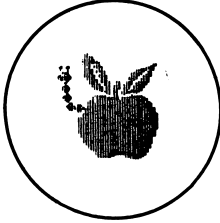**mecc**

the friendly computer

instructional computing courseware
for the **apple**® II computer

1	1	2	3	4	5	6	1	2	3	4	🤖
HOUSE	GREEN	VIOLET	WHITE	BLACK	ORANGE	BLUE	□	○	▭	◇	keyboard

2	Q	W	E	R	T	Y	U	I	5	P	🤖
PERSON	QUIT		ERASE	↙	↑	↗			△	PICTURE	diskette

3	A	S	D	F	G	H	J	K	L	;	🤖
CAR		SHAPE	DRAW	←◄		►→					diskette

4	5	X	C	V	B	N	M	,	.	/	🤖
SUN	TREE		COLOR	↙	↓	↘	MOVE DOT				diskette

space bar

monitor	monitor
computer	computer
disk drive	disk drive

The Friendly Computer

MECC

the friendly computer

instructional computing courseware
for the **apple**® II computer

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

INTRODUCTION

The Friendly Computer consists of five programs that introduce young students to the use of the keyboard, computer terminology, and some capabilities of the computer. The programs make extensive use of graphics and animation. The package is designed for individual use by students in the primary grades.

KEYBOARD introduces students to the location of the keys on the Apple II or Apple //e keyboard. The use of the shift key is also emphasized. An educational game, ZEBUG, provides further practice in locating randomly selected keys on the keyboard.

The TERM WORM program graphically presents some computer-related devices and the term naming that device.

PICTURE allows students to create drawings using single keystroke commands. The drawings can be saved on the diskette and viewed later using the PICTURE SHOW program. The drawings may also be printed if an appropriate printer is attached.

Note: Although the programs involve beginning reading, it has been found that pre-readers can use the programs with minimal assistance. Numerous visual prompts and single keystrokes make the programs easy to use.

Two sets of keyboard stickers are provided on the sheet following page 60. These stickers can be used to label parts of the computer and to easily identify the keys used in the PICTURE program. The small key stickers have been designed to allow placing them on the fronts of the keys.

Several student handouts are provided to use in conjunction with the programs. The handouts are of the following types: use of the computer, the keyboard, puzzles, and program aids. Many of these handouts have been designed so they can also be colored. It is suggested that you select the worksheets that would be appropriate for your students and assemble these handouts into booklets. Covers are provided for the booklets.

A certificate of excellence is included for presenting to students after they complete the unit.

Teacher Options allows you to delete pictures which have been saved using the PICTURE program and to set the printer specifications. To access this option, type CTRL-A when the main menu for The Friendly Computer appears. To type CTRL-A, hold down the CTRL key and type A. The Teacher Options menu will appear.

Students can exit a program at any time by pressing the ESCAPE (ESC) key twice in a row.

DESCRIPTION

The KEYBOARD program introduces students to locations of keys on the computer keyboard and the use of the shift key. Starting with the bottom row, students are asked to find and press selected keys from each row. After each row on the keyboard has been covered, including shift characters, students are given short words to type.

Curriculum Area: Computer Literacy

Topic: Keyboard

Grade Range: Primary

Reading Level: Beginning Reading

Type: Tutorial

Classroom Use: Individual

LEARNING OBJECTIVES

After using this courseware, the student should be able to:

● locate keys on the keyboard;

● use the shift key;

● type short words.

BACKGROUND INFORMATION

KEYBOARD introduces the location of keys on the keyboard. Students are presented with five keys from each row to locate and press. The use of the shift key is introduced with the top row of keys. The final sequence presents the students with five words to type. The words are selected from this list:

term	easy	quit	blue
worm	hard	car	save
key	draw	sun	
disk	move	tree	
owl	dot	name	

Throughout this program the Wise Owl and Zebug characters provide hints to those students making incorrect responses or not responding. If two or more keys are missed in any row, the students are presented with a review of those keys.

This program will work on either the Apple II or the Apple //e. The proper keyboard will be displayed according to the type of Apple being used.

PROGRAM PREVIEW

Students are introduced to the keyboard by the Wise Owl. The keyboard displayed will either be an Apple II keyboard (Figure 1) or an Apple //e keyboard (Figure 2), depending on the type of Apple computer you are using.
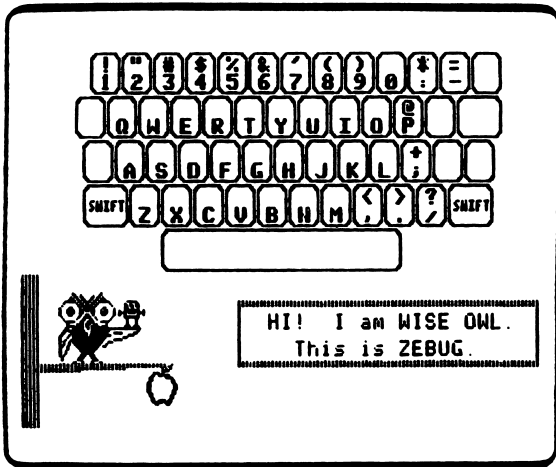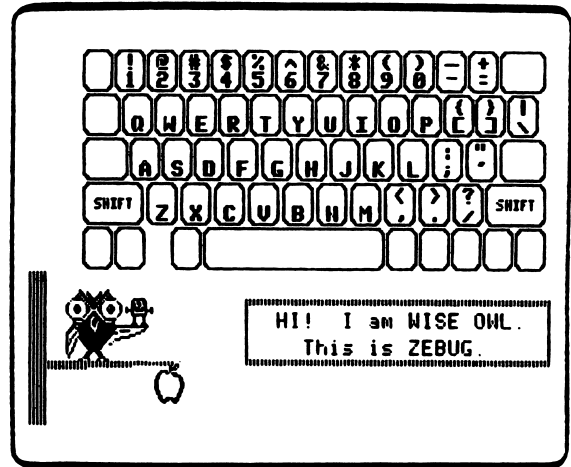

Figure 1

Figure 2

Starting with the bottom row of keys, students are asked to press keys from each row. These keys are randomly selected by the computer (Figure 3). Two chances are allowed to press the correct key. Zebug offers help to the students after a ten second delay or a wrong key has been pressed (Figure 4).
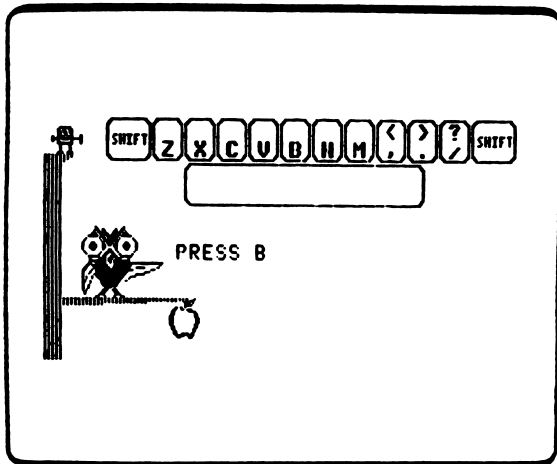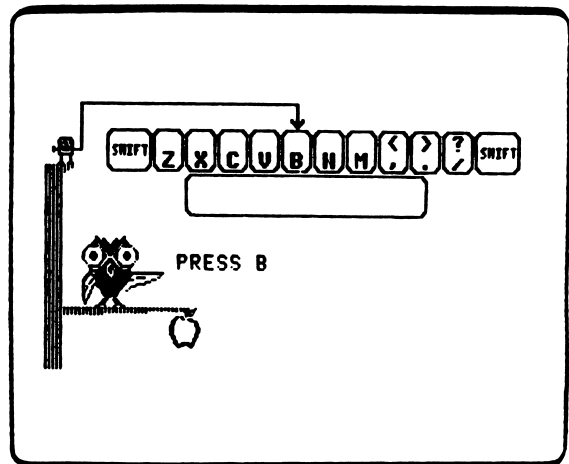

Figure 3

Figure 4

4

PROGRAM PREVIEW (continued)

When the students press the correct key, the Wise Owl places a star in a box (Figure 5). If the students miss twice, Zebug "zaps" the letter and presses the correct key (Figure 6).
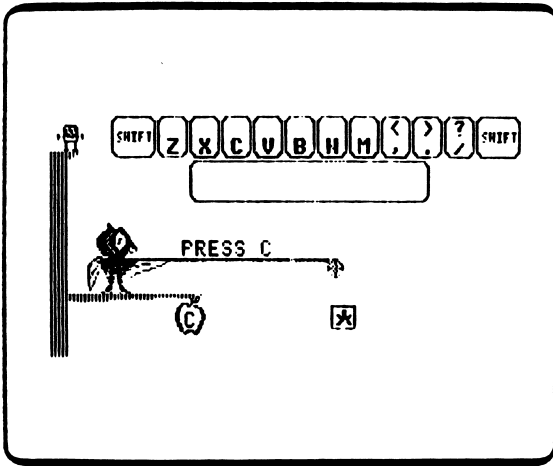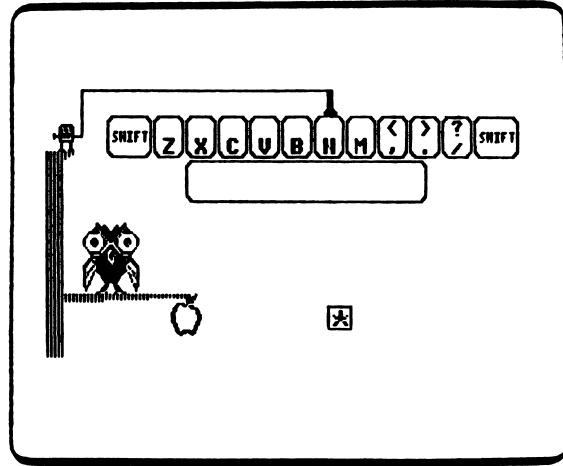

Figure 5

Figure 6

After the presentation of the four rows, the use of the shift key is introduced (Figure 7). This is followed by the presentation of short words to be typed by the students (Figure 8).
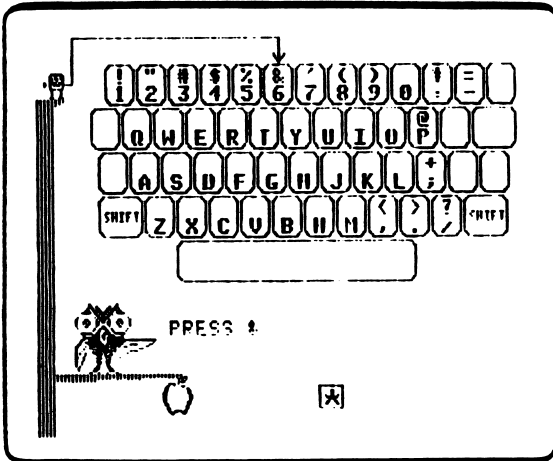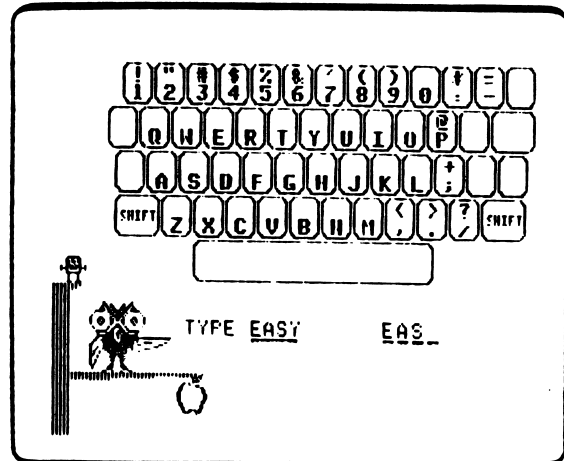

Figure 7

Figure 8

USE IN AN INSTRUCTIONAL SETTING

Preparation

Students using this program should have basic reading readiness skills. They should be able to recognize capital letters and the numerals 0-9. The students should also be able to discriminate visually the punctuation marks found on the keyboard.

Using the Program

Initially, some students may benefit from a quick demonstration on how to run this program. Very young students may need a demonstration on the use of the shift key. An aide or another student can provide any necessary demonstrations.

This program is designed to be used by individual students; however, many students benefit from interaction with their peers. Pairing students at one microcomputer has proven to be an effective technique for increasing student interaction.

Introduce the Zebug, Wise Owl, and Term Worm characters. Explain that these characters will help in learning about the computer.

Follow-up

1. Give students an opportunity to use KEYBOARD again. Each time the program is used, the students will see a different set of keys.

2. Use ZEBUG to provide practice in locating keys in a timed situation.

3. Use Handouts 1,2,3, and 4 to begin construction on the students' take-home computer booklets. This material includes a cover sheet, coloring pages, and certificate.

4. Use Handout 5a or 5b to provide practice in locating keys on the keyboard. These handouts may also be used to practice printing skills.

5. Use Handout 6a or 6b as a practice keyboard. Students may practice locating and touching keys. Students can use these handouts to "type" their spelling or vocabulary words.

6. Use Handout 7 for more practice in identifying letters and numerals.

7. Students may try to locate keys without looking at the keyboard. Students can place a towel over their hands to encourage "no looking."

DESCRIPTION

TERM WORM uses computer animation and interaction to introduce students to some beginning computer terminology. The major components of a computer system are individually displayed and identified: DISK DRIVE, MONITOR, COMPUTER, KEYBOARD, and DISKETTE. The parts are then randomly displayed and the students are asked to choose the correct term describing it. There is no penalty for incorrect guesses.

The next portion displays a keyboard and points out the RETURN KEY, SHIFT KEY, and SPACE BAR. Students are then asked to match each key with the term describing it.

Curriculum Area:	Computer Literacy
Topic:	Terminology
Grade Range:	Primary
Reading Level:	Beginning Reading
Type:	Tutorial
Classroom Use:	Individual

LEARNING OBJECTIVES

After using this courseware, the student should be able to:

●   identify parts of a computer system;

●   identify special keys.

