Grades 1 through 6
Addition & Subtraction
Multiplication & Division
Fractions, Decimals & Percents

Davidson.



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### **TABLE OF CONTENTS**

J.

- 1 INTRODUCTION
- 5 STARTING MATH BLASTER PLUS
- 5 Included in this Package
- Hardware Requirements
- 5 5 6 Starting the Program
- Self-booting Instructions
- 6 8 Signing In
  - Registering Your Five-year Warranty
- 8 Purchasing a Back-up Copy

#### USING THE DAVIDSON STUDENT DESKTOP INTERFACE 9

- 9 The Pull-down Menus
- 10 The Icons

13

14

16

17

18

45

- 10 Message and Dialog Boxes
- USING MATH BLASTER PLUS 11
- 11 Choosing a Subject, Stage, and Format
- Learning with the Five Math Blaster Plus Activities 13
  - Activity 1: Countdown
    - Activity 2: Ignition
  - Activity 3: Lift-off
  - Activity 4: Orbit
    - Activity 5: Blasternaut Game
- Printing a Certificate of Excellence 20
- Keeping Records 21
- 23 USING THE EDITOR AND TEST MAKER
- 23 Creating Your Data File
- Using Your New File with Math Blaster Plus 28
- 29 Creating a Test
- 30 ABOUT THE AUTHORS
- 31 APPENDICES
- 31 A. Menus
- 33 B. Math Facts
  - C. Printer Setup (Apple Version)
- 51 D. Hard Disk Instructions (IBM Version)

## QUICK START

#### Start the Program

- Apple Insert program disk, I label side up, in drive 1.
  - Turn on computer.
- **IBM** Boot DOS (2.1 or more).
  - Insert program disk, label side up, in drive A.
  - At the A>, type MBP.

#### Sign In

- Enter your name. Then press <Return> or click OK.
- Use the arrow keys or the mouse to select the correct month. Press <Return> or click OK. Enter the date and year in the same way.

#### Select a Subject

Mouse Keyboard	•	Pull down the Subject menu and select a subject. Press <esc> to access the menu bar. Use the right arrow key to access the Subject menu and</esc>
		the down arrow key to select a subject <return>.</return>
Select a Stage		
Mouse	•	Pull down the Stage menu and select a stage (level of difficulty).
Keyboard	•	Press < Esc> to access the menu bar and select a stage.
Select an Activ	vity	
Mouse	•	Click one of the five icons on the Main screen.

- Keyboard Use arrow keys to select an icon; press <Return>.
  - To leave an activity, select Stop from Activity menu.

### **INTRODUCTION**

Welcome to *Math Blaster Plus!* With the help of the Math Blasternaut, you are about to turn your computer into a powerful tool for building a sound foundation in math.



*Math Blaster Plus* will help you or your students master the basic math facts in addition, subtraction, multiplication, division, fractions, decimals, and percents – essential building blocks upon which all other math is based.

Students enjoy the motivating challenges and positive feedback this program offers. Colorful graphic presentations capture students' interest and retain their attention. Math becomes an interesting activity for students of all ages to enjoy as they learn. Learning is a positive experience; math is fun!

Math Blaster Plus takes full advantage of the unique benefits of computer instruction. Students work at their own pace, receive positive reinforcement as they progress, and strengthen their areas of weakness. Students learn, practice, and apply math facts. They achieve success as they learn; success builds upon success. Students are successful not only when they are using the software but in other math activities as well.

Math Blaster Plus can be used both at home and in the classroom. Teachers find it useful to help reinforce the material they've presented in class. Math Blaster Plus supplements math instruction; it doesn't replace it. The program is most effective when it is used after a concept has been introduced in class.

For example, after a student understands the concept of multiplication, *Math Blaster Plus* becomes an effective tool for mastering multiplication tables.

Parents find *Math Blaster Plus* valuable as an after-school activity for their children. The program is often recommended to parents by teachers as a supplement to classroom instruction. Because of the extensive material the program covers, different children in the same family can use *Math Blaster Plus* year after year.

*Math Blaster Plus* has many special features which enhance learning and motivate students:

#### **Extensive Material**

*Math Blaster Plus* covers all the operations students encounter in elementary school. Over 750 math facts are grouped into 30 stages representing various levels of difficulty.

#### **Review Lessons**

Students may review their math facts with the *Math Blaster Plus* review option. These files contain problems with combinations of inverse operations, i.e., addition *and* subtraction, within the same family of facts. This is an excellent way to review math facts that have already been mastered.

#### Supplementary Workbooks

Students may continue mastering their math facts with Davidson's *Math Blaster* workbooks. Twelve workbooks are available for grades 1 through 4. See the back of the manual for details.

#### **Multiple Activities**

Students master math facts utilizing any or all of five motivating learning activities designed by teachers. Each activity builds upon the previous one, so that the math facts are not only reinforced but used in a variety of ways, and students develop confidence as they learn.

#### Davidson Student Desktop Interface

This specially-designed learning environment with pull-down menus allows students to view and select all of the options, subjects, and stages from one screen. The colorful icons on the Main screen represent the five *Math Blaster Plus* learning activities.

#### **Blasternaut Character**

The engaging Blasternaut that appears throughout the program takes center stage in the highly motivating arcade-style Blasternaut game. Students enjoy the action and the challenge of correctly landing the Blasternaut in his space station.

#### Certificate of Excellence

As students master their facts and earn a perfect score, they may print a graphic certificate of excellence. This award provides a goal, recognizes their achievement, and reminds them of the fun they had.

#### **Record Keeping**

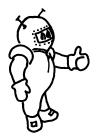
Students, as well as their parents and teachers, can keep track of their progress with the *Math Blaster Plus* record keeping system. Records can be saved to the disk and printed out for further reference.

#### Editor

To further extend the life of the product, and customize it to individual students' needs, the easy-to-use Editor allows you to enter your own math problems for use with all five *Math Blaster Plus* activities.

### Test Maker

A special feature of the Editor is a Test Maker which allows you to create and print a math test in hard copy form.



You'll find *Math Blaster Plus* one of the most comprehensive pieces of educational software you'll ever use. And you'll find it one of the most creative examples of what a powerful learning tool your computer can be. Learn and enjoy!

## STARTING MATH BLASTER PLUS

## Included in this Package

Your Math Blaster Plus package contains

- the Math Blaster Plus disk
- this manual
- a registration card

#### **Hardware Requirements**

Math Blaster Plus runs on the following Apple, IBM, and MS DOS computers:

#### Apple IIe, IIc, IIGs

- 128K, 1 or 2 drives
- extended 80 column card
- printer (optional)
- mouse (optional)

- IBM (and MS DOS computers)
- 256K, 1 or 2 drives
- color/graphics adapter
- printer (optional)
- mouse (optional)

#### **Starting the Program**

To start Math Blaster Plus, follow the steps for your computer.

#### Apple

- Insert program disk, label side up, in drive 1.
- Turn on computer.

#### IBM

- Boot DOS (2.1 or higher).
- Insert program disk, label side up, in drive A.
- At the A>, type MBP.



#### **Self-booting Instructions**

To make the IBM version self-booting:

- Boot the DOS disk (2.1 or higher) in drive A.
- If you have 2 drives, insert Math Blaster Plus in drive B.
- Type sys b: <Return>. Follow the screen prompts. (If you have only one drive, insert the MBP disk when prompted for the disk for drive B; insert DOS when asked for the disk for drive A.
- When the A> reappears, type copy command.com b: <Return>. Follow the screen prompts.
- When the A> reappears, type copy graphics.com b: <Return>.

The IBM version of *Math Blaster Plus* may be copied on a hard disk. For instructions, see Appendix D.

### Signing In

On the opening screen, you will see a dialog box.

• Enter your name in the dialog box <Return>.

