

Name: _____ Date: _____

Applying Probability to Make Informed Decisions

You and your best friend love pink starburst. There are four starburst left in the bag. Two are orange (your least favorite) and two are pink. You are going to select (without peeking) two candies from the bag. One will be for you and one will be for your best friend. Your friend thinks that the two of you will be equally likely to get the same color because the colors are either the same or they are different. Check her claim by performing a simulation.

- a. Name a device (probability model) that can be used to simulate selecting a starburst. Specify what outcomes represent getting a pink starburst and what outcomes represent getting an orange starburst.

- b. Define what a trial is for your simulation.

- c. Define what constitutes a success in your trial.

- d. Perform and list 20 simulated trials. Based on your results, is your friend's equally likely model correct?