TERM WORM

PROGRAM PREVIEW

The program begins by displaying a computer system (Figure 1). In the sequence that follows, each part of the computer system is shown, and the term identifying that part is given by Term Worm (Figure 2).
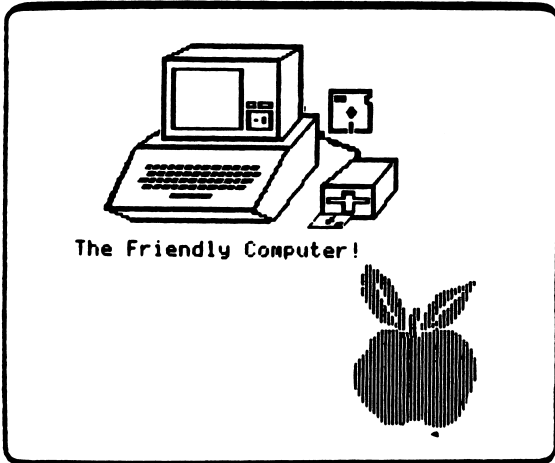

The Friendly Computer!
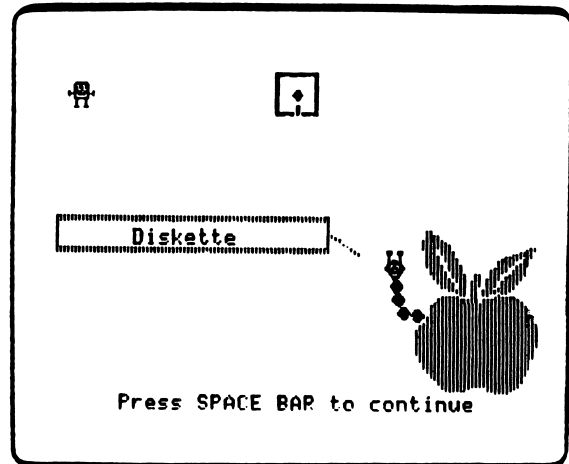
Figure 1

Diskette

Press SPACE BAR to continue

Figure 2

The parts displayed are the diskette, disk drive, monitor, keyboard, and the computer. Next, students practice matching each part to the term describing it (Figure 3). After they have successfully matched the devices with the terms, the entire system is displayed with labels (Figure 4).
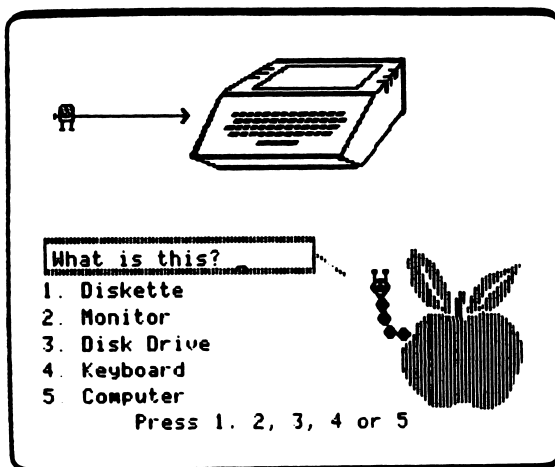

What is this?
1. Diskette
2. Monitor
3. Disk Drive
4. Keyboard
5. Computer
    Press 1. 2, 3, 4 or 5

Figure 3

Monitor

Keyboard

Diskette

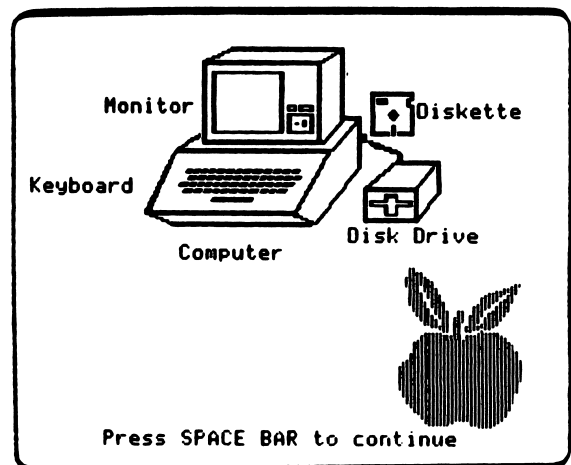Disk Drive

Computer

Press SPACE BAR to continue

Figure 4

PROGRAM PREVIEW (continued)

The next sequence of frames presents the keyboard and identifies three important keys — the space bar, shift key, and return key (Figure 5). Again, the students are asked to match the key with the term describing it (Figure 6).
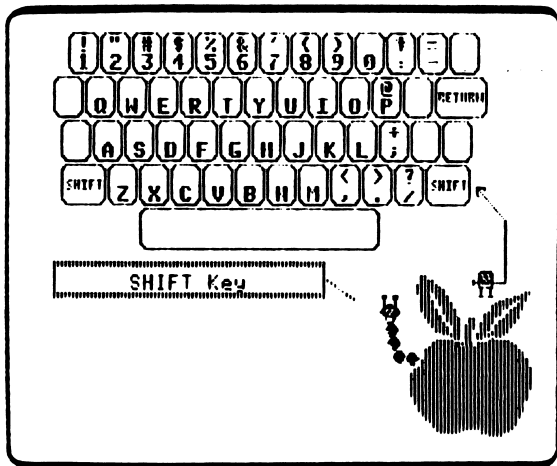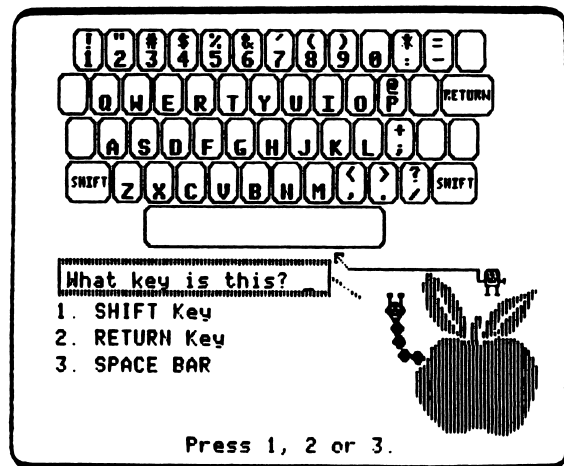

Figure 5

Figure 6

9

USE IN AN INSTRUCTIONAL SETTING

Preparation

You may want to introduce your students to the terms which name the devices in a typical computer system. For example, you may put the terms on a chalkboard or use them as a special vocabulary list. The terms used in this program are: computer, monitor, keyboard, diskette, disk drive, shift key, return key, and space bar.

Students using this program should have basic reading readiness skills.

Using the Program

Emphasize that the computer devices shown on the screen correspond to those that the students are now using.

Name each device by placing a label directly on or near it. Encourage students to refer to these labels when using this program. Labels are provided on the sticker sheet following page 60.

Explain the use and misuse of each device.

Demonstrate the starting procedure for the computer. Handouts 8-13 may be posted near the computer to remind students of the proper procedure.

Introduce the Term Worm and Zebug characters. Explain that these two characters will help in learning about the computer.

Follow-up

1. Use KEYBOARD to provide an opportunity for students to use the shift key. ZEBUG provides further practice in using the shift key in a race against time.

2. Continue assembling the take home computer booklets. Handouts 8-13 may be used for this activity. These handouts may also be used as a coloring activity.

3. Use Handouts 14 and 15 to provide practice in matching a computer term with a corresponding picture. Handouts 16, 17, 18a, and 18b provide further practice in recognizing computer terms.

4. Students may use Handout 19 to create and color their own computer system puzzle.

DESCRIPTION

ZEBUG is an educational game that provides practice in locating keys on the computer keyboard. In a race against time, students attempt to locate and press the key(s) corresponding to the character(s) displayed on the screen. An option is provided for the students to choose the difficulty level for the game.

Curriculum Area: Computer Literacy

Topic: Keyboard

Grade Range: Primary

Reading Level: Beginning Reading

Type: Educational Game

Classroom Use: Individual

LEARNING OBJECTIVES

After using this courseware, the student should be able to:

● quickly locate keys on the keyboard;

● use the shift key.

BACKGROUND INFORMATION

ZEBUG is an educational game designed to help students become more familiar with the keyboard and to locate keys quickly. The object of the game is to press the key(s) indicated on the screen before the character collides with ZEBUG. If the correct key(s) is pressed soon enough, ZEBUG will jump the character(s) shown. Ten points are scored for each character jumped.

Each game consists of three rounds. Each round consists of eight attempts to assist ZEBUG in jumping the character(s). The rounds will get progressively harder. At the conclusion of each round, ZEBUG will dance and bow. If the entire game is completed successfully, students will be presented with a trophy.

If the students do not respond soon enough, ZEBUG and the character(s) will collide and the ZEBUG will disappear. The students are given three ZEBUGS per game. The game is over after three collisions.

At the beginning of each game, students may choose the level of difficulty. The levels are: EASY, MEDIUM, and HARD. The chart below summarizes each level.

Level of Game	Round	Number of Characters	Shift Key Used?	Comments
Easy	1	1	No	Letters only
	2	1	No	Letters only
	3	2	No	Letters only
Medium	1	1	Yes	All characters
	2	1 or 2	No	All characters
	3	1 or 2	Yes	All characters
Hard	1	1 or 2	No	All characters
	2	1 or 2	Yes	All characters
	3	2 or 3	No	Short words

The words used in the Hard level are chosen from the following list:

GO	END	ONE	
TO	KEY	TWO	
IF	FOR	LET	
OR	BAR	BUG	(Error in programming)
ON	OFF	BIT	(Binary digit)
RUN	HIT		
NEW	RED		

PROGRAM PREVIEW

The object of the ZEBUG game is to find and press the key(s) indicated by the character(s) shown moving across the screen toward a ZEBUG. The key(s) must be pressed before ZEBUG and the character(s) collide. A demonstration is given before students start the game (Figure 1). Next, the students can select the level of difficulty for the game (Figure 2).
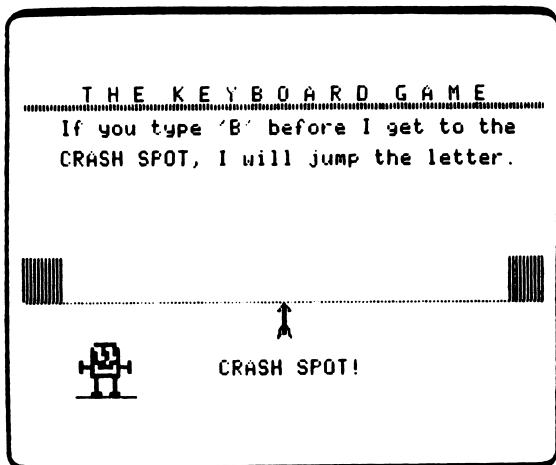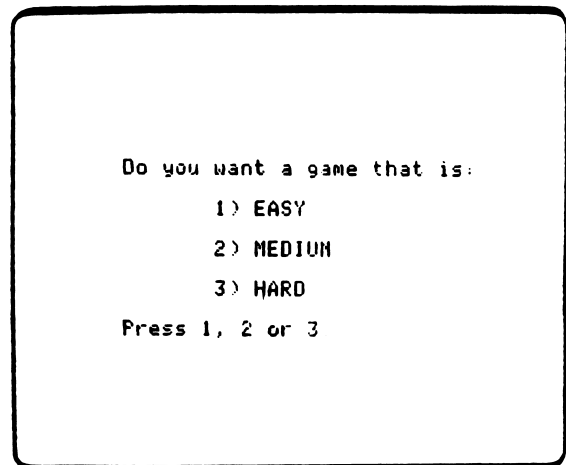

Figure 1

Figure 2

Each game consists of three rounds. During each round, ZEBUG will have eight encounters with characters. If the students are successful in pressing the key(s) indicated by the character(s), ZEBUG will jump the character(s). The jumped character(s) will then be stored in the boxes at the bottom of the screen. Each character jumped is worth ten points (see Figures 3 and 4).

Figure 3

Figure 4

13
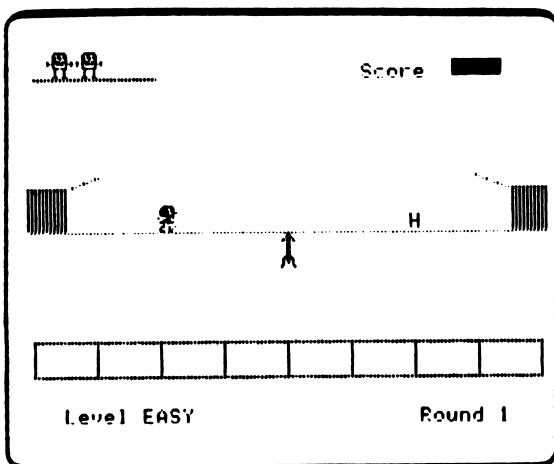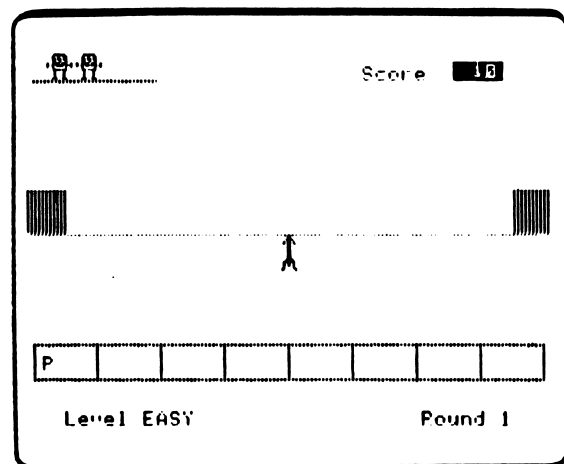
PROGRAM PREVIEW (continued)

