

Instructions for “The Product to Factor Game”

We have played this game in several ways, depending upon the ability of the students who were playing. In the simplest version, all the tiles are placed face down and each player randomly picks ten (10) tiles. Then each player takes a turn placing his/her tile on the appropriate square. Sometimes it takes the players a while to realize that most of the time there is more than one square for each number. When a player has successfully placed all the tiles, he picks ten more. The game is over when the board has been correctly filled.

The second level adds the possibility of some competition or cooperation. The tiles are placed face down and each player picks ten tiles. Before the actual play begins, a tile is randomly picked and placed in a correct square. Players must then determine if they have a piece which, when placed correctly, will touch either a side or a corner of a piece already played. For example, if the tile with the number 25 is played, the numbers surrounding it, i.e. 16, 20, 24, 30, 36, 30, 24, and 20, are all eligible to be played, since they each touch a side or a corner of 25.

If a player does not have a tile which can be correctly placed and also touch either the side or a corner of a piece already played, he must pick from the tile pile until he can play.

If the players want to play with a little competitive spice, each one plays whatever tiles he can, trying to get rid of all his tiles first and be the winner. If a player can not place a tile he already has, he draws from the pile until he can play.

If players want to cooperate, which is actually a lot of fun, they place all their tiles face up so the other players can help, if necessary. Often, while a player is determining what he can play, another player will say, “If you play ____ I can play ____ and the next player can play ____.” The object here is to fill the board within a certain time limit.