Enter your name.	
Julie Schwartz	
OK	

• Enter the month. Use the arrow keys on the keyboard or use the mouse to click on the screen arrows. When the correct month shows in the box, press <**Return>** or click **OK**. If your computer already has a clock/calendar, you will not be asked to enter the date.

Select the month.	$\leftarrow \rightarrow$
January	
OK	

• Enter the date and year in the same way.

Select t	he date.	$\leftarrow \rightarrow$
8		
ОК	January	

Select t	he year.	$\leftarrow \rightarrow$
1988		
ОК	January	r 8,

Note to IBM users: When the Main screen appears, access the File menu and select **MB+ Setup**. Designate the type of printer you will use and change the speed option if you wish. The program may run too fast on some computers. Increase the delay number in the box to decrease the speed at which the program will run. Registering Your Five-year Warranty Davidson & Associates, Inc. provides a five-year warranty on *Math Blaster Plus* and will replace, free of charge, any malfunctioning or damaged disk. Complete and return the enclosed registration card. This ensures that you will receive information about the latest updates and new programs.

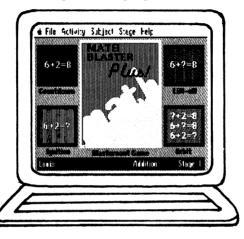


#### Purchasing a Back-up Copy

The program is copy-protected. You may purchase a back-up copy for \$10.00 when you send in your registration card. Back-ups are available on 3 1/2" or 5 1/4" disks. Be sure to specify the disk size you wish to purchase.

# USING THE DAVIDSON STUDENT DESKTOP INTERFACE

*Math Blaster Plus* utilizes the new Davidson Student Desktop Interface which allows you to move from one part of the program to another with ease.



### The Pull-down Menus

At the top of the *Math Blaster Plus* Main screen is a menu bar. You may access the menu bar with either the mouse or the keyboard.

#### Mouse

- To pull down a menu, point to an item on the menu bar and hold down the mouse button.
- Once the menu is pulled down, drag the pointer to the desired item, and release the button to select.

### Keyboard

- Press <**Esc**> to access the menu bar.
- Use the right and left arrow keys to pull down a menu.
- Use the down arrow key to highlight the desired item <Return>.

### The Icons

The five *Math Blaster Plus* activities are represented by colorful icons on the Main screen. You may access an activity by selecting an icon with either the mouse or keyboard.

### Mouse

- Double-click one of the five activity icons on the Main screen. **Keyboard**
- Use arrow keys to select an icon; press < Return>.

You can also access an activity by highlighting the activity icon and selecting **Start** from the Activity menu.

To leave an activity,

 Press C S (Apple version) or S (IBM version) or select Stop from the Activity menu.

### **Message and Dialog Boxes**

When *Math Blaster Plus* wants you to do something, it will prompt you with a message on the screen. If there is a choice for you to make, or information you need to enter, a dialog box will appear. For example, you will be asked to select a difficulty level when you start the Blasternaut Game. You may do this by using the keyboard or the mouse.

You will find that the new Davidson Student Desktop Interface allows you freedom to move from one part of the program to another quickly and efficiently. It makes using the computer easier than ever before and allows you to focus your attention completely on learning the material.

## **USING MATH BLASTER PLUS**

Now that you are familiar with the Davidson Student Desktop Interface which *Math Blaster Plus* utilizes, you are ready to focus on mastering the material and reinforcing it in a variety of ways.

#### Choosing a Subject, Stage, and Format

Before starting on one of the *Math Blaster Plus* activities, you should first select a subject. There are over 750 math facts covering five subject areas: 1) addition 2) subtraction 3) multiplication 4) division and 5) fractions, decimals, and percents. In addition, there is a review option which contains combinations of facts utilizing inverse operations; for example, problems in addition *and* subtraction are presented for review in Stage 1.

Problems in each subject area and in the review option are divided into six stages of difficulty. You may choose to have problems presented in vertical, horizontal, or mixed (combination of vertical and horizontal) format.

- Pull down the Subject menu on the menu bar, and select a subject: Addition, Subtraction, Multiplication, Division, Fractions (includes decimals and percents) or Review. A check mark will appear in front of your selection.
- Pull down the Stage menu and select a stage (1 through 6).
- Pull down the Stage menu again and select a format (horizontal, vertical, or mixed).

Use this chart to help select a stage on which to begin. The grades listed are those in which the facts are usually introduced. Older students will find all of the stages useful for mastery or review. See Appendix B for a complete listing of problems.

Grade 1	Addition	Subtraction	Review
	Stages 1, 2, 3	Stages 1, 2, 3	Stage 1
Grade 2	Addition	Subtraction	Review
	Stages 4, 5, 6	Stages 4, 5, 6	Stage 2
Grade 3	Multiplication	Division	Review
	Stages 1, 2, 3	Stages 1, 2, 3	Stage 3
Grade 4	Multiplication	Division	Review
	Stages 4, 5, 6	Stages 4, 5, 6	Stage 4
Grade 5	Fractions, etc. Stages 1, 2, 3	Review Stage 5	
Grade 6	Fractions, etc. Stages 4, 5, 6	Review Stage 6	

### Note to Teachers

Use the Test Maker to create a Pretest or Diagnostic Test using one of the Math Blaster Plus files, or create your own test using the Editor. Use the test in the classroom before students practice on the computers or after the computer lesson to check progress and retention.

After you go through the various stages of each operation, you may want to select a Review file which covers the problems you have mastered.

#### Learning with the Five Math Blaster Plus Activities

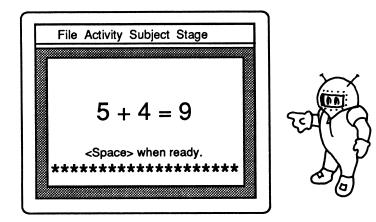
*Math Blaster Plus* teaches math facts with five highly motivating activities. The activities are represented by icons on the Main screen. Each activity is designed to build upon the previous one, but you may do the activities in any order you wish. You may use the mouse or the keyboard arrow keys to make your selection.

Note to Teachers If you or your students find the sound in Math Blaster Plus distracting during class activities, the Sound Off option on the File menu may be accessed from the Main menu and most activities.

### Activity 1: Countdown

In this interactive tutorial activity, a math fact will appear on the screen. Study the fact until you think you have learned it.

- Press <Space> to make the answer disappear.
- Type the correct answer into the equation <Return>.



If the answer is correct, the second problem will appear. If the answer is incorrect, you will get other opportunities to answer. In this practice activity, there is no scoring or time control. You may proceed at your own pace through the lesson.

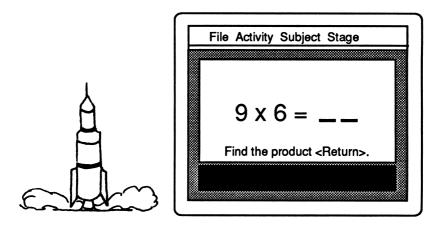
Note to Teachers These are math facts that should be memorized. Students should know them instantly without stopping to calculate. For this reason, answers are entered from left to right.

### Activity 2: Ignition

The Ignition activity presents a problem with the answer missing.

• As each problem appears, enter an answer <Return>.

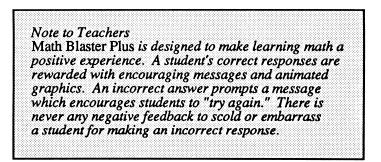
Encouraging messages and animation will reward your correct responses.



If your answer is correct, another problem will appear. If the answer is incorrect, you will have an opportunity to "Try again." If this response is

wrong, the correct answer will flash on the screen for you to study; press <**Space>** to continue. At the end of the lesson, a scoreboard will show the percentage of correct answers.

