

APPLEWORKS



for School Librarians

by
May Lein Ho

Hi Willow Research & Publishing Co.

APPLEWORKS FOR SCHOOL LIBRARIANS

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Hi Willow Research and Publishing

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To my father and mother

for their enduring love and support

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PREFACE

"AppleWorks," the first integrated program for the Apple computer has become one of the most popular programs among Apple computer owners. Its ease of use, flexibility, and adaptability to a wide range of business and management functions make it superb for the computer novice and the expert.

A number of books have appeared which are manuals for using "AppleWorks," but most are geared to the person interested in business applications. This book is designed for the school library media specialist. As such, it contains teaching examples and templates of use in the management of the school library media center.

This manual is to be considered a beginner's guide to "AppleWorks"--not a definitive manual. The author suggests that the user master the directions in this book and then read the official documentation for "AppleWorks" that was published by the Apple Computer Company. One of the best methods of learning "AppleWorks" is to use this book as a beginning guide, doing all the suggested exercises. Then use the program for several weeks every day. At this point, a careful reading of the official manual and/or one of the several books about "AppleWorks" on the market will be a very constructive exercise. Second and third readings of the manuals will stimulate many ideas on how to use the program more effectively.

The book includes a Template Disk which has a number of exercises and templates for use by the learner. The author will continue to collect and create templates for the program and so readers may write for updates to the publisher.

Perhaps the best advice to the beginner is to try the program--give the maze of directions time to jell--try again--use at least weekly. The author predicts that the user will become hopelessly addicted to the program.

Enjoy!

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LIST OF FILES ON THE TEMPLATE DISK

I. WORD PROCESSOR

1. billing (Template to notify departments for materials billed)
(Designed by Pam Howard)
2. calendar (Template to produce school calendar)
3. checkout (Template to produce software checkout sheet)
(Designed by Glenda Roberts)
4. computer time (Template to produce computer lab sign-up
sheet) (Designed by Ramona Freeman)
5. curr.mapping (Template to produce curriculum mapping
worksheet for teachers to fill out)
6. curr.survey (Template to produce curriculum survey worksheet
for teachers to fill out)
7. equip.request (Template to produce AV equipment request form)
8. free materials (Template to request free materials) (Designed
by Pam Howard)
9. introduction (Example used in SECTION II)
10. lesson plan (Template to produce lesson plan worksheet)
(designed by Ramona Freeman)
11. letter (Example used in SECTION V)
12. list (Example used in SECTION V)
13. LMC (Template to produce LMC instructional involvement
worksheet)
14. map (Template to produce total collection map, SECTION VII)
15. sample 2 (Example of total collection map, SECTION VII)
16. student data (Template to produce student data worksheet)
(Designed by Jo Hendren)
17. unit.guide (Template to produce unit planning guide
worksheet)
18. Worksheet (Template to produce collection mapping worksheet)

II. DATA BASE

1. acquisition (Template used for acquisition process)
2. acquisitionfile (Example template used in SECTION III)
3. AV catalog (Template for AV holdings or catalog)
4. AV.equip.inven. (Template used for AV equipment inventory)
5. bibliography (Template to produce bibliography)
6. child literat (Example used in SECTION V)
7. com.software (Template for computer software file)
8. comm.resource (Template to store community resource information)
9. Considerations (Example template for consideration file)
(Designed by Pat Page)
10. curr.map.db (Template to store curriculum mapping information)
11. curr.survey.db (Template to store curriculum survey information)
12. equip.checkout (Template to store AV equipment request and scheduling information)
13. Magazine (Template to store periodical holdings)
14. overdues (Template to record overdue information)
15. paperbacks (Template to record paperback holdings) (Designed by Pam Howard)
16. play index (Template to create play index)
17. pop.bks.series (Example template to record holdings of popular book series) (Designed by Pam Howard)
18. volunteers (Template to store volunteer information)
(Designed by Pat Page)
19. young adult (Example used in SECTION V)

III. SPREADSHEET

1. April (Example used in SECTION V)
2. Budget 1 (Example used in SECTION IV)
3. Budget 2 (Example used in SECTION IV)
4. budget.report (Example template to calculate budgets for the library media center)
5. Elem.Chart (Template to produce total collection chart for elementary schools, SECTION VII)
6. emphasis.areas (A list of emphasis area names that can be used to map the collection or classify on order materials)
7. gradesheet (Example template used in SECTION IV to learn @IF logical functions)
8. Junior.Chart (Template to produce total collection chart for junior high schools, SECTION VII)
9. lib.stock (Example template to calculate library holdings)
(Designed by Pat Page)
10. May (Example used in SECTION V)
11. reference coll. (Example template to record library reference collection holdings) (Designed by Pam Howard)
12. sample 1 (Example of Total Collection Chart, SECTION VII)
13. Senior.Chart (Template to produce total collection chart for senior high schools, SECTION VII)
14. SUBJECTS (A list of subject names that can be used to classify computer software)

SECTION I

INTRODUCTION TO APPLEWORKS

Appleworks is a computer program that consists of three components: data base, word processor, and spreadsheet. Because AppleWorks is an integrated program, you can move back and forth among these three components and the files they create. The purpose of this guide is to introduce you the most commonly used features in AppleWorks and provide a number of applications for libraries. Using this guide will prepare you to consult the AppleWorks Reference Manual with more understanding.

To use AppleWorks, you need the following equipment: An Apple IIc or Apple IIe with an extended 80 column card inside the computer, at least one disk drive, a monitor, the AppleWorks STARTUP and PROGRAM disk, one or two blank disks, and a printer. The Template Disk that accompanies this guide contains sample files you will use to learn AppleWorks. Several templates are also included to help you operate your library media center more effectively with AppleWorks. After you are familiar with AppleWorks, you can either utilize or revise those templates to fit your local needs.

Getting Started

1. Put the AppleWorks STARTUP disk (that's side 1) in Drive 1. (Be sure to close the door.)
2. Boot the disk by turning on the computer. (Adjust the monitor if necessary.)
3. When the title screen comes up, it asks you to flip the disk in Drive 1 and press RETURN.
4. The date screen comes up. Press RETURN or change the date as you wish.

Making a Storage Disk

Purpose: You have booted the PROGRAM disk. You must have a storage disk that will accept letters, data or files which you want to create. The PROGRAM disk is too full to store any of your work.

1. The MAIN MENU should be on your screen now. At the top it should say "Disk: Drive 1 (or 2)." That number should equal the number of disk drives you are using. If you need to change it, do the following:
 - (a) Light up (use the arrow keys) "5. Other Activities" and press RETURN.
 - (b) Light up "6. Select standard location of data disk " and press RETURN.
 - (c) Light up the correct disk number and press RETURN.
 - (d) Press ESC to get back to the MAIN MENU.

Now, whenever you boot up the PROGRAM disk, it will know how many drives you have. Once you have set this for your system, you won't have to do it again.

2. Now you are ready to format a storage disk. The MAIN MENU should be on the screen. Use the down arrow key to light up "5. Other Activities" and press RETURN.
3. Use the down arrow or press 5 to select "5. Format a blank disk," then press RETURN.
4. Put a new disk in Drive 2. (If you have one disk drive, you need to take the PROGRAM disk out and put the new disk in Drive 1). Follow the directions on the screen to name your disk and press RETURN. Press the Space Bar. If there is any information on the new disk, AppleWorks will ask you if it is OK to destroy it. Answer YES or NO. If you have answered YES, AppleWorks will format the disk.
5. Now you have initialized a storage disk for your files. If you are using different kinds of computer programs to do your work, it will be a good habit for you to label your storage disks all the time, e.g. AppleWorks Storage Disk, vol.name: Ho.
6. Turn off the computer and you are ready to go to the next section: Word Processor.

* Note: From SECTION II on, all the instructions will be given on the assumption that you have two disk drives. If you have one drive, you might need to make just slight adjustments.

SECTION II.

WORD PROCESSOR

You can use AppleWorks' word processor to write letters, memos, reports, etc. Once your document is in the word processor, you will find it a lot easier to edit mistakes, make changes, or arrange the document in different ways. From this section, you will first learn most of the important features in AppleWorks' word processor by using a document already prepared for you, then you will learn to create a document of your own.

Getting Started

1. Put the AppleWorks STARTUP disk in Drive 1.
2. Turn on the computer to boot the disk.
3. When the title screen comes up, flip the disk in Drive 1 and press RETURN. You are booting the AppleWorks PROGRAM disk.
4. The date screen comes up. Press RETURN or change the date as you wish.

AppleWorks' Desktop

Purpose: To learn the function of each of the items on the MAIN MENU.

You should be in the MAIN MENU now. You need to understand the concept of AppleWorks "Desktop." AppleWorks Desktop is like your work desk. You can have certain documents on the desk at the same time ready to be used and some are stored in drawers (on the disk). There are six options in the MAIN MENU:

1. Add files to the Desktop:

This means to go to the disk (the drawer) and see what files are on the disk (in the drawer). If you choose this option, AppleWorks will list all the files currently stored on the disk. You will be able to know the type and size of all the files and when they are created. If you light up the title of a file and press RETURN, that file will be moved from the disk (the drawer) onto the Desktop. Now let's try to add a file from the Template Disk which came with this manual to the Desktop.

- (a) Insert the Template Disk in Drive 2. Make sure the disk drive number at the top of the MAIN MENU is the same as the disk drive number you are using now. If not, you need to go back to SECTION I and do Step 1 in Making a Storage Disk.
- (b) Light up "1. Add files to the Desktop," press RETURN.
- (c) You are in the "Add Files" mode. Light up the current disk drive you are now using. Press RETURN.

- (d) You will be given a list of files on the Template Disk. Use the up or down arrow key to go through this list until you find the file "introduction," then press RETURN. You have added this file to the Desktop.
- (e) Press ESC to go back to the MAIN MENU.
- (f) Now add two other files of your choice to the Desktop. (Start at b. above.)

2. Work with one of the files on the Desktop:

This means that you want to do just what it says. But you need to see the document on the screen. If you have more than one document on your Desktop, you will have to choose one from these documents.

- (a) From the MAIN MENU, light up "2. Work with one of the files on the Desktop," and press RETURN.
- (b) You will get the "Desktop Index." The Desktop Index should list the files you've just added. You are going to work with the file: introduction, therefore, light up "introduction" and press RETURN. This file will come back to the screen.
- (c) Now press ESC to go back to the MAIN MENU.

* Additional tip: A quick way to get the Desktop Index is to press Open Apple Q.

3. Save Desktop files to disk:

This will let you store the visible document (the current document on the screen) onto the disk (put it in the drawer).

4. Remove files from the Desktop:

This will let you get rid of the clutter on your desk. If you have several files on the Desktop, you should specify which file you want to take from the Desktop.

5. Other Activities:

If you want to do such things as list files on the disk, delete files, format a blank disk, or specify information about your printer(s), you will select this option to do so.

6. Quit: This lets you leave AppleWorks.

You should now understand how to get several files from the storage disk onto the Desktop and work with any one of the files on the Desktop. If you don't feel comfortable doing this, practice until you do. You will try #3, #4, and some features in #5 later on in this section.

* Attention: AppleWorks uses "menu" format to guide you through the program. Starting from the MAIN MENU, once you select an option, you will be in the second menu. To go back to the MAIN MENU, you just need to press ESC. (In some cases, the second menu will lead you to the third menu. You will press ESC twice to go back to the MAIN MENU if you are in the third menu.) ESC key has another important function. After you enter a command to have AppleWorks do something, for example, delete, copy, or move some text, if you change your mind before you press RETURN you can press ESC to release that command.

Getting to Know AppleWorks' Word Processor

Now get "introduction" back on the screen from the Desktop. (Use the procedures you've learned from Step 2 on the previous page.) You are going to learn several important features in the word processor by using this file. Don't be afraid to try anything on this file. Unless you save the changes, the original file will remain intact on your disk.

When you are in the word processor, the screen is like an electronic piece of paper. The blinking cursor is your electronic pencil. The keyboard is just like your typewriter, including the Space Bar, the SHIFT key (used for making capital letters), and Caps Lock to make all caps. Now let's take a look at "introduction."

1. Moving the cursor:

Purpose: To learn how to get around in a document.

- (a) You can move your electronic pencil (the cursor) around by using the arrow keys. Try skipping through the text with the four arrows. You can move one letter at a time by pressing the arrow once. You can move faster by holding the arrow key down. You can skip even faster by holding down the Open Apple and the arrow keys.
- (b) To go to the end of the document, Open Apple 9 is the fastest way. Press Open Apple 1 to go back to the beginning of the file. Pressing Open Apple 2 to 8 will take you proportionally through your file.

2. Zooming in and out:

Purpose: To see the hidden formatting commands in the document.

- (a) Now go back to the first paragraph. Press Open Apple Z. This command will make every carriage return and all the printer options visible. They will be invisible when you print the document.
- (b) Now move the cursor up and down. The carriage return sign is a rectangle, while the printer options are those lines starting with eight hyphens. The printer options are the specifications

that control the format of your document and how it prints. Examples are as follows: "----- Platen Width: 8.0 inches," "-----Double Space," "----- Center," etc.

- (c) If you want to go back to normal, press Open Apple Z again. AppleWorks allows you to use all the features in the word processor while you are zoomed in or out.

* Recommendation: When you word process, stay in zoom so that all the formatting commands you enter will be visible. When you want to see how the document will look on paper, zoom out.

3. Using the RETURN key:

Purpose: To understand the function of the RETURN key.

