



Players: 2

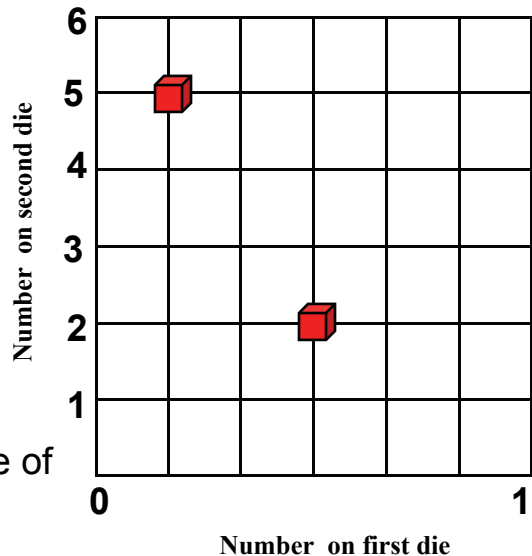
Materials: Game mat
2 regular dice (different colors)
60-80 cubes

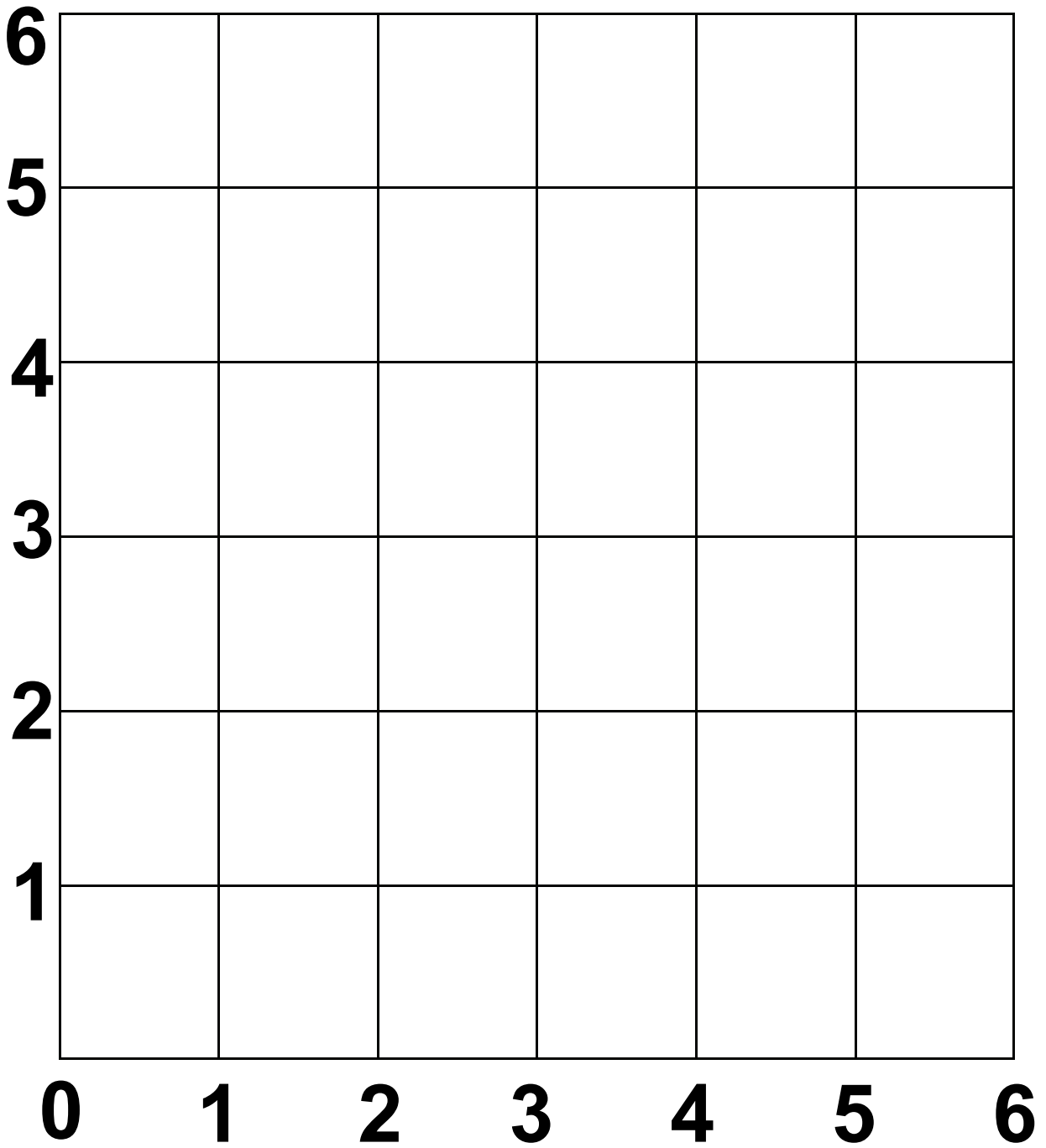
Directions:

1. Player A rolls both dice.
2. Player A forms the ordered pair that shows (e.g. (3, 2)) and places a cube on that intersection.
3. Player B rolls both dice.
4. Player B forms the ordered pair that shows (e.g. (1, 5)) and places a cube on that intersection.
5. If there is already a cube(s) on the intersection, the player places the cube on top of the cube(s). If the player places the fourth cube on any tower, that player gets another turn.
6. Play alternates back and forth until one player places the fifth cube on any tower. That player wins the game.

Analysis of Results:

7. Following the game, students should complete a tally sheet to record placement of cubes in the game using the High Five Record Sheet. Student pairs should analyze the results and compare the results to the theoretical probability of each outcome in a toss of two dice.
8. Student pairs should predict the outcome of the next game, based on their analysis.
9. Partners play another game, tally the results and analyze the results against theoretical probability.
10. Partners add their results to class results and analyze this larger sample to see if the results are closer to the theoretical probability that each dice combination is equally likely.







High Five Recording Sheet

Names:

A. Complete the frequency table for the game:

Number on Second Die	6						
	5						
	4						
	3						
	2						
	1						
		1	2	3	4	5	6
Number on First Die							

B. Compare the results of this game to the theoretical probability for tossing two dice. Were the results of the game equally likely? Explain.