Unit 8 Lesson 2: Chance Experiments

1 Which is More Likely? (Warm up)

Student Task Statement

Which is more likely to happen?

- When reaching into a dark closet and pulling out one shoe from a pile of 20 pairs of shoes, you pull out a left shoe.

- When listening to a playlist—which has 5 songs on it—in shuffle mode, the first song on the playlist plays first.
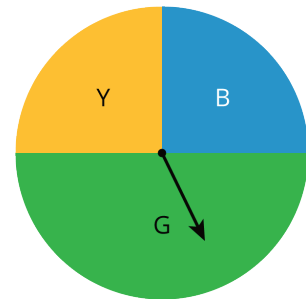
2 How Likely Is It?

Student Task Statement

1. Label each event with one of these options:

   impossible,   unlikely,   equally likely as not,   likely,   certain

   a. You will win grand prize in a raffle if you purchased 2 out of the 100 tickets.

   b. You will wait less than 10 minutes before ordering at a fast food restaurant.

   c. You will get an even number when you roll a standard number cube.

   d. A four-year-old child is over 6 feet tall.

   e. No one in your class will be late to class next week.

   f. The next baby born at a hospital will be a boy.

   g. It will snow at our school on July 1.

   h. The Sun will set today before 11:00 p.m.

   i. Spinning this spinner will result in green.

   j. Spinning this spinner will result in red.

2. Discuss your answers to the previous question with your partner. If you disagree, work to reach an agreement.

3. Invent another situation for each label, for a total of 5 more events.

3 Take a Chance

Student Task Statement

Your teacher will have 2 students play a short game.

1. When the first person chose 3 numbers, did they usually win?

2. When the person chose 4 numbers, did you expect them to win? Explain your reasoning.

4 Card Sort: Likelihood

Student Task Statement

1. Your teacher will give you some cards that describe events. Order the events from least likely to most likely.

2. After ordering the first set of cards, pause here so your teacher can review your work. Then, your teacher will give you a second set of cards.

3. Add the new set of cards to the first set so that all of the cards are ordered from least likely to most likely.