**BLM 7.SP.5.1: Which Conditions Affect Probability?**

1. Name outcomes that are possible when tossing a coin, and specify the probability of each outcome.
2. Indicate whether or not each of the following conditions will affect the theoretical probability of the next coin toss. Mark a Y (yes) or an N (no) beside each condition, and explain why you believe your answer is correct.

a) \_\_\_\_ The outcome from the previous toss

b) \_\_\_\_ Using a different coin on the next toss

c) \_\_\_\_ Tossing one coin 10 times or 10 coins one time each

d) \_\_\_\_ Tossing six heads in a row

e) \_\_\_\_ Tossing two coins at the same time

1. If you enter three tickets in a draw, and there are nine tickets entered in the draw, what is the theoretical probability that your name will be drawn?
2. Consider the following situations. Mark a Y (yes) or an N (no) to indicate whether or not each situation will affect the theoretical probability of your name being chosen on the next draw. Explain why you believe your answer is correct.

a) \_\_\_\_ Someone else’s name was drawn and then returned to the draw.

b) \_\_\_\_ Your name has been drawn the last six times. Each time your name was returned to the draw.

c) \_\_\_\_ Drawing someone else’s name and not returning the name to the draw.

1. Make a general statement about conditions that affect probability and conditions that do not affect probability.