If ZEBUG and the character(s) crash, ZEBUG disappears, and a new ZEBUG enters the game. During the game, students may use up to three ZEBUGS (see Figures 5 and 6).
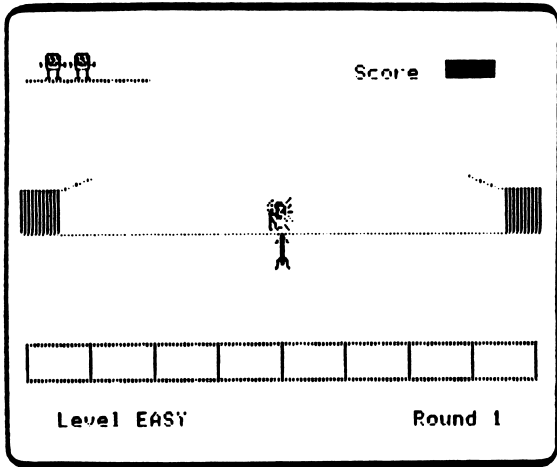
Figure 5
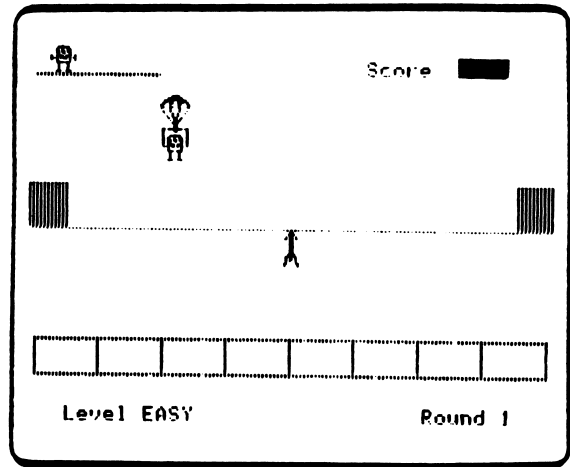
Figure 6

As the game progresses, each round becomes more difficult. The difficulty is controlled by the number of characters, use of the shift key, and the speed at which characters move (Figure 7). If the students successfully complete all three rounds, ZEBUG presents them with a trophy (Figure 8).
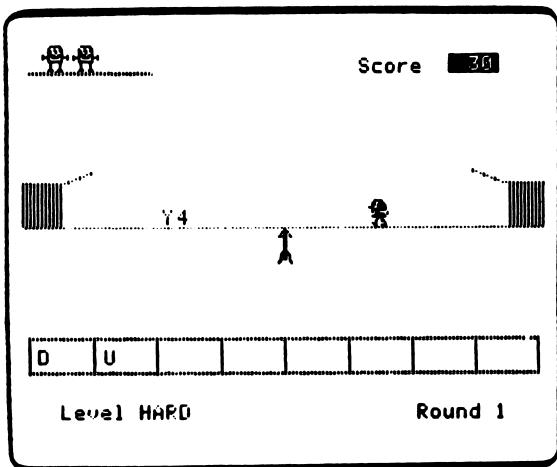
Figure 7
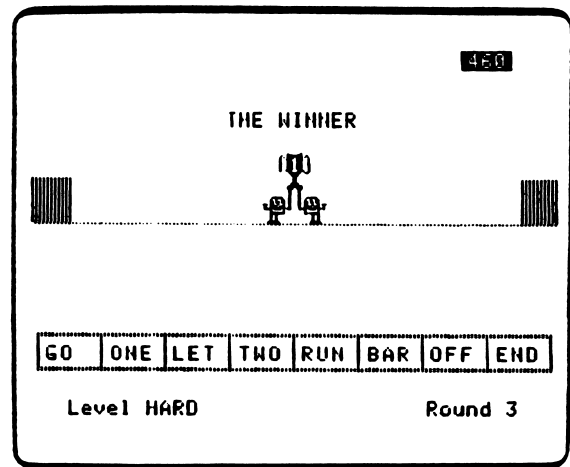
Figure 8

14

USE IN AN INSTRUCTIONAL SETTING

Preparation

Students using this program should have basic reading readiness skills. Students should be able to identify capital letters, numerals 1-9, and the punctuation marks found on the keyboard.

They also should be familiar with the location of keys on the keyboard.

Using the Program

Students experiencing extreme difficulty with ZEBUG may benefit from additional untimed practice in locating keys. KEYBOARD can be used to provide students with untimed practice in identifying keys.

Follow-up

1. Give students additional opportunities to use ZEBUG. Students may wish to keep track of their high scores.

2. Make a classroom ZEBUG CLUB poster. Students may keep track of their highest score on this poster.

3. Teacher-made ZEBUG CLUB badges can be given to students who complete the game.

4. Students may attempt to play ZEBUG without looking at the keyboard. Students can place a towel over their hands to encourage "no looking."

DESCRIPTION

PICTURE allows students to produce drawings easily by using a variety of single keystroke commands. Students have the ability to draw lines, produce intricate geometric shapes, insert pre-drawn shapes and pictures, change colors, erase, and save the picture produced. All available commands and options are displayed on the screen while using the program.

Curriculum Area:	Computer Literacy
Topic:	Computer Art
Grade Range:	Primary
Reading Level:	Beginning Reading
Type:	Student Utility
Classroom Use:	Individual

LEARNING OBJECTIVES

After using this courseware, the student should be able to recognize the ability of the computer to:

- perform a task according to directions;

- produce lines, shapes, colors, and drawings;

- produce different colors;

- rotate shapes;

- save information on the diskette.

16

BACKGROUND INFORMATION

PICTURE has been designed to introduce students to some of the graphic capabilities of a computer. It allows students to create their own pictures using single keystroke commands.

The students are first asked to enter their first names. Their names are then used to identify their pictures. Each name entered can be 16 letters long. Pictures that are saved on the diskette can later be printed or deleted. Up to eight student pictures can be saved on the diskette. After eight pictures have been saved, the first student picture saved is deleted before the next new picture is saved.

Students create their pictures in a bordered area on the screen. A cursor (■) is shown on the screen and indicates the position where drawing will begin. Using the available commands, the student can draw lines, shapes, or pre-drawn pictures.

The available commands and options are:

D raw – The Draw command allows the drawing of lines in any direction. The keys used to draw are:

```
 R    T    Y
 F  ← ✴ →  H
 V    B    N
```
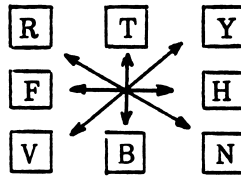
S hape – The Shape command allows the drawing of different shapes. These shapes can be rotated by repeatedly pressing the number of any given shape. This will create some interesting geometric patterns. The available shapes are:

        1 – Square
        2 – Circle
        3 – Rectangle
        4 – Diamond
        5 – Triangle

P icture – The Picture command places any of the following pictures into the drawing:

        1 – House
        2 – Person
        3 – Car
        4 – Sun
        5 – Tree

|M| ove dot – The **M**ove dot command allows students to move the cursor (■) to another position on the screen. The same keys used in the **D**raw command are used to move.

|C| olor – The **C**olor command allows the color to be changed. The following colors are available:

1 = Green   4 = Black
2 = Violet   5 = Orange
3 = White   6 = Blue

Note: The color is initially set to white. When using other colors, some lines and dots will not appear because of the computer's way of handling colors. If a student is having difficulty with nothing being drawn, the color may have been set to black.

|E| rase – The **E**rase command will erase the <u>entire</u> picture and place the cursor back in the center of the screen.

|Q| uit – The **Q**uit command allows students to exit the program. After pressing the Q key, students have the option of saving the picture just drawn.

PROGRAM PREVIEW

The PICTURE program first asks the students their names (Figure 1). Their names are used to label and save their pictures. The bordered part of the screen then becomes their "canvas" with available commands shown along the left edge (Figure 2).
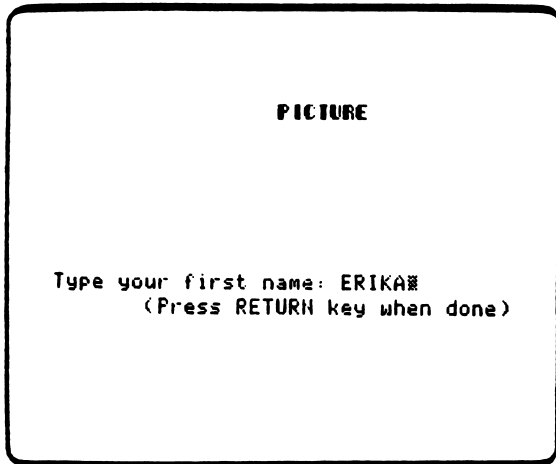
Figure 1
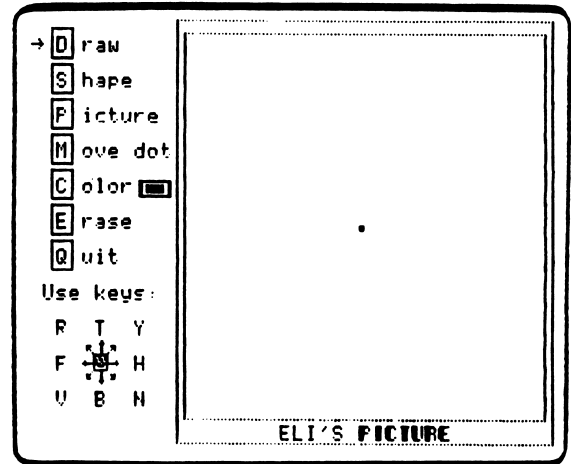
Figure 2

Students can use any of the commands shown by simply pressing the first letter of the command. The keys that are used for that mode appear in the lower left corner. The Draw command allows students to make line drawings as shown in Figure 3. In order to move the dot without drawing, the Move dot command is used (Figure 4).

Figure 3

Figure 4

19
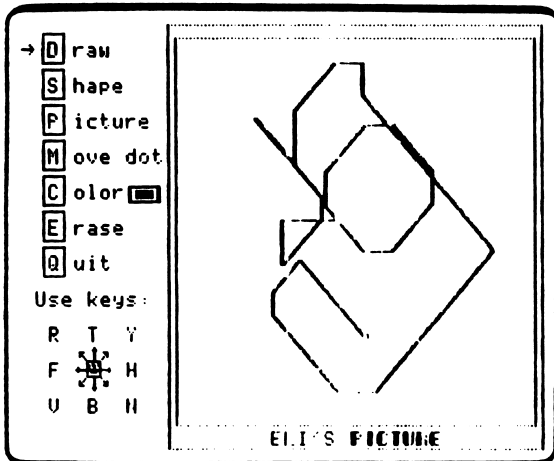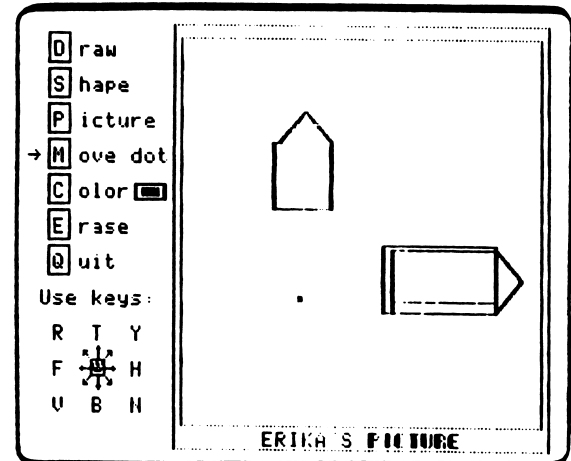
PROGRAM PREVIEW (continued)

The Shape command allows students to produce geometric shapes. Repeatedly pressing the number of any shape rotates it to produce some very interesting patterns (Figure 5). The Picture command allows students to select from the objects listed and place any of these objects on the screen (Figure 6).
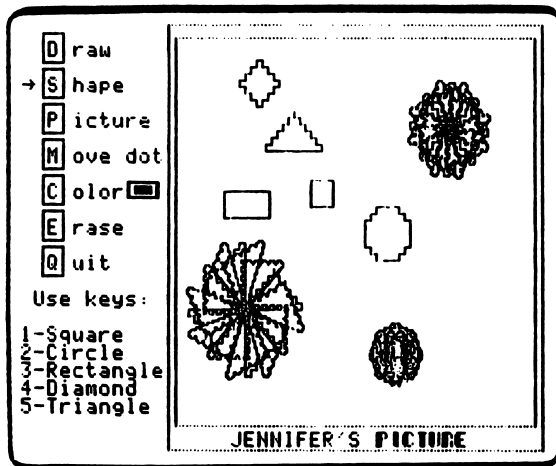
Figure 5
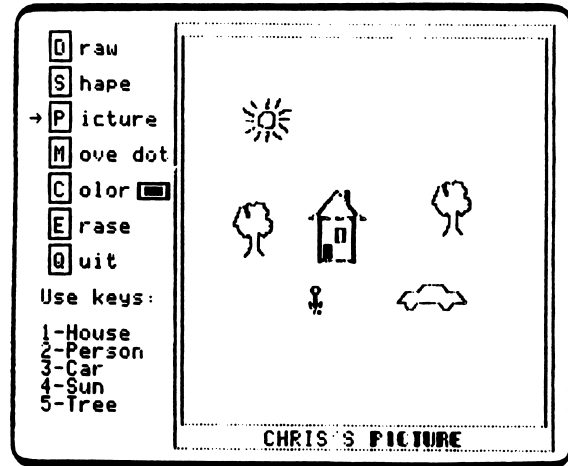
Figure 6

The Erase command will erase the entire picture and return the dot to the center. The Color command allows students to use different colors. When the students have completed a picture, it can be saved by using the Quit command and responding with a "yes" (Figure 7 and 8).
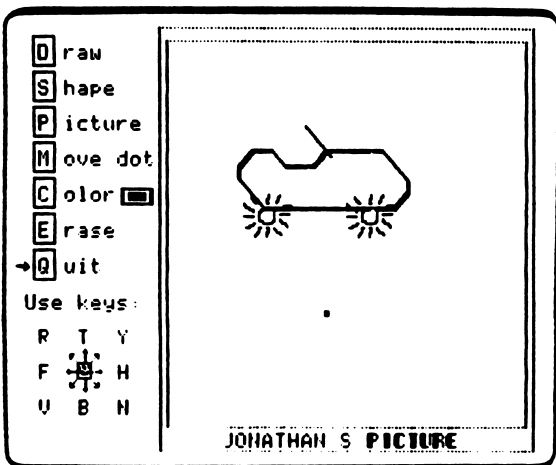
Figure 7
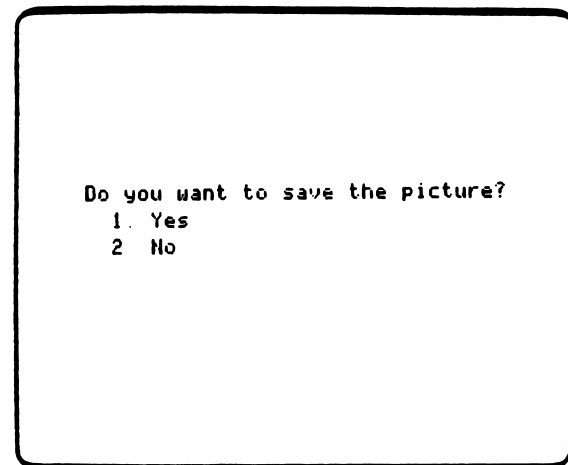
Figure 8

