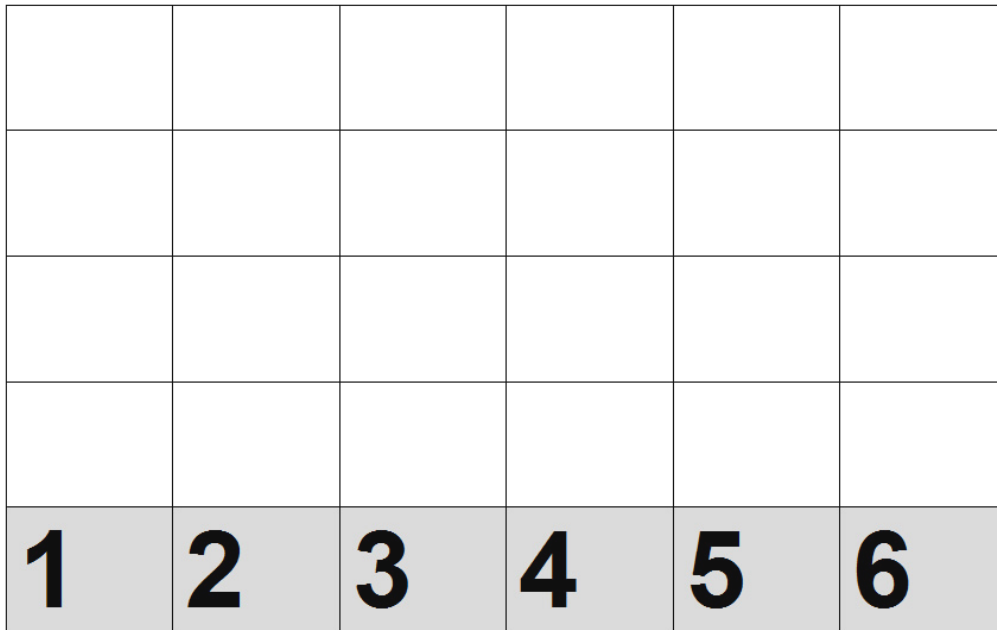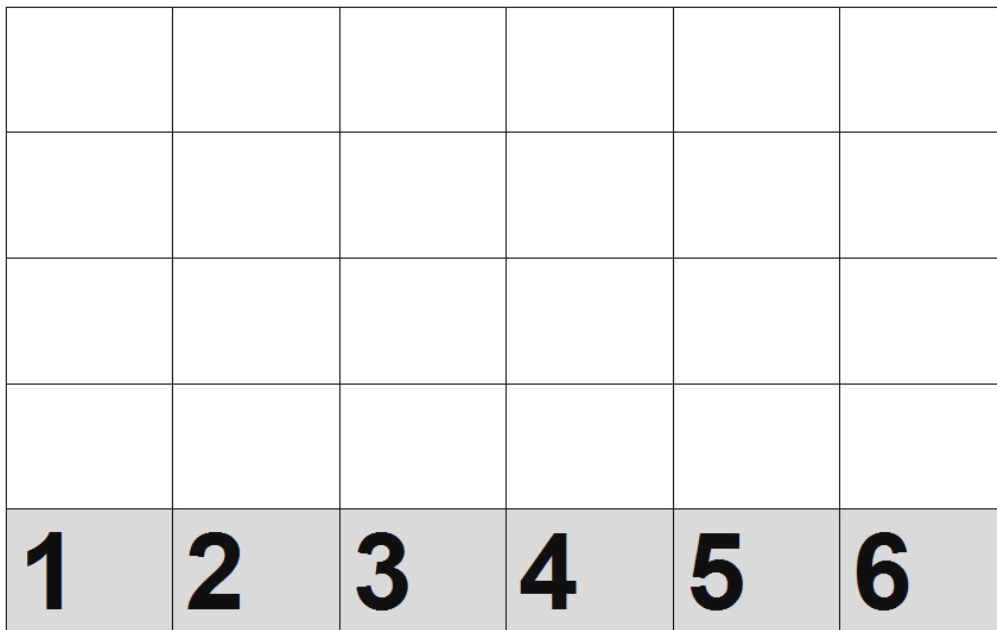**TAKING CHANCES**

Single Die Race

1. Roll a die, and in the bar graph below, shade the next available space above the number rolled. Repeat until one bar reaches the top of the bar graph. Make a prediction: which number will win?

1	2	3	4	5	6

2. Repeat the above activity. Make a prediction: which number will win?

1	2	3	4	5	6

Two Dice Race

Roll 2 dice and in the bar graph below shade the next available space above the sum rolled. Repeat until one bar reaches the top of the bar graph. Make a prediction: which number will win?

1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Recording Outcomes

Complete the chart by recording the possible ways of getting each sum when rolling 2 dice.

1					
2	1+1				
3					
4	1+3	3+1	2+2		
5					
6					
7					
8					
9					
10					
11	5+6	6+5			
12					

Two Dice Game

1. Play with a partner. Use 12 Xs to make a bar graph. Roll 2 dice and record the outcomes using Os on the same graph. Count the number of Xs that have an O in the same square. The player with the most Xs with an O wins the game.

Player 1

1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Player 2

1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

2. Replay the above game. How would you change your bar graph of Xs to improve your chance of winning?

Player 1

1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Player 2

1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						