Two Dice Table Game Suggestions

Several games can be based on this applet. Possible math goals of each game are indicated in parenthesis.

Game 1 (introducing table as a data structure; introduction of multiple--outcome event; computation of particular probabilities; motivation of different ways of expressing probabilities): Choose some winning numbers for a few players. Counting the outcomes, find the probability of each player winning and use the program to check it. Is the dice game fair to each player?

Game 2 (computation of particular probabilities; development of the concept of multiple-outcome event; discussion of divisibility): Choose two players, then assign every winning number to one of them (there will be no empty boxes in the table if you do it). Do it in a way that makes the dice game fair for both players. What is the probability of each player winning in this case? Can you do the same for three players? Four players? What is the largest number of players that can play the dice game fair?