PROGRAM PREVIEW (continued)

The available storage area for drawings may already be full when the students wish to save their pictures. Students are reminded that they must remove a previously stored picture in order to make room for their new one (Figure 9). By responding with a "yes" students can erase the first picture stored and save their new picture (Figure 10).

```
    Do you want to save the picture?
      1. Yes
      2. No

  The Picture Show is full.  Saving this
  picture will erase ELI'S picture.

        Press SPACE BAR to continue
```

Figure 9

```
    Do you want to save the picture?
      1. Yes
      2. No
```
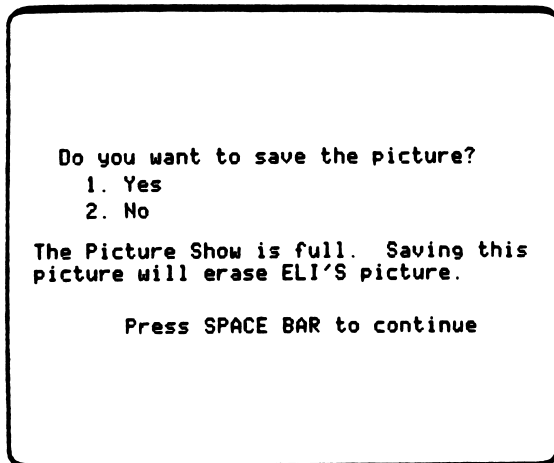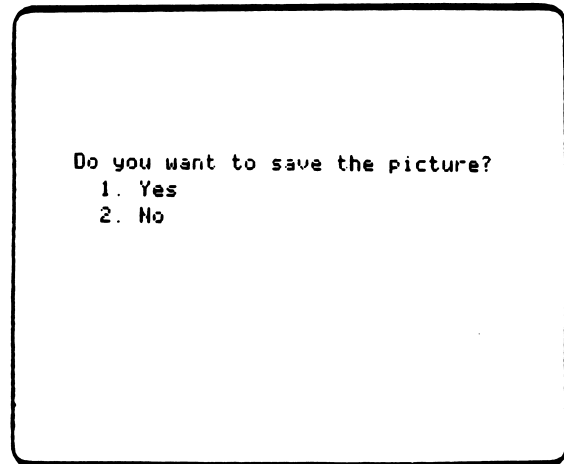
Figure 10

USE IN AN INSTRUCTIONAL SETTING

Preparation

Students should be familiar with the words presented in this program and be able to locate keys on the keyboard.

Using the Program

Some students may benefit from an initial demonstration of the program. Handouts 20, 21, and 22 should be used to lead students through the program's basic features. An aide or student can also be used to provide any necessary demonstrations.

You may want to place direction stickers (small arrows) on the keys used in the Draw and Move modes. These stickers will help young students use the direction commands. These and other help stickers are found following page 60.

Remember, only eight pictures can be saved! When a ninth picture is added, the first picture saved will be lost.

Follow-up

1. Give students additional opportunities to use PICTURE. Encourage exploration of the features.

2. Encourage students to share their pictures. Such interaction stimulates students to use additional features of the program.

3. Students can keep track of the commands needed to create a picture. Then the students can make a Computer Trail modeled on Handouts 20-22.

4. Favorite stories can be illustrated using PICTURE.

5. Students can create illustrations for content area reports and projects.

6. Students can illustrate scientific concepts, such as symmetry.

7. Favorite drawings may be saved and shown later using PICTURE SHOW.

8. Students can create team pictures, taking turns adding parts to the picture.

DESCRIPTION

PICTURE SHOW allows students to retrieve from the diskette drawings that were produced using the PICTURE program. Students can view any drawings that have been saved by selecting from the menu of available pictures. If the appropriate printer is available, students can print their pictures. The pictures are saved under the students' names.

Curriculum Area:	Computer Literacy
Topic:	Computer Art
Grade Range:	Primary
Type:	Student Utility
Classroom Use:	Individual

LEARNING OBJECTIVES

After using this courseware, the student should be able to:

- recognize the ability of a computer to retrieve information stored on a diskette;

- access information stored in a computer.

BACKGROUND INFORMATION

PICTURE SHOW will allow students to look at any of the pictures which have been drawn and saved with the PICTURE program. The MECC Picture and up to eight student pictures can be saved on the diskette. After eight pictures have been saved, the first student picture saved is deleted before the next new picture is saved.

A menu of saved pictures will appear when the PICTURE SHOW program is run. The student then selects the number of the desired picture and it is displayed. The pictures are identified by using the student's name. An option is provided for returning to the main menu of the diskette.

You may delete any or all of the pictures that have been saved on this diskette by accessing Teacher Options (Appendix B). Access this option by pressing Control A from the main menu for The Friendly Computer.

Note: Pictures stored on this diskette may be printed by using an Apple Dot Matrix (DMP) printer connected with a parallel interface card, an Apple Imagewriter printer connected with a serial interface card, or a printer connected and supported through an Orange Micro Grappler card. The interface card must be placed in slot 1 or slot 2. Refer to your printer manual for further instructions.

PROGRAM PREVIEW

The PICTURE SHOW program allows students or the teacher to view any of the pictures saved on the diskette. Up to eight pictures can be saved along with the MECC Picture. Students are shown a menu of existing pictures (Figure 1). After they select a picture, it is retrieved from the diskette and displayed on the screen (Figure 2). After viewing the stored pictures, you may wish to delete pictures by using the Teacher Option.
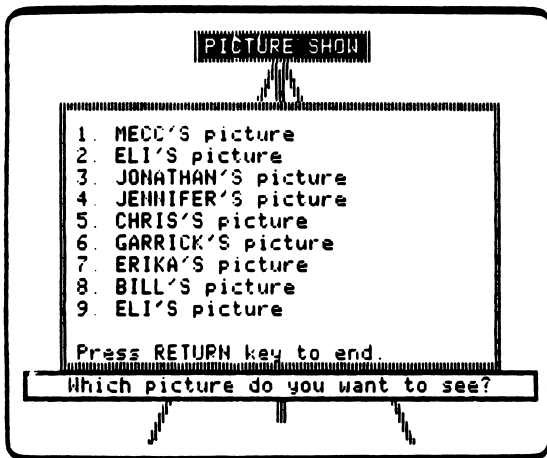
Figure 1
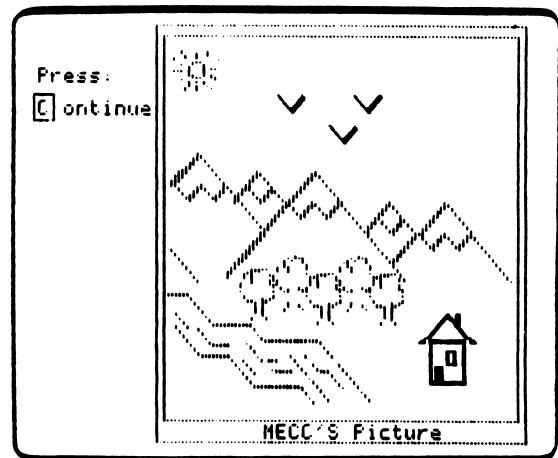
Figure 2

Drawings saved on the PICTURE SHOW program may be printed (see page 24). The printing option will not appear unless the Print Option has been turned on by using Teacher Options (compare Figures 3 and 4).
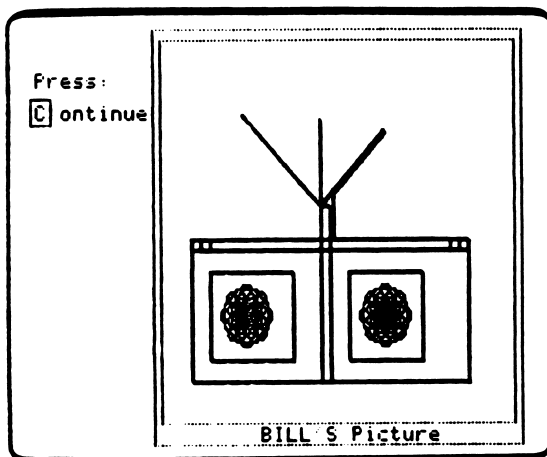
Figure 3
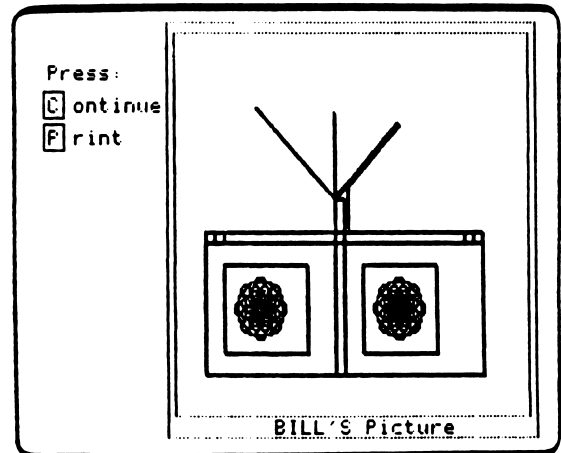
Figure 4

PROGRAM PREVIEW (continued)

Students will be reminded to prepare their printers. The frames shown in Figure 5 will appear to remind the students to turn on or "select" their printers. Figure 6 is a reduction of a printout.
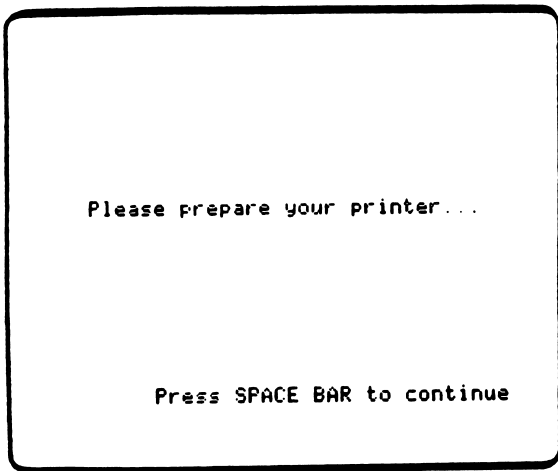
Please prepare your printer...

Press SPACE BAR to continue

Figure 5

JONATHAN'S Picture
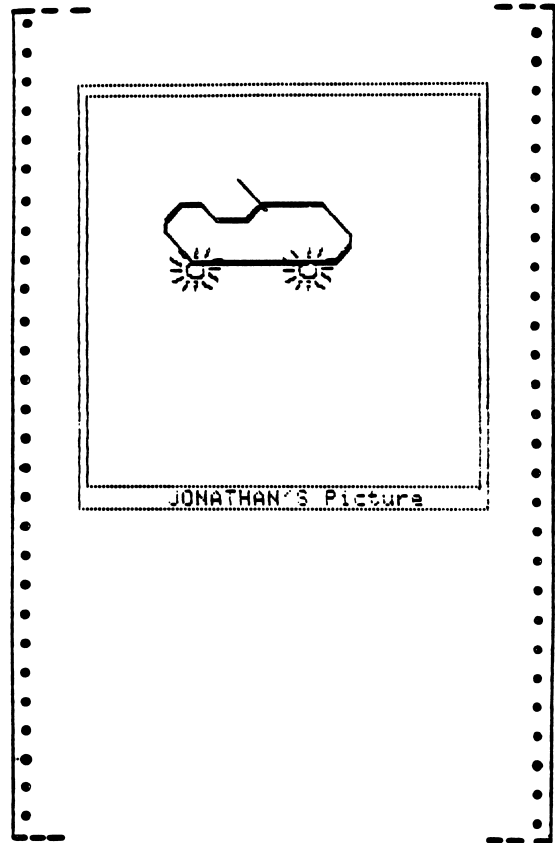
Figure 6

USE IN AN INSTRUCTIONAL SETTING

Preparation

Students should have created and saved pictures by using the PICTURE program.

Using the Program

Encourage students to look at the pictures created by other students. Students may view up to eight student-made drawings on this program.

Drawings created by the students may be deleted by using the Teacher Option from The Friendly Computer's main menu. Press Control-A to access Teacher Options. You may delete one picture or erase all of the pictures.

