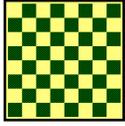
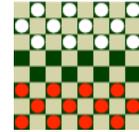


Math Games

Checkers (also known as Draughts) is a two-player board game. Checkers is played on a board which is divided into 64 squares. Each player starts the game with 12 checkers, also called "men".

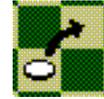


The two players sit across from one another. The board is oriented so a black (dark) square is in the bottom left corner for each player. Checkers uses only the black (dark) squares. You can't move your checkers into a white (red) square.



Moving the checkers

Move your checker forward one space diagonally in either direction to an open black square. A checker can only move forward. You may not land on a square that is occupied by your checker or your opponent's checker. Players alternate turns, making one move per turn.



Crowning a king

When a checker reaches the last row of the board, he is "kinged" or "crowned" and becomes a king. A king moves the same way as a regular checker, except he can move forward or backward. To king a checker, the opponent stacks an extra checker of the same color on top of it. Or, on some games, the player flips the checker to reveal a crown.

Jumping a checker

On your turn, if your checker is next to your opponent's checker, and the black square behind your opponent's checker is open, you must jump over it. After you jump your opponent's checker, remove it from the board. You have "captured" your opponent's checker.



If one jump leads to another jump, you then continue with the next jump as part of the same turn. Continue in this way until all possible jumps are complete. If your checker jumps to the last row and is crowned, you may not make any further jumps, your turn is over.

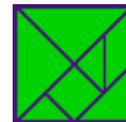
Jumping is compulsory. If you have the opportunity to jump and capture an opponent's checker, you must take it. If you have more than one capturing opportunity, you may choose whichever you prefer. You may not jump over your own checkers. You can jump and capture a king the same way as you jump and capture a regular checker.

Winning the game

A player wins the game when they capture all of their opponent's checkers, or when they block their opponent completely and the opponent cannot move.

Tangram Pieces

- a basic understanding of area without formulas
 - a familiarity with the names of certain polygons (e.g., square, triangle, and parallelogram)
 - the meaning of the term congruent
 - to develop geometric intuition



The Game of Pig (Grades 3–8) This game for two or more players gives students practice with mental addition and experience with thinking strategically. The object: to be the first to score 100 points or more.

How to play: Players take turns rolling two **dice** and following these rules:

1. On a turn, a player may roll the dice as many times as he or she wants, mentally keeping a total of the sums that come up. When player stops rolling, he/she records the total and adds it to the scores from previous rounds.
2. But, if a 1 comes up on one of the dice before the player decides to stop rolling, the player scores 0 for that round and it's the next player's turn.
3. Even worse, if a 1 comes up on both dice, not only does the turn end, but the player's entire accumulated total returns to 0. After students have had the chance to play the game for several days, have a class discussion about the strategies they used. You may want to list their ideas and have them test different strategies against each other to try and determine the best way to play.

Math Games

Product Game

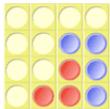
1. Player 1 puts a paper clip on a number in the factor list. No square on the product grid is marked with Player 1's color because only one factor has been marked; it takes two factors to make a product.
2. Player 2 puts the other paper clip on any number in the factor list (including the same number marked by Player 1) and then shades or covers the product of the two factors on the product grid.
3. Player 1 moves *either one* of the paper clips to another number and then shades or covers the new product.
4. Each player, in turn, moves a paper clip and marks a product. If a product is already marked, the player does not get a mark for that turn. The winner is the first player to mark four squares in a row -- up and down, across, or diagonally.

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

1	2	3	4	5	6	7	8	9
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Hangman Game with Math Words - Play Hangman with Math Words!

Hangman is a guessing game for two or more players. One player thinks of a word and the other tries to guess it by suggesting letters.



4 In A Line! Players take turns placing their piece on the board.
To win: connect 4 pieces in a row, column or diagonally on an 8x8 grid

Math Games

Deep Grey - Simple but challenging logic game. The one that picks the last box wins. (18 boxes pick 1 or 2).

Game of Nim

Rules

Nim is a two-player game of logic and strategy. The goal of Nim is to be the player who marks the last of ten circles on the gameboard. A player must mark one or two circles during their turn. The player who marks the last circle wins!

Questions for Students:

- Is this game fair regardless of who goes first or second?
- How many circles do you need your opponent to leave you to ensure that you'll win?
- What is your strategy?
- How would your strategy change if you could pick 1, 2, or 3 circles?