# Mattie's Math Games Help

#### Introduction

Mattie's Math Games is a collection of games designed to teach three to five year olds to third graders number recognition, counting, and number order, addition, subtraction, multiplication and division, all while the child is engaged in fun activities. Problem solving and analytical thinking skills are developed as the child finds his or her way through these very hands-on games. The colorful graphics, voices, sound effects and background music all add to the highly interactive, very intuitive play. Mattie is there to help by giving instructions and clues. And, incorrect responses are treated humorously, without pressure, allowing the child a relaxed, pleasant atmosphere in which to learn. The additional painting activity is included as a fun way for the child to paint Mattie's living room in colors of their choosing. Instructions are provided for saving and printing the child's art work.

# Requirements

486 or better processor, 256-color video, Windows 95, sound card, mouse

### Order

The full program contains all levels of all six activities. Four of the games have many different levels of number recognition, addition, subtraction, multiplication and division. The option to set or reset the level for each of ten saved names is easy and intuitive. Additionally, in "Mattie's Fun With Music" game, there is the option to save and load created songs, and to change the instrument for a completely different sound. Order the full version by clicking on the phone in Mattie's living room, selecting 'Order' and following the instructions, or by finding the file order.doc, filling in the order blank, and choosing File/Print.

#### Installation

Click on Start/Settings/Control Panel. Double-click on "Add/Remove Programs" and click on the "Install" button. You will see the message "Insert the program's first installation floppy disk or CD-ROM, and then click Next." If the program is on a disk or on your hard drive, click on "Next". To find the install program on your hard drive, on the next screen click on "Browse" and select the directory or disk where your unzipped program files are located (e.g., if you downloaded this program from CompuServe, select c:\cserve\download, or if the files are on a disk on a: or b: drive, select a: or b: ). Double-click on setup.exe and click on "Finish." If the program is on a disk, Windows 95 will find the install program, then click on "Finish." On some systems, installing the program to the same directory where the unzipped files are located, may cause a problem completing installation or running the program. If this occurs, install the program to a different directory. Once the files have been copied, install will place the program in Start Menu Programs. To start the program click on Start/Programs/Mattie's Preschool Math Games.

#### Uninstall

Click on Start/Settings/Control Panel. Double-click on "Add/Remove Programs". Scroll down the list of programs and click once on Mattie's Math Games. Click on the Add/Remove button to uninstall this program.

## **Play**

The six games are easy to find. The mouse cursor changes when it is moved over the toy corresponding to a game. Click on one of the toys to play that game. In addition, there are four other fun things to do. Try clicking on the teddy bear, table top, mouse trap and the phonograph player.

## **Mattie's Trapeze Save**

The first level of "Counting By ..." is available in the evaluation version of Mattie's Math Games. The other levels are available only in the ordered version of the game. Start "Mattie's Trapeze Save" by clicking on Mattie. Your child saves the day by finding the missing number and placing it in the correct order on the trapeze. Mattie starts the game by asking, "Where's the missing number?" Notice, when moving the mouse cursor over a numbered block at the bottom of the screen, the block will brighten. This shows the child that something can happen here.

The levels in Mattie's Trapeze Save are all precursors to multiplication skills. Children learn how to count by ones, twos, etc., up to counting by nines. Learning these sequences, and eventually memorizing them helps children when they learn their multiplication tables.

To play, click once on a numbered-block. Then, when moving the mouse, the block "sticks" to the cursor. When the chosen block is *near* the blank block on the trapeze, click once more. To put that block back and choose a different one, just click that block anywhere else on the screen, away from the trapeze, and it will float back to its original position.

If an incorrect number was chosen, Mattie humorously responds, and that number is bounced from the screen. If your child often seems to choose the incorrect response, don't worry! Incorrect responses are so much fun that the child may choose them most of the time *knowing* the correct response.

After a correct response, Mattie counts the numbers in order and provides further encouragement.

## Mattie's Lazy Cat Catch Game

The first level of number recognition, addition, subtraction, multiplication and division are available in the evaluation version of Mattie's Math Games. The other levels of this activity are available only in the ordered version of the game. Play Mattie's Lazy Cat Catch Game by clicking on the cat on the bookshelf. In this activity your child learns to count and find the fish with the correct number.

