**BLM 7.SP.4.2: What Is the Probability?**

The following six letter tiles are placed in a bag.

**E**

**G**

**D**

**I**

**B**

**R**

1. You are asked to shake the bag containing the six letters and draw one letter from the bag.

a) How many different outcomes (letter tiles) are possible in this situation?

b) What is the theoretical probability of drawing an E tile from the bag?

1. Lee shakes the bag containing the six tiles, draws a letter tile from the bag, records the letter he drew, returns the letter to the bag, and repeats the process 36 times. He drew the following:

B – 6 times

R – 4

I – 12

D – 9

G – 2

E – 3

Compare Lee’s experimental results and the theoretical probability of drawing the letter I in this situation.

1. Theoretically, in this situation, which is a more likely event, drawing a consonant from the bag, or drawing a vowel? Explain your thinking.
2. Describe one event that would be

a) impossible in this situation

b) certain in this situation

1. Create another question and answer related to probability using this situation.