



# Memory Math Match Game: User Manual

Welcome to Math-Match, a fun and educational card game designed to improve your memory and multiplication skills! 🎮 Test your memory as you match multiplication equations with their answers in a challenging and rewarding 4x4 grid. 🧠 ⭐

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## What This Game is About

Math-Match is an interactive memory card game featuring:

- A 4x4 grid of hidden cards (16 cards total).
- 8 pairs to match: each pair has a multiplication equation (e.g.,  $2 \times 2$ ) and its corresponding answer (e.g., 4).

Match all the pairs to win! 🏆

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## Getting Started

### 1. Starting the Game

- When you launch the game, a cheerful welcome message appears. 🌟
- Enter "0" and press Enter to begin the game. ▶

### 2. Game Interface

- The grid is displayed as hidden cards (?).
  - At the top, you'll see the number of remaining pairs to match.
  - Cards are numbered from 1-16, arranged left to right, top to bottom.
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## How to Play

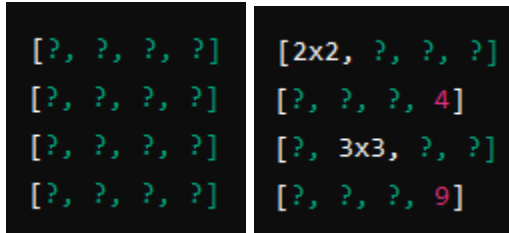
### 1. Basic Rules

- Flip two cards per turn to find a match.
- Match multiplication equations with their answers. ✅
  - Example:  $2 \times 2$  matches with 4.
- Keep matching until all pairs are found to win the game. 🎲

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## 2. Making Moves

- Enter a number between 1 and 16 to select a card.
- After selecting your first card, enter another number for the second card.
- Invalid inputs (like numbers outside the range or already matched cards) will be ignored. 🚫



*"An example of the 4x4 grid in Math-Match, where hidden cards are revealed and matched during gameplay."*

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## 4. Matching Process

- When two cards are selected:
    - Matched? 🎉 They'll stay face up.
    - Not a match? 😬 They'll flip back after a brief delay.
  - You'll get feedback on whether your cards matched or not.
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## 5. Game Features

- 🔊 Sound effects: Hear satisfying sounds when cards flip!
  - ⌚ Timer: Track your total playing time.
  - 📊 Remaining pairs: Always displayed at the top for easy reference.
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## **Winning and Exiting**

### 1. Winning

- Match all 8 pairs to win! 🎉
  - When you win, you'll see:
    - A congratulatory message 🎊
    - Your total playing time in minutes
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### 2. Exiting the Game

- Enter "0" anytime during card selection to exit the game. 📄
  - You'll see a warm goodbye message. 🤖👋
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## **Tips for Success**

### 1. Memory Strategies

- 🧠 Remember positions of the cards you've seen.
  - 🔍 Focus on equations you already know to find matches faster.
  - 📋 Systematic approach: Use the grid's numbering to work methodically.
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### 2. Mathematical Tips

- The game features multiplication tables from 2x2 to 5x5.
  - Equations and answers are randomly shuffled each time you play. 🎲
  - Practice your multiplication tables to boost your skills! ✨
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## **Common Issues and Solutions**

### 1. Invalid Inputs

- Enter a valid number (1-16) or your input will be ignored.
- Avoid selecting already matched cards
- Ensure you press Enter after your input.

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## 🌟 Fun Challenges

Boost your gameplay experience with these optional challenges:

- 🕒 **Speedrun Challenge:** Match all pairs as fast as possible!
- 💡 **No-Mistake Run:** Complete the game without flipping mismatched cards.
- 🏆 **Personal Best:** Beat your own high score or challenge a friend!

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## 🎉 Enjoy Playing!

Math-Match isn't just a memory game—it's also a fun way to improve your multiplication skills! 🌟

Take your time, focus, and try to beat your best completion time with every round. Good luck! 🍀

🧮 Math + Memory = Fun! 🧮