LSP 8408-T

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Head Full of Numbers ®

**Shake, Roll & Create
Math Equations!**
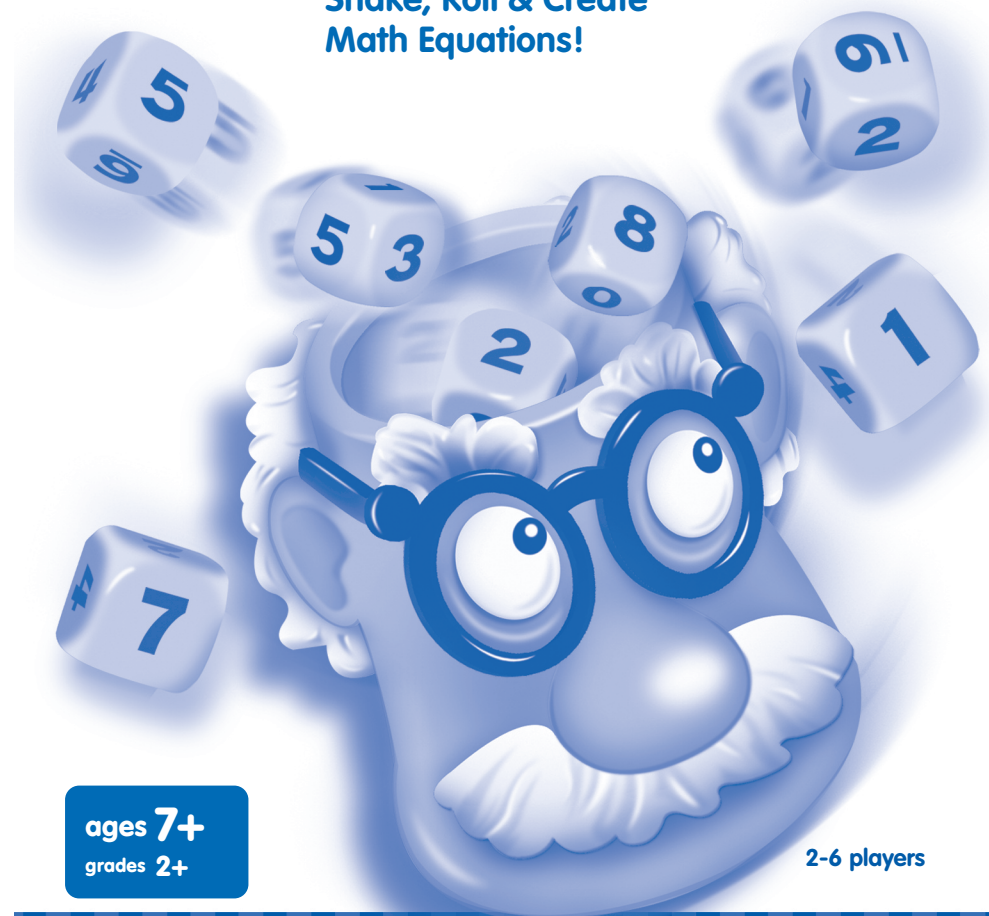
ages 7+
grades 2+

2-6 players

Math

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Object: Be the player that creates the most correct equations using the six number dice rolled.

Game play for 2–6 players

1. Place the six dice into the shaker.

2. Have one player roll the dice out of the head.

3. Once the dice are rolled, place the six dice in the tray, with the numbers rolled facing up. These are the numbers that will be used during game play.

4. Each player should then write the six numbers at the top of the scorecard in the spaces provided.

5. Start the timer. All players write as many equations as they can during that time.

6. Many forms of equations can be made: +, -, x, /, =, <, and > are all possibilities. The trick is to find a combination that works using only the numbers rolled.

   For example, the numbers rolled were 7, 2, 2, 3, 6, 4. The equations below are possible solutions that could be made.

$4 + 2 = 6$	$6 \times 4 = 24$
$2 + 4 = 6$	$6 \div 3 = 2$
$2 = 2$	$6 \div 2 = 3$
$6 - 4 = 2$	$7 + 2 = 6 + 3$
$24 \div 6 = 4$	$26 - 24 = 2$
$6 > 4$	$4 < 6$

7. A number can be used only once in an equation if only one of that number was rolled. However, the answer may repeat a number that was used to create the equation.

   (For example, with the numbers rolled in the example above, you can create $24 \div 6 = 4$ even though only one *4* was rolled.)

   *Exception: You may not repeat a number when creating an equal-to equation ($3 = 3$) if there is only one of that number rolled.

8. Reverse equations are also allowed (for example, $4 + 2 = 6$ and $2 + 4 = 6$).

9. Once the time runs out, the players say their equations aloud.

Scoring

1. Each player receives one point for every correct equation made.

2. Any correct equation that is unique from the other players' equations earns two points.

3. The player who had the most correct equations total earns an additional three points. (If there is a tie, no extra points are awarded.)

4. Game play continues until one player reaches 50 points or another specified total.

Game play for more than six players

To play a game with more than six players, divide players into small groups of 2-4 players. Each team will try to come up with equations together. At the end of the time, each team reads aloud the equations it came up with. Game play and scoring remains the same.

Variations of the game

Please note: In all cases, the game play and scoring will remain the same.

1. Change the variables of the game to focus on different skills or difficulty level. For instance, if you want to focus only on addition, or focus only on subtraction, you can state that only those types of equations can be made.

2. Create a rule that equations must consist of at least one double-digit number.

3. Create a rule that only one equation will count if a reverse equation is used (for example, $4 + 2 = 6$ and $2 + 4 = 6$ only receives one point).