Follow-up

1. Create a class poster displaying printouts of the students' favorite pictures.

2. Assemble the pictures into a class Computer Art book.

3. Students may create a series of drawings to illustrate a story.

4. Collect magazine and newspaper clippings showing other forms of Computer Art.

5. Students can show parents their favorite drawings at "open house" nights.

6. Include printouts of favorite drawings as part of the students' take-home booklets.

7. Use printouts to create "special occasion" cards.

8. Students can create small maps or drawings for content area reports.

9. Students can create mazes and challenge others to solve them.

10. Favorite drawings can be displayed. Other students can then try to re-discover the techniques used in the drawings.

STUDENT HANDOUTS

Name

THE FRIENDLY COMPUTER
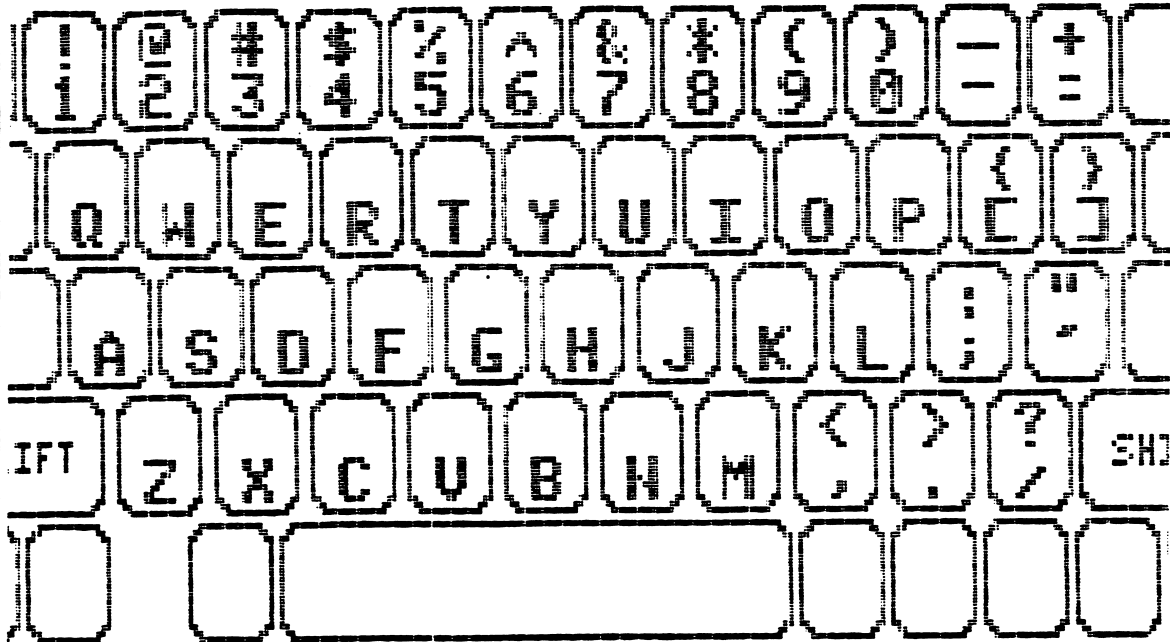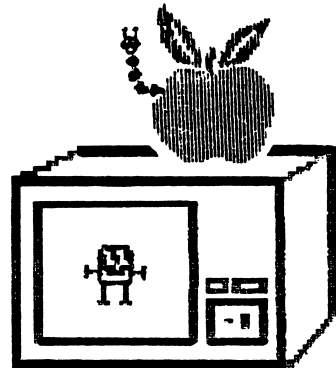
I am
WISE
OWL.
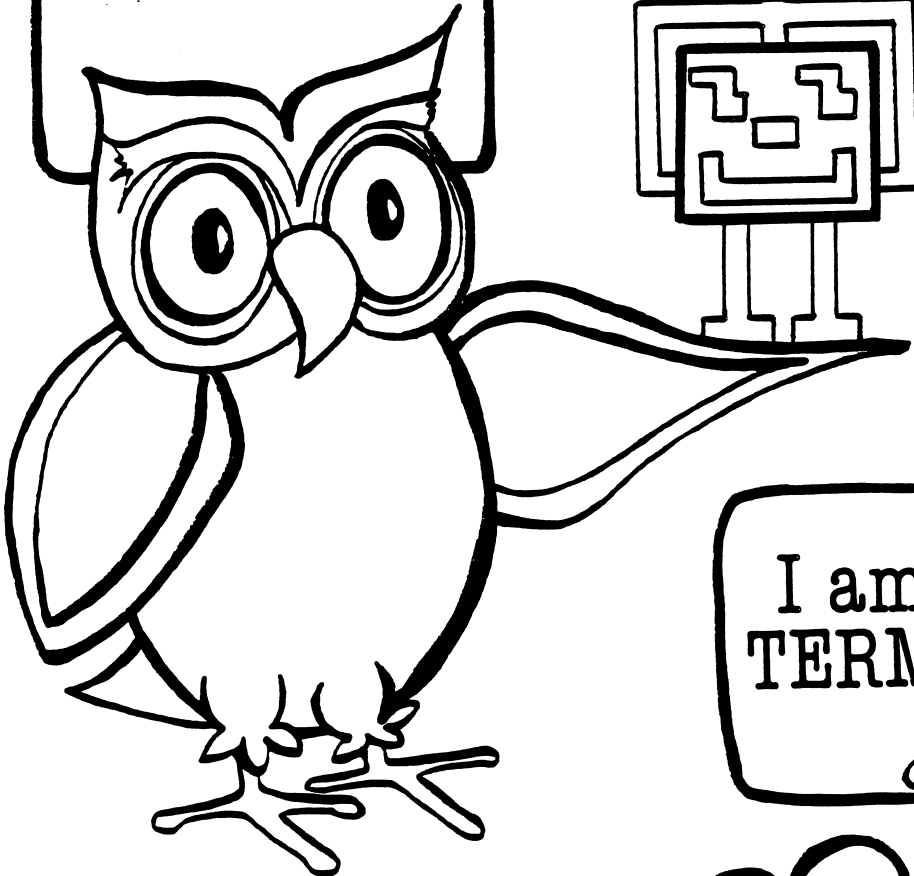
I am
ZEBUG.
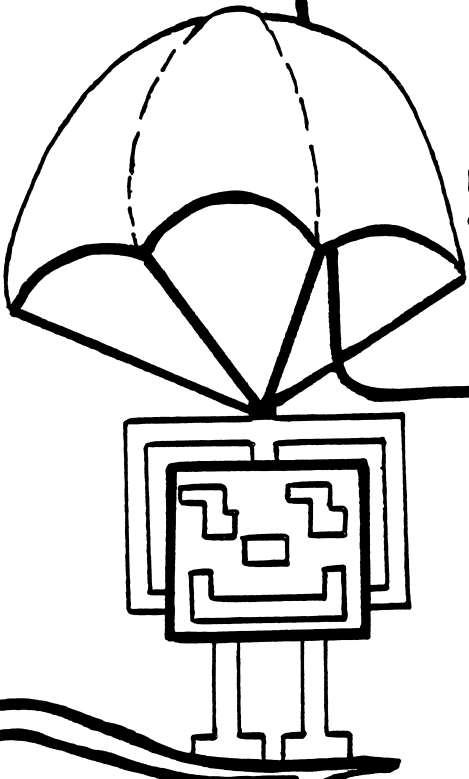
I am
TERM WORM.

Name _____

Color the picture.

4   4

1   1

3   3

2

1   3

1

4   4   1   6

1

6   3

1

5

3

2   2

© MECC, 1983

① YELLOW   ③ BLACK   ⑤ RED

② ORANGE   ④ BROWN   ⑥ GREEN

31
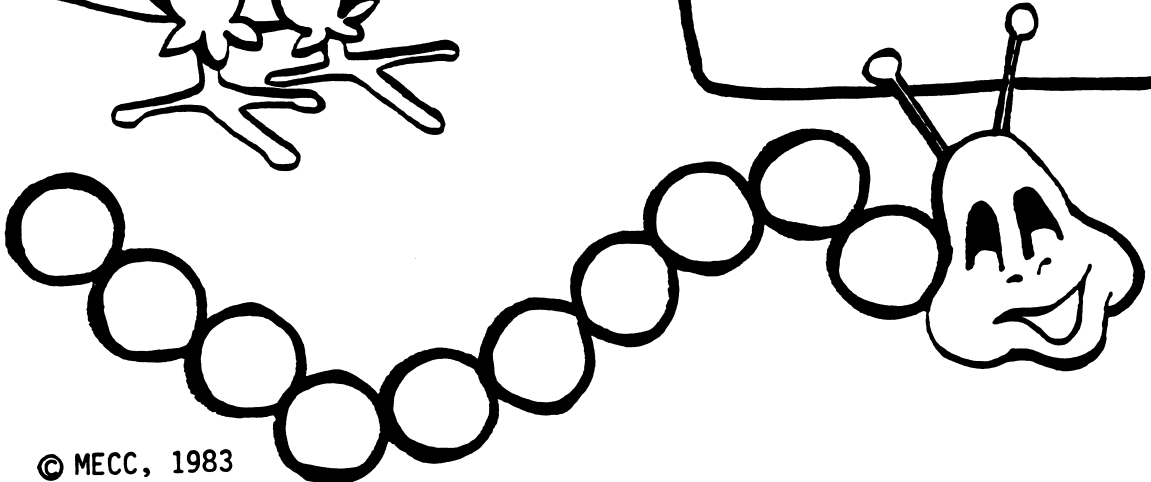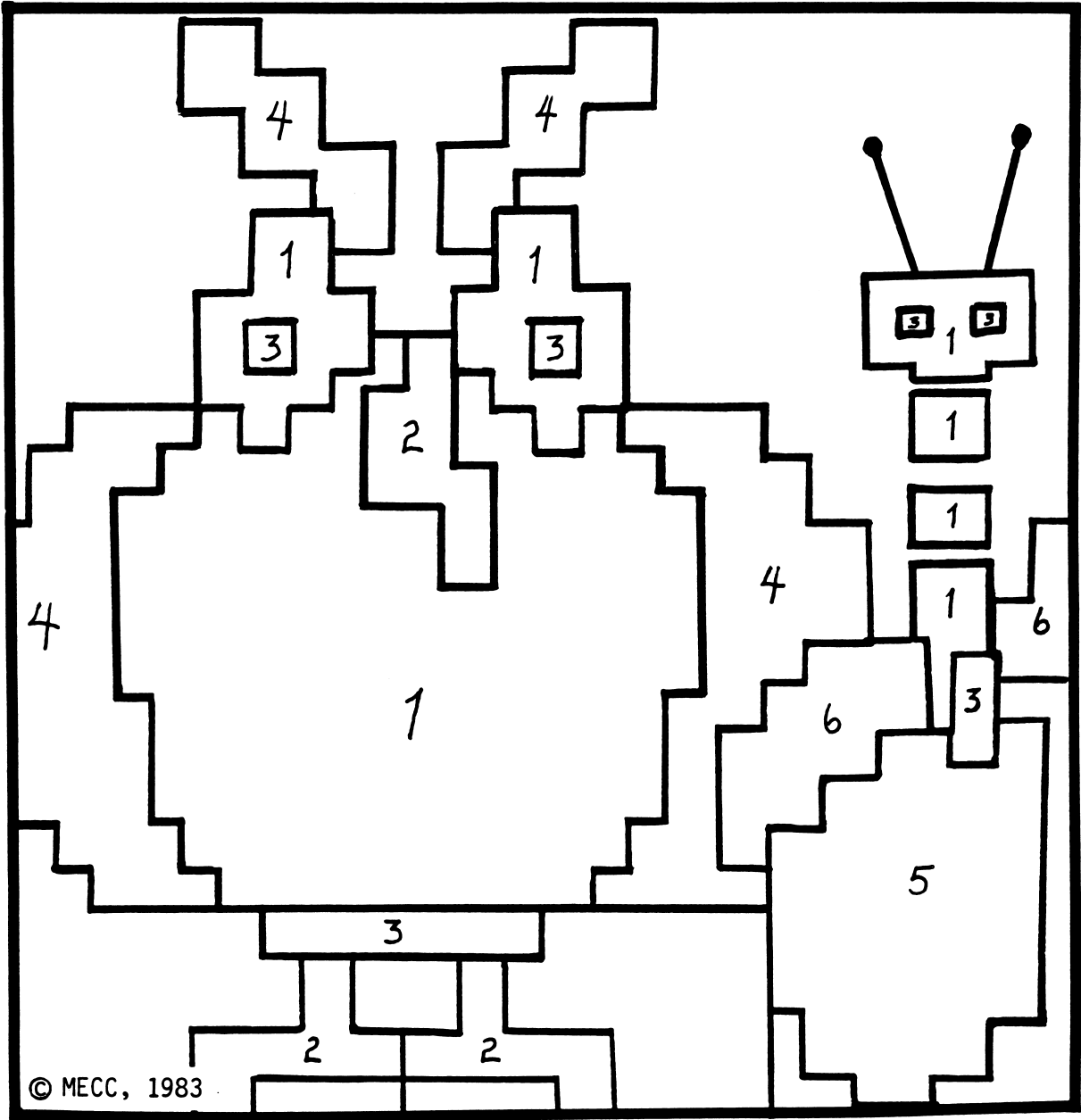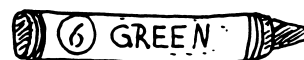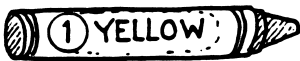
This is to certify that ⸺
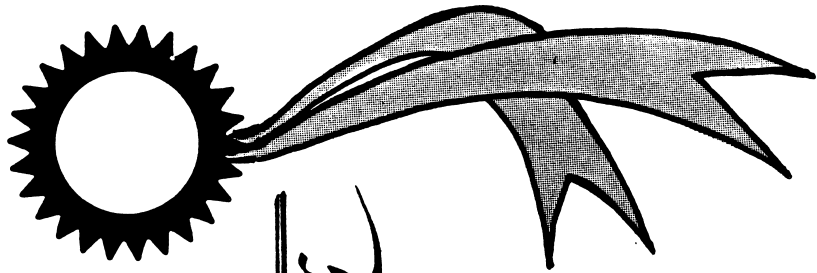
has done excellent work with

◯ the keyboard

◯ computer terms

◯ computer art

◯ caring for the computer
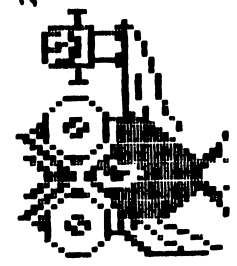
ZEBRA

Wise Owl

TermWorm

⸺
TEACHER

Name _____

Fill in the
empty keyboard.
Apple II

! 1	" 2	# 3	$ 4	% 5	& 6	' 7	(8	) 9	0	* :	= -

Q W E R T Y U I O P @ RETURN

A S D F G H J K L + ;

