Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Theoretical Probability – Simple Events #2

***Simple Events***

**There are 20 red apples and green apples in a bag. The probability of randomly picking a red apple is 0.4. How many red apples are in the bag? How many green apples are in the bag?**

**Total number of events: 2**

**Probability – P(picking red apple) or P (0.4) = number of red apples**

 **20**

**So: number of red apples = 0.4 x 20 = 8; number of green apples = 20 – 8 = 12**

**There are 8 red apples and 12 green apples**

1. **There are 30 bottles of fruit juice in a cooler. Some are orange juice, others are cranberry juice, and the rest are other juices. The probability of randomly grabbing one of the other juices is 0.6. How many bottles of orange juice and cranberry juice are in the cooler?**
2. **A model builder has 30 pieces of balsa wood in a box. Four pieces are 15 inches long, 10 pieces are 12 inches long, and the rest are 8 inches long. What is the probability the builder will pull an 8-inch piece from the box without looking?**

***Simple Events – Finding not getting something***

**A bag contains 1 red marble, 2 blue marbles, and 3 green marbles. The probability of picking a red marble is 1/6.**

**To find the probability of NOT picking a red marble, subtract the probability of picking a red marble from 1.**

**P = 1 – 1/6 = 5/6 (The probability of not picking a red marble from the bag is 5/6)**

1. **There are 13 dimes and 7 pennies in a cup.**
2. **What is the probability of drawing a penny out without looking?**
3. **What is the probability of NOT drawing a penny?**
4. **If P(event A) = 0.25, what is P(NOT event A)?**
5. **If P(NOT event B) = 0.95, what is P(event B)?**