- (a) With the zoom on, move the cursor around the first paragraph. You will find that there is only one carriage return, which is at the end of the paragraph. This is one of the major differences between the typewriter and the word processor. You don't use a carriage return at the end of each line. As you type a line, the program will automatically push words on to the next line when it gets too full. This is called "word wraparound." Therefore, press RETURN only when you come to the end of a paragraph or you want to create a blank line.
- (b) Now, use the down arrow key to go to the Getting Started section in "introduction." You will find at the end of every single item, there is a carriage return. By doing so, each item will be treated as a paragraph so that all the items will be lined up when printed out. Don't try to put extra spaces to line up the items if you want them to be separated. On the screen they might look all right, yet they won't line up when you print them out.
- (c) Now go to the end of the file by press Open Apple 9. After you get there, press RETURN a few times to create blank lines. This shows you where your carriage returns are.

4. Deleting information:

Purpose: To be able to delete unwanted information from the document.

- (a) Press the DELETE key to delete the blank lines you've just created.
- (b) Hold the Space Bar down and notice how the line and column numbers change on the bottom of the screen. To get rid of all the spaces you just made, hold down the DELETE key until you go back to where you started.
- (c) The DELETE key only works from right to left. Now you are going to delete the last two words of this file: Word Processor. Put the cursor on the period and delete left.

- (d) If you want to delete to the right, use Control-Y (or Open Apple Y). This will delete the whole line to the right of the cursor. Put your cursor at the beginning of the last sentence of the file, try Control-Y to see what will happen.
- (e) Now go to the Making a Storage Disk section. You are going to delete all the lines from (a) to (d) in Step 1. You can delete upward or downward. Now do either of the following, you will be able to delete a block of information from the screen.

Choice 1: Put your cursor on the left parenthesis of (a). Press Open Apple D. Then use the down arrow key and right arrow key to highlight everything from (a) to the period sign at the end of (d), then press RETURN.

Choice 2: Put your cursor on the period sign at the end of item (d). Press Open Apple D. Then use the up arrow key and left arrow key to highlight everything from the period sign up to the left parenthesis of (a). Press RETURN. You've deleted a whole block.

- (f) Now move the cursor several lines up, stop when you are on a line "-----Centered." (Press Open Apple Z to zoom in if you can't find it.) This is a printer option to center a line. You can delete a printer option by pressing Open Apple D and RETURN. Try this and notice how Making a Storage Disk moves while you delete the printer option. (Remember, Open Apple D is the only way to get rid of a printer option command).
- (g) Try to delete different printer options in the file and watch the results.

* Note: Be sure you are comfortable using the DELETE key, Open Apple D and Control-Y before leaving this section.

* Additional tip: You can use Open Apple D and then Open Apple 1 - Open Apple 9 to delete whole sections of a document. If too much has been lighted up for deletion, before you press RETURN you can always adjust with the arrow keys.

5. Entering information:

Purpose: To learn to enter, insert, or type over information in a document.

- (a) Now type a 3-5 sentence paragraph at the end of this file. Do not use carriage return until you are at the end of the paragraph. Use the Space Bar to put five spaces on your screen to indent the first line of your paragraph. If you made any mistakes or you have a carriage return you should not have, use the DELETE key to erase and do it over again.
- (b) Now add another short paragraph. To indent, press TAB. You'll get a five-space indentation. The vertical lines in the dashed

line across the top of the screen indicate the default tab positions (every 5 spaces) of AppleWorks. You will learn how to set a tab later on.

- (c) It is very easy to insert words in your sentences. Your cursor should be a blinking underline when you want to do the insertion. Check your cursor. If it is not a blinking cursor, press Open Apple E first. Now type: AppleWorks is a computer program. You want to insert "very useful" between "a" and "computer." Put the cursor on the "c" of "computer." Now type "very useful" and add a space after you type "useful" to separate "useful" and "computer." Notice how all the words in this sentence are pushed aside to make room for the new words. Now add more words anywhere in the document.
- (d) When you want to type over the existing information with new information, press Open Apple E (for editing) to get the overstrike cursor, which is a blinking rectangle. To go back to the normal insert mode, press Open Apple E again. Now try to switch back and forth from Open Apple E and type something. Notice how the insert and overstrike cursors work and the differences between the two cursors.

More Features in AppleWorks' Word Processor

You are almost ready to create a document of your own. Before you do this, there are some useful features in AppleWorks' word processor you might want to learn. You may choose to skip this section and go directly to the Creating Your Own Document section and come back here later.

1. Centering text:

- (a) Now go to the end of the file on your screen. Be sure you are in Zoom.
- (b) Press Open Apple O to get the Printer Options. Type "CN," press RETURN and ESC.
- (c) Type "Creating your own document." Notice how the text is centered and moves when you are typing it. Now press RETURN.
- (d) When you want to stop centering text, you must eliminate the centering command. Press Open Apple O, then type "UJ" (for unjustifying) or "JU" (for justifying). Press RETURN and ESC.

2. Underlining text:

Now you are going to underline what you've just typed. There are two ways to underline text:

Choice 1:

- (a) Move the cursor to the "C" of "Create." Press Control-L. A little caret will appear.
- (b) Move the cursor to the space after the "t" of "document." Press Control-L. Another caret will appear. When printed out, these words will be underlined.

Choice 2:

- (a) Move the cursor to the "C" of "Create."
- (b) Press Open Apple O, type "UB," then press RETURN and ESC. A little caret will appear on the screen.
- (c) Move the cursor to the space after the "t" of "document."
- (d) Press Open Apple O again. Type "UE," press RETURN and ESC. Another little caret will appear on the screen.

* Additional tip: When you want to underline text, you can first enter the underlining commands, then type the text. Now try this. Before typing the text that you want to underline, press Open Apple O, type "UB," and press RETURN. Then type "UE," press RETURN, and press ESC. On the screen, you will see two carets. Put your cursor on the last caret, then type the text you want to underline between the two carets. If you choose to use Control-L to underline, you can use the same procedures.

3. Using boldface:

There are also two ways to boldface text. If you want "your own" in "Creating your own document" to be boldfaced when printed out, here is how:

Choice 1:

- (a) Put the cursor on "y." Press Control-B. A caret will appear.
- (b) Move the cursor to the space after the "n" of "own." Press Control-B. Another caret will appear.

Choice 2:

- (a) Put the cursor on "y."
- (b) Press Open Apple O. Type "BB," press RETURN and ESC. A caret will appear.
- (c) Move the cursor to the space after the "n" of "own."

- (d) Press Open Apple O. Type "BE," press RETURN and ESC. Another caret will appear.

* Additional tip: You can also put the boldface commands first before you type the text that you want to boldface. Try this. Press Open Apple O, type "BB," and press RETURN. Type "BE," press RETURN and ESC. You will get two carets on the screen. Now you can type the text you want to boldface between the two carets. If you want to use Control-B to boldface, you can use the same procedures.

4. Using superscripts or subscripts:

- (a) Position the cursor to where you are going to put a superscript or a subscript.
- (b) Press Open Apple O, type "+B" (to begin a superscript) or "-B" (to begin a subscript), then press RETURN. A little caret will appear on the screen.
- (c) Then type "+E" (to end a superscript) or "-E" (to end a subscript), press RETURN. A little caret will appear on the screen.
- (d) Now press ESC to go back to the REVIEW/ADD/CHANGE mode. On the screen, you will have two carets. Put the cursor on the last caret and type the superscript or subscript between the two carets.

5. Spacing:

AppleWorks offers you three choices in spacing: single, double, and triple. Whenever you want to change spacing, press Open Apple O, type ss (for single), ds (for double), or ts (for triple), then press RETURN and ESC. Now try to put several spacing commands in the file on the screen.

6. Hanging or bulletin paragraphs:

Many times you want itemized lists to be numbered and have the second line indented such as:

```
123. Now is the time for all
      good people
```

To do this, first count how many spaces you want the second line indented. Then

- (a) Press Open Apple O. Type "IN" and press RETURN.
- (b) Type in the number of spaces the second line should be indented.
- (c) Press RETURN and ESC.

* Note: To go back to normal format, don't "justify" or "unjustify" the text. You need to use the same procedures except that you will type "0" (zero) for the number of spaces indented.

7. Using tabs:

AppleWorks sets tabs every 5 spaces for you. If you want to change the 5 space tab, the following are the procedures to set or clear tabs. When you save your document, the tab position you set will also be saved.

- (a) Press Open Apple T. The cursor will move to the double line at the top of the screen. The vertical line indicates the current tab setting.
- (b) Use the right or left arrow key to move the cursor to wherever you want to set or clear a tab. (Use the column indicator at the bottom to help you set tabs.)
- (c) Press S (to set a tab), or C (to clear a tab) or R (to remove all the tabs).
- (d) Press ESC when you finish.

* Note: After you set your tabs, you can use "TAB" key to move the cursor to the next tab stop, and "Open Apple TAB" to go back to the previous tab stop.

8. Moving text:

Purpose: To move a paragraph or two from one place to another.

- (a) When you want to move text from one place to another, position your cursor at the end or beginning of the text to be moved.
- (b) Press Open Apple M, choose "Within document," and press RETURN.
- (c) Use the arrow keys to light up the text to be moved. Press RETURN.
- (d) Position the cursor to the new place and press RETURN. The text should be moved to the new place you specified. Practice this until you feel comfortable with it.

9. Copying text:

Purpose: To copy a paragraph or two from one place to another.

- (a) When you want to copy text from one place to another, position your cursor at the end or beginning of the text to be copied.
- (b) Press Open Apple C, choose "Within document," and press RETURN.

- (c) Use the arrow keys to light up the text to be copied. Press RETURN.
- (d) Position the cursor to the new place and press RETURN.

* Note: Notice the difference between moving and copying text. When you copy a paragraph, you will get two identical paragraphs in your file. If you move a paragraph, you just move it to another place.

10. Finding text:

Purpose: To find text you specify within a document.

- (a) Move the cursor to wherever you want to start.
- (b) Press Open Apple F.
- (c) Choose "Text" (to find text, ignoring upper or lower case), or "Case sensitive text" (to find text that exactly matches). Press RETURN.
- (d) Type the text and press RETURN. (Or press RETURN if you want to find the same text as last time.)
- (e) AppleWorks will move the cursor to highlight the first occurrence of the text found and ask you whether you want to go on or not.
- (f) Answer "Yes" or "No" depending on your need.

* Note: AppleWorks only searches from the current position to the end of the file. Therefore, if you want to search something from the beginning, you need to press Open Apple 1 to go back to the beginning of the file.

11. Setting and finding markers:

When you are working with a large document, if you know in advance you are going to come back to a certain place to do some work, say, to insert a file from the data base or spreadsheet, you can set a marker there. Then, later on when you want to find the spot where you put the marker, you can have AppleWorks locate it for you. To set a marker, you will do the following:

- (a) Position the cursor to the place you want to set a marker.
- (b) Press Open Apple O. Type "SM" and press RETURN.
- (c) Type a number to specify your marker (any number between 1 and 254), press RETURN. On the screen, you will find "-----Set a Marker:" and the number you entered. Press ESC to go back to your document.

The following are the procedures to find a marker:

- (a) Put the cursor at the beginning of your file if you want to search from the beginning. Press Open Apple F.
- (b) Highlight "Marker" and press Return. Type the number of the marker you want to return to, and press RETURN.
- (c) AppleWorks will spot the cursor to the marker position and ask if you want to find the next occurrence of the same number. Answer Yes or No depending on your need.

12. Replacing text:

You may replace one, several, or all occurrences of information within a document with new information. This is a faster way to correct typos in your document.

- (a) Put the cursor to wherever you want to start.
- (b) Press Open Apple R.
- (c) Choose "Text" (to replace text, ignoring upper or lower case), or "Case sensitive text" (to replace words that use capitalization just as you specify).
- (d) Type the replaced text, press RETURN. (Or press RETURN if you want the same text replaced as last time.)
- (e) Type the new text, press RETURN. (Or press RETURN to accept the last new text.)
- (f) Choose "One at a time." AppleWorks will highlight the first occurrence. Choose "Yes" or "No." If you choose "Yes," AppleWorks will replace it and ask whether you want to find the next occurrence.
- (g) Choose "Yes" or "No." If you choose "Yes," AppleWorks will go on until it finds no more occurrences. Press ESC to stop any time you want to.

* Note: If you want to replace all the occurrences of something without having to check and respond each time, you can choose "All" in Step (f). Also, like finding text, AppleWorks searches text you want to replace from the current cursor position to the end. You need to bring the cursor to the beginning of the file if you want to search from the beginning.

Creating Your Own Document

1. You are ready to create your own document. You might want to remove "introduction" from the Desktop. The Desktop can hold 12 files at

the same time. If it gets too full, AppleWorks will give you a signal. Then you need to remove some files from the Desktop. Remember, the files on the Desktop are not saved yet. Therefore, before removing your files, make sure you've saved what you want. (You will learn how to save files in the next section.)

- (a) Now press ESC to get the MAIN MENU. Highlight "4. Remove files from the Desktop," press RETURN.
 - (b) You are in the "Remove Files" mode. Highlight "introduction," and press RETURN.
 - (c) You don't want to lose the original "introduction," therefore, choose "3. Throw out the changes to the file," then press RETURN. Answer "Yes," and press RETURN. (If you choose #1, the file on the Desktop will be saved, and replace the old file on your disk.)
2. You are back to the MAIN MENU.
- (a) Light up "1. Add files to the Desktop" and press RETURN.
 - (b) You now want to make a new file on the word processor. Use the arrow key to light up "3. Word Processor" and press RETURN.
 - (c) Press RETURN since you are starting from scratch.
 - (d) AppleWorks now wants a name for your new file. Type a name and press RETURN.
3. You are in the REVIEW/ADD/CHANGE mode. You may type anything you want. Use different features you've learned in the previous section.

