## The Product Game

Materials: 2 paperclips, and 2 different colored game pieces (for example: coins, beans, or colored cubes. You will need several of each.)

Object of the Game: To be the first to get 4 in a row, horizontally, vertically or diagonally.

How to Play: The first player places the paperclips on any 2 of the 9 numbers below, multiplies the numbers (factors), and places a game piece on the answer (product) in the grid. Factor $\times$ Factor $=$ Product

The second player moves one of the paperclips to a new factor, finds the product, and marks their product with a different color game piece. Play continues until one player has marked four products in a row, column, or diagonal.

Note: It's OK to place 2 paperclips on the same factor: ( $5 \times 5=25$ )
(Want to play against the computer? Try http://illuminations.nctm.org/ActivitySearch.aspx and search "product")

| 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 8 | 9 | 10 | 12 | 14 |
| 15 | 16 | 18 | 20 | 21 | 24 |
| 25 | 27 | 28 | 30 | 32 | 35 |
| 36 | 40 | 42 | 45 | 48 | 49 |
| 54 | 56 | 63 | 64 | 72 | 81 |

$\begin{array}{lllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$

