



of Players: 1-8 **Grade:** 2-5th grade **Time:** 30 min **Subject:**

ABOUT THE GAME

“Sumoku is a crossword-style game with colored number tiles that can be played five different ways. In all Sumoku games, game play starts with the roll of a die to create a "key number" – either 3, 4 or 5”. The goal is to get rid of all of your tiles by playing them in lines “crossword-style” where the sum of the numbers equal a multiple of the key number. “A tile is one of six colors, and a color cannot be repeated in a connected set of tiles”. Players take turns placing rows of tiles and connecting them with existing tiles. Points are scored by counting the sum of the tiles you place each turn. If the key number is 3 and you place a 7 and 3 on an existing 2, you would score 10 points for that turn.

*Excerpts taken from BGG Description

WHAT THE GAME TEACHES

Students of all levels can play this game. However, you will want to have the players be of similar math ability. A child with basic adding and skip counting skills will be able to play. Children who know their multiplication fluently will be able to play competitively and use more strategy to make high scoring moves. If it suits the needs of your group you can play collaboratively without scoring, focusing on the math skills. Sumoku is a great way to reinforce counting/adding in the head, especially if you do not allow for scratch paper to be used during the game.



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Please contact us if you have any questions about this game, or if you would like to know about more games that can help make learning fun!

EXAMPLE LESSON PLAN

Prep Time: Minimal

Material Usage: Sumoku Game

Standards and Learning Objectives: The standards covered by Sumoku can start as early as 2nd grade. Younger students can practice their number sense and adding numbers together (2.NS.BT.5), while older students will be able to practice strategic planning and their algebraic thinking skills.

Instruction: Place all the tiles face-down on the play area. Each player will take 8 tiles to start with. Roll the numbered cube to obtain the key number. Explain to students that each row's sum must be a multiple of that number and that no color may repeat on any given row. This allows variance to the game and forces other rows to be made. Each time tiles are placed down, the player will add up the sum of the row and add it to their point total, then they will draw tiles from the face-down pile until they have 8 tiles. Play continues until no more tiles can be played. Players then deduct the sum of their remaining tiles from their points. The player with the most points wins!

Watching the Play: Watching each student as they play will give a good sense of their mathematical ability. The gaming portion of Sumoku is getting your tiles to fit on the game board while abiding by the color rule. With this in mind, the students will make multiple addition problems in their head while thinking on where to place their tiles. Encourage students to be aware of what is on the board, not just in their hand, simply adding one tile on a row of five tiles still demonstrates their addition skills.

Independent Play and Group Games: Sumoku is a wonderful game for the classroom as a free-time activity for students to enjoy with each other after finishing projects and/or independent work. The game can also be played by the entire class by placing them in groups and using a smart board and or document camera if your classroom is equipped with one. Alternatively, using a whiteboard and different color expo markers work just as well. This will allow students to work together as a group and collectively use their math skills to ensure they receive the maximum amount of points. If you decide to play as a group, allowing the kids to use their own scratch paper is useful as not all the students will be able to handle the tiles to help them with their addition. Writing the already present sums on the board or the screen will speed up the adding process with the students and can speed up the gameplay.

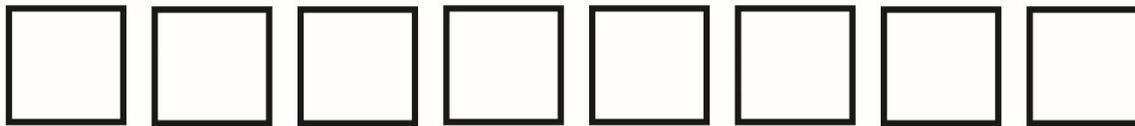
Extended/Optional Learning: Sumoku is a great game to utilize as a tool for simple addition and subtraction problems as well. This can be done by using the worksheet provided. The worksheet is a great way to teach the game as well.



NAME: _____

DATE: _____

NUMBER TILES:



KEY NUMBER

My Answers:



_____ = _____

_____ = _____

_____ = _____

_____ = _____

KEY NUMBER

My Answers:



_____ = _____

_____ = _____

_____ = _____

_____ = _____

KEY NUMBER

My Answers:



_____ = _____

_____ = _____

_____ = _____

_____ = _____