Saving Your Document

1. When you are satisfied with your first document, you are ready to save it. Take out the Template Disk from the disk drive, and insert your initialized storage disk. Press Open Apple S. Your file will be saved on the disk under the name you gave it. You can also create a backup on a different disk.
2. Now press ESC to get the MAIN MENU. Highlight "5. Other Activities," and press RETURN. Choose "2. List all files on the current disk drive," and press RETURN. You will find your file name listed.

Renaming Your Document

After you've saved your document, you can create a duplicate of that file and rename it. Then you can modify the renamed file and save the changes under the new file name. There are two ways to rename a file.

Choice 1:

- (a) You've already saved the file you want to duplicate. Press ESC to go back to the MAIN MENU. Highlight "3. Save Desktop files to disk" and press RETURN.
- (b) The Save Files menu is presented. Select the file you want to copy and press RETURN. AppleWorks then tells you you've made "NO changes" to the file.
- (c) Highlight "1. Save the file on the current disk" and press RETURN. AppleWorks will inform you that the file already exists on Drive 2.
- (d) Highlight "2. Save with a different name" and press RETURN.
- (e) AppleWorks asks you to type a new name for the file. Before you do so, press Open Apple Y (or Control-Y) to delete the old file name. Then type the new file name and press RETURN. AppleWorks will save your file under the new name and you will have two identical files under different names.

Choice 2:

- (a) Get the file you want to change name. That file should be saved first if you want to keep it.
- (b) Press Open Apple N. Use Open Apple Y (or Control-Y) to delete the old file name. Type a new name and press RETURN.
- (c) You will find the file name indicated on the upper left-hand corner of the screen has been changed. Now you can press Open Apple S to save your file under the new name you gave it.

Printing Out Your Document

Now you are ready to print your document. (If you have a printer other than an Apple DMP or an Imagewriter, you need to go to the Setting Up Your Printer section to adjust some printer specifications and do your printing after that.)

1. Get the file you want printed onto the screen. Turn on your printer.

2. Press Open Apple P.
3. It will ask you whether you want to print the entire document, just a page, or starting at the cursor. Light up the answer and press RETURN.
4. It will ask you how many copies you want. Answer the question and press RETURN. You will get a hard copy of your document.

Formatting the Page

Basically, what you see on the screen is what you get when your document is printed out. If you don't change any printer options, AppleWorks will use the default specifications to print your document.

When you press Open Apple O, many formatting commands appear at the bottom of the screen. You can change these commands so that the page will be printed as you want. Look through the list in the next section: Open Apple O: Printer Options and use any that you wish when you need to change the format. The procedures to change a printer option are as follows:

1. Zoom in so that you can see the text marked with printer options.
2. Put the cursor to the place you want the printer option to take effect. (Press RETURN to get a blank line if there is none right above the text you want to put the option.)
3. Press Open Apple O, type the code letter, and press RETURN.
4. Type the new value, and press RETURN.
5. Press ESC to go back to the REVIEW/ADD/CHANGE mode. (You might want to delete the blank line you've put in if you don't want it there.)

The document will be reformatted to your specifications until you change it again.

* Warning: The only way to get rid of an Open Apple O command in a document is to delete it by using Open Apple D. The DELETE key will not work.

Open Apple O: Printer Options

<u>Code</u>	<u>What</u>	<u>Normal Setting</u>	<u>Options</u>
PW	platen width	8.0 inches	Up to 13.2 inches
LM	left margin	1.0 inches	0-9 by tenths inches
RM	right margin	1.0 inches	0-9 by tenths inches
CI	characters/in.	10 (pica)	depends on printer Usually: 10 (pica), 12 (elite), 17 (tiny), proportional - check manual
IN	indented	0	any # to width of line
JU	justification	right and left margins	
UJ	unjustified	left margin justified	
CN	centering	centered	
PL	paper length	11 inches	11-25.4 by tenths inches
TM	top margin	0 inches	0-9 by tenths inches
BM	bottom margin	2 inches	0-9 by tenths inches
LI	lines per inch	6	8
SS	single space between lines		
DS	double space between lines		
TS	triple space between lines		
SK	skip lines (create blanks)	none	1 - # of lines on a page

* Warning: The above commands are theoretical and may need to be adjusted for your printer. A little experimentation will help establish the limits of your printer.

More About Printing the Document

1. Calculating page numbers:

Before you print a document, you might want to see how the pages break so that you can adjust some places where you might want to start a new page.

- (a) Press Open Apple K.
- (b) Choose the printer you will use to print your document. Press RETURN.
- (c) Move the cursor to see the page breaks.

2. Creating a new page break:

If you are unhappy with a natural page break, you can force AppleWorks to create a new page. Here is how:

- (a) First move the cursor to the beginning of your text that you want to put a new page command. (If there is no blank line right above the text you want to print on a new page, you need to press RETURN first to get a blank line there.)
- (b) Press Open Apple O, type "NP," then press RETURN and ESC. (Delete the blank line you just put in if you don't want it there.)

3. Adding a header:

AppleWorks will print a header on the first text line immediately following the top margin. Then, AppleWorks will skip two blank lines and start printing the text. The header must be entered on the top line of the first page on which it is to appear. Here is how to set the header:

- (a) Move the cursor to the beginning of the file. Press Open Apple O, type "HE" and press RETURN. On the screen, you'll find a message like this: -----Page Header.
- (b) If you want the header to be centered, type "CN" and press RETURN.
- (c) Press ESC to return to the REVIEW/ADD/CHANGE mode. Now you can type a header for your document. Press RETURN to end the header.
- (d) Press Open Apple O, type "UJ" or "JU" to eliminate the centering command.

4. Setting a footer:

You need to enter the footer command on the first page it is to appear. Once you set the footer, AppleWorks will print it on the last text line immediately before the bottom margin and will be preceded by two blank lines. To set a footer, the cursor can be anywhere on the page where the footer is going to start.

- (a) Position the cursor at the beginning of the document, if that's where you want the footer to start. Press Open Apple O, type "FO" and press RETURN. On the screen, you will find a message: -----Page footer.
- (b) If you want to center the footer, type "CN" and press RETURN.
- (c) Press ESC to return to the document. You need to type the page footer immediately after the footer line message. Now type a word for the page footer, and press RETURN.
- (d) Press Open Apple O, type "JU" or "UJ" to stop the centering command.

5. Printing page numbers:

Page numbers can be printed if you specify AppleWorks to do so. If you want to print continuous numbers on the top or bottom of each page with a header or a footer, you will first set your header or footer as described in the previous two sections. Then, on the same line, move the cursor over to the place you want to print the page number, type "Page" if you want this word printed with the number. Press the Space Bar once so that there will be a space between the word and the number. Now do the following:

- (a) Press Open Apple O, type "PP" (to print page number) and press RETURN.
- (b) Type "PN" and press RETURN. Then type a number you want to start with. (Type "1" if you want to start with page number 1.)
- (c) Press ESC to return to the REVIEW/ADD/CHANGE mode.

* Note: If you want to print only numbers on the top or bottom of each page without any header, footer, or even the word "page", you will first move the cursor to the beginning of the document, press Open Apple O, type "HE" or "FO", press RETURN then ESC. Move the cursor to where you want to put the number (e.g. along the left margin, center, or along the right margin), then do (a), (b), and (c) as described above.

6. Using sticky spaces:

Sticky spaces can be used when you don't want AppleWorks to separate words or groups of characters at the end of a line. For

example, you are typing a person's name, Robert Jones Jr., and you don't want the name split, you can put sticky spaces between words.

To insert a sticky space, just press Open Apple and Space Bar. Now type "Robert", Open Apple and Space Bar, "Jones", Open Apple and Space Bar, "Jr." You will find that two carets replace the regular spaces and connect these three words together. Your screen should look like this: Robert^Jones^Jr. If you put the cursor on the caret, "Sticky Space" will display at the bottom of the screen.

7. Grouping text:

AppleWorks allows you to group a block of information together so that it will not be broken between pages. For example, you want to group items in a list or everything in a table. Here is how to group text:

- (a) Position the cursor on the first line of the group.
- (b) Press Open Apple O, type "GB," and press RETURN.
- (c) Move the cursor to the line following the last line of the group.
- (d) Press Open Apple O, type "GE," and press RETURN.

8. Entering information from the keyboard:

You can have the printer stop during the printing so that you can type information directly from the keyboard into the document. For example, you want to personalize the overdue notices by putting the patron's name in the notice. To set a command that allows you to enter information from the keyboard, you will do the following:

- (a) Position the cursor in the place where you want to enter information.
- (b) Press Open Apple O, type "EK," and press RETURN.
- (c) A caret will appear on the screen. Press ESC to return to the document. If you put the cursor on the caret, "Enter Keyboard" will display at the bottom of the screen. When you print your document, the printer will stop at the place you put the caret and wait for your response. The printer will start again after you type the information and press RETURN.

Setting Up Your Printer

If you don't have an Apple DMP or an Imagewriter, before you can print a file, you must tell AppleWorks what kind of a printer you have. You only need to do this once for one printer. Here is how:

1. Press ESC to the MAIN MENU.
2. Select "5. Other Activities," press RETURN.
3. Select "7. Specify information about your printer(s)," press RETURN. You will be in the Printer Information menu. Choose "2. Add a printer (maximum of 3)" and press RETURN.
4. AppleWorks will list the printers it recognizes. If you have one of these printers, AppleWorks will be able to set the specifications for the printer. Now select your printer and press RETURN. (If your printer is not listed, select "custom printer.")
5. Type a name for the printer and press RETURN. Select the slot number where the printer is accessed and press RETURN. (If you choose "custom printer," go to Step 7 and continue.)
6. Now the screen will show 5 printer specifications that contain the default values AppleWorks will recognize. Adjust them if your printer has different settings. After you finish the adjustments, press ESC until you go back to your document. Now you are ready to print your document.
7. If you choose "custom printer," first adjust the printer specifications from (1) to (5) according to your own printer.
8. You are ready to adjust some printer codes. Select "6. Printer codes," and press RETURN. AppleWorks allows you to specify the printer codes for (1) characters per inch, (2) lines per inch, (3) boldface, subscript and superscript, and (4) underlining. You need first to check your printer manual to get the right control codes for all these functions. After you get the information, follow the instructions on the screen and enter the appropriate control codes. Step 9 will give you an example of setting the boldface control codes. The techniques to enter other control codes will be similar.
9. Suppose the control codes to begin the boldface are ESC and an asterisk (*). To end the boldface, you will use ESC and a comma (,). The following are the procedures to enter the boldface control codes:
 - (a) You are in the Printer Information menu. Highlight "6. Printer codes," and press RETURN.
 - (b) You are now in the Printer codes menu. Highlight "3. Boldface, Subscript and Superscript," and press RETURN.
 - (c) You are in the Enhancements menu. Highlight "1. Boldface Begin," and press RETURN.
 - (d) Enter the following two codes: ESC and an asterisk (*). To go back to the Enhancements menu, press SHIFT and a caret (^).

- (e) Now Highlight "2. Boldface End," and press RETURN. Then enter the following two codes: ESC and a comma sign (,). Press SHIFT and a caret (^) to return to the Enhancements menu.

* Note: Be aware that after you type the control codes, don't press ESC or RETURN to go back to the Printer codes menu. You have to press SHIFT and a caret (^) to exit.

* Additional tip: Usually you will use the superscript begin code to end the subscript and the subscript begin code to end the superscript. To show you how this works, here is an example of the subscript and superscript control codes for NEC Spinwriter 7710.

To begin the superscript: ESC ;
To end the superscript: ESC :

To begin the subscript: ESC :
To end the subscript: ESC ;

Command Summary

1. Open Apple C - Copy information
2. Open Apple D - Delete information
3. Open Apple E - Edit text, switch between overstrike and insert cursors
4. Open Apple F - Find information
5. Open Apple H - Print the current screen display
6. Open Apple K - Calculate pages
7. Open Apple M - Move text
8. Open Apple N - Change file name
9. Open Apple O - Options for printer
10. Open Apple P - Print the document
11. Open Apple Q - Quick switch between files on the Desktop
12. Open Apple R - Replace information
13. Open Apple S - Save the document on disk
14. Open Apple T - Set tabs
15. Open Apple Y (or Control - Y)
 - Erase right to the end of a line
16. Open Apple Z - Zoom to display format commands
17. Open Apple 1 - Move to the beginning of a file
18. Open Apple 9 - Move to the end of a file
19. Open Apple 2-8 - Move proportionally within a document
20. Open Apple left or right key
 - Move the cursor one word left or right
21. Open Apple up or down key
 - Get previous or next screen display
22. Control - L - Begin and end underline
23. Control - B - Begin and end boldface

Exercises

1. The first exercise will help you review most of the features you've learned in the word processor section.
 - a. Write a three paragraph report to the principal which would include the following features: underlining, centering, indention, and a list of items using the hanging or bulletin paragraph. Print it out left margin justified and single spaced.
 - b. Rearrange paragraph 3 between paragraph 1 and 2 using the move command and reprint it out in justified format and double spaced.
 - c. Next, add a paragraph between paragraph 2 and 3, then print it out again in justified format, with paragraph 1 double spaced, paragraph 2 single spaced, and paragraph 3, and 4 double spaced.
 - d. Finally, choose one word that occurs several times in the document. Replace this word with a synonym using the replace command. Then reprint the document using appropriate justification, spacing, and margins.
2. Create a form letter template for free materials. Leave space in your template to enter from the keyboard such information as the date, addressee, or the title of the item you want. Save your template if you want to use it later on.
3. Create a ten item numbered bibliography with the following characteristics:
 - a. The title must be centered, boldfaced and underlined.
 - b. Each item should be numbered and should use the indent feature. (Try IN 4 or IN 5).

