Name

Probability

Home-School Connection Topic **9**

Dear Family,

Your child is studying probabilities of simple and compound events. He or she is learning to use precise terms to describe actions and their possible outcomes, and to distinguish between and determine theoretical and experimental probabilities.

You can help your child understand probability concepts by playing the following game.

Number Cube Probability

Materials: Number cube, paper, and pencil for each player

Step 1 Each player lists three possible events when rolling a number cube:

- An event with probability $\frac{1}{6}$, such as "2"
- An event with probability $\frac{1}{3}$, such as "5 or 6"
- An event with probability $\frac{1}{2}$, such as "odd number"
- **Step 2** Player 1 rolls the number cube. If the result matches an event from Player 1's list, he or she places a check mark next to that event. A player may check no more than one event per turn.
- **Step 3** Players take turns rolling the number cube until one player has checked all three events on his or her list.

Observe Your Child

Focus on Mathematical Practices

Construct viable arguments and critique the reasoning of others.

Help your child become proficient with this Mathematical Practice. Ask him or her to develop and explain a strategy for choosing events in Step 1. Consider playing the game several times to allow your child to use and compare different strategies.