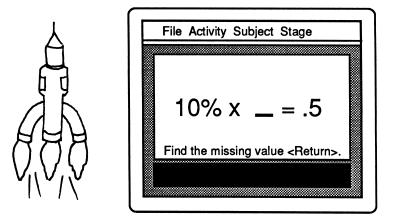
SCO	REBOARD	
Name	Jimmy	
Date	March 3, 1988	
Subject	Addition	
Stage	4	
Activity	Lift-off	
Correct	22	
Total	25	
Score	88%	
Press P to print Scoreboard.		
<spac< td=""><td>e&gt; to continue.</td><td></td></spac<>	e> to continue.	



### Activity 3: Lift-off

In the Lift-off activity, the problem on the screen will have a missing part.

- Determine the value for the missing part.
- Enter the missing part <Return>.



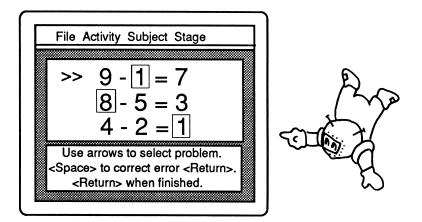
You will have two chances to supply the correct answer. Encouraging messages and animated graphics provide positive reinforcement. The scoreboard will appear at the end of the lesson; you may retake any missed problems. The scoreboard or special certificate may be printed.

Note to Teachers The Lift-off activity builds thinking skills as students apply the facts they have learned. It strengthens their understanding of inverse operations by requiring them to analyze the problem and use the opposite operation to solve for the missing part.

#### Activity 4: Orbit

You will be further challenged by the Orbit activity. Three randomly selected problems from the file will appear together on the screen. One term in each problem will be boxed. Look at each equation and find the boxes which contain errors.

- Select a box using the mouse or arrow keys.
- Press **<Space>** to erase the incorrect number.
- Type in the correct number and press <Return>.
- When all corrections have been entered, press <**Return**> again.



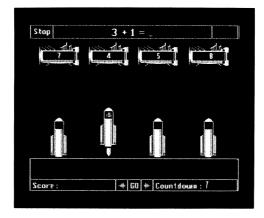
Each correct answer will get a star. If you have missed any corrections, you will get a second chance to earn stars. After ten screens, a scoreboard will appear. The scoreboard or a special certificate may be printed out.

Note to Teachers Orbit is a problem solving activity which requires the student to discriminate between correct and incorrect math facts. Correcting the errors reinforces learning. Students enjoy this chance to "be the feacher."

### Activity 5: Blasternaut Game

You will find the Blasternaut game a fun-filled way to build speed and accuracy with the math skills you've just mastered. The object of the game is to get the Blasternaut into the rocket aimed at the right answer. A problem appears at the top of the screen. A different answer choice is displayed inside each of four space stations.

- Select a difficulty level for playing. (Beginners should use level 1.)
- Click the screen arrows with the mouse or use the keyboard arrow keys to move the Blasternaut directly under the rocket that is aimed at the correct answer choice.
- Click GO or press <Space> to make the Blasternaut jump in and fire the rocket.



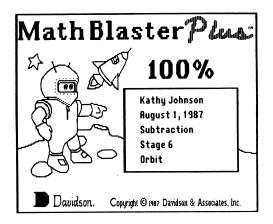
If your choice is correct, the Blasternaut lands successfully on the space station, the correct answer appears in the problem, and you score points. You may choose from three difficulty levels of play. The number of points you score will depend upon the level of play and your speed in answering. Occasionally an astronaut in distress will float across the screen. Help the Blasternaut rescue him and take him safely to a space station. You will earn Bonus Points!

#### Note to Teachers

The Blasternaut game reinforces learning in an interesting and exciting way. Students build speed and accuracy as they play this game. The more proficient they become, the higher their scores. This game is often used by teachers as a reward for good performance in another activity of the program or on another class assignment. Students learn while they are having fun.

### Printing a Certificate of Excellence

The Ignition, Lift-off, and Orbit activites offer students a certificate of excellence for a perfect score. The printed certificate of excellence is a special feature which rewards students and reinforces a positive feeling for math. This tangible graphic reward can be given to the student, posted in the classroom, or sent home to parents.



To print your graphic certificate, follow the screen prompts.

Note to Apple users: see Appendix C for a list of printers and directions for Printer Setup. If your printer is not compatible with the graphics used in this special certificate, you may print out a text certificate.

Note to IBM users: If you did not make the program disk self-booting, you must run graphics.com prior to starting *Math Blaster Plus* if you wish to print a graphic certificate.

#### **Keeping Records**

Before you create student files, format a blank disk to use as a Records Disk on which to store all students' records. Records may be printed out or viewed on the screen to help parents and teachers evaluate progress and diagnose a student's needs for further practice.

#### Apple

- Format a blank disk using ProDOS. See
  - computer owner's manual.
- Name the disk
   MBPRECORDS

#### IBM

- Format a disk using DOS 2.1 or higher.
  - If using a hard disk, create a subdirectory. See computer owner's manual.
- Select MB+Setup from the File menu and indicate the pathname for your Records Disk.

To create and access a Student Record file:

- Type the student's name into the sign-in box at the beginning of the program.
- Access the File menu and select **Record Keeping On**. When the student completes a scored activity (Lift-off, Ignition, Orbit, or Blasternaut Game), the program will ask for the Records Disk.
- Insert the Records Disk you have formatted (or press C to cancel). The program will look on that disk for the student's name as it was typed in at the beginning of the program. If it finds the name, the score will be saved in the student's file. If it does not find the name on the disk, it will automatically create a new file.
- If you wish to add another student, select New Student from the File menu.

Select Record Keeping Off from the File menu to turn off record keeping.

To view a student's record on the screen:

- Type student's name into the sign-in box on the opening screen.
- Select See Record from the File menu.

You will be asked to insert the Records Disk. The student's record file will appear on the screen.

Note: If you get a "FILE NOT FOUND" message, catalog the Records Disk (using your DOS disk or System Utilities disk) to look for the filename.

To print a record:

- Type the student's name into the sign-in box.
- Select **Print Record** from the File menu.
- Press P to print or C to cancel.
   When the printing is finished, the Main screen will reappear.

Julie Schwartz's record			Page 1				
No.	Date	Subject	Stage	Activity	Correct	Total	Score
1	May 10, 1988	Addition	2	Ignition	23	25	92%
2	May 10, 1988	Addition	2	Lift-off	25	25	100%
3	May 11, 1988	Addition	2	Orbit	30	30	100%
4	May 12, 1988	Addition	2	Game			150
5	May 13, 1988	Addition	3	Ignition	20	25	80%
6	May 14, 1988	Addition	3	Ignition	5	5	100%
	•			-			

The *Math Blaster Plus* record keeping system allows you to assess each student's strengths and weaknesses. In the next section, you will learn how to create custom files and mastery tests with the easy-to-use Editor.

## USING THE EDITOR AND TEST MAKER

You may enter your own sets of problems to use with all five learning activities. Before you begin, format a blank disk to use as a Data Disk on which to save the new data files you create.

Apple

#### IBM

- Format a blank disk using ProDOS. See your computer owner's manual.
- Name the disk **MBPDATA**

- Format a blank disk using DOS 2.1 or higher.
- If using a hard disk, create a subdirectory. See computer owner's manual.
- Select MB+ Setup from the File menu and indicate the pathname for your custom Data Disk.

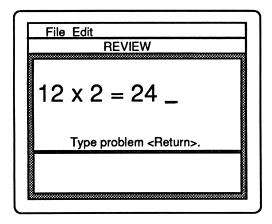
### **Creating Your Data File**

To create your own set of problems to be used with all five *Math Blaster Plus* activities, access the Editor from the Main screen.