SHIFT Z X C V B N M < , > . ? / SHIFT

SHIFT   SHIFT
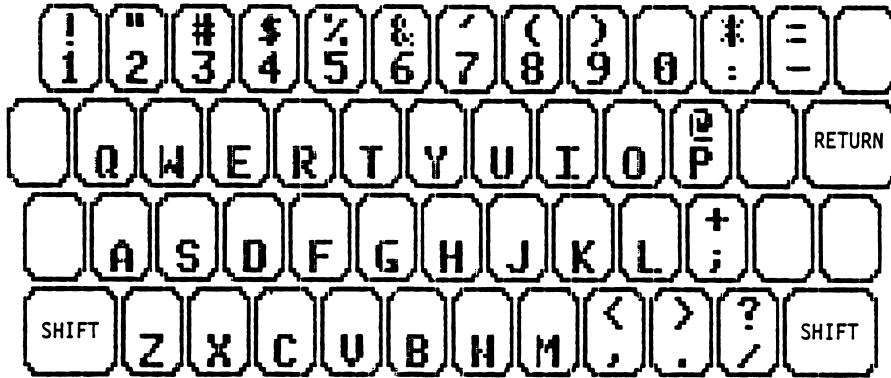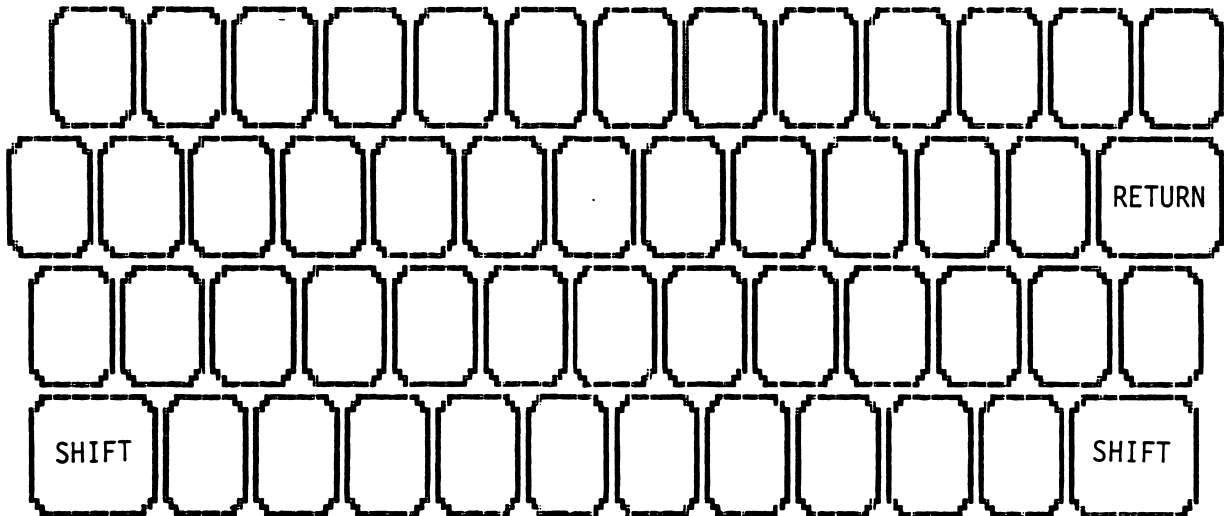
RETURN

Name _____
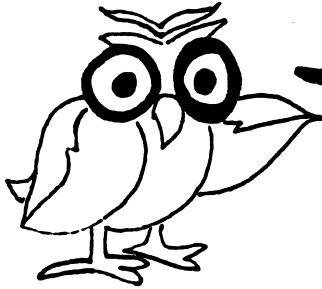
Fill in the
empty keyboard.
Apple //e

! 1	@ 2	# 3	$ 4	% 5	^ 6	& 7	* 8	(9	) 0	_ -	+ =	
Q	W	E	R	T	Y	U	I	O	P	{ [	}]		\
A	S	D	F	G	H	J	K	L	: ;	" '	RETURN
SHIFT	Z	X	C	V	B	N	M	< ,	> .	? /	SHIFT

| RETURN |
| SHIFT | SHIFT |

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34

6a

RETURN

SHIFT

SHIFT

1 2 3 4 5 6 7 8 9 0

Q W E R T Y U I O P

A S D F G H J K L

Z X C V B N M , . ?/

keyboard

Apple II

6b

RETURN

SHIFT

SHIFT

1 2 3 4 5 6 7 8 9 0

Q W E R T Y U I O P

A S D F G H J K L

Z X C V B N M , . ?/
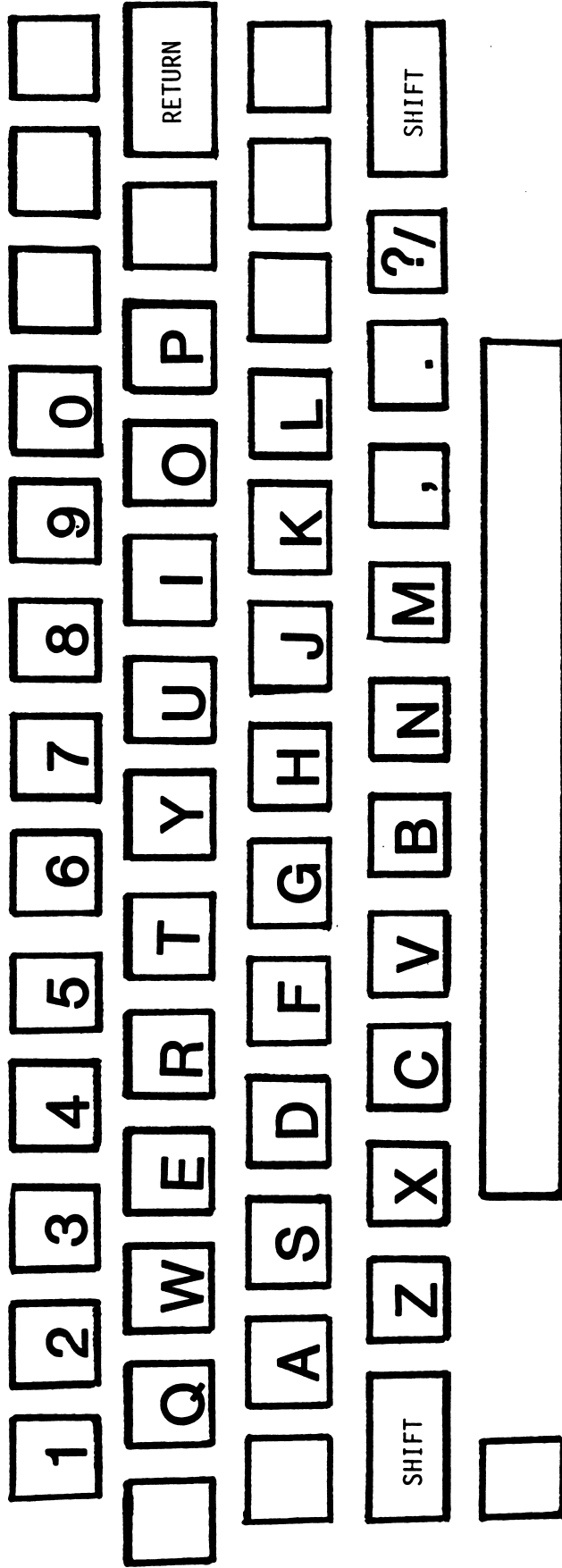
keyboard

Apple //e
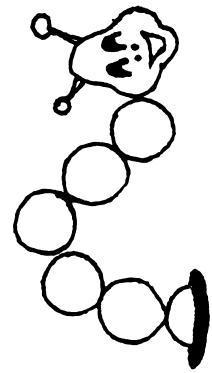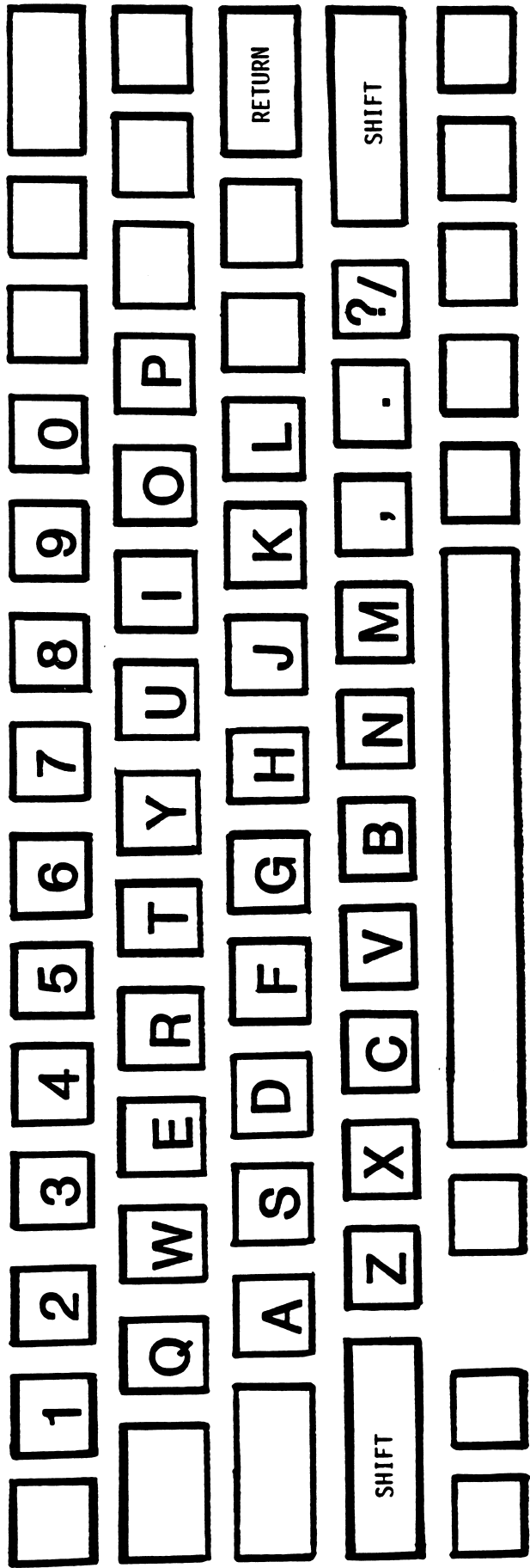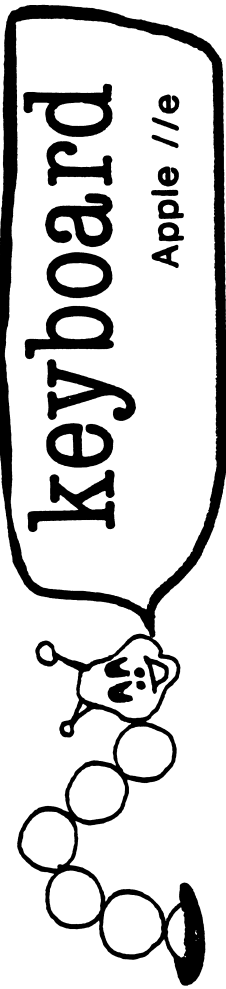
DECODE THE MESSAGE

$\overline{13}\ \overline{25}\quad \overline{6}\ \overline{18}\ \overline{9}\ \overline{5}\ \overline{14}\ \overline{4}\quad \overline{20}\ \overline{8}\ \overline{5}$

$\overline{3}\ \overline{15}\ \overline{13}\ \overline{16}\ \overline{21}\ \overline{20}\ \overline{5}\ \overline{18}$!

CODE

A	B	C	D	E	F	G	H	I
↓	↓	↓	↓	↓	↓	↓	↓	↓
1	2	3	4	5	6	7	8	9

J	K	L	M	N	O	P	Q
↓	↓	↓	↓	↓	↓	↓	↓
10	11	12	13	14	15	16	17

R	S	T	U	V	W	X	Y	Z
↓	↓	↓	↓	↓	↓	↓	↓	↓
18	19	20	21	22	23	24	25	26

Now, write your own message.

Name _____

DECODE THE MESSAGE

M Y   F R I E N D   T H E
13 25   6 18 9 5 14 4   20 8 5

C O M P U T E R!
3 15 13 16 21 20 5 18

CODE

A	B	C	D	E	F	G	H	I
↓	↓	↓	↓	↓	↓	↓	↓	↓
1	2	3	4	5	6	7	8	9

J	K	L	M	N	O	P	Q
↓	↓	↓	↓	↓	↓	↓	↓
10	11	12	13	14	15	16	17

R	S	T	U	V	W	X	Y	Z
↓	↓	↓	↓	↓	↓	↓	↓	↓
18	19	20	21	22	23	24	25	26

Now, write your own message. © MECC, 1983

WISE
OWL
says:
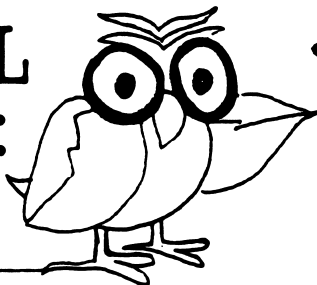
Take care of
the diskette.

8

Don't....
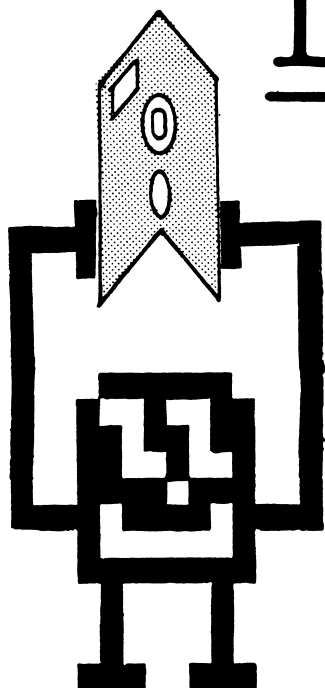
bend

touch

diskette

3

Turn on
the computer.

© MECC, 1983

computer

42

4

Choose a lesson from the **menu**.

