Activity 9 Assessment
Conducting Experiments

Making Predictions and Conducting Experiments

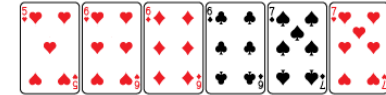| Makes predictions and performs experiments.	Performs experiment, records results, and compares predictions to results.	Knows that with more trials, the closer the actual results may be to predicted results.	Performs experiments, analyzes results, and compares and justifies predictions.
"The probability of getting 2 tails when tossing 2 coins is $\frac{1}{4}$. That isn't what happened in the experiment. I'm not sure why."	"If I roll a number cube 20 times, I expect to roll each number about 3 times. The results weren't close to my predictions because I only rolled a 4 once."	"When I conducted more trials (100), I noticed that the results got closer to my predictions. But they still didn't match exactly."	"The probability of drawing a 6 or a 7 is $\frac{5}{6}$. So, when I conduct the experiment 60 times, I would expect to get a 6 or 7 about 50 times. I got 6 or 7 forty-four times. I have to do more trials."

Observations/Documentation

Activity 9 Assessment
Conducting Experiments

Theoretical Probability of Independent Events

Predicts likelihood of favored outcomes based on personal preferences or experiences.	Represents probability using words/fractions and predicts the likelihood of future events.	Represents probability using 'odds in favour' and predicts likelihood of future events.	Fluently makes and justifies predictions about the likelihood of future events.
			"Knowing the likelihood of events can help me make decisions in real life. For example, weather forecasts are created by comparing the likelihood of different weather conditions."
"I think I will get the blue marble because last time I got a blue marble."	"I think I will get a blue marble because $\frac{6}{12}$ or $\frac{1}{2}$ of the marbles are blue."	"The probability of getting a red marble is $\frac{1}{4}$. The probability of not getting a red marble is $\frac{3}{4}$. The 'odds in favour' of a red marble are 1:3. It is not likely that I will get a red marble."	

Observations/Documentation