- Select Editor from the File menu; the Editor screen will appear.
- From the Editor's File menu, select New.
- You will be asked to enter a name for your new file (8 characters or less). It is a good idea to choose short names for your files, i.e., TEST, ADD3, SUB2. They will be easier for students to remember and easier to type in when these files are used with the program.

Now you are ready to enter problems into your newly-created file. Follow the steps that begin on the next page.

Step 1: Enter the first problem. (Limit your file to 36 problems.)

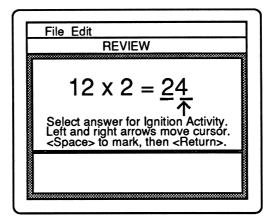


• Type the problem (in horizontal format) with the correct answer **<Return>**. Separate terms and signs with spaces, i.e., 2 + 4 = 6 or 1 + 3/4 = 1 3/4. The maximum length for each problem is 15 characters/spaces. Use only these symbols with the program:

+	(plus)	for addition
-	(hyphen)	for subtraction
:	(colon)	for division
x	(lower case)	for multiplication
%	(percent)	for a percent sign
•	(period)	for a decimal point
1	(slash)	for fractions

Use the **<Delete>** key to make corrections before pressing <Return>. Press **<Return>**; the problem will be centered and a pointer will appear.

Step 2: Mark the correct answer for the Ignition activity.

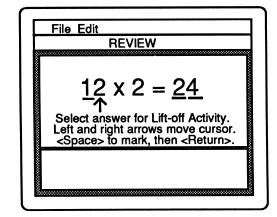


- Use the left and right keyboard arrow keys to move the pointer; press **<Space>** to underline each consecutive character which is to be a part of the "answer" supplied by the student.
- When all desired characters have been marked, press <Return>.

Step 3: Select directions to appear on the screen during the Ignition activity.

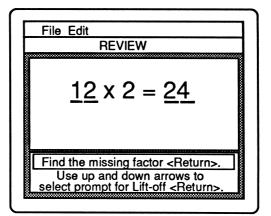
File Edit BEVIEW	7
REVIEW	_
12 x 2 = <u>24</u>	
Find the product <return>.</return>	
Use up and down arrows to select prompt for Ignition <return>.</return>	

• Use the up and down keyboard arrows to select the directions you wish to appear on the screen <Return>.



Step 4: Mark the correct answer for the Lift-off activity.

 Decide which part of the problem on the left side of the equal sign you wish to designate as the "answer" for the Lift-off activity. Move the pointer using the left and right keyboard arrows and press <Space> to underline each character in the answer
 <Return>. Note: marked characters must be consecutive. Step 5: Select directions for the Lift-off activity.



• Use the up and down keyboard arrows to select the directions you wish to use for this activity **<Return>**. A new screen for your next problem will appear.

Continue entering problems; repeat the same steps as you type in each problem. When you have typed in all the problems, you are ready to save your file on the data disk you have formatted or a hard disk.

Step 6: Save your file.

- Be sure that your new formatted data disk is in the drive.
- Pull down the Edit menu and select Stop.
- Pull down the File menu and select Save. Your new file will be saved to your formatted data disk or hard disk.

You may return to your file later to edit or correct it; access the Editor, select Open from the File menu and type the name of the file you wish to edit. To view an entire file:

- Open the file you wish to view on the screen.
- Select View File from the File menu.
- Leave the View mode by selecting Stop from the Edit menu.

To make corrections in a problem:

- Use up and down arrows to get to the problem.
- Select Delete from the Edit menu; delete the problem.
- Select **Insert** from the Edit menu; reenter the problem, answer, and the directions that go with that problem; save. (Steps 2-6)

To insert a new problem into a file:

- Use up and down arrows to get to the problem in front of which you wish to insert a new problem.
- Access the Edit menu and select Insert.
- Type the new problem(s) and mark the answers and directions that go with it. Problems following the insert will be renumbered.
- To leave the insert mode, select Stop from the Edit menu.

To delete a problem from a file:

- Use up and down arrows to get to the problem you wish to delete.
- Access the Edit menu and select **Delete**. The problem will be deleted and subsequent problems will be renumbered.

### Using Your New File with the Math Blaster Plus Program

To use your new file with the program, follow the steps below.

- Exit the Editor; access the File menu and select MB Plus.
- From the Main screen, select Your Data from the Subject menu.
- Type in the name of your data file; select an activity.

#### **Creating a Test**

Any *Math Blaster Plus* file (see Appendix B for file name) or a file you have created and entered using the Editor can be printed out in test form. You may print the problems in file order or random order. See sample below.

To print out a test:

- Open the file you wish to print..
- Select Print Test or Print Random Test from the File menu.
- Type in the information that you want to appear beneath the name line. You may also specify a title and one line of directions.

Note: Since most printers will not print a division sign character, a colon (:) will be printed instead. A horizontal line may be drawn between the dots, thus creating the proper sign.

Name Room 14 - Mrs. Johnson June 6, 1988 Multiplication Facts Test Write the answers to these multiplication problems. 1.  $3 \times 3 =$  21.  $4 \times 9 =$ 2.  $3 \times 4 =$  22.  $5 \times 6 =$ 3.  $3 \times 5 =$  23.  $7 \times 9 =$ 

You will find the Test Maker useful for creating a pretest or a post-test for your students. It may also be used for additional drill material for students who are not at the computer. In addition to these tests, you may want to supplement the computer activities with one of the *Math Blaster* workbooks.

### **ABOUT THE AUTHORS**

*Math Blaster Plus* was developed by a team of educators and programmers at Davidson & Associates, Inc. The team was directed by Dr. Jan Davidson, former teacher, founder and president of Davidson & Associates, Inc. and Mike Albanese, programming manager.

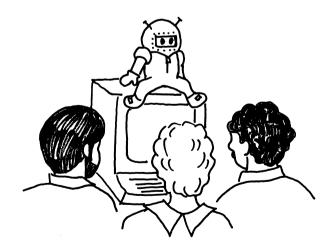
#### The Math Blaster Plus team:

Louis X. Savain programmed the Apple version in FORTH and assembly languages;

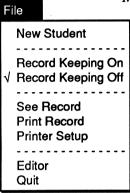
James Densmore and Louis X. Savain developed the IBM version;

Cathy Johnson wrote the data files and manual and offered valuable educational expertise in the product's design.

The *Math Blaster Plus* team received an abundance of enthusiastic support and assistance from all of the associates at Davidson. Game graphics were designed by Tim Nixon; manual art was done by Marilyn Marr.

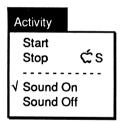


## **APPENDIX A: MENUS**



#### MAIN SCREEN MENUS File Menu

New Student - start a new student Record Keeping On - keep records Record Keeping Off - no record made See Record - view a record on screen Print Record - make a printout of a record Printer Setup - specify printer to be used Editor - access editor to create new files Quit - leave Math Blaster Plus



Activity Menu Start - start an activity Stop - end an activity Sound On - turn on sound Sound Off - turn off sound

#### Subject Addition ✓ Subtraction Multiplication Division Fractions Review ──── Your Data

Subject MenuAdditionSubtractionSubtractionMultiplicationDivisionFractions, etc.ReviewYour Data - access user-created files

Stage	
Stage 1 Stage 2 √ Stage 3 Stage 4 Stage 5 Stage 6	2 3 4 5
√ Mixed Vertica Horizor	

#### <u>Stage Menu</u>

Stage 1	difficulty levels	
Stage 2	of problems in	
Stage 3	each subject area	
Stage 4	(See Appendix B)	
Stage 5		
Stage 6		
Mixed - problems i	in combined format	
Vertical - problems presented vertically		
Horizontal - problems presented horizontally		

