

## Logical Fact Fun (updated 2/27/2019)

**Description:** The purpose of this event is to “claim” as many four adjacent boxes in a horizontal, vertical, or diagonal straight line as possible. The winner is the player who has scored the most points. The game is over when no more moves are possible on the game board.

**Number of Participants:** 2

**Approximate Time:** 20 minutes (5 minutes for instructions/questions – 15 minutes for play)

**The Competition:**

1. Begin by choosing a player to go first; ex. abc letter of first name, highest roll of a die, etc.
2. To take a turn,
  - a. Choose and announce a multiplication fact of two one-digit numbers;
  - b. Record the fact on your recording sheet under “equation”;
  - c. Place your mark (marks explained in #6) in the appropriate 3 or 4 boxes on the playing board; and
  - d. Record the number of points you earned on your recording sheet under *score*.
  - e. ***Students each have 1 minute to choose a fact, mark the recording sheet and score points.***
3. For each digit that represents the fact chosen, place your mark in the lowest unoccupied box in the column of the playing board that represents that digit. Ex. If you selected  $6 \times 3 = 18$  place your mark in the lowest available box in columns 6, 3, 1, and 8.
4. Should your multiplication equation contain the same digit more than once, place your mark in one box for each use of that digit. Ex.  $9 \times 9 = 81$ , place your mark in the 2 lowest unoccupied boxes in column 9, one mark in column 8, and column 1.
5. In each column, play begins in the bottom row and starts upwards, one box at a time, until no boxes are left in that column. No mark can have an empty box below it.
6. The number of times a particular digit is used may not exceed the spaces in that column. Ex. If there are only two boxes left in column 1, a player may not select the multiplication fact  $1 \times 1 = 1$  as there would not be enough boxes in the column to record all three of the 1’s.
7. Marks: Your mark may be your initial, an X/O or any other symbol you want. Each partner should choose a different colored pencil to make it easier to see possible moves.
8. Points are scored when a player claims four adjacent boxes in a horizontal, vertical, or diagonal straight line. However, to score a point, at least one of your four marks must have been made in a previous turn. In a single turn you may never place all 4 marks in a straight line of adjacent boxes.  
Ex. The 1<sup>st</sup> player to take a turn may not choose  $3 \times 4 = 12$  or  $8 \times 7 = 56$ . But these equations may be used in later turns if they **do not form a straight line** on the playing board.
9. If a player records an incorrect equation (Ex:  $3 \times 4 = 25$ ) and they catch their own mistake before their time is up, or they end their turn, they may erase the mistake and



- 1 judge for each team
- 1 “playing board” per team (If game board is filled before time is up, a new one will be provided)
- 2 colored pencils