

LESSON
5.3

Experimental Probability of Compound Events



TEKS

Proportionality—
7.6.B Select and use different simulations to represent . . . compound events without technology. Also 7.6.A, 7.6.C, 7.6.I



ESSENTIAL QUESTION

How do you find the experimental probability of a compound event?

EXPLORE ACTIVITY



TEKS 7.6.I

Exploring Compound Probability

A **compound event** is an event that includes two or more simple events, such as flipping a coin *and* rolling a number cube. A compound event can include events that depend on each other or are independent. Events are independent if the occurrence of one event does not affect the probability of the other event, such as flipping a coin and rolling a number cube.

- A** What are the possible outcomes of flipping a coin once? _____
- B** What are the possible outcomes of rolling a standard number cube once? _____
- C** Complete the list for all possible outcomes for flipping a coin *and* rolling a number cube.

H1, H2, _____, _____, _____, _____, T1, _____, _____, _____, _____

There are _____ possible outcomes for this compound event.

- D** Flip a coin and roll a number cube 50 times. Use tally marks to record your results in the table.

	1	2	3	4	5	6
H						
T						

H1 would mean the coin landed on heads, and the number cube showed a 1.

- E** Based on your data, which compound event had the greatest experimental probability and what was it? The least experimental probability? _____

- F Draw Conclusions** Did you expect to have the same probability for each possible combination of flips and rolls? Why or why not?