#### **EDITOR MENUS**

File	
New	
Open	
Close	)
Save	
View	File
Print	File
Print	Test
Print	Random Test
MB P	lus
Quit	



### <u>File Menu</u>

New - create a new data file Open - open a file Close - close a file Save - save a file on a disk View File - list file on screen Print File - print out a file Print Test - problems in file order Print Random Test - random order problems MB Plus - return to program Quit - leave the program

#### Edit Menu

Undo - undo a deletion just made Insert - insert a problem into a file Delete - delete a problem from a file Stop - stop insert mode

#### **APPENDIX B: MATH FACTS**

ADDITION STAGE 1

ADDITION STAGE 2

**ADDITION STAGE 3** 

Sums from 2 to 9	Sums from 10 to 14	Sums from 15 to 18
1 + 1 = 2 2 + 0 = 2 2 + 1 = 3 3 + 0 = 3 3 + 1 = 4 2 + 2 = 4 4 + 0 = 4 4 + 1 = 5 3 + 2 = 5 5 + 0 = 5 5 + 1 = 6 4 + 2 = 6 3 + 3 = 6 6 + 1 = 7 5 + 2 = 7 4 + 3 = 7 7 + 1 = 8 6 + 2 = 8 5 + 3 = 8 4 + 4 = 8 8 + 1 = 9 7 + 2 = 9 6 + 3 = 9 5 + 4 = 9 9 + 0 = 9	$9 + 1 = 10  8 + 2 = 10  7 + 3 = 10  6 + 4 = 10  5 + 6 = 11  10 + 1 = 11  9 + 2 = 11  8 + 3 = 11  7 + 4 = 11  6 + 5 = 11  10 + 2 = 12  9 + 3 = 12  8 + 4 = 12  7 + 5 = 12  6 + 6 = 12  11 + 2 = 13  10 + 3 = 13  9 + 4 = 13  8 + 5 = 13  7 + 6 = 13  11 + 3 = 14  10 + 4 = 14  9 + 5 = 14  8 + 6 = 14  7 + 7 = 14  9 + 5 = 10  10 + 4 = 14  9 + 5 = 14  8 + 6 = 14  7 + 7 = 14  9 + 5 = 10  10 + 4 = 14  9 + 5 = 14  8 + 6 = 14  7 + 7 = 14  9 + 5 = 10  10 + 4 = 14  9 + 5 = 14  8 + 6 = 14  7 + 7 = 14  9 + 5 = 10  10 + 4 = 14  9 + 5 = 14  8 + 6 = 14  7 + 7 = 14  9 + 5 = 14  8 + 6 = 14  7 + 7 = 14 \\ 9 + 5 = 14  8 + 6 = 14 \\ 7 + 7 = 14 \\ 9 + 5 = 14 \\ 9$	13 + 2 = 15 $12 + 3 = 15$ $11 + 4 = 15$ $10 + 5 = 15$ $9 + 6 = 15$ $8 + 7 = 15$ $14 + 2 = 16$ $13 + 3 = 16$ $12 + 4 = 16$ $11 + 5 = 16$ $10 + 6 = 16$ $9 + 7 = 16$ $8 + 8 = 16$ $14 + 3 = 17$ $13 + 4 = 17$ $12 + 5 = 17$ $11 + 6 = 17$ $10 + 7 = 17$ $9 + 8 = 17$ $14 + 4 = 18$ $13 + 5 = 18$ $12 + 6 = 18$ $11 + 7 = 18$ $10 + 8 = 18$ $9 + 9 = 18$
File Name:	Eila Nome	File Name

File Name: /MATH.1/DATA/ADD.1 File Name: /MATH.1/DATA/ADD.2

File Name: /MATH.1/DATA/ADD.3

33

ADDITION STAGE 4	ADDITION STAGE 5	ADDITION STAGE 6
Sums from 20 to 100 in multiples of 10	Sums from 19 to 22	Sums from 23 to 25
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
Eile Nome	Ella Marray	Pile Menner

File Name: /MATH.1/DATA/ADD.4

File Name: /MATH.1/DATA/ADD.5 File Name: /MATH.1/DATA/ADD.6

## SUBTRACTION STAGE 1

Minuends from 8-10,

subtrahends from 0-9

SUBTRACTION STAGE 2

Minuends from 11-15, subtrahends from 1-5

SUBTRACTION STAGE 3

Minuends from 11-15, subtrahends from 6-10

File Name: /MATH.1/DATA/SUB.1 File Name: /MATH.1/DATA/SUB.2

File Name: /MATH.1/DATA/SUB.3

#### SUBTRACTION STAGE 4

#### **SUBTRACTION STAGE 5**

0

2

3

4

1

2

0

2 \_

3

0

2

3

4

1

2

4

\_

\_ 3

\_

16

16 \_ 1 =

16

16 \_

16 \_

17 \_ 0 = 17

17

17 \_

17 \_\_\_

17 \_ 4 \_

18

18 \_ 1 =

18

18 \_

18 \_ 4 ----

19 \_

19 \_ 1 =

19

19 \_

19 \_

20 \_ 0 =

20

20 \_

20

20

#### SUBTRACTION **STAGE 6**

Minuends from 60-100 subtrahends from 20-90 in multiples of 10

Minuends from 16-20, subtrahends from 0-4

\_

\_

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\_

=

----3

=

=

=

=

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=

= 16

=

=

=

16

15

14

13

12

16

15

14

13

18

17

16

15

14

19

18

17

15

20

19 -

18

17

16

Minuends from 15-20 subtrahends from 5-9

File Name: /MATH.1/DATA/SUB.6

#### 100 -30 20 100 \_

File Name: /MATH.1/DATA/SUB.4

= 80

> File Name: /MATH.1/DATA/SUB.5

MULTIPLICATION STAGE 1	MULTIPLICATION STAGE 2	MULTIPLICATION STAGE 3
Multipliers of 1 and 2	Multipliers of 3 and 4	Multipliers of 5 and 6
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5 x 0 = 0 5 x 1 = 5 5 x 2 = 10 5 x 3 = 15 5 x 4 = 20 5 x 5 = 25 5 x 6 = 30 5 x 7 = 35 5 x 6 = 40 5 x 9 = 45 5 x 10 = 50 5 x 11 = 55 5 x 12 = 60 6 x 0 = 0 6 x 1 = 6 6 x 2 = 12 6 x 4 = 24 6 x 5 = 30 6 x 6 = 36 6 x 7 = 42 6 x 8 = 48 6 x 9 = 54
File Name: /MATH.1/DATA/MUL.4	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

File Name: /MATH.1/DATA/MUL.5

File Name: /MATH.1/DATA/MUL.6

#### MULTIPLICATION STAGE 4

## MULTIPLICATION STAGE 5

## MULTIPLICATION STAGE 6

Multipliers of 7-8

Multipliers of 9-10

77777777777	X X X X X	0 = 1 = 2 = 3 = 4 =	0 7 14 21 28
7	х	5 =	35
7	х	6 =	42
7	х	7 =	49
7	Х	8 =	56
7 7 7 7 7	х	9 =	63
7	Х	10 =	70 77
7	Х	11 =	77
7	Х	12 =	84
8	Х	0 =	0
8	Х	1 =	8
8 8 8 8	Х	2 =	16
8	Х	3 =	24
8	х	4 =	32
8	х	5 =	40
8	х	6 =	48
8	х	7 =	56
8 8 8 8	х	8 =	64 72
8	х	9 =	72
8	х	10 =	80
8	х	11 =	88
8	х	12 =	96

