

Class Notes  
*Analyzing the Game of Sprouts*

**Investigation**

<b>Sprouts Game Starting with 1 Node</b>				
Move Number	Number of Nodes	Degree of Nodes	Sum of Degrees	Number of Edges
0				
1				
2				

<b>Sprouts Game Starting with 2 Nodes</b>				
Move Number	Number of Nodes	Degree of Nodes	Sum of Degrees	Number of Edges
0				
1				
2				
3				
4				
5				

**Observations & Analysis**

**Conclusion Questions**

1. How many initial moves are possible for a game that starts with five dots?
2. Is it possible to predict the number of initial moves based on the number of dots you start with? Explain/justify.
3. Is it possible to predict the total number of moves required before the game must end? What would determine this? Explain/justify.