THE FRIENDLY COMPUTER

1	Keyboard	4	Picture
2	Worm Worm	5	Picture Show
3	Zebug	6	Program Descriptions

Press 1, 2, 3, 4, 5, or 6

© MECC, 1983

menu

THE FRIENDLY COMPUTER

1	Keyboard	4	Picture
2	Worm Worm	5	Picture Show
3	Zebug	6	Program Descriptions

Press 1, 2, 3, 4, 5, or 6

2. Turn on the monitor.

3. Turn on the computer.

4. Choose a lesson from the menu.
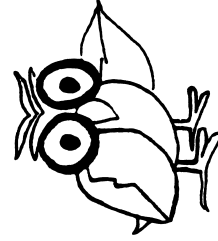
1. Put the diskette in the disk drive.
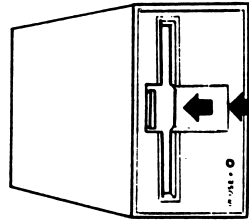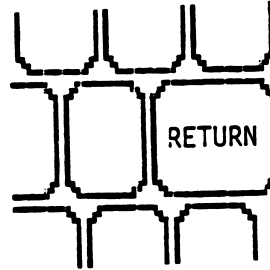
14

Match the
word to
the picture.
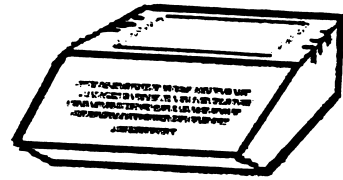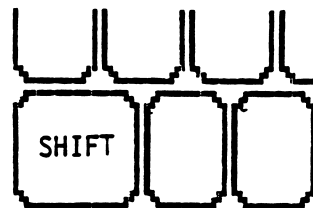
shift key

keyboard
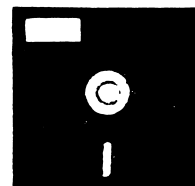
computer
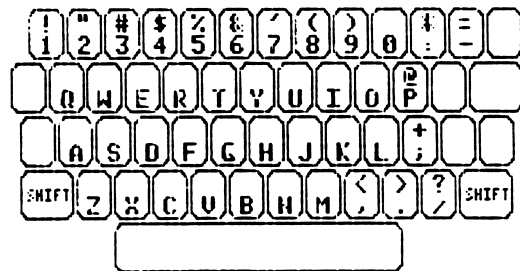
Term Worm

diskette

Name

Match the
word to
the picture.

shift key

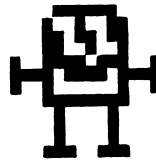keyboard

computer
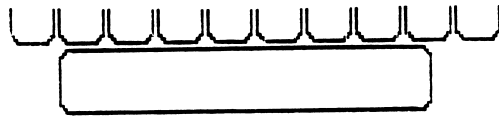
Term Worm

diskette

SHIFT

© MECC, 1983

46
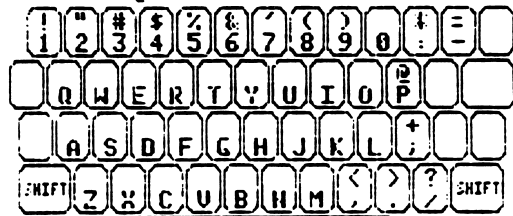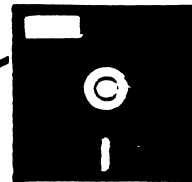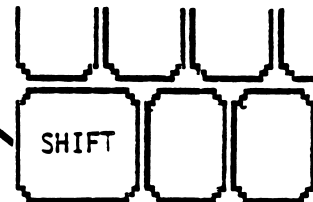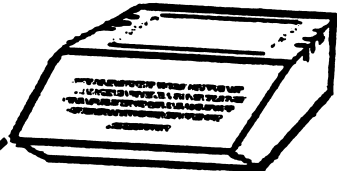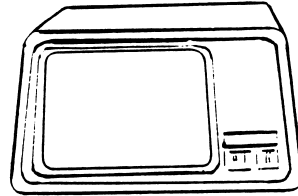
return key

monitor

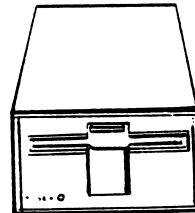disk drive
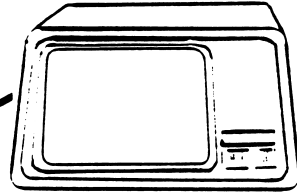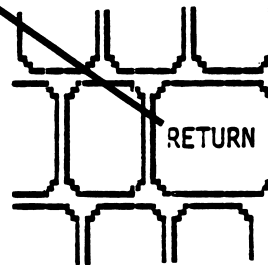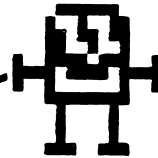
Zebug

space bar
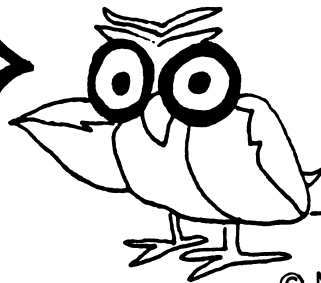
Match the
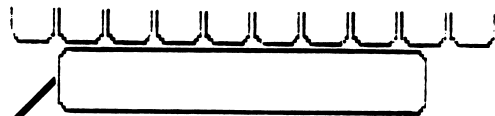word to
the picture.

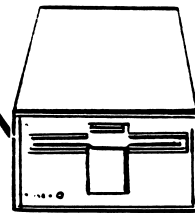# Name

return key

monitor

RETURN

disk drive

Zebug

space bar

Match the word to the picture.

Name _____

WORD HUNT

Circle the Computer Terms

```
D  I  S  K  D  R  I  V  E  B  Q  U  E  T
N  S  O  A  P  N  T  R  V  I  S  I  T  L
M  O  N  I  T  O  R  S  N  Q  E  V  S  X
L  O  V  E  X  P  T  A  H  I  L  M  O  Z
A  B  L  C  O  M  P  U  T  E  R  A  N  O
X  V  O  Q  N  X  Z  B  O  Y  A  P  A  R
T  Y  G  I  K  E  Y  B  O  A  R  D  R  L
D  I  S  K  E  T  T  E  A  M  B  Y  O  V
```

Look for these words _____

computer

keyboard

monitor

disk drive

diskette

Name _____

WORD HUNT

Circle the Computer Terms

```
D  I  S  K  D  R  I  V  E  B  Q  U  E  T
N  S  O  A  P  N  T  R  V  I  S  I  T  L
M  O  N  I  T  O  R  S  N  Q  E  V  S  X
L  O  V  E  X  P  T  A  H  I  L  M  O  Z
A  B  L  C  O  M  P  U  T  E  R  A  N  O
X  V  O  Q  N  X  Z  B  O  Y  A  P  A  R
T  Y  G  I  K  E  Y  B  O  A  R  D  R  L
D  I  S  K  E  T  T  E  A  M  B  Y  O  V
```
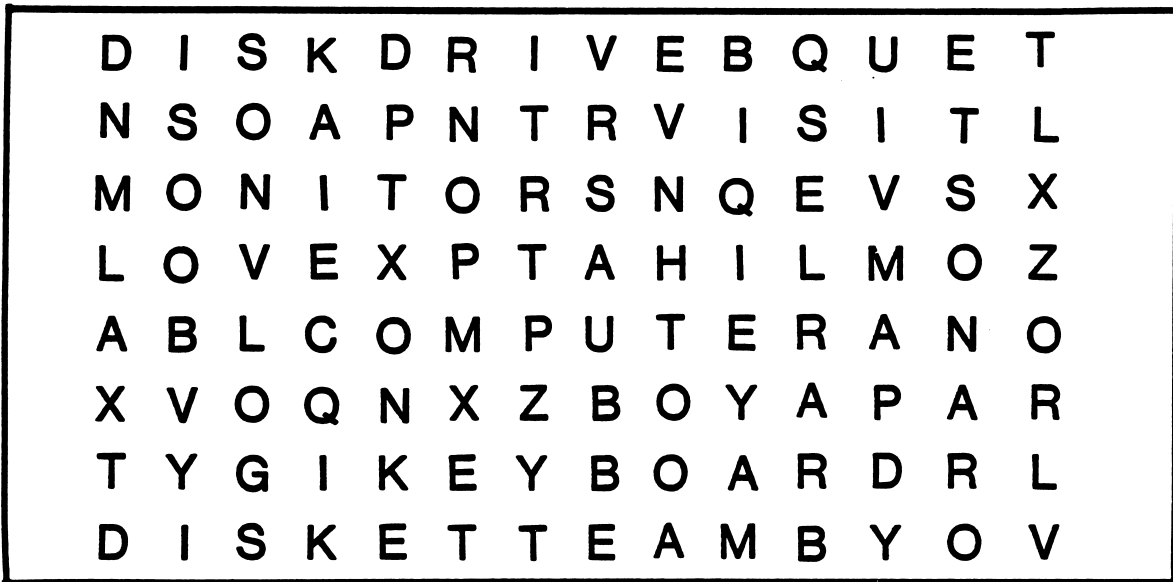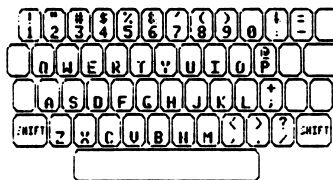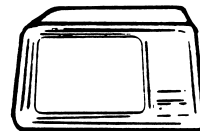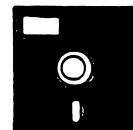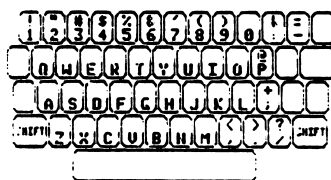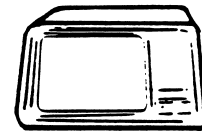
Look for these words _____

computer

keyboard

monitor

© MECC, 1983 disk drive

diskette

Name _____

WORD HUNT

Circle the Computer Terms

```
M  O  N  I  T  O  R  D  B  D  C  E  A  D
S  Q  U  X  H  I  R  I  W  A  O  F  O  I
R  U  N  W  J  A  L  S  M  C  M  I  P  S
P  E  V  Y  O  Z  K  K  X  N  P  G  Q  K
O  W  T  B  D  V  C  E  B  A  U  R  S  D
M  N  Y  I  T  U  E  T  F  Y  T  Z  X  R
X  E  V  L  K  J  N  T  A  K  E  H  C  I
K  Q  U  R  S  P  O  E  H  J  R  L  D  V
T  Y  M  E  N  U  Z  B  I  E  F  G  M  E
```
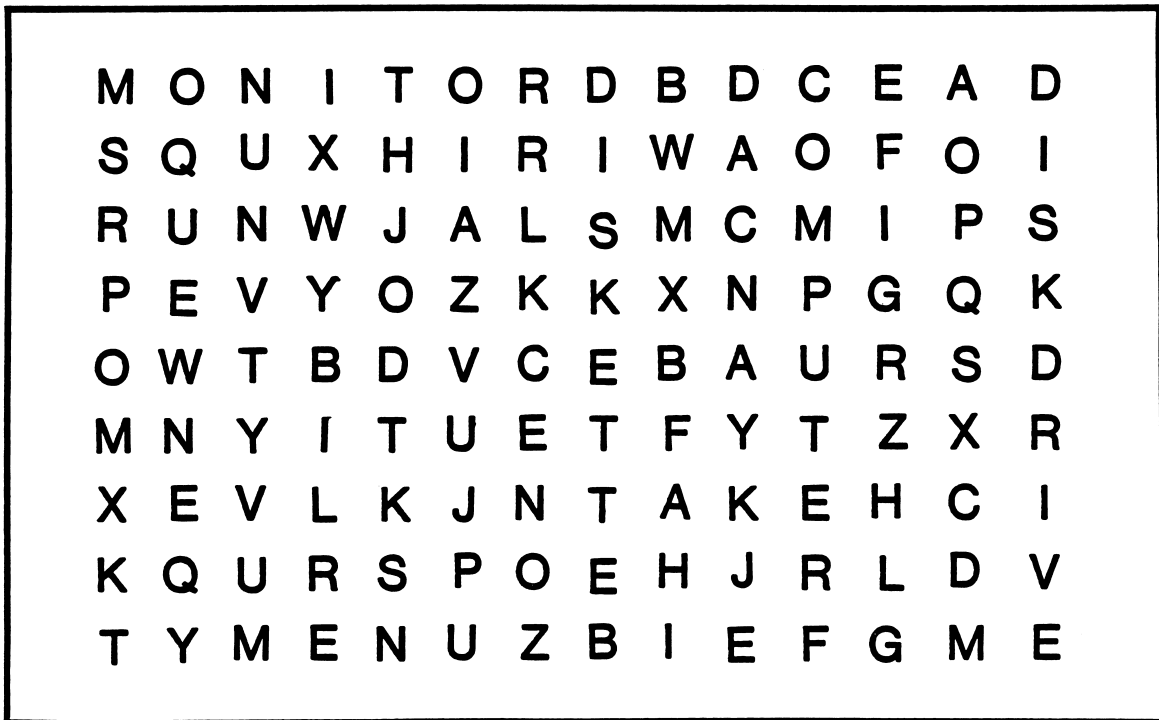
© MECC, 1983

Look for these words

run   computer
monitor   disk drive
menu   keyboard
diskette

Name _____

WORD HUNT

Circle the Computer Terms

```
M O N I T O R D B D C E A D
S Q U X H I R I W A O F O I
R U N W J A L S M C M I P S
P E V Y O Z K K X N P G Q K
O W T B D V C E B A U R S D
M N Y I T U E T F Y T Z X R
X E V L K J N T A K E H C I
K Q U R S P O E H J R L D V
T Y M E N U Z B I E F G M E
```
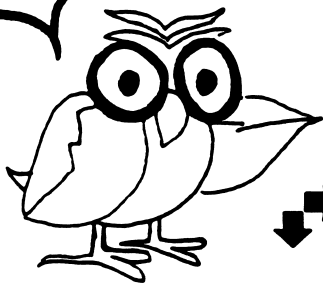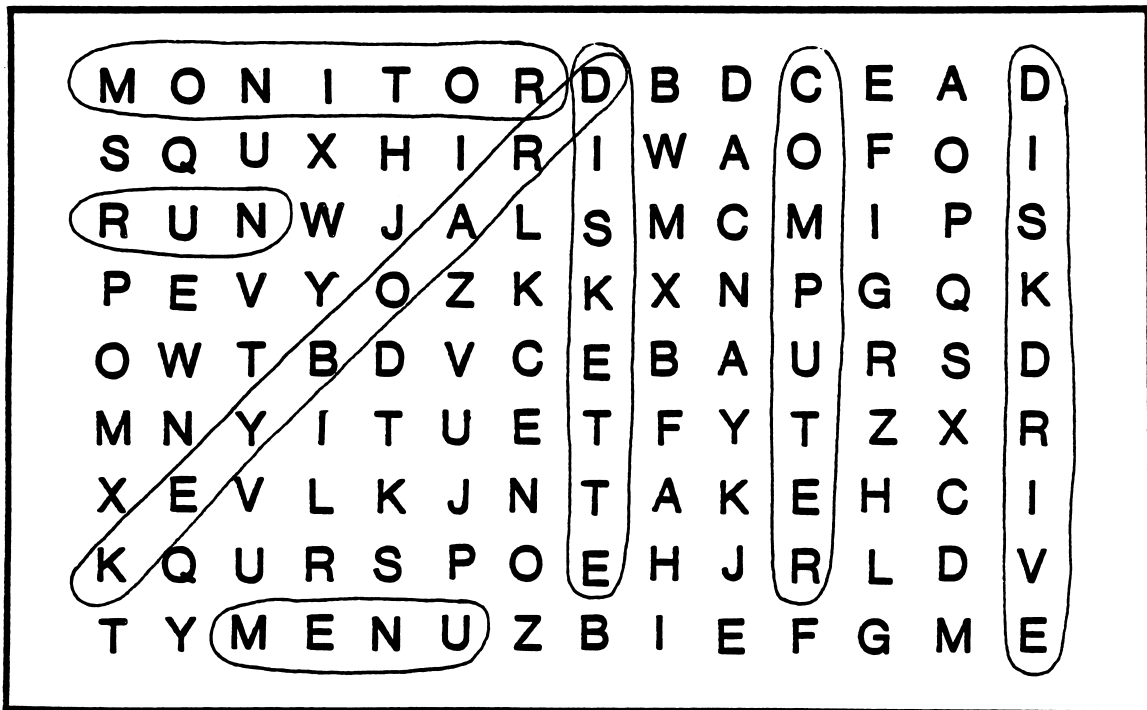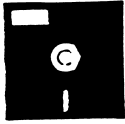
© MECC, 1983

Look for these words

run computer
monitor disk drive
menu keyboard
diskette

DOWN

1 diskette

6 monitor

2 keyboard

7 shift key

space bar

ACROSS

4 disk drive

5 computer

8 return key

COMPUTER
CROSSWORDS

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Answer Sheet

DOWN

1 diskette

6 monitor

2 keyboard

7 shift key

3 space bar

ACROSS

4 disk drive

5 computer

8 return key

COMPUTER
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DOWN

1

6

2

7 SHIFT

3

ACROSS

4

5

8 RETURN

COMPUTER
CROSSWORDS

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18b

DOWN
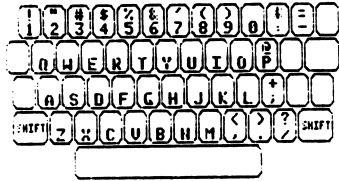
1

6

2

7

3

ACROSS

4

5

8

COMPUTER
CROSSWORDS

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Cut out the pieces to make a puzzle.

