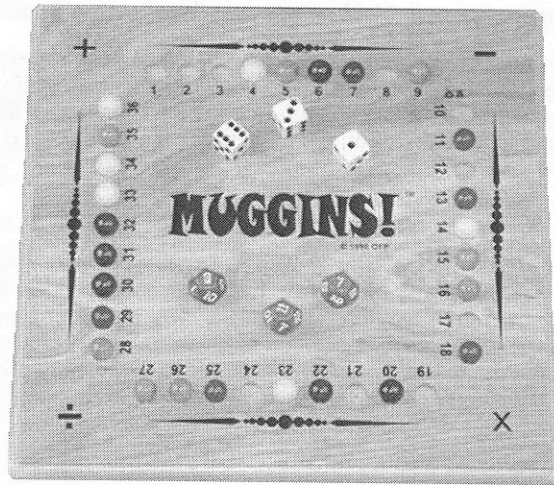


MUGGINS!™



Analytical Aerobics for the Mind!

**Ages 8 to Nuclear Physicist
1 - 4 Players**

**CONTENTS:
Wooden Game Board,
80 Marbles (20 each of 4 colors),
4 Removable Marble Trays, 3 Six-sided
& 3 Twelve-sided Dice**

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OBJECT

Add, subtract, multiply, and/or divide three (3) numbers shown on the dice to produce an answer. Try to make an answer that helps build a run for you (bonus points) or blocks your opponent's run. Throw in a bluff or challenge your opponent's answer as you try to outwit and outmaneuver each other in this analytical aerobic workout for the mind!

RULES OF THE GAME

Each player selects a marble color. (20 marbles per player.) Each player must first roll all three dice and add the numbers shown to get a total. The player with the highest total becomes Player #1. Play continues clockwise.

Player #1 begins the game by rolling all three dice. Then, selecting any two of the numbers rolled on the dice, Player #1 must add, subtract, multiply, or divide the two numbers together to produce a subtotal. To that subtotal the player must add, subtract, multiply, or divide the third die to produce a total. This total will be the answer placed on the board. The player must use all three dice in a turn but only once each. The choice of operations (adding, subtracting, multiplying, dividing) and the order in which these operations are used is entirely up to the player. Although many answers may be possible, only one answer may be used on each turn. The answer selected must be an open spot on the board. *The strategy is to select the answer that helps build a player's run of 2 to 5 marbles in a row for bonus points or to block an opponent's run. (See Scoring)*

For example, Player #1 (blue marble color) rolls a 1, 3, and 6. Some of the possible combinations are: $3 - 1 = 2 + 6 = 8$; $6 \times 3 = 18 - 1 = 17$; $6/3 = 2 + 1 = 3$. *Notice that each number was used only one time.* Player #1 could place a marble in the open 3 spot to build onto an existing run of two blue marbles for five bonus points at the end of the game, or Player #1 might choose to take the open 8 spot to block the yellow's run of four in a row. Either option is a good strategic move. (See Figure 1)

BLUFFING

Bluffing is legal in **MUGGINS!** if you can get away with it. When a player places a marble on the board, no explanation is given on how the number was produced. Each player is responsible for making sure all moves are correct, i.e. that no one tries to bluff their way onto the board. If a player challenges a move, then the player in question must explain the answer. If no correct solution is given, then the challenger removes the illegal marble from the board plus one additional marble of the bluffer. If a correct solution is given, then the challenged player is allowed to remove one of the challenger's marbles from the board. A challenge must be announced before the dice are touched by another player.

TRIPLES

Any player rolling triples (Example: 4, 4, 4) must remove one marble of their choice from each opponent. The player must then use the same roll to make a total as in any other turn and place a marble in that answer. It is good strategy to consider the possible answers that can be made with a throw of triples when considering which marble to take from the board from each opponent. Keep in mind that only one marble may be placed in a turn.

NO MOVE

If a player has no possible move on a turn, then that player must declare "no move" and pass the dice to the next player. If an opponent sees a possible answer that the player overlooked, then "**Muggins!**" can be declared as soon as "no move" is announced. The opponent then explains the answer and places a marble of their own color in that spot. The opponent is still allowed a turn in the regular rotation.

GAME ENDS

The game ends when one of the following occurs:

- All 36 spaces are filled, or
- After 3 consecutive rolls by each player with no available move, or
- After a player has used all 20 of the individual's allotted marbles.

SCORING

Scoring takes place after the game is complete. Each player begins by counting the number of marbles on the board for the individual players. Score 1 point for each space occupied by your marble. Next, bonus points are added to the above score as follows:

- 2 points for each run of two,
- 5 points for each run of three,
- 7 points for each run of four,
- 10 points for each run of five or more. (No additional points are scored for a run greater than 5.)

