

# The Game of Science

On the following pages you will find the records of several matches for a game, along with the appropriate playing board. (I will supply the playing pieces - tooth picks that have been broken in half or some other similar item.)

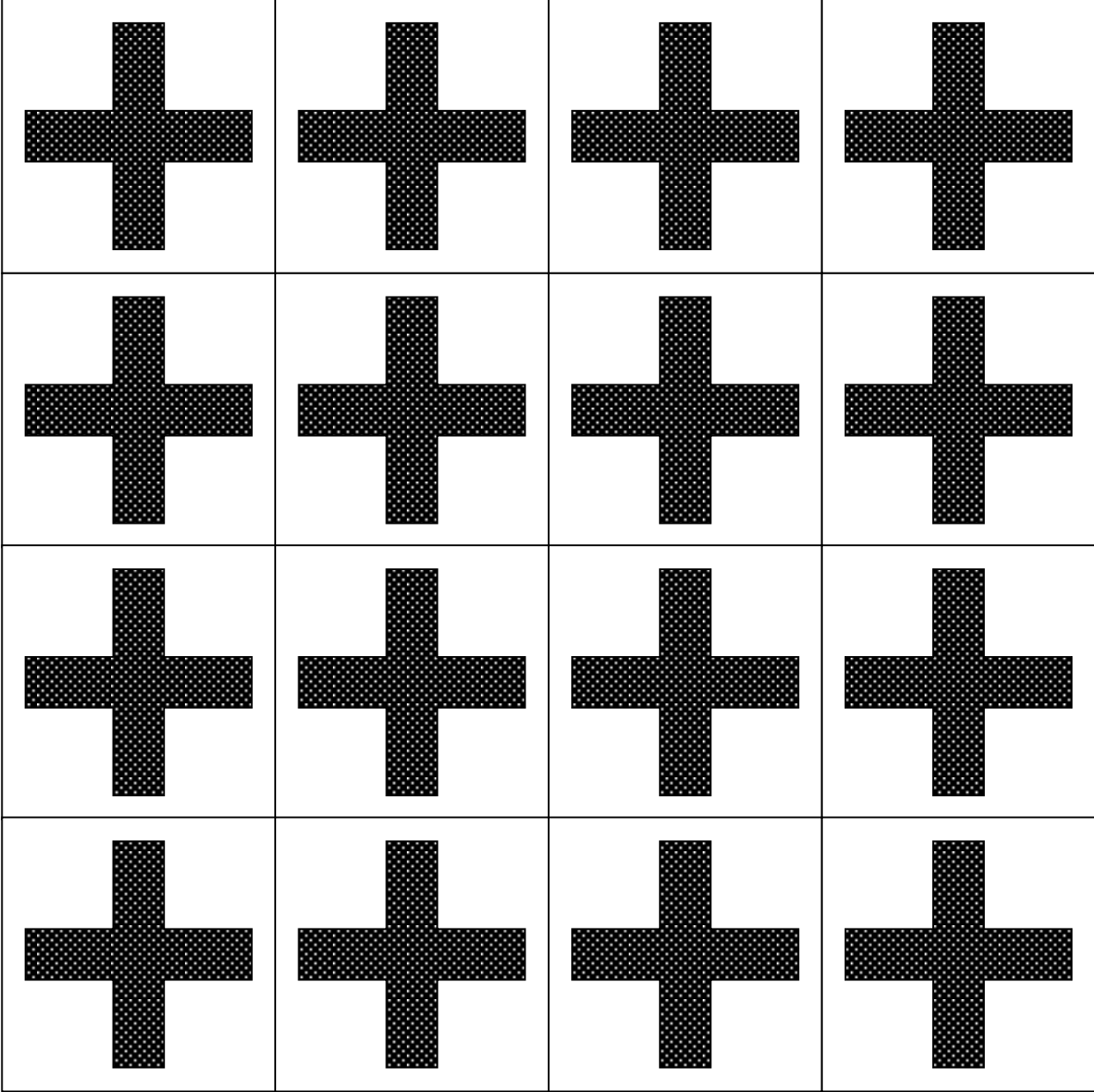
The most basic objective of this activity is for you to determine as many of the rules for this game as possible. That is, determine in as much detail as possible how the game is played, and how one wins.

Start to generate a model of what you think the rules are using the first few matches. Then, use later matches to test or refine your model.

Work carefully or you will make mistakes. You can and should collaborate with others. Be careful not to jump to conclusions! Some specific questions you must answer are:

1. What do the numbers signify in moves like "C4-H"?
2. What are the rules of the game? List as many as possible.
3. How does one win the game? Be as specific as possible.
4. State one rule that you thought was true but turned out to be wrong. How did you figure out it was wrong?
5. How does this activity simulate science? There are only five questions on this lab so answer this question carefully. Your answer should be about one paragraph, not one sentence. Your writing will be graded along with the content in your answer.

This playing board is for the matches described on the following page, which were played by novices. (“Novice” means the players fully understand and play by the rules, but are not necessarily making the most strategically sophisticated moves.)



To determine the rules of this game, recreate the following *Matches* (1-5) on the board.

<b>Match 1</b>		
Round #	Player 1	Player 2
1	B2-V	C3-H
2	D2-V	A4-V
3	D1-H	B1-H
4	A1-V	B4-H
5	B3-V	C2-H
6	C1-V	D3-H
7	C4-V	A2-H
8	D3-H to V	A3-H
9	D4-H	A1-V to H
10	B2-V to H	
<i>Player 1 wins</i>		

<b>Match 2</b>		
Round #	Player 1	Player 2
1	A2-V	A1-V
2	C3-H	B2-H
3	D4-V	C4-V
4	A4-H	B3-V
5	C1-V	C1-V to H
6	D2-V	D1-H
7	C2-V	B2-H to V
<i>Player 2 wins</i>		

<b>Match 3</b>		
Round #	Player 1	Player 2
1	B1-V	C3-H
2	B3-H	D2-V
3	B2-V	A4-V
4	D4-H	A2-H
5	C1-H	A1-V
6	C4-V	D1-H
7	D3-V	B4-H
8	C2-V	A2-H to V
<i>Player 2 wins</i>		

<b>Match 4</b>		
Round #	Player 1	Player 2
1	B3-V	B3-V to H
2	C2-H	B2-H
3	D4-V	C3-H
4	A2-V	D2-V
5	A4-V	B3-H to V
6	D1-H	D3-H
7	C1-V	B1-H
8	C3-H to V	B1-H to V
9	B4-H	C4-H
10	A3-H	A1-H
11	A4-V to H	B3-V to H
<i>Player 2 wins</i>		

<b>Match 5</b>		
Round #	Player 1	Player 2
1	C4-H	D2-V
2	C2-H	A1-V
3	D4-V	D3-H
4	A4-H	B3-V
5	B1-V	A2-H
6	A3-V	C4-H to V
7	B4-H	C3-H
8	C2-H to V	B2-H
9	D1-H	C1-H
10	D3-H to V	C3-H to V
<i>Player 2 wins</i>		