How did you cope with the indention when you got to item #10?

4. Add two items to your bibliography created for exercise #3. Add one between item #3 and #4 and the other between item #7 and #8. Renumber the entire bibliography. Is there any automatic way to renumber?

5. Create a catalog of AV materials. The catalog will be subdivided by curriculum area and include four columns: call number, format, title, and comments. Set up the columns using the TAB feature. Arrange your list alphabetically by title under each category. The following is an example of this exercise.

SOCIAL STUDIES

629.46 Filmstrip Indians of the Plains Used by 4th grade

SCIENCE

523 Video Cosmos 12 one-hour units
531 Filmstrip Learning about Sounds contains 5 units

6. Write a short budget request to your principal. Save this for use as a later exercise in Section V, exercise #1.
7. Analyze the "Curriculum Mapping Worksheet" on your Template Disk. Notice that both underline carets and the underline key have been used to create a fill-in form. Practice filling in the form using the insert cursor and the overstrike cursor. (Press Open Apple E to switch between these two cursors.) Which cursor do you prefer? The author prefers the overstrike cursor. Now use both underline carets and underline key to create a fill-in form that you can use in the future.
8. Retrieve as many word processing templates as possible from your Template Disk. Analyze them to see whether they can be used in your center. You might want to modify the templates to meet your local needs.

SECTION III.

DATA BASE

AppleWorks' data base can help you work with information you normally keep in lists, such as names and addresses, schedules, inventories. If you have an Apple computer with 128 K RAM, you will be able to store about 750 records in a file assuming that an average record size is 75 characters.

Getting Started

1. Put the AppleWorks STARTUP disk in Drive 1.
2. Boot the disk by turning on the computer.
3. When the title screen comes up, flip the disk in Drive 1 and press RETURN.
4. The date screen comes up. Just press RETURN or change the date as you wish.
5. You should now be at the "MAIN MENU." Light up "1. Add files to the Desktop" and press RETURN.
6. You now want to make a new file for the data base. Use the arrow key to light up "4. Data Base" and press RETURN.
7. Press RETURN since you are starting from scratch.
8. Type a name for this new file. Name it "Student Records" or any other name you wish. Press RETURN.

Creating a New Data Base File

The moment you name your record and press RETURN, you will be in the CHANGE NAME/CATEGORY mode. On the left of the screen, you will find "Category 1" and on the right you are given several options.

1. Press Open Apple Y or Control-Y to delete "Category 1."
2. AppleWorks allows you to enter a maximum of 30 categories per record, and the maximum length of a record is 1024 characters. In a record, a category name can be up to 20 characters long. The first data base file you are going to create will contain the following categories: First Name, Last Name, SS#, Street, City, State, Zip Code, and Tel. #.
3. Now type the category names mentioned above. Press RETURN after you type each category name.
4. When you've finished typing all the category names, press ESC. AppleWorks will tell you that your file does not contain any

information and you will automatically go into the Insert New Records feature. Now press the Space Bar to continue.

5. AppleWorks will display "Record 1 of 1" with all the category names listed on the screen. You are ready to enter the information in your first record. AppleWorks allows you to type up to 76 characters for each category, including the number of letters in the category name.
6. Now you can create about 10 records for your data base file. Here are some of the commands you will use to edit information and move your cursor in your records.
 - (a) To confirm an entry, press RETURN.
 - (b) To delete one character to the left of the cursor, use the DELETE key.
 - (c) To erase the rest of an entry starting from where the cursor is, use Control-Y and RETURN.
 - (d) Press Open Apple E to switch between the insert mode (for inserting characters) and editing mode (for typing over the existing characters).
 - (e) Use the right or left arrow to move within an entry. Use the up or down arrow to move among categories.
 - (f) Use TAB to move the cursor to the next entry. Use Open Apple TAB to move the cursor to the last entry.
 - (g) Press Open Apple and up arrow to go back to the previous record with the cursor on the same category.
 - (h) Press Open Apple and down arrow to display the next record with the cursor on the same category.

Saving and Loading the Data Base File to and from the Disk

1. Now you can save the data base file you've just created. Insert your own initialized storage disk, and press Open Apple S. Your file will be saved on the disk under the name of "Student Records" or whatever you named it. It won't hurt to save your file as often as possible. You can save your back-up file on another disk.
2. Press ESC to get back to the MAIN MENU. You can add a file to the Desktop, work with one of the files on the Desktop, save a file, or remove a file from the Desktop as in the word processing mode.

Single- and Multiple-Record Layouts

Now get the data base file you've just created back to the screen. So far you are in the Single-Record Layout, which contains all the information in one record. You might move the up or down arrow key to pass records. Now press Open Apple Z. You will be in the Multiple-Record Layout which lets you see all the records at once. To go back to the single-record layout, press Open Apple Z again.

Let's learn to move the cursor in the multiple-record layout:

1. First get the multiple-record layout. Use TAB to go horizontally to the next entry.
2. Press Open Apple TAB to go back to the previous entry.
3. Use right or left arrow key to move within an entry.
4. Use up or down arrow key to move the cursor vertically under a category.
5. Use Open Apple and up arrow to move the cursor to the top of the previous screenful of records.
6. Use Open Apple and down arrow to move the cursor to the bottom of the next screenful of records.
7. Use Open Apple 1 through 9 to move the cursor proportionally through a file.
8. The RETURN key can make the cursor either go downward or to the right. You can decide the cursor movement when you press RETURN. Here is how:
 - (a) First press Open Apple L. You will be in the CHANGE RECORD LAYOUT menu.
 - (b) Press ESC. You will be asked what direction the cursor should go when you press RETURN. Highlight your choice and press RETURN.
 - (c) You should be back in your data base file. Try to press RETURN to move the cursor.

In the multiple-record layout, you can see vertically all the records at once, but you can't see all the categories you've defined. For example, if you are now in the multiple-record layout of your "Student Records" file, you will find that the screen will just display five categories: First Name, Last Name, SS#, Street, and City. If you want to display such categories as First Name, Last Name, SS#, and Tel. #, you have to temporarily delete other categories so that you can move the category of Tel. # to the front. Here is how:

1. Use Open Apple Z to get the multiple-record layout.
2. Press Open Apple L to get the Change Record Layout menu.
3. Put the cursor on Street, press Open Apple D. You've just temporarily deleted this category.
4. Now delete the following categories: City, State, and Zip Code.
5. Now you should have 4 categories left: First Name, Last Name, SS#, and Tel. #.
6. To go back to the multiple-record layout, you will press ESC, choose the RETURN key direction you want, then press RETURN.
7. Now you are in the multiple-record layout. This time the categories shown on the screen should be the 4 categories you specified.
8. If you press Open Apple Z to get the single record, you will find your record still contains all the categories you've defined.

In addition to allowing you to edit information when you are in the single-record layout, AppleWorks also lets you change information when you are in the multiple-record layout. You will find the techniques you've just learned very handy if you want to edit a lot of information under one or two categories. Instead of getting every single record to change information, you can just display the categories you want to change in the multiple-record layout, delete the entry you want to edit, then type new information in that entry.

Now let's try other features used with Open Apple L. Those features will help you display your records exactly the way you want them. Your file will not be changed at all.

1. You are now in the multiple-record layout with four categories: Last Name, First Name, SS#, and Tel. #.
2. Press Open Apple L.
3. You'll insert the categories you've deleted. First move the cursor to Tel. #. Press Open Apple I.
4. The screen now lists all the categories you've just deleted. Highlight "4. Zip Code," and press RETURN. You will then go back to the Change Record Layout mode, and "Zip Code" has been inserted back.
5. Now try to insert the other three categories in the order you want.
6. You are going to switch First Name and Last Name. Put the cursor on Last Name, then press Open Apple and "<". (You should not use SHIFT for "<".) You will notice the column your cursor is on shifts one column to the left. Now try to switch categories the way you like, then put them back in their original position.

7. Sometimes you might want to adjust the column width. First put the cursor on the category you want to adjust, press Open Apple right or left arrow to adjust the column width of that category.

* Note: Whenever you want to go back to the Multiple-Record Layout from the Change Record Layout, you just need to press ESC, choose Down or Right, then press RETURN.

Arranging Records

You can arrange records in the order you want them. Arranging records can be done when you are either in the single-record layout or multiple-record layout. Suppose you want to alphabetize your records according to the student's last name. Here is how:

1. You are in the multiple-record layout. (If you are not, press Open Apple Z to get there.) Move the cursor to any entry under Last Name.
2. Press Open Apple A.
3. Choose "From A to Z," then press RETURN. Your records will be in alphabetical order!
4. Now practice arranging records under other categories.

Adding New Records

After you've created your data base file, you can add new records at the end of your file.

1. Get the last record of your file.
2. You should be in the single-record layout of that record. (If you are not, press Open Apple Z to get there.) Use RETURN or the down arrow to pass the record.
3. AppleWorks will then give you a message that you have passed the last record and can start typing new records at the end.
4. Choose "Yes," and press RETURN.
5. AppleWorks will display a blank record and wait for your response. Now you can start entering new information.

Inserting Records

1. Put the cursor to the place where you want to insert your records. You can be in the single-record layout or multiple-record layout.
2. Press Open Apple I. You'll get a blank record.
3. Type information into the entries, and press RETURN after each one.
4. After you've finished one record, AppleWorks will display another blank record. You can insert as many records as you want. When you've inserted all the records you want, press ESC.

Deleting Records

If you are in the multiple-record layout and want to delete records, you will:

1. Put the cursor on the record you want to delete. (If you want to delete more than one record, put the cursor on the first or the last of the records you want to delete.)
2. Press Open Apple D.
3. Press RETURN. (If you want to delete more than one record, before you press RETURN, you need to use the up or down arrow key to highlight the records you want to delete.)

When you are in the single-record layout, you can delete records too. The following are the procedures to do so:

1. Go to the record you want to delete. (Use the up or down arrow key to pass records.)
2. Press Open Apple D.
3. Choose "Yes" if you really want to delete that record.
4. Press RETURN.

Duplicating a Field Within a Record

Suppose you have 5 students that live in Fayetteville, Ar. Instead of typing "Fayetteville, AR" five times, you can set the standard values for these two categories. By doing so, AppleWorks will automatically fill in "Fayetteville" and "AR" for you. Here is how:

1. You are in the REVIEW/ADD/CHANGE mode (or the INSERT NEW RECORD mode).

2. Press Open Apple V. You will be in the SET STANDARD VALUES mode.
3. Move the cursor to the City category. Type "Fayetteville" and press RETURN.
4. Move the cursor to the State category. Type "AR" and press RETURN.
5. Press ESC to go back to the REVIEW/ADD/CHANGE mode.

Once you've set the standard values for these two categories, unless you remove them, they will be kept in your data base. Whenever you want to create a new record at the end of your file, or insert a new record among other existing records, you don't have to type them anymore. Now try to either create several records at the end of your data base or insert several new records. You will notice "Fayetteville" and "AR" already exist in your new records. Now try to set standard values for other categories.

If you want to type something different in the category where you've already put a standard value, you can either press Open Apple Y to delete it or remove the standard value if you don't want to use it anymore. To remove a standard value permanently, press Open Apple V first. You will be in the SET STANDARD VALUES mode. Move the cursor to the category where you want to remove the standard value, press Open Apple Y and RETURN. Then AppleWorks will erase the value and will not fill that category anymore. Now practice to remove all the standard values you set.

* Additional tip: Another alternative to setting the standard value is to use the ditto command to duplicate an entry into another record under the same category. The procedures are as follows:

1. Suppose you are going to create 5 records in which the street name will be the same. First you need to create five blank records at the end of your file or insert them somewhere in your file. (To create a blank record, you will still use the techniques you've learned in the Adding New Records or Inserting Records section. Instead of typing anything, you'll press RETURN to skip categories so that all the entries will be blank.)
2. After you've created the blank records, move your cursor to the first blank record. Move your cursor to the Street category, type a street name and press RETURN.
3. Get the multiple-record layout. (Press Open Apple Z.) Move your cursor one line below the street name you've just typed.
4. Press Open Apple and single quote ('). (Don't press Shift key to do this.) The entry above the cursor should be copied to the present cursor position.
5. Now try to duplicate this entry in the other blank records you've created.

Copying Records

Sometimes you might want to copy a record or a group of records. If you want to copy a record several times and put the copied records immediately after the original, here is how:

1. You should be in the multiple-record layout. (If not, use Open Apple Z to get there.)
2. Put the cursor on the record you want to copy.
3. Press Open Apple C. Choose "Current record," and press RETURN.
4. Type the number of copies you want to make and press RETURN.

If you want to copy a group of records (or one record) and put them in another place, you will:

1. Put the cursor on the first or last record of the group you want to copy. (You are in the multiple-record layout to do this.)
2. Press Open Apple C. Choose "To clipboard (cut)" and press RETURN.
3. Use the up or down arrow key to highlight the records you want to copy. Press RETURN. The records are now copied to the clipboard.
4. Move the cursor to the new place you want your records to go.
5. Press Open Apple C. Choose "From clipboard (paste)" and press RETURN. The records will be copied from the clipboard.

Moving Records

AppleWorks not only allows you to copy records, it also lets you move records to another place in your file. When you copy records, the old records are still in your file. Therefore, after you've finished copying, there will be two identical groups of records in your data base file. On the other hand, when you move records, your records will just be moved to a new place. Here are the instructions to move records:

1. You are in the multiple-record layout.
2. Put the cursor on the first or last record of the group you want to move.
3. Press Open Apple M. Choose "To clipboard (cut)" and press RETURN.
4. Use the up or down arrow key to highlight the records you want to move.

