# BANDT BAT <br> IN 

## ROLL THEM BONES!

Look! It's Bandit Bat, the worlds CUTEST bat! He wants to play a game with you! Bandit Bat will roll 2 dice. If they come up as 7 , he will give you a dollar! If any other number comes up, you give him a dollar. It sounds like fun, but maybe we should investigate things before we play...

First, let's count all of the possible rolls for two dice. Each possible roll of two dice is shown below. How many are there?

Next, lets figure out the score for each roll. For each roll, add up the two dice and write the sum to the right of the roll.


Ok. Time to count again. Write down the number of times each sum appears above.
$\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ 6 $\qquad$ 7

8 $\qquad$
$\qquad$ 10 $\qquad$ 11 $\qquad$ 12

We have what we need! Write the fraction that shows the number of times a 7 will appear over the number of possible dice rolls. If it is equal to $1 / 2$, the game is fair. If it is more or less than $1 / 2$, one player will win more often than the other. Is the game fair? If not, who will usually win?

