FRACTION-DECIMAL GAME

The Fraction-Decimal game is designed to make children more aware of fraction-decimal equivalence. They have to create a fraction from the rolls of two dice and then convert this fraction into a decimal and find the decimal on the board.

Age range: 5th Grade + **Number of players**: 2-4

Learning: Convert fractions to decimals, rounding to 3 decimal places

You will need

- 20 counters in different colors (one color per player)

- 2 dice
- A calculator

Instructions

- Player 1 throws both dice, and then chooses one of the numbers to be the numerator and the other to be the denominator of a fraction.
- Player 1 then tries to convert this number to a decimal mentally.
- Player 2 checks Player 1's decimal by dividing the numerator by the denominator using a calculator (and rounding to 3 decimal places where appropriate).
- If Player 1 is correct, they get to place their counter on the board covering the decimal up. If Player 1 is incorrect, it is Player 2's turn.
- Player 2 then takes their turn to roll both dice and convert their fraction into a decimal. Player 1 checks this on a calculator.
- The winner is the first player to get 3 counters in a row.

Variations

- The winner is the player with the most counters on the board after a certain time limit (or when the board is filled up with counters). This variation works better for 3 or 4 players.
- To make the game easier (or quicker), a player can choose one dice per turn to re-roll if they wish.
- To make the game even simpler and easier, players can say any fraction which matches a decimal on the board and cover it up, e.g. 'six-tenths matches 0.6'.
- In a 3 player game, one player can be a 'checker' and check the decimals are correct using a calculator.



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Roll 2 dice. Choose one number for the numerator and one number for the denominator.

3

Now convert this fraction into a decimal!

5

Round your decimal to 3dp and cover part of the grid.

0.2	5	0.167	0.333	1	0.6
0.5	1.333	1.25	0.667	6	0.75
0.4	1.2	0.25	0.833	1.5	2
3	1.5	1.667	2.5	0.8	0.667
0.333	1	0.6	4	0.5	1.25

THE FIRST PLAYER TO GET THREE IN A ROW IS THE WINNER!