5. Press RETURN. You'll find the records you've just highlighted are gone. They are moved to the clipboard.
6. Move the cursor to the new place you want your records to go.
7. Press Open Apple M. Choose "From clipboard (paste)" and press RETURN. The records should be moved to the new place you specified.

Finding Records

You can ask AppleWorks to find all the records that contain the information you specify. The information may be in any category in a record or anywhere within an entry. Now try the following procedures:

1. Press Open Apple F.
2. Type the information you want to find. This can be a word, part of a word, a number, etc.
3. Press RETURN. AppleWorks will display all the records that contain the information you've indicated. If there is no such record, AppleWorks will tell you that no record matches and you can press the Space Bar to continue.
4. If AppleWorks finds records for you, it will remember the information you've specified. Therefore, next time when you press Open Apple F again, the information you've specified previously will be displayed. If you want to find the same information, you can press RETURN. Otherwise, you need to use Control-Y to delete the old information and then type the new information you want to find.
5. To return to the REVIEW/ADD/CHANGE mode, you can press ESC.

If you want to be more specific and find certain information in a particular category, you can do the following:

1. Press Open Apple R.
2. AppleWorks will display all the categories in your file. Choose a category under which the information will be searched. Press RETURN.
3. Choose a comparison. Press RETURN.
4. Type the information that each entry in the specified category should be compared with.
5. Press RETURN. On the screen, three connectors will be displayed for you to choose: and, or, through.
6. Here, you will have two choices:

- (a) If you just want to specify one category, you can press ESC. AppleWorks will display all the records that meet your requirements, if there are any.
- (b) You can choose one connector, and specify information to be found in another category. Then, AppleWorks will allow you to specify information for the third category. Whenever you don't want to go further, you can press ESC. AppleWorks will then do the searching for you.

Renaming a File

Sometimes you may want to modify your file and save the changes, but you don't want to lose the old file. For example, you want a list of students in Mr. Jones' room without disturbing the whole student file. One way to do so is to rename your student file first, delete all the records except those in Mr. Jones' class, then save that file under the new name you gave it. Here is how to rename a file:

1. Get the file you want to rename. (That file should already be saved by you if you want to keep it.) Press Open Apple N.
2. Press Open Apple Y or Control-Y to delete the old file name.
3. Type a new file name, and press RETURN. You will find that the file name indicated on the upper left-hand corner of the screen has been changed. Now you should have two identical files under different names.
4. Press ESC to go back to your file. Now you can make changes, then save it under the new name.

Changing the File's Structure

From this section you will learn how to change the category name of your file, how to permanently delete a category from your file, and how to insert a new category in your data base file. (If you haven't tried to change your file name in the previous section, you might want to do so since you will change things permanently in your file.)

To change the structure of a file, first press Open Apple N, then press RETURN. AppleWorks will display all the category names you specified on the left-hand side of the screen. On the right-hand side, you will be given several options. Now let's try the following functions after you press Open Apple N and RETURN.

1. To change a category name:

- (a) You are in the CHANGE NAME/CATEGORY menu. (If you are not, press Open Apple N to get there.)

- (b) Put the cursor on the category you want to change. (Use the up or down arrow to move the cursor.)
 - (c) Press Open Apple Y or Control-Y to delete the old category name.
 - (d) Type new category name.
 - (e) Press RETURN. The category name will be changed permanently.
2. To insert a category in your file: (Suppose you are going to insert a category named "Grade Level" between SS# and Street.)
- (a) You are in the CHANGE NAME/CATEGORY menu. (If you are not, press Open Apple N to get there.)
 - (b) Put the cursor on "Street."
 - (c) Press Open Apple I.
 - (d) Type the new category name "Grade Level" and press RETURN. (Before you type the new category name, if there is a question asking you whether you want to set custom record layouts back to standard, you need to answer Yes or No depending on your choice.)

You've just inserted a new category in your file. If you want to enter the grade level in all the records you have, there are two ways to do so. First press ESC to go back to your file. Now you can either zoom in to get every single record and enter the grade level. Or, you can enter the information when you are in the multiple-record layout. You will use TAB to move the cursor to the first entry under "Grade Level," type the information, then press RETURN. The cursor will go to the next line and wait for your response when you press RETURN. (If the RETURN key happens to move horizontally, to make it move vertically, you can press Open Apple L, press ESC, then select the RETURN key direction.)

3. To delete a category permanently from your file:

- (a) You are in the CHANGE NAME/CATEGORY menu. (If you are not, press Open Apple N to get there.)
- (b) Move the cursor to the category you want to delete.
- (c) Press Open Apple D.
- (d) Answer Yes if you want to permanently erase all the entries in the category you've specified.
- (e) Press RETURN. You've just deleted one category permanently. Press ESC to go back to your file.

Printing Your Data Base File

Now you are ready to print your data base file. Press Open Apple P. There will be five options you can choose. Since you haven't created any report format yet, you will choose to create either a new "tables" format or a new "labels" format. You will first learn to print a table format report, then a label format report. (See the next two pages for example.)

1. To create a "tables" format:

- (a) If you haven't pressed Open Apple P, you may do so now.
- (b) Choose option 2: Create a new "tables" format. Press RETURN.
- (c) Type a name for the record, and press RETURN.
- (d) The REPORT FORMAT is on the screen. You can try different options to adjust your report format. For example, you can use Open Apple right or left arrow to adjust the column width. You can delete the columns you don't want to print out. You can switch columns. Or, you can arrange entries under a column.
- (e) When you are satisfied with your report format, move the cursor to the end. There you will find "LEN" and a number. This tells you how wide your report is going to be when it is printed out. Make a note of this number.
- (f) Now press Open Apple O to get the PRINTER OPTIONS menu. Check the number in "char per line (est)." If this number is greater than the "LEN #" you noted from the previous screen, you will be able to print out your report without any changes. If the number shown in "char per line (est)" is less than the "LEN #," you need to adjust either the printer options or your report format. For example, you can adjust CI (chars per inch) or PW (platen width). Or, you can press ESC to go back to the REPORT FORMAT and adjust the column width of the categories you want to print.
- (g) Now you are ready to print your report. Press Open Apple P. AppleWorks will ask you where you want to print the report. Highlight the appropriate choice, and press RETURN.
- (h) Type report date or press RETURN. Then answer how many copies you want, and press RETURN. Your report will be printed out now.

2. To create a "labels" format:

- (a) Press Open Apple P, if you haven't done this yet.
- (b) Choose option 3: Create a new "labels" format. Press RETURN.

Report: student records

First Name	Last Name	SS#	Street	City	State	Zip Code	Tel. #
Debbie	Conrad	234-90-1023	345 School	Fayetteville	AR	72701	501-443-2480
Peter	Johnson	230-12-5641	23 Maple	Harrison	AR	57921	501-223-1246
Laura	Jones	230-15-0978	7 Duncan	Springdale	AR	72051	501-699-9599
Beth	London	231-32-6541	1 Maple	Fayetteville	AR	72701	501-443-3901
James	Smith	231-17-0913	22 Riversi	Fayetteville	AR	72701	501-443-3203

EXAMPLE 1. A "Tables" Format Report

Report: student records

May 10, 1985

Debbie
Conrad
234-90-1023
345 School
Fayetteville
AR
72701
501-443-2480

Peter
Johnson
230-12-5641
23 Maple
Harrison
AR
57921
501-223-1246

Laura
Jones
230-15-0978
7 Duncan
Springdale
AR
72051
501-699-9599

Beth
London
231-32-6541
1 Maple
Fayetteville
AR
72701
501-443-3901

James
Smith
231-17-0913
22 Riverside
Fayetteville
AR
72701
501-443-3203

EXAMPLE 2. A "Labels" Format Report

- (c) Type a name for the report and press RETURN.
- (d) You are now in the REPORT FORMAT menu. AppleWorks displays all the category names in your file and tell you how many lines for each record. If you don't want to change anything, you are ready to print the label report. You might want to press Open Apple O to get the PRINTER OPTIONS and adjust some options according to your specific printer. Press Open Apple P to print your report.
- (e) Category names can also be printed on your labels format report. (See the example on the next page.) After you've done Step (a) to Step (c) as described above, you can enter the command so that AppleWorks will print the category names on your report. Here is how:
 - (i) Put the cursor on the first character of the first category name in your file, then press Open Apple V. Once you enter this command, the entry from the first record under the same category will appear on the screen next to the category name.
 - (ii) Now use Open Apple V to specify other category names you want to include in your report. If you change your mind after you press Open Apple V for one category name, you can press Open Apple V again to release the command. Practice this technique to see how it works.
 - (iii) You are ready to print your report again. Before you print it on paper, try to print it on the screen. Press Open Apple P, choose "The screen," and press RETURN. Your report will be visible on the screen. After you go through the whole file, you will be back to the REPORT FORMAT menu. Press Open Apple P again and print your report on paper.
- (f) If you don't want to print out a specific category, you can delete that category temporarily. First move the cursor to the category you want to delete, press Open Apple D. That category is gone! You might want to press Open Apple D again to delete the space line.
- (g) To insert a previously deleted category, you will first insert a spacing line, then insert that category. Here is how:
 - (i) Press Open Apple I, then choose either "spacing line above cursor position" or "spacing line below cursor position."
 - (ii) Now you need to make sure the cursor is on the spacing line you've just inserted. Press Open Apple I again.
 - (iii) AppleWorks will display the categories you've deleted. Choose the category you want to insert, and press RETURN.

Report: student record

May 10, 1985

First Name: Debbie
Last Name: Conrad
Street: 345 School
City: Fayetteville
State: AR
Zip Code: 72701
Tel. #: 501-443-2480
SS#: 234-90-1023

First Name: Peter
Last Name: Johnson
Street: 23 Maple
City: Harrison
State: AR
Zip Code: 57921
Tel. #: 501-223-1246
SS#: 230-12-5641

First Name: Laura
Last Name: Jones
Street: 7 Duncan
City: Springdale
State: AR
Zip Code: 72051
Tel. #: 501-699-9599
SS#: 230-15-0978

First Name: Beth
Last Name: London
Street: 1 Maple
City: Fayetteville
State: AR
Zip Code: 72701
Tel. #: 501-443-3901
SS#: 231-32-6541

First Name: James
Last Name: Smith
Street: 22 Riverside
City: Fayetteville
State: AR
Zip Code: 72701
Tel. #: 501-443-3203
SS#: 231-17-0913

EXAMPLE 3. A Labels Format Report Printed with Category Names

- (h) If you want the labels to be printed out alphabetically by the last name, you can arrange your file first. Put the cursor on "Last Name," press Open Apple A, choose "From A to Z," and press RETURN.
- (i) Suppose you want the last name to be printed out on the same line as the first name. Here are the procedures:
 - (i) Put the cursor on the first letter of "Last Name," press Open Apple right arrow to move "Last Name" about 15 spaces to the right. Then use Open Apple up arrow to move "Last Name" up next to "First Name."
 - (ii) Delete the empty space below "First Name" and "Last Name." Put the cursor back to the empty space, then press Open Apple D.
 - (iii) Now you will "left justify" all the entries under "Last Name." Put the cursor on the first letter of "Last Name." Press Open Apple J. A character "<" will appear on the left of "Last Name." When your records are printed out, all the last names will be left justified. (Check the samples on the next two pages to recognize the differences between the justified and unjustified formats. Example 6 is an example of mailing labels with last name justified.)
- (j) When you are in the REPORT FORMAT, you can also ask AppleWorks to display the records the way when they are printed on paper. Press Open Apple Z to get the first record. Press Open Apple > (no SHIFT) to display the next record, and Open Apple < to go back to the previous record. You can also use Open Apple 1 through 9 to move through the file. When you are finished, press Open Apple Z to go back to the category names.
- (k) If you need to adjust the printer options, you can press Open Apple O. You will be in the PRINTER OPTIONS menu, which allows you to change the margin settings. Also, you will have such formatting options as whether you want the printer to omit a line when all the entries on that line are blank, or whether you want to keep the number of lines the same within each record.
- (l) Now you are ready to print your labels. Press ESC to go back to the REPORT FORMAT menu. Press Open Apple P to print the labels.
- (m) AppleWorks allows you to save the report format you've set. If you want to do so, you can press Open Apple S to save your file again after you've formatted how you want to print your data base file. Later on, you can duplicate the format for another report file, or delete it if you don't want to use it anymore.

Report: student records

May 10, 1985

Debbie Conrad
345 School
Fayetteville
AR
72701

Peter Johnson
23 Maple
Harrison
AR
57921

Laura Jones
7 Duncan
Springdale
AR
72051

Beth London
1 Maple
Fayetteville
AR
72701

James Smith
22 Riverside
Fayetteville
AR
72701

EXAMPLE 4. An "Unjustified" Labels Format Report

Report: student records

May 10, 1985

Debbie Conrad
345 School
Fayetteville
AR
72701

Peter Johnson
23 Maple
Harrison
AR
57921

Laura Jones
7 Duncan
Springdale
AR
72051

Beth London
1 Maple
Fayetteville
AR
72701

James Smith
22 Riverside
Fayetteville
AR
72701

EXAMPLE 5. A "Justified" Labels Format Report

Report: student records

May 10, 1985

Debbie Conrad
345 School
Fayetteville AR 72701

Peter Johnson
23 Maple
Harrison AR 57921

Laura Jones
7 Duncan
Springdale AR 72051

Beth London
1 Maple
Fayetteville AR 72701

James Smith
22 Riverside
Fayetteville AR 72701

EXAMPLE 6. A Mailing Label Example with Last Name Justified

More About Two Special Features in AppleWorks' Data Base

AppleWorks data base allows you to do simple calculations: you can add (+), subtract (-), multiply (*), or divide (/) in your data base. If you have your acquisition file in data base, this function will turn out to be very handy when you want to calculate the total cost of the materials you purchase. Another feature, the Record Selection feature, will enable you to establish certain comparisons so that you can do a "Boolean" type search. For example, you want to group all the records from the same publishing company in your acquisition file, or you want to know all the records that are related to drug education and receive the first priority in your file. If you have a play collection index or a holiday collection index in data base, you can do different searches to specify the records you want to look at. This section will help you become familiar with the calculation and Boolean search features in AppleWorks data base. You can utilize them in numerous different ways later on.