Play starts with the cat on a skateboard in the lower right-most area of the waterfall. From this position, no fish can be caught. Mattie says, "Catch the correct number." To play the game, the child counts the small fish on the right part of the screen below Mattie (in the number recognition levels), or, solves the mathematical equation (in the addition, subtraction, multiplication and division levels), and moves the mouse back and forth, thereby moving the cat. The cat is positioned under the correctly-numbered fish. Notice that the small fish are organized to allow the child to begin learning to count by fives.

If an incorrectly-numbered fish was chosen, Mattie responds humorously by raising her umbrella and bouncing the fish from the screen. If your child often seems to choose the incorrect number, don't worry! Especially in this game, incorrect responses are so much fun that the child will want to bounce as many fish from the screen as possible. If he or she does nothing more than bounce fish from the screen, with an occasional catch, you know they know the correct number - they're learning! After a correct response, the fish is caught, Mattie says the number and encourages the child further.

## **Mattie's Driving Count Game**

The first level of number recognition, addition, subtraction, multiplication and division are available in the evaluation version of Mattie's Math Games. The other levels of this activity are available only in the ordered version of the game. Play "Mattie's Driving Count Game" by clicking on the car on the bookshelf. The object of this game is to pick up as many circles as Mattie requests.

Mattie says, "Pick up the correct number of circles, and click on the stop sign." The number (in the number recognition levels) or the mathematical equation (in the addition, subtraction, multiplication and division levels) are located below Mattie. Below the road in the car's interior with glove box.

To play the game, move the mouse to the left, stopping to click on objects to be collected. The car must be at least partially on the object in order to be able to pick it up. Collected items are stored in the car's glove box.

As the car moves further to the left, the road starts scrolling to the right, so that more parts of the road are visible. When the mouse reaches the end of the mouse pad, just pick up the mouse and put it down on the right most part of the mouse pad to continue. This very quickly becomes automatic for the child.

When all of the items are picked up, click on the stop sign located in the lower left part of the screen. If an incorrect number of items was collected, Mattie counts the items and says "You need more" or "You have too many." If there are too many items in the glove box, just click on any one of them to remove it. After a correct choice, Mattie counts the items in the glove box and displays a multimedia treat for the child.

### **Mattie's Fun With Music**

The option to save created songs, and four different musical instruments are available in the full ordered version. Play "Mattie's Fun with Music" by clicking on the birdhouse on the bookshelf. This activity was designed to teach preliminary music concepts while the child is having fun exploring this musical environment.

To make it easy to explore, the cursor changes over different parts of the screen. Click on one of the "grumps" and it will sing its note. Watch out for naughty grumps if there is no activity for a period of time! Pick up a musical note by clicking once on the whole, half or quarter note at the bottom of the screen and moving it to a position on the staff. Click once more to place that note on the staff. Place many notes on the staff and click the "Play" button to hear your new song. To try something different with the same newly created song, click on one of the four instrument numbers for a completely different sound. Your child's songs can be saved to disk and played again another day, or changed and resaved. A number of songs are provided with the ordered version. There are no levels in this activity.

### Mattie's Moon Guess Game

Play "Mattie's Moon Guess Game" by clicking on the moon on the bookshelf. The goal of this game is to guess which number Mattie is thinking of (in the number recognition levels), or the solve the mathematical equation (in the addition, subtraction, multiplication and division levels) and click on the correct number. This game encourages problem solving, analytical thinking, number order, and the concepts of lower and higher, less and more. Hints can be turned on or off at any time during game play.

Mattie will ask your child to "Try to guess the number." When the mouse if over any number, the cursor will change to a pointing hand. To play the game click on a number. Mattie will float to that number. If the number was not the correct one, Mattie will say either, "Try higher" or "Try lower." If the number was the correct one, she will give you a piece of the puzzle, and tell you "Now find the next puzzle piece." When all of the puzzle pieces are collected, Mattie will say, "Now put the puzzle together." Now the mouse cursor will show the pointing hand only over the puzzle pieces. There are a different number of puzzle pieces depending on the level.

Moving the puzzle pieces around is very easy. Click on any piece and it will now have a brighter blue border around it to show that it has been selected. Click on the same puzzle piece and it will be de-selected. Click on two puzzle pieces and they will be swapped. The child will enjoy not only putting the puzzle together but also the multimedia show waiting for him or her.