Name _____

FOLLOW COMPUTER'S TRAIL

Make this picture.
Press the keys in
the computer trail.

Start

End

Name _____

FOLLOW 🍎
COMPUTER'S
TRAIL

Make this picture.
Press the keys in
the computer trail.

Start

M E
B
B B
D B B
B
F N
N
F H N
R H T
R H
R
T
S T T T
T T T
T T
3
3 3
3 3
3 3
3 3
3 3
3 3
3 3 3

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End

Name

FOLLOW COMPUTER'S TRAIL

Make this picture.
Press the keys in
the computer trail.

Start

F
F
V
V
V
V
D
M
1
P
E

P
3
F
1
F
M
C
D
F
F

M
5
P
3
C
M
T

T
T
T
T
T
T
P
4

End

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APPENDICES

CREDITS

The development team which produced this courseware product included Craig Solomonson, Project Coordinator; Doris Bower, Designer; Greg Holey, Developer; and Bill Way, Programmer.

TO THE READER:

MECC has made every effort to ensure the instructional and technical quality of this courseware package. Your comments—as user or reviewer—are valued and will be considered for inclusion in any future version of the product. Please address comments to:

MECC Courseware Development
3490 Lexington Avenue North
St. Paul, MN 55126

TEACHER OPTIONS

The Friendly Computer provides teacher options to print or delete any student pictures saved on the diskette. These options can be accessed by typing CONTROL-A while viewing the main menu (Figure 1). This is done by holding down the control key and then pressing the A key. The Teacher Options menu will then appear (Figure 2).
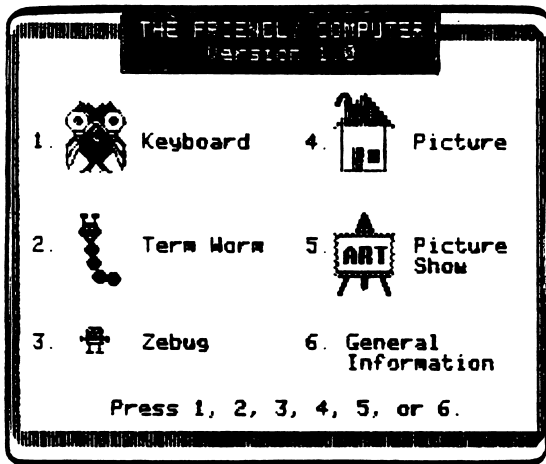
Figure 1
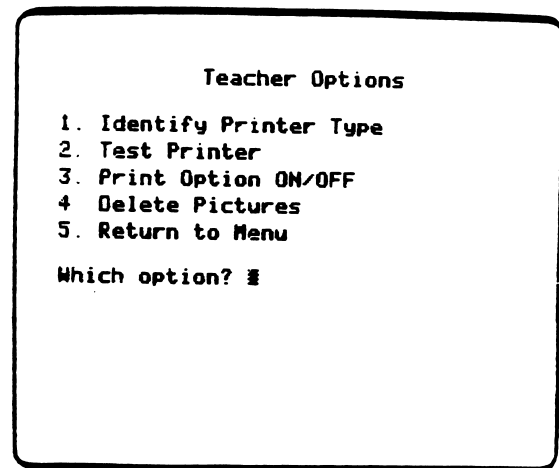
Figure 2

PRINTING PICTURES

Before any pictures can be printed, the following steps must be followed:

Step 1: Run Option #1 to identify the type of printer you have. (Only certain types will work.)

Step 2: Run Option #2 to test the printer.

Step 3: Run Option #3 to turn the Print Option on.

The following printer and interface card combinations will work with this diskette:

a) An Apple Dot Matrix printer connected with a parallel interface card in slot #1 or #2.

b) An Apple Imagewriter printer connected with a serial interface card in slot #1 or #2.

c) A printer with graphic capabilities connected with an Orange Micro Grappler interface card in slot #1 or #2. (Consult your interface card manual for a list of printers that work with this card.)

STEP 1: Identify Printer Type

If you do not have one of the printer/interface combinations listed, pictures cannot be printed (Figure 3). If you have the proper combination, indicate which one (Figure 4).

```
+---------------------------------------+    +---------------------------------------+
|        Identify Printer Type          |    |        Identify Printer Type          |
|                                       |    |                                       |
| Pictures can be printed with the      |    | Pictures can be printed with the      |
| following combinations of printers    |    | following combinations of printers    |
| and interface cards:                  |    | and interface cards:                  |
|                                       |    |                                       |
| 1. Apple DMP / Parallel card          |    | 1. Apple DMP / Parallel card          |
| 2. Apple Imagewriter / Serial card    |    | 2. Apple Imagewriter / Serial card    |
| 3. Printer / Grappler Card            |    | 3. Printer / Grappler Card            |
|                                       |    |                                       |
| Do you have one of these              |    | Do you have one of these              |
| combinations (Y/N)? N                 |    | combinations (Y/N)? Y                 |
|                                       |    |                                       |
| Pictures cannot be printed.           |    | Which number? 1▮                      |
|                                       |    |                                       |
|                                       |    |                                       |
|     Press SPACE BAR to continue       |    |                                       |
+---------------------------------------+    +---------------------------------------+
```

<center>Figure 3</center>   <center>Figure 4</center>

The interface card between your printer and the computer must be inserted in either slot #1 or slot #2 of your computer. If the interface card is not in one of these slots, it must be moved (Figure 5). Be sure the computer is turned off before moving the interface card. If the interface card is in one of these slots, indicate which one (Figure 6).

```
+---------------------------------------+    +---------------------------------------+
|   The interface card between your     |    |   The interface card between your     |
| printer and computer must be          |    | printer and computer must be          |
| inserted into either Slot #1 or Slot  |    | inserted into either Slot #1 or Slot  |
| #2 of your computer.                  |    | #2 of your computer.                  |
|                                       |    |                                       |
| Is the interface card in one of       |    | Is the interface card in one of       |
| these slots (Y/N)? N                  |    | these slots (Y/N)? Y                  |
|                                       |    |                                       |
| In order to print pictures, the       |    | Which slot (1 or 2)? 1                |
| interface card must be moved to       |    |                                       |
| either Slot#1 or Slot#2.              |    | You can verify these settings by      |
|                                       |    | selecting the 'Test Printer' option.  |
|                                       |    |                                       |
|     Press SPACE BAR to continue       |    |     Press SPACE BAR to continue       |
+---------------------------------------+    +---------------------------------------+
```

<center>Figure 5</center>   <center>Figure 6</center>

STEP 2: Test Printer

After the printer type and slot number have been identified, this information is saved on the diskette. To verify that the information is correct, run the Test Printer Option (Figure 7). The screen shown in Figure 8 should be printed. If the screen appears different or no printing occurs, check 1) the printer type and settings, 2) the interface card type, and 3) the slot number.

```
            Teacher Options

1. Identify Printer Type
2. Test Printer
3. Print Option ON/OFF
4. Delete Pictures
5. Return to Menu

Which option? 2█

 ┌──────────────────────────────┐
 │ Diskette is currently set for:│
 │  Apple DMP / Parallel card   │
 │  Inserted in slot #1         │
 └──────────────────────────────┘
```

Figure 7

```
            Test Printer

┌──────────────────────────────┐
│ Diskette is currently set for:│
│  Apple DMP / Parallel card   │
│  Inserted in slot #1   .     │
└──────────────────────────────┘

  If the above settings are correct,
this screen should be printed as
seen.  If not, please check your; 1)
printer type or settings, 2)
interface type or manual, and 3)
slot number.

   ┌──────────────────────────┐
   │   TURN PRINTER ON NOW    │
   │   AND PRESS RETURN.      │
   └──────────────────────────┘

  Press SPACE BAR to continue
```

Figure 8

STEP 3: Print Option ON/OFF

In order to have the Print command displayed when running the PICTURE SHOW program, this option must be turned on (Figures 9 and 10). It is suggested that you turn the Print Option off when using the program with no printer attached. This will prevent students from "hanging up" the program if they press P.

```
            Teacher Options

1. Identify Printer Type
2. Test Printer
3. Print Option ON/OFF
4. Delete Pictures
5. Return to Menu

Which option? 3█

 ┌──────────────────────────────┐
 │ Diskette is currently set for:│
 │  Apple DMP / Parallel card   │
 │  Inserted in slot #1         │
 └──────────────────────────────┘
```

Figure 9

```
         Print Option ON/OFF

This option determines if the Print
command is displayed and students
are allowed to print their pictures
while running the PICTURE SHOW
program.

┌──────────────────────────────┐
│ Current setting:             │
│    P rint will not be displayed.│
└──────────────────────────────┘

Do you wish to turn P rint on ? Y█
```

Figure 10

DELETING PICTURES

The Delete Pictures Option allows you to delete any or all pictures from the diskette. A list of pictures will be shown (Figure 11). After the picture has been deleted, the updated list will appear (Figure 12). Press the RETURN Key to exit this option and return to the menu.

```
          Delete Pictures

1. DELETE all pictures.
2. ELI'S picture
3. JONATHAN'S picture
4. JENNIFER'S picture
5. CHRIS'S picture
6. GARRICK'S picture
7. ERIKA'S picture
8. BILL'S picture
9. ELI'S picture

DELETE which picture? 5▮

Press RETURN to exit
```

Figure 11

```
          Delete Pictures

1. DELETE all pictures.
2. ELI'S picture
3. JONATHAN'S picture
4. JENNIFER'S picture
5. GARRICK'S picture
6. ERIKA'S picture
7. BILL'S picture
8. ELI'S picture


DELETE which picture? ▮

Press RETURN to exit
```

Figure 12

MECC SERVICES

MECC is an organization established in 1973 to assist Minnesota schools in implementing educational computing. MECC provides a variety of services to ed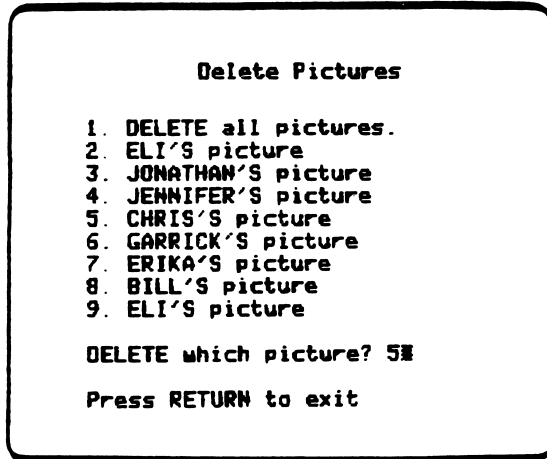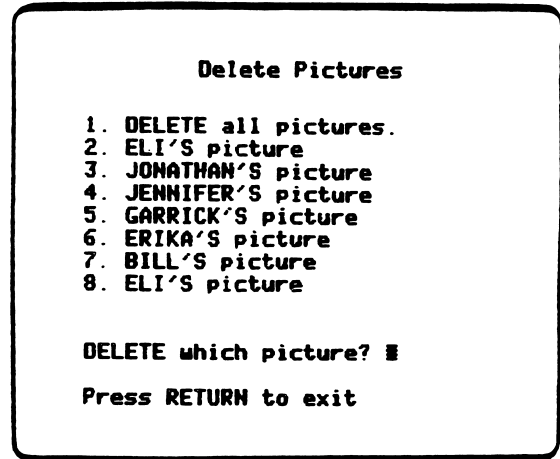ucation, including 1) development and distribution of instructional computing courseware; 2) in-service training for educators and development of materials for conducting training; and 3) educational computing assistance through newsletters and equipment purchase contracts. MECC's knowledge and expertise in the educational computing field comes from more than fifteen years of working with and providing leadership for thousands of educators on a daily basis.

- *MECC Educational Computing Catalog*
  A catalog containing descriptions of instructional computing courseware as well as training and planning materials is published annually and distributed at no charge. To request a catalog, write or call MECC Customer Services.

- **MECC Memberships**
  Educational institutions may become MECC Members, which qualifies them to obtain MECC courseware and training at specially reduced prices. To learn more about MECC Memberships, write or call MECC Marketing.

- **Training Programs**
  MECC conducts educational computing workshops for educators throughout the United States. For information on workshop schedules or to arrange a special training activity, write or call MECC Training Services.

- *MECC Network* **Newsletter**
  Published regularly throughout the school year, MECC's newsletter focuses on MECC activities, services, and products. To obtain, write or call indicating your interest in the *MECC Network* newsletter.

  For information on all the above items, use the MECC General Information telephone number: 612/481-3500.

- **Help Line**
  If you have any problems using MECC software:
    1) make note of the *name* and *version number* of the product;
    2) note the *brand* and *model* of the equipment involved, as well as the type of *printer card* used if the problem concerns a printer;
    3) write or call the Help Line to describe the problem (**612/481-3660**).

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