1. To calculate categories:

- (a) First, add to the Desktop a file named "acquisitionfile" from your Template Disk.
- (b) This is a sample acquisition file that you may consider to build for your center. Press Open Apple Z to get a single record. The categories in this data base include: Author, Title, Publisher, Year, ISBN#, Copies, Cost, Type of Media, Curriculum Topic, Priority, and Requested by. Grouping materials under different curriculum topics is highly recommended, since by doing so you will be able to know how to allocate your budget to establish emphasis collection areas so that the collection in your center will really match the needs of the curriculum. A list of emphasis collection areas is included in your Template Disk. Those are the emphasis areas indicated by about 70 school library media specialists who participated in a collection mapping research. You may print the list, modify it, and use the area names to group your materials.
- (c) Now press Open Apple Z to go back to the multiple-record layout for this file. Press Open Apple P for print. Choose option 2: Create a new "tables" format and press RETURN. Type a name for the report and press RETURN. You will be in the REPORT FORMAT menu.
 - (i) Move the cursor to the Cost column. Notice that the numbers under the Cost column are "left-justified." You are going to right-justify this column. Press Open Apple J for right justification.
 - (ii) Type "2" for decimal places, and press RETURN. Press RETURN again to accept AppleWorks default 3 blank spaces after the category. The Cost column will become

"9999999.99." Don't panic, your data are still in your file. This is just to show you how the category will be formatted.

- (d) Before you learn to do the calculations, delete the following columns: ISBN# (column E), Type of Media (column H), Curriculum Topic (column I), Priority (column J), and Requested by (column K). Now arrange the Publisher column (column C). (It is not necessary to delete columns in order to calculate. Yet, deleting some columns you don't want to include might make the columns you want to look at more visible.)
 - (e) Now move the cursor to the right of the last column, on the letter "e" in the vertical margin delimiter which shows the length of your data base. Press Open Apple K. You'll find AppleWorks adds one column for you and asks you to type a name for the calculated category. Press Open Apple Y (or Control-Y) to delete the word "calculated" and type "Total" for the column name. Press RETURN.
 - (f) AppleWorks now asks you to type the calculation rules. You want to multiply column E (Copies) and column F (Cost), therefore, type "E*F" and press RETURN. Type "2" for decimal places, press RETURN. Press RETURN to accept 3 blank spaces for this category. You'll find that the Total column looks like this: 9999999.99.
 - (g) You can also total all the entries under the Total column. Your cursor should be on this column, press Open Apple T. Press RETURN to accept 2 decimal places, press RETURN again to accept 3 blank spaces. You'll notice ten double dashes appear at the end of the Total column. AppleWorks will then calculate the grand total for you.
- * Note: To remove the totals you've calculated, you will place the cursor on the category with the totals, press Open Apple T again.
- (h) Suppose you want to get a subtotal for each publisher, you can calculate the group totals, too. Move the cursor to the Publisher column. Press Open Apple G. AppleWorks will ask you whether you want to print the group totals only. To see the details of the records, you will choose No and press RETURN. AppleWorks again asks you whether you want to go to a new page after each group. Answer No by pressing RETURN since you don't have so many records.
 - (i) You are ready to print the data base with the calculation results. Press Open Apple P and follow the regular printing instructions. (If you want to print the report to the screen first to see how it looks, you can choose "The screen" and press RETURN. Type report date or press RETURN. On the screen you will see your data base report.)
 - (j) Save the report format if you want to keep it for the future.

* Warning: Calculation rules are based on column letters. If you rearrange columns or delete some columns, the column letters included in your calculation rules may be changed, too. In order to get the correct results, you need to adjust the column letters in your calculation rules.

2. To do the Boolean search:

When you first create a data base file, the selection rule is "All Records," which means AppleWorks will display all the records in your file. The selection rule is always indicated in the upper left-hand corner of the screen. If you want to find certain records that contain the information you specify, you can use the Record Selection feature to have AppleWorks do the searching. For example, you can ask AppleWorks to display only the materials published by Morrow publishing company. Here is how:

- (a) You are in the multiple-record layout of the "acquisitionfile." Press Open Apple R.
- (b) AppleWorks displays all the category names. Choose "Publisher" and press RETURN. A list of operations displays on the screen. Notice the selection rule on the screen has been changed to "Publisher."
- (c) Now choose "equal" and press RETURN. The selection rule now becomes "Publisher equals." AppleWorks then asks you to type the comparison information. Type "morrow" and press RETURN. The selection rule displays "Publisher equals MORROW."
- (d) AppleWorks will allow you to specify more information. For now, you just want to search everything published by Morrow, so press ESC to leave the Select Records mode. If AppleWorks can't find any record that meets your requirement, it will tell you no record matches. Now, AppleWorks displays five items published by Morrow.
- (e) After you get all the records you specified, you can try all the features available for a regular AppleWorks data base on this file. For instance, if you want to display the type of media and curriculum topic for the items, you can press Open Apple L, delete several categories you don't need, then go back to the multiple-record layout. If you want to calculate how much you need to pay this company, you can use the techniques you've just learned to calculate the totals. After you do the calculation, you can also print this file.
- (f) Now you are going to try a more complicated search. Press Open Apple R. Answer No to the question whether you want to select all records. You will try to find all the materials that were published in 1984, cost less than 10 dollars, and get the first priority.

- (g) Try some more searches. (After each search, if you want AppleWorks to display all the records, you just need to press Open Apple R, answer Yes when AppleWorks asks you whether you want to select all records or not.)

Command Summary

1. Open Apple A - Arrange entries under category
2. Open Apple C - Copy information
3. Open Apple D - Delete information
4. Open Apple E - Edit, switch between insert and overstrike cursors
5. Open Apple F - Find information
6. Open Apple G - Calculate (or remove) group totals
7. Open Apple H - Print the current screen display
8. Open Apple I - Insert records
9. Open Apple J - Left justify entries in a category for a labels format report
10. Open Apple K - Define a category for calculation
11. Open Apple L - Change record layout
12. Open Apple M - Move information
13. Open Apple N - Change name for a file, a category, or a report
14. Open Apple O - Options for the printer
15. Open Apple P - Print the data base file
16. Open Apple Q - Quick change files on the Desktop
17. Open Apple R - Adjust record selection rules
18. Open Apple S - Save the data base file
19. Open Apple T - Calculate (or remove) category totals
20. Open Apple V - Set standard values, specify category names to be printed on the "labels" format report
21. Open Apple Y - Erase to the end of the entry
22. Open Apple Z - Switch between single- and multiple-record layout
23. Open Apple 1-9 - Move within the data base file

Exercises

1. Create an AV catalog using the following categories: Subject Area, Call #, Format, Title, and Comments. Try using the techniques you've learned to eliminate repetitive typing. Print out the following "tables" style reports alphabetically or numerically arranged by (a) Subject Area, (b) Format, (c) Call #, and (d) Title. Compare this type of catalog with a similar one done on the word processor. Which one do you prefer?
2. Create a mailing list of at least 10 names and addresses and print out mailing labels with complete information. Create a second set of labels using only some categories and rearrange the information. Next, select just the people from a single city and print out labels for them. Labels should be alphabetically arranged by city and then subarranged alphabetically by person's first name.

3. Using the data base created for #2, insert 2 addresses in the middle of the file and add two addresses at the end of the file. Print out the file in "tables" format with arranging it. Then arrange the file by zip code and reprint it. Delete 4 records and print the file again. Now make 10 copies of the first name on the file and print out mailing labels so that you have 10 labels for one person and one label each for the rest of the persons listed.
4. Using the AV catalog data base in #1, add a new category "Price" to the file. Enter pricing information. Calculate the total cost of all the items in the file, and print out the results.
5. Create a play index using the data base. A sample template called "play index" is on the Template Disk. Modify it to suit your needs before you begin. In a workshop session, each person can index one volume of plays and then all the data bases can be merged to produce a comprehensive play index. Practice Boolean searches and create printouts arranged by title, playwright, and volume title.
6. Create an AV equipment inventory data base. A sample template named "AV.equip.inven." is on the Template Disk. Modify it to suit your needs before you begin. Print out a list by location, type of equipment, and date purchased.
7. Create a community resource file. You can load "comm.resource" from your Template Disk to see whether it can be used in your center.
8. Add the "acquisitionfile" from your Template Disk. Two report formats (#1, and #2) were saved with this file. Press Open Apple P, choose option 1: Get a report format. AppleWorks will display the current two report formats. First print out Report #1, then Report #2. Your printouts should look like the sample printouts on the next two pages, which were produced on Imagewriter.
9. Now go back to the REPORT MENU. Choose option 3: Create a new "labels" format. Can you design a report just like Report #1? Arrange the entries in the following categories for your report: Curriculum Topic, Type of Media, and Priority. You will print the category names, too. (Hint: To move the last three categories to the front, you need to insert a spacing line above "Author," then do the moving.) Now examine Report #2. Can you create a new "labels" format report like Report #2? If each entry can be printed on a 3x5 continuous pin-fed card, can you use this format to send out your acquisition orders?
10. There are some other data base templates on your Template Disk. Retrieve them to see whether they can be used in your center.

File: acquisitionfile
Report: #1

Page 1
May 10, 1985

Curriculum Topic: drugs Type of Media: filmstrip Priority: 1
Author:
Title: Marijuana: facts, myth, & decision
Publisher: Guidance Associates Year: ISBN#:
Cost: 159.50 Copies: 1

Requested by: Miller Jones

Curriculum Topic: human development Type of Media: filmstrip Priority: 1
Author:
Title: Preparing for parenthood
Publisher: Guidance Associates Year: ISBN#:
Cost: 79.50 Copies: 1

Requested by: Miller Jones

Curriculum Topic: human development Type of Media: filmstrips Priority: 1
Author:
Title: Pregnancy
Publisher: Guidance Associates Year: ISBN#:
Cost: 119.50 Copies: 1

Requested by: Mary Smith

Curriculum Topic: geography Type of Media: filmstrip Priority: 2
Author:
Title: Tasaday: stone age people in a space age world
Publisher: Guidance Associates Year: ISBN#:
Cost: 79.00 Copies: 1

Requested by: Robert Johnson

Curriculum Topic: myth Type of Media: book Priority: 1
Author:
Title: Hungry woman: myths and legends of the Aztecs
Publisher: Morrow Year: 1984 ISBN#:
Cost: 10.50 Copies: 1

Requested by:

File: acquisitionfile
Report: #2

Author:
Title: Marijuana: facts, myth, & decision
Publisher: Guidance Associates Year:

ISBN#: Copies: 1 Cost: 159.50

Author:
Title: Preparing for parenthood
Publisher: Guidance Associates Year:

ISBN#: Copies: 1 Cost: 79.50

Author:
Title: Pregnancy
Publisher: Guidance Associates Year:

ISBN#: Copies: 1 Cost: 119.50

Author:
Title: Tasaday: stone age people in a space age world
Publisher: Guidance Associates Year:

ISBN#: Copies: 1 Cost: 79.00

Author:
Title: Hungry woman: myths and legends of the Aztecs
Publisher: Morrow Year: 1984

ISBN#: Copies: 1 Cost: 10.50

Author: Bulla, Clyde Robert
Title: Cardboard
Publisher: Crowell Year: 1984

ISBN#: Copies: 1 Cost: 10.89

Author: Bunting, Eve
Title: Clancy's coat
Publisher: Warne Year: 1984

ISBN#: Copies: 1 Cost: 11.95

SECTION IV.

SPREADSHEET

AppleWorks' spreadsheet allows you to work with numbers or formulas in rows and columns. One spreadsheet file can contain 127 columns and 999 rows. This section is designed to help you become familiar with the important features in AppleWorks' spreadsheet.

Getting Started

1. Put the AppleWorks STARTUP disk in Drive 1. (Be sure to close the door.)
2. Boot the disk by turning on the computer. (Adjust monitor if necessary.)
3. When the title screen comes up, it asks you to flip the disk in Drive 1 and press RETURN.
4. The date screen comes up. Just press RETURN or change the date as you wish.
5. You should now be at the "MAIN MENU." Light up "1. Add files to the Desktop" and press RETURN.
6. You now want to make a new file on the spreadsheet. Use the arrow key to light up "5. Spreadsheet" and press RETURN.
7. Press RETURN since you are starting from scratch.
8. It now wants a name for the file. Name it "Budget" or any other name you wish. Press RETURN.

Planning Your Spreadsheet

The first task is to plan what you need in your spreadsheet. The planning should be quite thorough or you will suffer later.

Basically, you need to decide how many columns you will need, how wide the columns need to be, what kind of information is going to be under each column (words or numbers). You need to tell AppleWorks how to display the information. Finally, you need to design your calculation formulas according to what results you want to have. All this needs to be done first before you start entering information in the spreadsheet.

