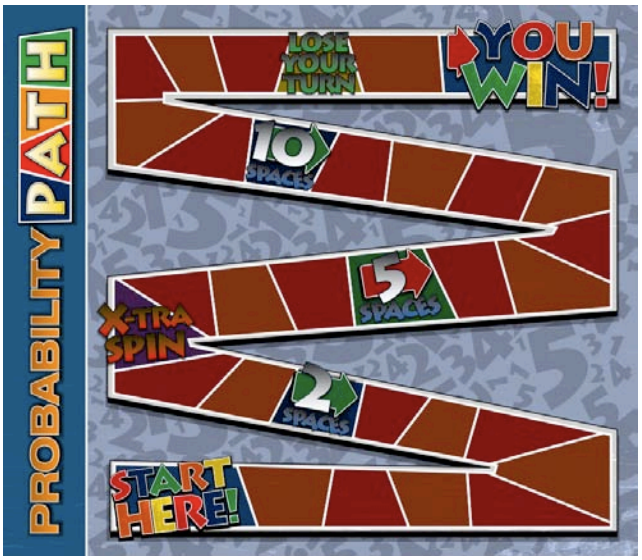
Introduction to Probability
Problems from Video

Cameron and a few friends have gotten together for Board Game night. They are playing Probability Path. The goal of the game is to be the first to move a piece along a winding path to the finish. The spinner determines how far you move. Who wins is just a matter of chance.

Board Game:



Spinner:

Experimental Probability

1. Determine the probability of spinning each number on the spinner by conducting an experiment.
   a. Print the spinner on the last page of this document.
   b. Insert a brad through a paperclip and then through the center of the spinner.
   c. Spin the paperclip 100 times and record the number of times you spin each number in the table below.
   d. Determine the experimental probability of each event and record it in the table.

Event	Spins out of 100 (tally)	Spins out of 100 (number)	Experimental Probability
1			
2			
3			
4			
5			

Theoretical Probability

2. Determine the probability of spinning each number on the spinner by analyzing the spinner. What fraction of the time would you expect to spin each number? Record your results in the following table.

Event	Theoretical Probability
1	
2	
3	
4	
5	

3. Compare your experimental and theoretical probabilities. Are they the same? What would cause the experimental and theoretical probabilities to be closer in value?

4. Scott needs to spin a 6 to win the game. What is the probability of spinning 6?

   P (spinning 6) =

5. Tim needs to spin a 1 or greater to win the game. What is the probability of spinning a 1 or greater?

   P (spinning 1 or greater) =

6. Lexi has spun a 2 the last five turns. What is the probability that Lexi will spin a 2 on her next spin?

   P (spinning 2) =

7. If Kyle spins a two he will have to go back 10 spaces. What is the probability of him NOT spinning a 2?

   P (not spinning 2) =