



Name: _____ Hour: _____ Date: _____



Who will win the Last Banana?

Suppose that you're on a desert island playing dice with another castaway. The winner's prize will be the last banana. Here are the rules of the game:

- Each player rolls a die
- If the largest value shown is a 1, 2, 3, or 4, then Player 1 wins
- If the largest value shown is a 5 or 6 then Player 2 wins

1. Who do you think has advantage in this game: Player 1, Player 2, or neither? Make your **best guess** and explain your choice.
2. Play the game 20 times with your partner and record the winner of each game by tallying in the table below.

Player	1	2
Tally/Count of Wins		
Percentage of Wins		

- a. How many times did Player 1 win? _____ Write this as a proportion. _____
 - b. How many times did Player 2 win? _____ Write this as a proportion. _____
3. Who won more often? Maybe this was only true for your group. Let's see how the rest of the class did. Write the number of wins for Player 1 in the table on the board.
 - a. Find the total proportion of wins for Player 1 for the whole class.
 - b. Find the total proportion of wins for Player 2 for the whole class.

4. To determine the true probability of Player 1 winning, we should list out all possible rolls that we could get. Complete the table below to show all possible rolls.

- a. Use your table to find the probability of Player 1 winning.
- b. Which was closer to the probability you found in #4a, your group data or the classroom data? Why do you think that is?

	1	2	3	4	5	6
1	1,1					
2						
3						
4						
5						
6						