In the following section, you will learn step-by-step how to create a simple spreadsheet. You are going to create a simple monthly budget report which will keep track of the money to spend and the expenditures in your center. You will include the following categories in the spreadsheet: Month, To Spend, Paid: To Whom, Books, AV, Mags. (for periodicals), Supplies, and Total. You will want the monthly

totals of what you have spent in each category. Finally, you will calculate the total expenses, and have the amount subtracted from the money to spend. With the exception of the entries in the "Month" and "Paid: To Whom" columns, all the data will be dollars and cents.

Creating the Budget Template

You are now ready to create what is known as a template on the spreadsheet screen. This means you will create the structure of the spreadsheet into which you can enter your actual amounts. Pictured on the next page is the actual spreadsheet that you will create.

To create this spreadsheet, perform the following steps. Think about the steps as you do them.

Step 1: Create the category labels (You should have the REVIEW/ADD/CHANGE screen on the computer. If not, get it there.)

- (1) Before you start, here are the commands for typing entries:
 - (a) To confirm an entry, use RETURN or arrow keys.
 - (b) Use DELETE key to delete one character to the left of the cursor.
 - (c) Press Open Apple Y or Control-Y to delete characters to the right of the cursor.
 - (d) Use Open Apple E to switch between the insert cursor (for inserting) and overstrike cursor (for typing over the existing characters).
- (2) Now put the cursor in the upper left-hand corner. Type "Month." (Press the right arrow to jump to the next column.) (You can press RETURN or use arrow keys to confirm an entry.)
- (3) Now you are ready to type "To Spend," but you need more spaces in column B. Here is how to get more spaces for a column:
 - (a) First move the cursor to column B.
 - (b) Press Open Apple L. Light up "Columns" (use arrows), press RETURN, then press RETURN again.
 - (c) Light up "Column width" and press RETURN.
 - (d) Use Open Apple right arrow to add 2 spaces.
 - (e) Press RETURN. You have just created a new column for "To Spend" which is 2 spaces wider than the original. (The default column width is 9 spaces.)

File: Budget

A	B	C	D	E	F	G	H	
1;	Month	To Spend	Paid: To Whom	Books	AV	Mags.	Supplies	Total
2;	Jan	\$1,000.00						\$1,000.00
3;	Jan		369 Supply				\$36.00	
4;	Jan		B. Dalton	\$36.25				
5;	Jan		EBSCO			\$190.00		
6;	Jan		Highsmith				\$200.00	
7;	Jan		Scholastic	\$300.00				
8;	Tot. Exp.			\$36.25	\$300.00	\$190.00	\$236.00	\$762.25
9;	Balance							\$237.75

EXAMPLE 7. A Complete Screen Picture of "Budget"

- (f) Now type "To Spend" and press the right arrow.
- (4) Create a wide column for: Paid: To Whom. Do it just like the above by adding 10 spaces to the column width.
- (5) Create regular category labels for the following columns: Books, AV, Mags., Supplies, and Total. (Type Books, right arrow, AV, right arrow, Mags., right arrow, Supplies, right arrow, Total, right arrow.) In Step 2, you will learn how to adjust the layout of the spreadsheet.
- (6) After entering the category labels, you may want to move the cursor around:
- (a) Use the four arrow keys to move the cursor around without changing anything.
 - (b) Use the TAB key to move the cursor to the right cell, and use Open Apple TAB to move the cursor to the left cell.
 - (c) Use Open Apple and arrow keys to move the cursor across one full screen of information.
 - (d) Use Open Apple 1 to 9 to move the cursor proportionally in the spreadsheet.

Step 2: Enter standard value and label formats

You need to tell AppleWorks how information is to be displayed on the spreadsheet. There are two types of entries on the spreadsheet: labels (words) and values (numbers, functions, or formulas).

You will be able to specify whether the labels are left justified, right justified, or centered in each "cell" (or box). If you want to put some numbers in the cells, AppleWorks needs to know how many decimal places the numbers should have, or whether they should have dollar signs, percent signs or just numbers.

- (1) Press Open Apple V. Light up "Value format" and press RETURN. You want a dollar sign for the values you will enter, so light up "Dollars" and press RETURN. AppleWorks asks you how many decimal places you want. Type "2" and press RETURN.
- (2) Now press Open Apple V again. Light up "Label format" and press RETURN. You want to center your labels, so light up "Center" and press RETURN.

This is the way you specify how all the cells in the spreadsheet should be displayed. Later on, you will learn how to adjust an individual cell, column, or row layout. Instead of using Open Apple V, you will use Open Apple L to do this.

Step 3: Enter information in the spreadsheet

- (1) Move the cursor right below the Month column. (Use arrow keys). Type "Jan" and press the right arrow. Type "1000" and press the right arrow.
- (2) Now move the cursor back to "Jan" you have just typed. On the bottom left, you will find "A2: (Label) Jan." This tells you the position of the cursor, which is now on column A, row 2. The information this cell contains is a "label format" and "Jan" is what you've just typed in.
- (3) Move the cursor to B2. You will find "B2: (Value) 1000" on the bottom left. When this value is displayed on the spreadsheet, AppleWorks automatically puts a dollar sign before it just the way you've asked.
- (4) Now you will copy the information in cell B2 to cell H2.
 - (a) Put the cursor on B2.
 - (b) Press Open Apple C, light up "Within worksheet," press RETURN and press RETURN.
 - (c) Use the right arrow to move the cursor to H2 right below Total, then press RETURN.

On the screen you will find "*****" in cell H2, which means the column you set up before is not wide enough to display the value you tried to put in this cell, even though the value has already been stored in the spreadsheet. Add one more space to this column by using the technique you've learned in Step 1. Once you've adjusted the column width, "\$1,000.00" will be displayed in H2.

- (5) Now go back to the Month column. There will be five more entries with "Jan" in the cells. Instead of typing "Jan" 5 times, you can copy "Jan" from A2. Now do the following:
 - (a) Put the cursor back on A2, press Open Apple C, light up "Within worksheet," press RETURN, and press RETURN.
 - (b) Press the period sign (.). Then use the down arrow key to highlight five cells below A2. Stop at A7. Press RETURN. You will find that "Jan" has been copied and displayed from A3 to A7.
- (6) You are ready to type the following entries in the spreadsheet. Wherever your cursor is now, you can use the following method to let it go to the specific cell you want. (Of course, you can use the arrow keys to do this, too).

For example: You want the cursor to go back to C3.

- (a) Press Open Apple F, choose "Coordinates," press RETURN.
 - (b) Press Open Apple Y to erase the former coordinate if there is any.
 - (c) Type C3 and press RETURN. The cursor will be in C3.
- (7) Now type the following: (You are given, in the parentheses, the information about under which column each entry will be and the cursor position.)

Row 3: B. Dalton (Paid: To Whom) (C3), 36.25 (Books) (D3)

Row 4: Scholastic (Paid: To Whom) (C4), 300 (AV) (E4)

Row 5: EBSCO (Paid: To Whom) (C5), 190 (Mags.) (F5)

Row 6: Highsmith (Paid: To Whom) (C6), 200 (Supplies) (G6)

- (8) Now in G7, enter "36." In C7, you will enter "369 Supply." This label starts with a number. If you try to type "369 Supply" in C7, AppleWorks will beep on you the minute you try to type "J." This is because once you type "3," AppleWorks automatically accepts this entry as a value entry. So it won't allow you to put a letter in a value entry. You have to give AppleWorks a signal that you are entering a label entry starting with a number. Here is how: Put the cursor on C7. Press SHIFT and type " (a quotation mark). Once you type the quotation mark, notice that, on the bottom left, AppleWorks indicates C7 is a label. The quotation mark is just a signal to AppleWorks. It will not be displayed on the spreadsheet. Now you can type "369 Supply."

* So far your spreadsheet should look like EXAMPLE 8 on the next page.

* Note: If you want to change something you've typed in a cell, there are several ways to do so. First put the cursor on the cell you want to make changes, then do the following:

- (1) Retype the information, press an arrow key (or RETURN).
- or, (2) Press Open Apple U first. Press Open Apple Y (or Control-Y) to delete the former entry. Then you can make changes and press RETURN. If you want to erase part of the entry, type Open Apple U. Move the cursor to where you want to erase, press Open Apple Y (or Control-Y), press RETURN. If you want to restore an entry you've deleted, press ESC. You can also use Open Apple E to switch between the insert cursor and overstrike cursor after you press Open Apple U.

File: Budget

A	B	C	D	E	F	G	H	
1;	Month	To Spend	Paid: To Whom	Books	AV	Mags.	Supplies	Total
2;	Jan	\$1,000.00						\$1,000.00
3;	Jan		B.Dalton	\$36.25				
4;	Jan		Scholastic		\$300.00			
5;	Jan		EBSCO			\$190.00		
6;	Jan		Highsmith				\$200.00	
7;	Jan		369 Supply				\$36.00	
8;								
9;								

EXAMPLE 8. A Partial Screen Picture of "Budget" with Entries on Column C Unarranged

- or, (3) Press Open Apple B, light up "Entry," then press RETURN. You just "blank" a cell! Now you can type the new information in the entry. Try these techniques!

Now you are going to arrange all the entries from row 3 to row 7 under column C so that the entries under "Paid: To Whom" will be in alphabetical order. Sometimes, arranging entries might affect the calculation formulas in other cells, which of course will result in incorrect calculations. Therefore, if you plan to arrange certain columns, do it before you put in calculation formulas.

- (a) Move the cursor to column C.
- (b) Put the cursor either at row 3 or row 7.
- (c) Press Open Apple A. Then use the up or down arrow key to highlight from row 3 to row 7. Press RETURN.
- (d) Choose "1. Labels from A to Z," and press RETURN.
- (e) The entries in column C from row 3 to row 7 should be arranged alphabetically. Your screen should look like EXAMPLE 9 on the next page.

Step 4: Calculation

Now you are going to put calculation formulas in the cells where you want the results to be displayed.

- (1) Type "Tot. Exp." in A8. Find cell D8. Type "@sum(d3...d7)" and press RETURN. On the screen, D8 will display "\$36.25." "@Sum" is one of the arithmetic functions you can use.
- (2) Now put the following functions in the cells indicated:
 - @sum(e3...e7) in cell E8,
 - @sum(f3...f7) in cell F8,
 - @sum(g3...g7) in cell G8.
- (3) Notice that once you put the calculation instruction in a cell, AppleWorks starts calculating for you and displays the result on the screen. If you want to examine the formulas you put in, press Open Apple Z. To come back to the normal display, press Open Apple Z again.
- (4) Now type "+d8+e8+f8+g8" in cell H8 and press RETURN. On the screen, you will have "\$762.25" in H8. (You can also type "@sum(d8...g8)" to get the same result.)
- (5) Now you want to subtract \$762.25 (H8) from the amount to spend (\$1,000 in H2). First type "Balance" in cell A9, then go to cell H9 to put the formula in the cell. In H9, type "+h2-h8" and press RETURN. The screen will display "\$237.75."

File: Budget

	A=====	B=====	C=====	D=====	E=====	F=====	G=====	H=====
	Month	To Spend	Paid: To Whom	Books	AV	Mags.	Supplies	Total
1;	Jan	\$1,000.00						\$1,000.00
2;	Jan		369 Supply				\$36.00	
3;	Jan		B. Dalton	\$36.25				
4;	Jan		EBSCO			\$190.00		
5;	Jan		Highsmith				\$200.00	
6;	Jan		Scholastic		\$300.00			
7;								
8;								
9;								

EXAMPLE 9. A Partial Screen Picture of "Budget" with Entries on Column C Arranged Alphabetically

As you can see, there are two ways to do the addition calculation. You can either use "@SUM" function or put in an addition formula. Whenever you use a formula, it should start with a plus sign (+) or some other signs. You may refer to the AppleWorks manual for different functions & formulas (pp. 196-203).

Now, let's examine the formulas in D8, E8, F8, and G8. You will find that the structure of the formulas in E8, F8, and G8 is similar to that of the formula in D8. Under different columns (columns D, E, F, and G), each formula is trying to calculate the total from row 3 to row 7. Therefore, once you put a formula in D8, instead of typing the formulas for E8, F8, and G8, here is a short cut for you:

- (a) Suppose you've already put a formula in D8, which is "@sum(D3...D7)." E8, F8, and G8 are all empty. (You can use Open Apple B to erase the formulas you've put in E8, F8, and G8.)
- (b) Put the cursor on D8. Press Open Apple C (for copy). Choose "Within worksheet," press RETURN and RETURN.
- (c) Press the period sign (.), then move the cursor to highlight E8, F8, and G8. Press RETURN.
- (d) On the bottom left, AppleWorks highlights D3 and asks reference to D3. You have two choices: No change or Relative.
- (e) If you want to copy D3 exactly to the next three cells, you will choose "No change" (or type N). On the other hand, if you want D3 to change according to the position of the cell, you will choose "Relative." Here, choose "Relative" and press RETURN.
- (f) AppleWorks then lights up D7 and asks reference to D7. Choose "Relative" (or type R) and press RETURN.
- (g) You have just created three formulas by copying the formula from D8. You might use Open Apple Z to examine the formulas you've just put in.

* Note: Arrow keys can be used as pointers to construct the calculation formulas. Now move your cursor to cell D8. The calculation formula in this cell is "@sum(D3...D7)." Press Open Apple B to blank this cell. You will learn to use the pointers to put the same formula back to this cell.

- (a) Your cursor is on cell D8. First type "@sum" and a left parenthesis. On the screen, your formula should look like this: @sum(.
- (b) Use the up arrow key to move the cursor to cell D3, which is the starting cell of the formula. Notice that in cell D8

AppleWorks automatically puts "D3" in your formula after "@sum(."