#### Multipliers of 11-12

DIVISION STAGE 1 DIVISION STAGE 2 DIVISION STAGE 3

Divisors of 1 and 2	Divisors of 3 and 4	Divisors of 5 and 6
$\begin{array}{rcrr} 0 & \pm & 1 & = & 0 \\ 1 & \pm & 1 & = & 1 \\ 2 & \pm & 1 & = & 2 \\ 3 & \pm & 1 & = & 3 \\ 4 & \pm & 1 & = & 4 \\ 5 & \pm & 1 & = & 5 \\ 6 & \pm & 1 & = & 6 \\ 7 & \pm & 1 & = & 7 \\ 8 & \pm & 1 & = & 8 \\ 9 & \pm & 1 & = & 9 \\ 10 & \pm & 1 & = & 9 \\ 10 & \pm & 1 & = & 7 \\ 8 & \pm & 1 & = & 8 \\ 9 & \pm & 1 & = & 9 \\ 10 & \pm & 1 & = & 7 \\ 10 & \pm & 1 & = & 9 \\ 10 & \pm & 1 & = & 7 \\ 10 & \pm & 2 & = & 2 \\ 6 & \pm & 2 & = & 3 \\ 8 & \pm & 2 & = & 4 \\ 10 & \pm & 2 & = & 5 \\ 12 & \pm & 2 & = & 6 \\ 14 & \pm & 2 & = & 7 \\ 16 & \pm & 2 & = & 8 \\ 18 & \pm & 2 & = & 9 \\ 20 & \pm & 2 & = & 10 \\ \end{array}$ File Name: /MATH_1/DATA/DIV.1	$\begin{array}{rcrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rcrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

File Name: /MATH.1/DATA/DIV.2

File Name: /MATH.1/DATA/DIV.3 DIVISION STAGE 4

#### DIVISION STAGE 5

Divisors of 9 and 10

#### DIVISION STAGE 6

Divisors	of 7	and	8
----------	------	-----	---

7 0 0 ÷ = 7 7 1 ÷ = 14 7 2 ÷ = 3 21 7 ÷ = 28 4 7 ÷ = 35 5 7 ÷ = 6 42 7 ÷ = 7 49 7 ÷ = 8 56 7 ÷ = 63 7 9 ÷ = 70 7 = 10 ÷ 77 7 = 11 ÷ = 12 84 ÷ 7 0 8 0 ÷ = 8 ÷ 8 1 = 23 8 16 ÷ = 8 24 ÷ = 32 8 4 ÷ = 5 6 8 40 ÷ = 8 48 ÷ = 7 8 56 ÷ = 8 8 64 ÷ = 8 72 ÷ 9 = 8 = 10 80 ÷ 88 ÷ 8 = 11 96 ÷ 8 = 12

$\begin{array}{c} 0 & \div \\ 9 & \div \\ 18 & \div \\ 27 & \div \\ 36 & \div \\ 45 & \div \\ 54 & \div \\ 63 & \div \\ 72 & \div \\ 81 & \div \\ 90 & \div \\ 99 & \div \\ 108 & \div \\ 0 & \div \\ 10 & \div \\ 20 & \div \end{array}$	99999999999999999999999999999999999999		01234567891011201234	
63 ÷	9	=	7	
72 ÷	9	=	8	
81 ÷	9	=		
90 ÷	9			
99 ÷	9			
108 ÷	9	=		
0 ÷	10	=	0	
10 ÷			1	
20 ÷	10		2	
30 ÷ 40 ÷	10	=	3	
40 ÷	10	=	4	
50 ÷	10	=	5	
60 ÷ 70 ÷	10	=	6	
70 ÷	10	=	7	
80 ÷	10	=	8	
90 ÷	10	=	9	
100 ÷	10	=	10	
110 ÷ 120 ÷	10	=	11	
120 ÷	10	=	12	

Divisors	of	11	and	12
----------	----	----	-----	----

0 11 22 33 44 55 66 77 88 99 110 121 132 0 12 24 36 48	* * * * * * * * * * * * * * * * * *	$\begin{array}{c} 11\\ 11\\ 11\\ 11\\ 11\\ 11\\ 11\\ 11\\ 11\\ 11$	$\begin{array}{c} = & 0 \\ = & 1 \\ = & 2 \\ = & 3 \\ = & 4 \\ = & 5 \\ = & 6 \\ = & 7 \\ = & 8 \\ = & 9 \\ = & 10 \\ = & 11 \\ = & 12 \\ = & 0 \\ = & 1 \\ = & 2 \\ = & 3 \\ = & 4 \end{array}$	
	 +			
	• •			
	÷			
152	• •		$= 10^{-10}$	
12	÷		= 1	
$\overline{24}$	÷		= 2	
36	÷		= 3	
	÷		= 4	
60	÷	12	= 5	
72	÷	12	= 6	)
84	÷ ÷	12	= 7 = 8	,
96 108	÷ ÷	12 12	= 8	
120	÷ +	12	= 10	
132	÷	12	= 10 = 11	
144	+ +	12	= 12	
144	•	12	= 12	

File Name:	File Name:	File Name:
/MATH.1/DATA/DIV.4	/MATH.1/DATA/DIV.5	/MATH.1/DATA/DIV.6

#### FRACTIONS **STAGE 1**

9/12

9/18

10/12

10/16

10/18

12/16

12/18

**FRACTIONS STAGE 2** 

1 = 7/6 = 11/6

1 5/6

1 1/8 =

=

11/8 = 13/8

13/8 = 15/8

15/8 = 17/8

= 1

Reduci fraction		ommo	n Renaming improper fractions
2/12	_	1/6	3/2 = 11/2
2/16	=	1/8	4/2 = 2
2/18	=	1/9	5/2 = 21/2
3/9	=	1/3	3/3 = 1
3/12	=	1/4	4/3 = 1 1/3
4/6	_	2/3	5/3 = 12/3
4/8	=	1/2	6/3 = 2
4/12	=	1/3	4/4 = 1
4/16	=	1/4	5/4 = 1 1/4
4/18	=	2/9	7/4 = 13/4
6/8	=	3/4	8/4 = 2
6/9	=	2/3	5/5 = 1
6/12	=	1/2	6/5 = 1 1/5
6/16		3/8	7/5 = 12/5
6/18	=	1/3	8/5 = 13/5
8/12	=	2/3	9/5 = 14/5
8/16	=	1/2	10/5 = 2
8/18	=	4/9	6/6 = 1

3/4

1/2

5/6

5/8

5/9

3/4

2/3

=

=

=

=

=

\_

**FRACTIONS STAGE 3** 

Adding and subtracting fractions

1/3 1/5 1/4 3/8 5/8 2/9 2/9 1/3 5/8 3/5 7/9 3/4 5/6 7/8 8/9 7/9 1 1 1	+++++++++	1/3 3/5 1/4 1/6 1/8 1/8 1/8 1/9 2/3 3/8 2/5 5/9 1/4 1/6 1/8 3/8 2/9 1/2 1/3 3/4 2/5		2/3 4/5 1/2 1/3 1/2 2/3 1 1/5 2/9 1/2 2/3 3/4 1/2 2/3 1/4 2/3 1/2 2/3 1/2 2/3 1/2 2/3 1/2 2/3 1/2 1/2 2/3 2/4 5 1/2 2/3 1/2 2/3 1/2 2/3 2/4 5 1/2 2/3 2/4 1/2 2/3 1/2 2/3 2/3 1/2 2/3 1/2 2/3 1/2 2/3 1/2 2/3 1/2 2/3 2/3 1/2 2/3 2/3 1/2 2/3 2/3 1/2 2/3 2/3 2/3 2/3 2/3 2/3 2/3 2/3 1/2 2/3 2/3 2/3 2/3 2/3 2/3 2/3 2/3 2/3 2
ī	-	2/5	=	3/5
1	-	5/8	=	3/8