A run can only be counted one time. For example, a run of 4 cannot be counted as two runs of 2 in a row in addition to a run of 4. Also, remember that runs count around corners as if all 36 slots were in a circle. **The player with the highest number of points wins the game! (See Figure 1)**

SAMPLE SCORING

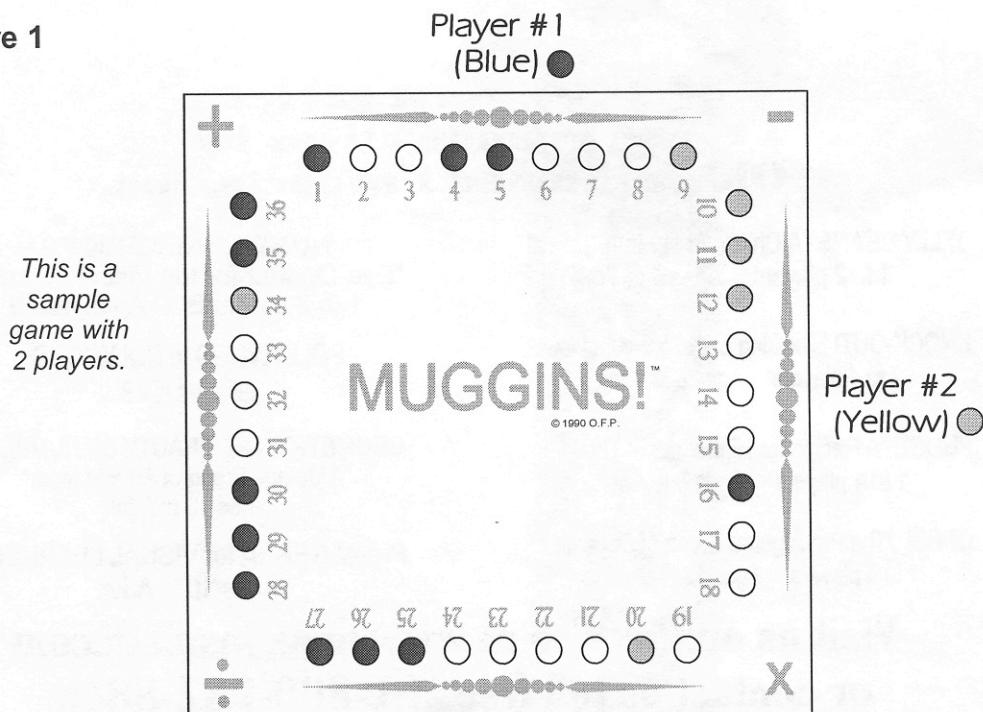
In the game below, the scoring for blue would be as follows: 12 points for the number of blue marbles placed (1 point/marble) plus 17 bonus points for runs (1 run of 2 = 2 points, 1 run of 3 = 5 points, 1 run of 6 = 10 points). Blue has a total score of 29 points for the game.

MULTI-LEVELS

For younger players who understand addition and subtraction but are not yet ready for multiplication and division, play the regular game of **MUGGINS!** using the three twelve-sided dice and addition and subtraction only. No bluffing is allowed on this level. An even simpler version would be using the three six-sided dice with only addition and subtraction and playing on only the 1 - 18 portion of the board.

For an even greater challenge to the regular **MUGGINS!** game, try using the three twelve-sided dice or a combination of the sixes and twelves! For example, try using 1 twelve-sided die with 2 six-sided dice or 2 twelve-sided dice with 1 six-sided die.

Figure 1



GAME VARIATIONS

Solitaire:

In this version of **MUGGINS!**, a player tries to fill-in all 36 spaces with the least number of rolls possible. *There is no need to build runs since points are not given.* Next, the player sets aside 50 marbles. All other marbles should be put away. Every time the player rolls the dice, a number is made, and a marble is placed on that number. Anytime the player rolls the dice and an open number cannot be made, then the player removes an unused marble from the original number of playing pieces and sets this marble off to the side. This excess of marbles will count toward the total number of throws of the dice. After all 36 spaces have been filled, the player counts the total number of set-off marbles plus the 36 filled spaces on the board to produce the player's score. A player who fills-in all 36 spaces in exactly 36 throws of the dice has scored a perfect game! This is extremely difficult but possible for those up for the ultimate challenge! *Remember: The lower the score...the better the win!*

Dishes:

For a quick analytical workout, try this highly motivational version of **MUGGINS!** All three dice are thrown at one time. If doubles or triples are rolled, roll the dice again until three different numbers are produced. Once three different numbers are shown, then the dice will not be rolled again. Players must alternate turns by making a total from the numbers shown and placing a marble in the appropriate space. No bluffing is allowed in this version, and runs do not count toward the outcome of the game. The first player failing to make a new total loses and has to DO THE DISHES!

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