

# GETTING STARTED

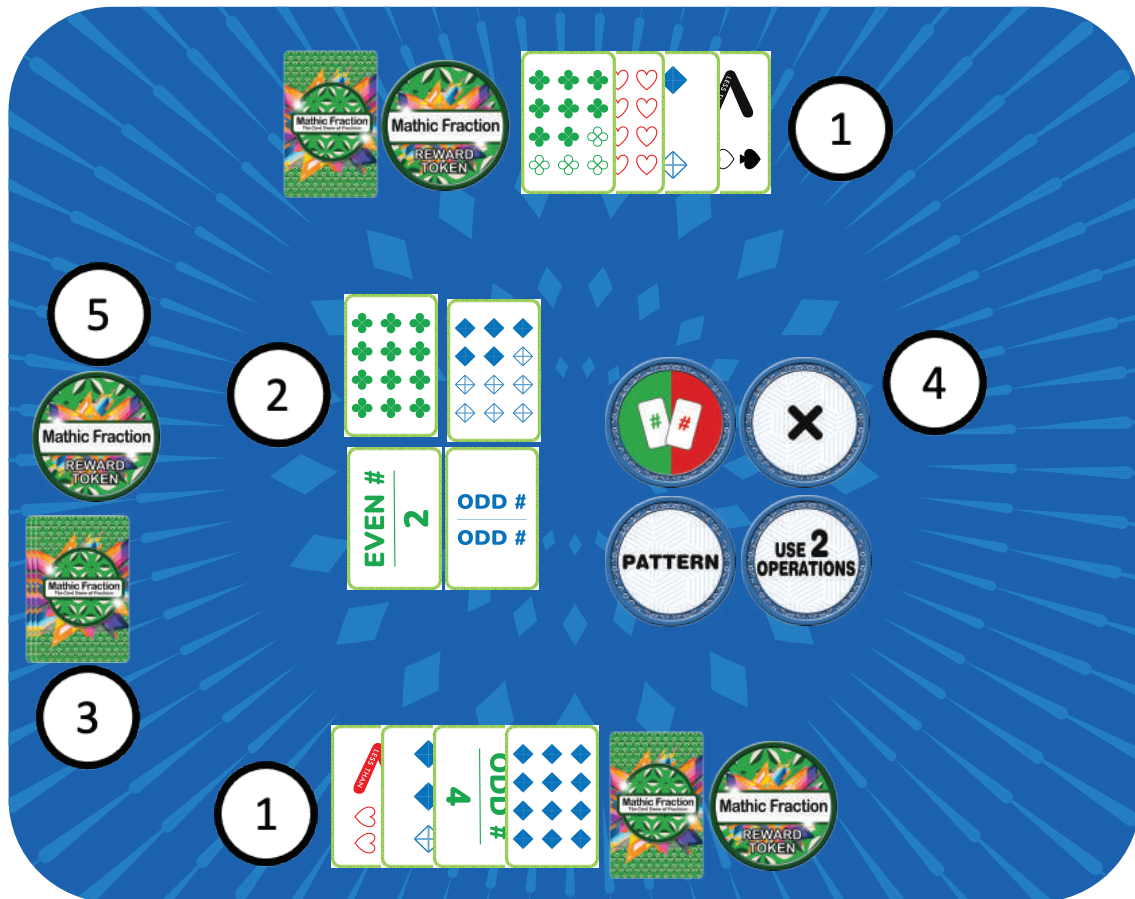
E-RULEBOOK



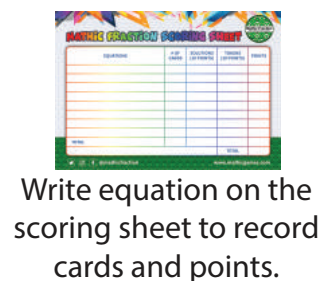
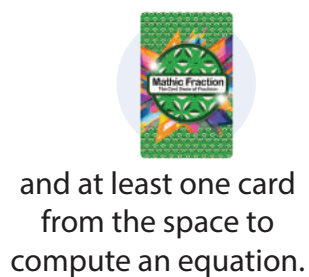
## Game Setup:

1. Shuffle the deck, then deal four cards to each player.
2. Place 4 cards in the middle of the table called the "space".
3. Place the remaining mathic cards upside down to the left of the dealer.
4. Shuffle the reward tokens and place 4 tokens in the space face up.
5. Place the remaining mathic reward tokens upside down to the left of the dealer.
6. The player whose favorite number is biggest goes first to either compute or discard.

The goal of Mathic Fraction is to earn the most points by computing equations and earning tokens.