File Name:	File Name:	File Nar
/MATH.1/DATA/FRA.1	/MATH.1/DATA/FRA.2	/MATH.1

11/6

8/8

9/8

me: 1/DATA/FRA.3

FRACTIONS STAGE 4	FRACTIONS STAGE 5	FRACTIONS STAGE 6
Multiplying decimals	Finding percentages	Fraction/percentage equivalents
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
File Name:	File Name:	File Name:

File Name: /MATH.1/DATA/FRA.4

/MATH.1/DATA/FRA.5 /MATH.1/DATA/FRA.6

<	REVIEW STAGE 1	REVIEW STAGE 2	REVIEW STAGE 3
	Addition and Subtraction	Addition and Subtraction	Multiplication and Division
	2 + 1 = 3 5 + 0 = 5 7 + 1 = 8 6 + 3 = 9 8 + 2 = 10 6 + 5 = 11 10 + 2 = 12 9 + 5 = 14 12 + 3 = 15 10 + 6 = 16 13 + 4 = 17 9 + 9 = 18 8 - 4 = 4 9 - 5 = 4 10 - 7 = 3 11 - 1 = 10 12 - 3 = 9 13 - 5 = 8 14 - 3 = 11 15 - 2 = 13 11 - 8 = 3 12 - 7 = 5 13 - 9 = 4 14 - 8 = 6 15 - 6 = 9	11 + 8 = 19 14 + 5 = 19 13 + 7 = 20 15 + 6 = 21 12 + 10 = 22 18 + 4 = 22 11 + 12 = 23 15 + 8 = 23 12 + 12 = 24 13 + 12 = 25 16 + 9 = 25 17 + 8 = 25 16 - 0 = 16 17 - 2 = 15 18 - 4 = 14 19 - 1 = 18 19 - 4 = 15 20 - 3 = 17 15 - 8 = 7 16 - 5 = 11 17 - 6 = 11 18 - 7 = 11 19 - 6 = 13 20 - 9 = 11	1 x 0 = 0 1 x 3 = 3 1 x 6 = 6 2 x 2 = 4 2 x 4 = 8 2 x 9 = 18 3 x 3 = 9 3 x 7 = 21 3 x 11 = 33 4 x 5 = 20 4 x 8 = 32 4 x 12 = 48 $2 \div 1 = 2$ $5 \div 1 = 5$ $9 \div 1 = 9$ $6 \div 2 = 3$ $10 \div 2 = 5$ $14 \div 2 = 7$ $3 \div 0 = 0$ $12 \div 3 = 4$ $18 \div 3 = 6$ $27 \div 3 = 9$ $16 \div 4 = 4$ $28 \div 4 = 7$ $40 \div 4 = 10$
	File Name: /MATH.1/DATA/REV.1	File Name: /MATH.1/DATA/REV.2	File Name: /MATH.1/DATA/REV.3

<b>REVIEW</b>	<b>REVIEW</b>	REVIEW
STAGE 4	STAGE 5	STAGE 6
Multiplication and	Multiplication and	Fractions
8 x 11 = 88 15 + 5 = 3 30 + 5 = 6 60 + 5 = 12 24 + 6 = 4 42 + 6 = 7 66 + 6 = 11 7 + 7 = 1 49 + 7 = 7 63 + 7 = 9 16 + 8 = 2 40 + 8 = 5 48 + 8 = 6	108 + 9 = 12 60 + 10 = 6 80 + 10 = 8 120 + 10 = 12 44 + 11 = 4 121 + 11 = 11 132 + 11 = 12 24 + 12 = 2 96 + 12 = 8 132 + 12 = 11	2/16 = 1/8 3/9 = 1/3 4/8 = 1/2 6/12 = 1/2 8/12 = 2/3 9/18 = 1/2 10/16 = 5/8 12/16 = 3/4 3/2 = 1 1/2 5/2 = 2 1/2 6/3 = 2 7/4 = 1 3/4 9/5 = 1 4/5 11/16 = 1 5/6 8/8 = 1 13/8 = 1 5/8 1/5 + 3/5 = 4/5 1/6 + 1/6 = 1/3 5/8 + 1/8 = 3/4 2/9 + 4/9 = 2/3 7/9 - 5/9 = 2/9 7/8 - 1/8 = 3/4 8/9 - 2/9 = 2/3 1 - 1/3 = 2/3 1 - 5/8 = 3/8
File Name:	File Name:	File Name:
/MATH.1/DATA/REV.4	/MATH.1/DATA/REV.5	/MATH.1/DATA/REV.6

### APPENDIX C: PRINTER SETUP (Apple Version)

Before printing the graphic Certificate of Excellence, access the File menu from the Main screen, select **Printer Setup**, and answer these questions.

Printer category:	Α	(A-U)
Interface category:	Α	(A-Y)
Line feed:	Y	(Y-N)
Slot Number:	1	(1-7)

- Scan the following lists to find the category of the printer you're using; enter the appropriate letter.
- Find the category for the interface card your printer uses; enter its letter.
- Choose Y (Yes) for Line Feed. Print out a sample certificate to see if this choice is correct for your printer. (If there is a blank line between each line of graphics, change the Yes to No.)
- Enter the slot number for your printer card (most often slot 1).
- Save these choices to the disk. They may be changed and saved again if necessary.

You may print out a sample graphic certificate if you wish. If your printer is unable to print the graphics, you can print out a text certificate when a student earns 100% on an activity. On the following pages are a list of printers and a list of printer interface cards supported by the Apple version of *Math Blaster Plus*.

#### PRINTERS

The *Math Blaster Plus* graphic certificate may be printed if you have one of the following printers:

- A. Anadex DP-9000/9500 \*
- B. Anadex DP-9001/9501 \* Datasouth 180
- C. Apple Dot Matrix \*\*
- D. Apple Scribe
- E. Brother M-1009 Epson FX-80 Epson FX-85 Epson JX-80 Epson LX-80 Panasonic KX-P1091/1092
- F. Epson MX-70
- G. Epson MX-100 Epson MX-80 with Graftrax HP Thinkjet \*\*\* Panasonic KX-P1090
- H. Epson RX-80 Epson LQ-800
  - I. Apple Imagewriter Apple Imagewriter II Epson AP-80
  - J. Malibu 200
- K. Mannesmann Tally 160/180
- L. Okidata Microline 82A/83A \*\*\*\*

- M. Okidata Microline 92/93 Okidata Microline 84
- N. C. Itoh Prowriter C. Itoh Prowriter II C. Itoh 7500 C. Itoh 8510 NEC PC-8023/8025
  - O. Smith Corona D100/200/300
  - P. Blue Chip M120/10 Mannesmann Tally Spirit 80
  - Q. Star Delta 10/15 Star Gemini 10/15 Star Radix 10/15
  - R. TRS-80 DMP-105 TRS-80 DMP-400
  - S. Transtar 315
  - T. Okidata Microline 192/193
  - U. Legend 1385 IBM Compatibles
    - \* "Option R" (2K buffer expansion) is required for printing graphics.

**	Set dip switches as follows:	O = Open  C = Closed	
	- SW1	SW2	
	12345678	12345678	
	000 000 00	COO OOC CO	

- \*\*\* Switch 5 must be up to set the alternate mode (Epson compatible).
- \*\*\*\* Must be equipped with the Okigraph graphics option.

