Play the game with a partner or the computer a few times using the standard 4x4 square, then fill in the table and answer the following questions.

First Move	Proper Factors	My Score	Opponent's Score
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

- What number gets the most points for player 1 when the first player chooses it? Is it wise to choose this number if the first player wants to win the game?

- What number gets the most points for player 2 if the **first** player chooses it? Can you think of another number not listed which has the same quality?

- What number gives equally as many points to player 1 as it does to player 2 when the first player chooses it?

- Which numbers cannot be chosen once 1 has already been chosen?

- Develop a strategy using these facts so that player 1 always wins the game.

- Try the strategy on a different game board with more than 16 tiles. Does your strategy always work?

Once students are comfortable with their definitions and strategies, ask them to try the 100 tile board and list all the prime numbers they encounter.

As supplemental practice, allow students to play the Prime Smash game on an apple device.