## How To Play





# GETTING STARTED

## Gameplay:

The player whose favorite number is biggest goes first, then going clockwise, in turns, each player must either Compute or Discard.

**Compute** Use one card from your hand and one or more cards from the space to make an equation, then collect all of the cards in the equation. Computed cards are placed in the collected pile next to the player to be counted at the end of the game.

When computing an equation, the player must:

- Use only one card from their hand
- Use at least one card from the space
- Write their equation on the scoring sheet

**Discard** If a player cannot compute using any of the cards in their hand (or there are no cards in the space) they must put out a card from their hand into the “space”.

**Solutions** If a player during their turn, computes an equation that clears all of the cards. This is called computing a “solution” and awards the player 10 points.

## Player Actions:

There are many ways to play even when it’s not your turn like stealing and challenging equations.

**Stealing Equations** If a player discards from their hand not noticing that the card can compute an equation, any player can steal that equation and any reward points it may earn.

**Challenging Equations** Every equation must be true, so if a player thinks an equation isn’t true they can challenge the equation. If the equation is correct, the challenger loses their next turn. If the equation is incorrect, the player collects no cards or points and loses their turn.

## End of a Hand

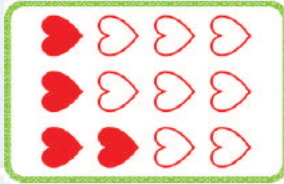
When all players have no cards left in hand, the dealer deals 4 mathic cards to each player, but does not deal any more cards to the space. The game continues until there are not enough cards left in the deck to deal 4 cards to all players. When this happens, the game ends, and any cards left in the space are awarded to the last player to compute cards.

## End of the Game

If a player has 100 or more points at the end of a round, the game ends. Otherwise, play continues with a new round. The first player to get 100 points is the winner. In the case of a tie, the player who had the most points in the last round wins. If still tied, the players share the victory.

# THE CARDS OF MATHIC FRACTION

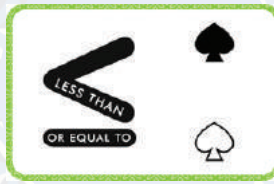
52 CARDS



## Fraction Cards

There are 52 Basic Cards in four suits numbered from 0/12-12/12: Hearts, Spades, Diamonds, and Clubs.

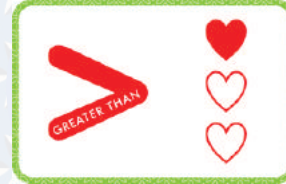
10 CARDS



## Greater Than or Equal to Cards:

These cards represent any number or fraction that is greater/less than or equal to the fraction shown on the card.

10 CARDS



## Greater/Less Than Cards

represent any number or fraction that is greater/less than the fraction shown on the card.

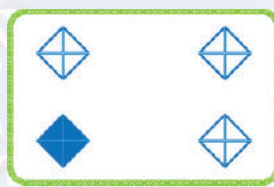
10 CARDS



## Odd/Even Numerator Cards:

The numerator must be even or odd, depending on the card.

8 CARDS



## Simplest Fraction Cards

represent fractions in their simplest form.

10 CARDS



## Odd/Even Cards:

The numerator and denominator must be even or odd, depending on the card.

## Feedback

Please feel free to modify and adapt this game to suit your students / players.

We'd love to hear how you're using Mathic Games!

Fill out the following short form @ [bit.ly/mathicgamesideas](http://bit.ly/mathicgamesideas)

For more information and companion worksheets, please visit:  
[www.mathicgames.com](http://www.mathicgames.com)

# Reward Tokens

There are five types of Reward Tokens:  
Color, Operation, Number, Pattern, and Odd/Even.

- Reward tokens may only be earned for an equation in the same turn in which the equation was played.
- Each reward token is worth 20 points.
- There should always be 4 tokens displayed during gameplay.
- One equation can earn multiple tokens.



## Color Reward Tokens

To earn these reward tokens, cards in the equation must be the same color cards as the colors on the token.



## Number Reward Tokens:

To earn these reward tokens, equations must equal or use the number on the token.



## Odd/Even Reward Tokens:

To earn this token, one side of the equation must have all odd or even numbers as shown on the token.



## Operation Reward Tokens:

To earn this token, equations must use the type of operations shown on the token.

Please note that some tokens can be many operations. The subtraction token can also be a divisible by token when placed vertical. Either less than or greater than token can be used as exponent as found on calculators. Addition symbol can be multiplication



## Pattern Reward Tokens:

To earn the Pattern Token, player must make any mathematical pattern with the cards in the space and one card from the player's hand. Patterns must have at least 3 cards.

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