#### PRINTER INTERFACE CARDS

The *Math Blaster Plus* graphic certificate may be printed if you have one of the following printer interface cards:

- A. Apple Communications SSM-AIO-II Serial SSM-ASIO Versacard Serial
- B. Apple IIc Serial Port
- **Apple Centronics Parallel C**. Apple Parallel Apricorn Parallel Epson APL Graphicard Microsystems MSE 1022 Microtek RV-611C MPC-AP-80 MPC-AP-Graph Omnigraph Printer Pro Printerface Printmax SSM-Appic Tymac Versacard Parallel Wizard-IPI Wizard-BPO
- D. Apple Serial
- E. CCS 7720 Parallel
- F. CCS 7728 Parallel
- G. Dispatcher Dual-Comm Plus Franklin Dual Port Printermate

- H. Dumpling 64
- I. Dumpling GX
- J. Fingerprint+ Parallel Grappler+
- K. Grafstar Grappler Orange Spies Niceprint/Super-MX
- L. Grappler Serial Pretty Print
- M. Mountain Comp Parallel
- N. Mountain Comp Serial
- O. Micro Buffer II
- P. Apricorn Serial MCP AP-SIO MPC Graphwriter
- Q. PKASO or PKASO/U
- R. Quadram-Apic
- S. K-T Parallel SSM-AIO-II Parallel SSM-APIO
- T. Apple Super Serial Fingerprint+ Serial Microtek SV-622C Videx PSIO Serial
- U. Videx Uniprint

- V. Fingerprint
- W. Transtar Pics
- X. MBI VIP
- Y. Apple Firmware (GS)

Note: If you do not have one of the printers or printer interface cards listed in this appendix, you may still print a text certificate; follow the prompts on the screen.

### APPENDIX D: HARD DISK INSTALLATION (IBM Version)

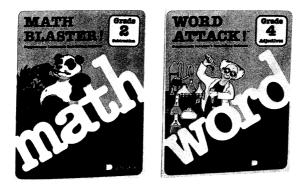
The IBM version of Math Blaster Plus may be installed onto a hard disk:

- Boot the hard disk (drive C) as usual.
- Put the Math Blaster Plus disk in drive A.
- At the C>, type A: (You must log on to the drive that the *Math* Blaster Plus disk is in. If you put the disk in drive B, type B:)
- At the A> (or B>), type HDINSTAL C: and press < Enter>.

A subdirectory named MBP will be created and the necessary files will be copied into it. To remove the program from your hard disk, follow the instructions above, but substitute UNINSTAL for HDINSTAL.

#### To run Math Blaster Plus from your hard disk:

- Boot your computer as you normally would.
- If you plan to print the graphic certificate, at the prompt, type **GRAPHICS** and press <Enter>. (You probably have this file on your hard disk in a DOS subdirectory; if not, use the file on your DOS disk.)
- At the C>, type CD MBP and press <Enter>. This will take you to the *Math Blaster Plus* directory.
- At the C>, type MBP and press <Enter>.
- Access the File menu, select **Setup**, and enter the information; it will be saved.



#### **Davidson Supplementary Workbooks**

Davidson's line of quality educational products includes a series of workbooks to supplement the award-winning Math Blaster, Math Blaster Plus and Word Attack software.

Children will enjoy each workbook's enchanting characters while parents and teachers will appreciate the variety of stimulating activites that build basic skills. And while the workbooks were designed for use with the software, they can be used separately or for additional drill and practice. Each reproducible workbook is 48 pages in length.

#### Math Blaster Workbooks

Math Blaster, Gr. 1 Addition Math Blaster, Gr. 1 Subtraction Math Blaster, Gr. 1 Add.&Sub.

Math Blaster, Gr. 2 Addition Math Blaster, Gr. 2 Subtraction Math Blaster, Gr. 2 Add.&Sub.

Math Blaster, Gr. 3 Addition Math Blaster, Gr. 3 Subtraction Math Blaster, Gr. 3 Add.&Sub.

Math Blaster, Gr. 4 Addition Math Blaster, Gr. 4 Subtraction Math Blaster, Gr. 4 Add.&Sub.

#### Word Attack Workbooks

Word Attack, Gr. 2 Adjectives Word Attack, Gr. 2 Nouns Word Attack, Gr. 2 Verbs

Word Attack, Gr. 3 Adjectives Word Attack, Gr. 3 Nouns Word Attack, Gr. 3 Verbs

Word Attack, Gr. 4 Adjectives Word Attack, Gr. 4 Nouns Word Attack, Gr. 4 Verbs

Suggested retail: \$4.95 ea.

For more details call or write: Davidson & Associates, Inc. 3135 Kashiwa Street, Torrance, CA 90505 1-800-556-6141 (outside California) 1-213-534-4070 (inside California)





Davidson & Associates, Inc. File No. 91613 Los Angeles, CA 90074 - 1613

#### Math Blaster Plus has a 5-YEAR warranty! To receive important product update information and to register this product, please complete this card and return it to us today. Name Street Address City \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_ Telephone Number ( )\_\_\_\_\_ Your Version Apple IBM C64/128 Atari Disk Size □ 5.25" □ 3.5" Purchased From \_\_\_\_\_ Address \_\_\_\_\_ Date In what type of store was your program purchased? ☐ Mail order-advertisement Hardware & software store Discount store Software only store Book store □ Other Department store Mail order-catalog What MOST influenced your purchase? □ Salesperson □ Friend □ Magazine ad □ Your child **Other** □ Teacher/School □ Newspaper □ Gift □ Review Back-up Copy Send a back-up copy of Math Blaster Plus. A check for \$10.00 to Davidson & Associates. Inc. is enclosed. California residents please add applicable sales tax. 050187 I do not wish to purchase a back-up at this time.

### HOW TO SWAP YOUR DISK FREE!

If you want to swap your disk for a different size (5.25" to 3.5" or vice versa), just follow the directions below:

- fill out your product registration card
- fill out the back of this card
- place the following into a stiff envelope:
  (1) your Davidson disk,
  (2) the product registration card, and
  (3) this card
- send all of the above to:

Davidson & Associates, Inc. 3135 Kashiwa Street Torrance, CA 90505 Attn: Customer Service

#### **DISK SWAP CARD**

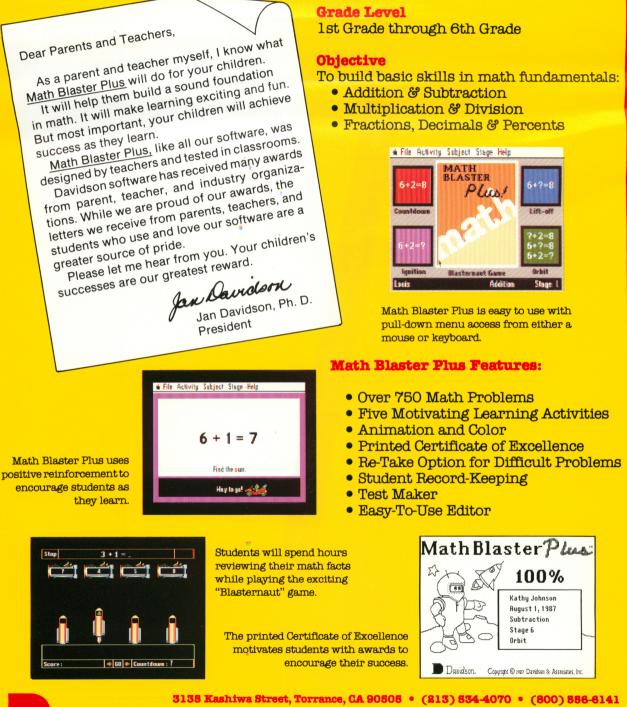
Davidson Program	Name		
Computer Type (C	ircle):	Apple	IBM
Size of Disk You V	Want (C	ircle):	
		;	
3.5"	5.2	25"	
Your Name:	-		

Your Address:\_\_\_\_

City/State/Zip:\_\_\_\_\_

Telephone Number: ( )	
Don't forget to send us this card,	
your product registration card, a	ind
the Davidson disk you want to sy	vap.

# MATH BLASTER Plus!



Davidson. System requirements: Math Blaster Plus will run on the Apple® IIGS, IIc, IIe (with extended 80-column card and 128K), Laser® 128, IBM®, Tandy® 1000, Compaq®, Kaypro®, Leading Edge® and most compatibles.

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