

# The Mad Minute!

The **Mad Minute!** is designed to practice basic math facts. There are forty problems on each page. Teachers can make up their own pages to practice particular concepts like, doubles, doubles + 1, or facts up to +x. **Mad Minute!** is most effective for practicing addition, subtraction and multiplication.

Each child is given a **Mad Minute!** page. All the children in the group may be working on a different level and still do **Mad Minute!** together.

The teacher times the children for one minute. Papers are corrected and the score is the number of correct answers. Reward students for **any** improvement since their last **Mad Minute!** Teachers can assign five facts for the student to take home to practice for the next class. In this way, students have the opportunity to improve their score on the **Mad Minute!** each time. (See: Mad Minute Pages.pdf for an example and blanks for making your own pages.)

## 24 Game

This game can be used by individual students to see how many they can solve in 3 or 5 minutes or by groups of students in cooperation, or by teams competing against each other. Everyone can work on the same card and the first one who can give a correct solution wins the card. Another variation is for teams of different ability levels to work on cards of the appropriate level and compete to see which team gets the most cards in 3 or 5 minutes.

The object is to win points by being the first to make 24 using all four numbers on a card.

Cards are worth 1, 2, or 3 rated by difficulty. The number of colored circles on the corner of the card shows its difficulty.

Players can add, subtract, multiply and divide. All four numbers must be used, but may not be used more than once. The result of an operation may be used only once.

Example: A card with 8, 5, 4, 7

$$4 + 8 = 12$$

$$7 - 5 = 2$$

$$2 \times 12 = 24$$

or a card with 2, 2, 4, 7

$$2 \div 2 = 1$$

$$7 - 1 = 6$$

$$4 \times 6 = 24$$

An example of an **incorrect solutions**: A card with 4, 4, 3, 2

$$2 + 4 = 6$$

$$3 - 2 = 1$$

$$1 \times 4 = 4$$

$$4 \times 6 = 24$$

because the 2 was used twice.

or  $3 \times 4 = 12$

$$12 \div 4 = 3$$

$$12 \times 2 = 24$$

because 12 was used twice

or  $3 \times 4 = 12$

$$12 \times 2 = 24$$

because only 3 numbers were used.

The secret is to look for patterns.

(Cards may be printed from 24 Game Cards.pdf)

## Cooperative Problem Solving

Use a Sum Square Recording Sheet with each set of cards. Place cards, each with a number from 0 - 9. Four students or four pairs of students try to solve the problem.

Each student or pair of students receive one of four cards. They are to follow the directions on their card. But unless all four students share their information and work cooperatively, they cannot solve the puzzle.

Watch to make sure one student in the group is not dominating, taking the cards and solving the puzzle. The point of this exercise is cooperation. Encourage the stronger students to help the weaker ones, giving clues or being the "scribe" for the group.

(Cards may be printed from Cooperative Problem Cards.pdf)

# Card Games

## Addition Rummy

The object of this game is to get rid of cards by forming “sets” of cards. A “set” is three or four cards with the same sum. This may be played with 2-6 players.

Deal 6 cards (7 if 2 players) one at a time to each player. Place the remaining cards face down to form a “draw” pile. Turn the top card face up on the table to start the discard pile. The player to the left of the dealer draws a card from either the drawing pile or the discard pile and forms a set if possible which he lays face up before him. He then must discard one card to the discard pile. He may form as many “sets” as he can, but he must only draw and discard once. Each player draws, plays, and discards in turn. Any player may play the fourth card to any set on the table.

A game is complete when one player lays down all his cards or when no cards remain in the drawing and discarding piles. All players total the cards remaining in their hand. The player with the smallest number wins.

To help beginning students or weaker students, each player’s hand may be laid on the table in front of them so they can be “coached” in forming “sets”.

(Cards may be printed from Addition Rummy Cards.pdf)

## Capture

Deal each player five black cards. These cards are placed face up in front of each player. The red cards are placed face down in the center. The first player draws one red card and turns it face up. If this card has the correct answer to any black card of his, he captures the red card. Both cards are placed face down and are no longer played until the end of the game. The player now draws another black card to keep his hand of five cards complete.

If the player cannot match the answer card he passes. The red card remains face up, to be matched by other players when it is their turn. The next player draws a red card and tries to match any of his black cards. He captures any cards he can match. The game ends when one player has used all his cards and no cards remain to be drawn. The winner has the largest number of matched cards.

(Cards may be printed from Addition Capture.pdf and Times Capture.pdf)

## Old Number Game

This game is played with the same cards as Capture, except that a Red X card is added.

All cards are dealt to 7 - 14 players. Some players will have an extra card. Each player matches problems (black) with answers (red) cards and shows these to the other players. These matched pairs are placed in the discard pile.

After all the matched pairs are discarded, the dealer takes a card from the player on his left. (Of course he must not see what card he is picking.) If the card he picks matches some card in his hand, he **must** throw the matched pair into the discard pile. The player to the left of the dealer then takes a card from the player on his left and so on. Picking a player's card continues in this way until some player matches his last card. He is the champion. But the game continues until someone is left with only the Old Number - Roman numeral X. He is the loser.

(Cards may be printed from Addition Capture.pdf and Times Capture.pdf)

## Fact-O

Deal five cards to each player. One card is turned face up and the remaining cards are placed in a stack face down.

The numbers on the face up card may be added, subtracted, multiplied or divided.

The person to the left of the dealer plays a card from his hand with the same sum, difference, product or quotient as the face up card. If he can not play a card, he must take a card from the face down stack. He continues to draw until he can match. His turn ends when he matches the answer and puts his card on top of the face-up cards.

The game continues until someone uses all his cards, he is the winner.

Example:  $6, 2 = 8, 4, 12, 3$

(Cards may be printed from Facto.pdf)

## **War**

War may be played with a group or with just two players using the Minus Cards. Deal all cards among players. Everyone turns over 1 card at a time. Whoever has the lowest answer wins all the cards on the table. If two have the same number, they each turn over another card. Whoever has the lowest wins all the cards.

(Cards may be printed from: [Minus Cards.pdf](#))

## **Bingo**

Bingo is also a great group game. Cards with 16 squares may be used. For subtraction practice, numbers 1-18 may be randomly placed in the 16 squares. For addition practice, numbers 4-20 may be randomly placed in the 16 squares. For multiplication practice, answers for any times tables being learned may be randomly placed in the 16 squares.

The teacher calls out a math problem. Students cover the answer if it is on their card with a button or bean. The first student to cover four answers in a row wins the turn.

(See examples: [Bingo.pdf](#) for making your own cards.)

## **Concentration**

Place pairs of cards face down randomly on the table. Students take turns turning over two cards. If they make a pair, they may take those two cards and try again. If they don't make a pair, they replace them face down. The next student may take their turn. The winner has the most cards at the end of play.

This may be played with any of the sets of cards. It is best played for review of facts fairly well known by the group. If students have to work too hard to know the answers, they lose interest in this game quickly.