

LESSON
12-3

Experimental Probability of Compound Events

Reteach

A **compound event** includes two or more simple events.

The possible outcomes of flipping a coin are heads and tails.

A spinner is divided into 4 equal sections, each one a different color.

The possible outcomes of spinning are red, yellow, blue, and green.

If you toss the coin and spin the spinner, there are 8 possible outcomes.

2 possible coin outcomes		Red	Yellow	Blue	Green	4 possible spinner outcomes
	Heads	9	11	11	14	
	Tails	10	12	7	6	8 possible compound outcomes

To find the experimental probability that the next trial will have an outcome of Tails and Blue:

- Find the number of times Tails and Blue was the outcome: 7.
- Find the total number of trials: $9 + 11 + 11 + 14 + 10 + 12 + 7 + 6 = 80$.
- Write a ratio of the number of tails and blue outcomes to the number of trials: $\frac{7}{80}$.

A store hands out yogurt samples: peach, vanilla, and strawberry. Each flavor comes in regular or low-fat. By 2 P.M. the store has given out these samples:

	Peach	Vanilla	Strawberry
Regular	16	19	30
Low-fat	48	32	55

Use the table to answer the questions.

- What is the total number of samples given out? _____
- What is the experimental probability that the next sample will be regular vanilla?

- What is the experimental probability that the next sample will be strawberry?

- What is the experimental probability that the next sample will **not** be peach?
