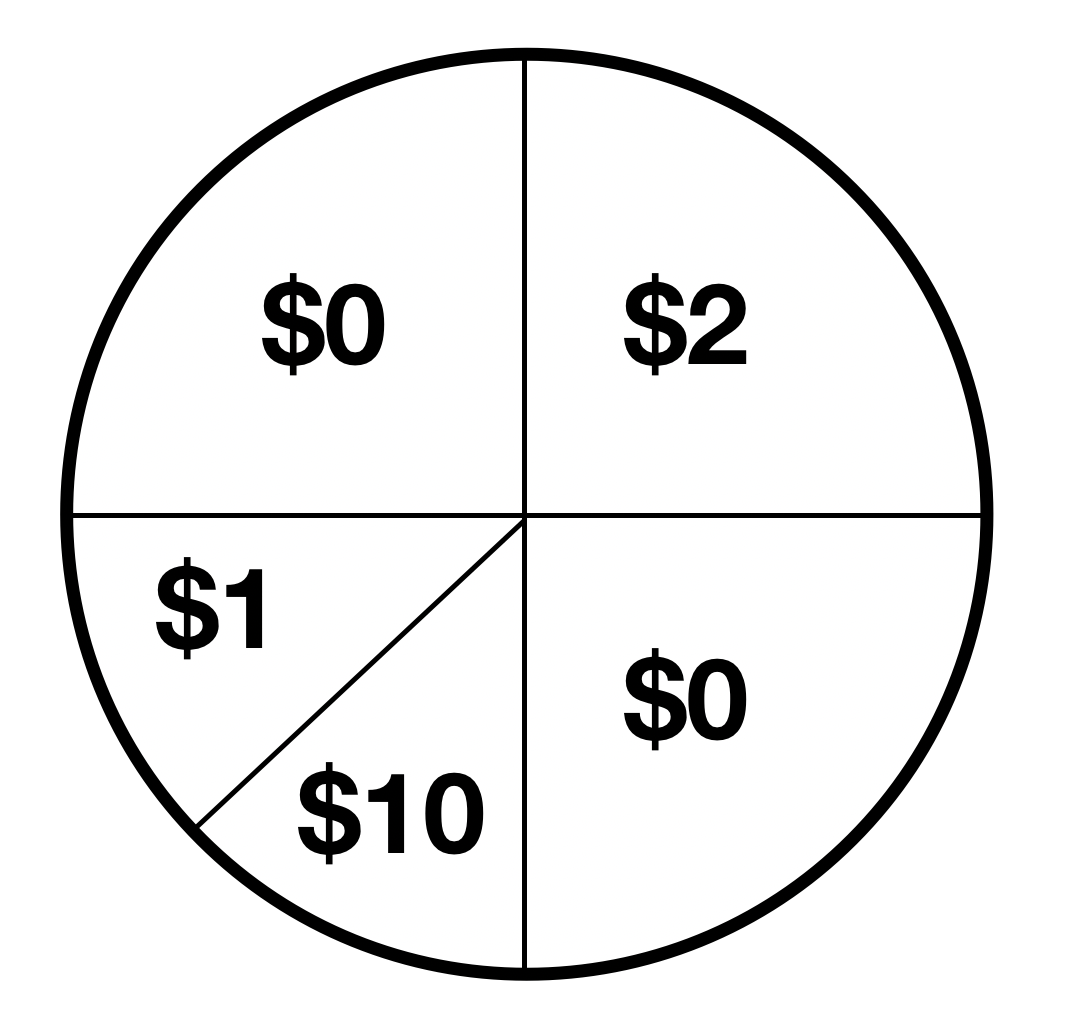
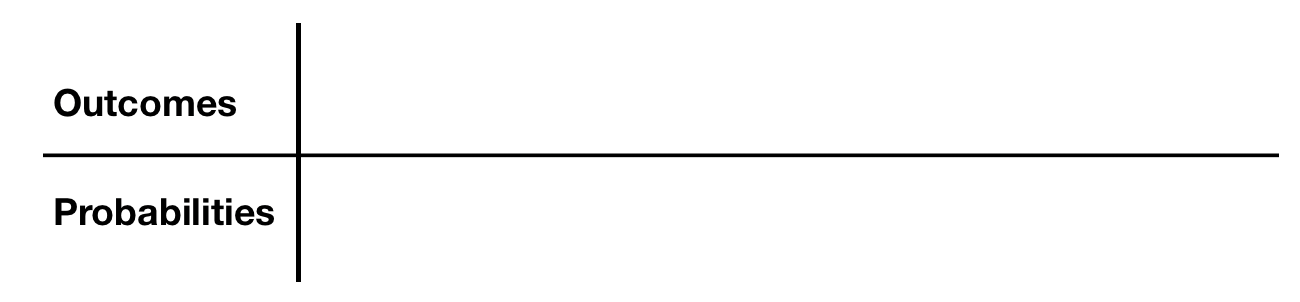
**Carnival Game Tycoon Lecture Notes: Lesson 5 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Delta College STEM Explorer **Hour**:\_\_\_\_\_\_

1. **Expected Values**
   1. Defined: The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of a game is sum of all of the **\_\_\_\_\_\_\_\_\_\_\_**of each value of each outcome and the corresponding probability of that outcome.
   2. Formula: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**until **\_\_\_\_\_\_**outcomes are accounted for
      1. X= the **\_\_\_\_\_\_\_\_\_\_\_\_** of the outcome
      2. P= the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**of the outcome
   3. Application to Games:
      1. Knowing the Expected Value is important for planning **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** games or determining if games are worth **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
      2. Example “Spinner Game”



* + 1. Use of **\_\_\_\_\_\_\_\_\_\_\_\_\_**



* + 1. Solving for E (Expected Value):
    2. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of the Expected Value #: In this scenario, the Expected Value of **\_\_\_\_\_\_\_** means that you can **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** to win on average $.875 per **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** This is a **\_\_\_\_\_\_\_\_\_\_\_** game for the player and a **\_\_\_\_\_\_\_\_\_** game for the house.