#### **Dimmed Numbers**

Notice that when in some levels, some of the numbers are dimmed and unavailable for play. This shows the child that only some numbers can be chosen.

#### Hints

Hints are always set off at the beginning of each journey into the Moon Guess Game. When hints are on, only the numbers which can be selected are shown in bright colors, the other numbers are dimmed. With hints on, only those numbers which have not been eliminated are bright. When the child selects, say, 10, and the correct guess number is 5, Mattie will say "Try lower," and the numbers above and including 10 will now be dimmed, showing the child that the correct number is less than 10. To turn hints on click on the 'Hints Off' button. This button will change to 'Hints On' and blink a few times. To turn hints off, click on the 'Hints On' button.

### **Mattie's Paint**

Play "Mattie's Paint" by clicking on the round colored box in the bookshelf. Mattie's Paint is a fun way for a child to experiment with colors, while painting Mattie's living room. Pick a color by clicking on it. This color now fills the larger box at the right of the palette. Then click on a part of the screen and it will be filled with the selected color. Clicking on a black outline on the screen will have no effect.

Your child's art work can be saved and printed at a later time. To save the picture when it is on the screen, click the "Paint Screen" button on your keyboard. This puts the picture into the Windows clipboard. Then when your child is finished playing with Mattie, open a paint program. You can use the paint program that comes with Windows 95 by clicking Start/Program/Accessories/Paint. When in Paint, select Paste from the Edit menu. Your child's work can be changed, if desired, and printed by selecting File/Print.

#### Levels

The levels available in Mattie's Math Games are:

#### **Number Recognition**

Numbers 1 - 5 Numbers 1 - 10 Numbers 1 - 20 Numbers 0 - 100

#### Addition

Addition through x + y = 5Addition through x + y = 12Addition through x + y = 18Fill in the blank Add three single-digit numbers Add two two-digit numbers with no regrouping Add two two-digit numbers with regrouping Add two three-digit numbers with regrouping Add two three-digit numbers with regrouping

### **Subtraction**

Subtraction through 5 - x = ySubtraction through 12 - x = ySubtraction through 18 - x = yFill in the blank Subtract two two-digit numbers with no regrouping Subtract two two-digit numbers with regrouping Subtract two three-digit numbers with regrouping Subtract two three-digit numbers with regrouping

## Multiplication

Multiply up to  $2 \times 9 = 18$ Multiply up to  $6 \times 9 = 54$ Multiply up to  $10 \times 10 = 100$ Fill in the blank

#### Division

Division to 18 / 2 = 9Division to 54 / 6 = 9Division to 100 / 10 = 10Fill in the blank

### Counting By ...

Counting By 1's
Counting By 2's
Counting By 3's
Counting By 4's
Counting By 5's
Counting By 6's
Counting By 7's
Counting By 8's
Counting By 9's
Counting By 10's

Not all levels are available in each activity. Mattie's Moon Game has all levels except the Counting By ... levels. Mattie's Trapeze Save game contains all the Couning By ... levels. The Lazy Cat Catch Game and the Driving Count Game contain most of the number recognition, addition, subtraction, multiplication and division levels, where appropriate.

Repetition is very important for children learning math. Even though the child has learned some levels, they are still chosen in play. Children also need to continue to play at levels at which they are competent to build self-confidence.

You can easily set a new level yourself by clicking on the Level button within an activity and then selecting the desired level. Levels for each activity are saved to disk for use the next time your child plays the game.

## Help

Click on the phone in the main screen to get help about playing the game, ordering the game, and playing the various activities. Click on the Help button (question mark) in any activity to get help about playing that game.

# **Back to Mattie's Living Room**

Click on the Back to Mattie's Living Room button (curved arrow) to get back to the main activity screen in order to select another activity or to exit the program.

#### Quit

Click on the door in Mattie's living room to quit the game.

### Support

LatticeWork Software, Inc. can be reached for support at:

LatticeWork Software, Inc. P.O. Box 362 Lafayette Hill, PA 19444 USA

or via email to latticewrk@aol.com

or via email to 74453,2112@compuserve.com

Please visit our web page at:

http://members.aol.com/latticewrk/lattice.htm