- (c) Type a period sign (.). AppleWorks puts three dots for you.
- (d) Use the down arrow key to move the cursor to cell D7, the ending cell of the formula. AppleWorks now highlights the block from cell D3 to cell D7.
- (e) Press RETURN. AppleWorks will put "D7" in your formula. Type a right parenthesis and press RETURN. You've put a formula in cell D8. The same result "\$36.25" will be displayed on the screen.
- (f) Now you can blank cell E8, cell F8, or cell G8, and practice using the same technique to put the formula back.

Saving and Loading the Spreadsheet to and from the Disk

1. Press Open Apple S. Your file will be saved on the disk under the name of "Budget" or whatever you named it.
2. Press ESC to get back to the MAIN MENU. You can add a file to the Desktop, work with one of the files on the Desktop, save a file, or remove a file from the Desktop as in the data base or word processor mode.
3. You've just created a spreadsheet. You can load "Budget 1" from the Template Disk to look at the sample prepared for you. If you followed the instructions step-by-step, your spreadsheet should be the same as the sample.
4. If you have already loaded "Budget 1" from the Template Disk, there are at least two files on your Desktop now: your spreadsheet and "Budget 1." To switch between your spreadsheet and "Budget 1," you can press Open Apple Q to get the Desktop Index. Highlight the file you want to work on, then press RETURN. You will find that you go back to the file you've specified. Open Apple Q (for quick change) is a very convenient command you can use to get a file from the Desktop when there are several on the Desktop.

Printing Out a Spreadsheet

Your report can't be wider than the number of characters allowed per line according to the printer options for the spreadsheet and the information about the printer that you specify. (To specify the printer, you choose "5. Other Activities" from the MAIN MENU, then choose "7. Specify information about your printer(s)." After this, you can adjust your printer.) The following are the regular procedures to print out your spreadsheet if you don't have to specify your printer.

1. Press Open Apple P.
2. Specify how much you want to print by choosing All, Rows, Columns, or Block. Use the cursor to highlight the area you want to print if you don't print the whole spreadsheet. Press RETURN.
3. The information on the top of the PRINT menu will tell you how many characters wide your spreadsheet will be. Compare this number with the values the Printer Options allow. If your report is not too wide, continue printing steps.
4. If your report is too wide, press ESC to return to the REVIEW/ADD/CHANGE mode. Press Open Apple O to get the PRINTER OPTIONS menu. Adjust the printing values you need. For example, you can increase "CI" (chars per inch) so that the characters per line can be increased, too. Or, you can adjust the platen width, left margin, or right margin. After you've finished this, you can do your printing. A print-out from "Budget 1" is included on the next page.

Other Features in AppleWorks' Spreadsheet

1. Protect cells:

Sometimes, you may want to protect cells so that what you've entered will not be changed inadvertently by you or someone else using your spreadsheet. Suppose you want to protect cells on row 8. Here is how:

- (a) Move the cursor to row 8.
- (b) Press Open Apple L, highlight "Rows."
- (c) Press RETURN and RETURN.
- (d) Highlight "Protection," and press RETURN.
- (e) Choose "Nothing," and press RETURN. (If you choose "Label only," then only labels can be typed. If you choose "Values only," only values can be typed. If you choose "Nothing," you will protect the cells completely.)

Now put your cursor on D8, E8, F8, G8, or H8, and try to type a number or a letter. AppleWorks will beep on you and won't allow you to enter anything. Protection takes effect only on cells that already have entries or cell layouts. If you move your cursor to B8 or C8, you'll be able to enter information.

If you want to protect a blank cell, you can put the cursor on the blank cell, press Open Apple L again, highlight "Entry," then use Step (c) to Step (e) mentioned previously to protect it. If you want to protect several consecutive blank cells, instead of choosing "Entry," you will choose "Block."

Month	To Spend	Paid: To Whom	Books	AV	Mags.	Supplies	Total
Jan	\$1,000.00						\$1,000.00
Jan		369 Supply				\$36.00	
Jan		B. Dalton	\$36.25				
Jan		EBSCO			\$190.00		
Jan		Highsmith				\$200.00	
Jan		Scholastic		\$300.00			
Tot. Exp.			\$36.25	\$300.00	\$190.00	\$236.00	\$762.25
Balance							\$237.75

EXAMPLE 10. A Print-Out of "Budget 1"

2. Insert rows or columns:

- (a) Place the cursor on the row below or on the column to the right of where you want to put extra columns or rows.
- (b) Press Open Apple I. Choose Rows or Columns.
- (c) Type the number you want to insert and press RETURN.

3. Delete rows or columns:

- (a) Press Open Apple D. Choose Rows or Columns.
- (b) Move the cursor to highlight the rows or columns you want to delete. Press RETURN.

4. Adjust layout for a specific cell, column, or row:

Usually you will use Open Apple V to specify the label and value formats for the whole spreadsheet. If you want a different layout for specific cells, columns, or rows, you can override the specifications by using Open Apple L.

- (a) Place the cursor where you want to change the layout.
- (b) Press Open Apple L, choose Entry, Rows, Columns, or Block.
- (c) If you choose rows, columns, or block, use the arrow keys to highlight the area you want to change, press RETURN.
- (d) Choose Value format, Label format, or Protection. If you choose Columns, you have one extra option: Column widths.

5. Move columns or rows:

- (a) Place the cursor on a cell of one of the columns or rows you want to move.
- (b) Type Open Apple M, light up "Within Spreadsheet," and choose Columns, or Rows.
- (c) Move the cursor to highlight the columns or rows you want to move, press RETURN.
- (d) Move the cursor to the place where you want the moved columns or rows to go, press RETURN.

6. Set a fixed titles area:

With a fixed titles area in place, you will find it easier to look at information or enter information in the spreadsheet.

- (a) Put the cursor either just below the bottom row of the titles area or to the right of the right column of the titles area.

- (b) Press Open Apple T.
- (c) Choose Top, Left Side, or Both. Now you will have a fixed titles area on the top or on the left of the screen no matter where you move the cursor.
- (d) To remove the fixed titles area, press Open Apple T, choose "None." Remember to remove the fixed titles area before you try to save your spreadsheet.

* Note: If you want to have the fixed titles areas on the top and left side of the screen at the same time, you need to put the cursor in the cell just below and to the right of the row and column intersection.

7. Split the spreadsheet:

Sometimes, you might want to split the spreadsheet in two so that you can see two parts of it at the same time. When you are working on a big spreadsheet, you might find this very convenient. To split the spreadsheet into two side-by-side parts, your cursor should be in the column that will form the left boundary of the righthand display. To split the spreadsheet into a top and a bottom window, your cursor will be in the row that will form the top boundary of the bottom display.

- (a) Press Open Apple W, choose "Side by side" or "Top and bottom" depending on how you want to split your spreadsheet.
- (b) Once you split the spreadsheet, the windows will move independently. You need to "synchronize" the windows so that the two windows will match. Press Open Apple W again, then choose "Synchronize."
- (c) To "jump" from one window to another, use Open Apple J.
- (d) To go back to one window, press Open Apple W, then choose "One."

8. Adjust recalculation:

Usually, whenever you change a value in a cell, AppleWorks will automatically recalculate new values in certain related cells. This will slow you down when you are typing a lot of values and formulas. Therefore, if you are working on a big spreadsheet and you don't want to calculate the values immediately after you enter an entry, you can "turn off" the automatic recalculation function. Here is how:

- (a) Press Open Apple V.
- (b) Choose "Recalculate" and press RETURN.
- (c) Highlight "Frequency," press RETURN.
- (d) Move the cursor to "Manual" and press RETURN.

Now try to enter some numbers and calculation formulas. Notice AppleWorks will not do any calculation for you. To let AppleWorks start calculating again, simply press Open Apple K.

9. @IF logical functions:

The @IF logical functions allow you to perform the "what if" task in AppleWorks spreadsheet. First add "gradesheet" to your Desktop from the Template Disk. You are going to use this file to learn the logical functions.

- (a) This is an example of using the spreadsheet to calculate students' grades. There are eight students in the class. Six tests have been recorded. Column H calculates the average of the six tests for each student. Row 11 calculates the class average for each test. Then, from column I to column L, based upon the average, AppleWorks calculates how many points a student needs to make to reach a certain level. Now examine how this spreadsheet works.
- (b) The @IF logical functions are used in the cells from column I to column L. Basically, the @IF function is made up of three parts. The first part must be a logical value, an expression that can be evaluated by AppleWorks. The logical operators used in the expression can be as follows: <, <=, >, >=, =, or <>. The second and the third part can be any value. Calculation instructions can also be given in the second or third part of the logical function. This is how a logical function works: Appleworks will evaluate the first part, the logical expression, to see whether it is true or not. If the expression is true, AppleWorks will execute the second part and return the answer to you. Otherwise, Appleworks will execute the third part.
- (c) Now examine the grades of the first student. In cell I2, the logical function is as follows: @IF(H2<90,H2-90,@NA). Appleworks will first evaluate to see whether the value in H2 is less than 90 or not. Now the value in cell H2 is 81.50. It is less than 90, therefore, the logical expression is true. AppleWorks subtracts 90 from 81.50 and puts the result "-8.50" in cell I2. Tom Smith needs to make 8.50 more to get an A. AppleWorks moves on to evaluate the logical function in cell J2: @IF(H2<80,H2-80,@NA). Now the value in cell H2 is greater than 80. The expression is false, therefore, AppleWorks will not execute "H2-80." Instead, it puts "@NA" (not available) in cell J2, which means Tom Smith has reached the level of B. Examine the grades of the next student whose average is 63.50. AppleWorks tells you that she needs to make 26.50 more to get an A, 16.50 to get a B, 6.50 to get a C, and her grade is above the minimum level of D.
- (d) Now add several test results (insert columns) or students (insert rows), then revise the formulas or logical functions to get the similar results. Practice using the logical functions in other spreadsheets you've designed.

Command Summary

1. Open Apple A - Arrange or sort rows
2. Open Apple B - Blank or erase cells
3. Open Apple C - Copy cells
4. Open Apple D - Delete rows or columns
5. Open Apple E - Switch between the overstrike and insert cursors
6. Open Apple F - Find information
7. Open Apple H - Print the current screen display
8. Open Apple I - Insert rows or columns
9. Open Apple J - Jump from one window to another
10. Open Apple K - Calculate (start automatic recalculation)
11. Open Apple L - "Layout." Adjust cell, row, column, or block layout
12. Open Apple M - Move rows or columns
13. Open Apple N - Change file name
14. Open Apple O - "Options" for the printer
15. Open Apple P - Print the spreadsheet
16. Open Apple Q - Quick change between files on the Desktop
17. Open Apple S - Save the spreadsheet
18. Open Apple T - Set fixed titles area
19. Open Apple U - Edit the contents of a cell
20. Open Apple V - Set value or label formats for the whole spreadsheet
21. Open Apple W - Split the spreadsheet
22. Open Apple Y - Clear to the end of a cell
23. Open Apple Z - Zoom to see the formula

Exercise I

After setting up the "Budget" spreadsheet with January expenses in it, you might want to sharpen your skills by doing the following exercises. If you've tried some of the features listed above and changed your spreadsheet, remove what you have now on the screen, and reload your original spreadsheet to do this exercise.

1. Insert a row between 8 and 9.
2. Type "Percent" in column A.
3. In columns D, E, F, G, on the same row, put in formulas so that you will be able to tell the percentage you spent under each category from the total amount of money to spend in January. You will put a percent sign for each entry. (Hint: You can put the formulas in the appropriate cells first. Then use Open Apple L to adjust the value format for the whole row. By doing so, you can put the percent sign for each cell at the same time.)
4. In column H, you will put a formula to calculate the total percentage of your expenses from the total amount of money to spend.

5. Print out your spreadsheet. Your print-out should look like EXAMPLE 11 on the next page.
6. The following are the February expenses that you will enter in the spreadsheet. First, enter a line that separates the January and February expenses. Move the cursor to the first column four lines below January expenses. (It's row 14.) Now type SHIFT and a quote mark ("). Type equal signs (=) in this cell and press RETURN. Copy the cell to the rest columns so that you will get a double line to separate two sections. Move the cursor 4 lines below the double line. From row 18, enter the following information:
 - (a) To Spend: \$2546.
 - (b) AV: \$300 (a check to Vanguard AV).
 - (c) Books: \$57.98 (a check to Baker & Taylor).
 - (d) Mags.: \$48.50 (a check to NYT).
 - (e) Mags.: \$160 (a check to EBSCO).
 - (f) Supplies: \$250 (a check to Tersh).
 - (g) Supplies: \$70 (a check to West Office).
 - (h) Software: \$178 (a check to Worldwide Computer). (Now you need to insert a column.)
 - (i) Software: \$120 (a check to Quark).
 - (j) Software: \$55 (a check to 7 Compwise). (Now you need to give AppleWorks a signal that you are starting a label with a number!)
7. Arrange what you've entered from (b) to (j) under column C.
8. Try to left justify column C.
9. In cell I18, use the arrow keys as your pointers to construct a formula that will add the balance in January (\$237.75) to the total amount of money to spend in February (\$2,546.00). To do this, put the cursor on cell I18 first. Type a plus sign, then move the cursor to cell B18. Type a plus sign again. Notice your cursor automatically goes back to cell I18. Now move the cursor up to cell I10. Press RETURN. Your cursor goes back to cell I18. At the bottom left, AppleWorks automatically puts the formula in this cell and displays \$2783.75 on the screen. You will use this amount as the money to spend in February.
10. Use the pointers again to enter formulas so that you can get the similar results as you have for January expenses. Now you might want to load "Budget 2" from the Template Disk and compare it with what you have created.
11. Print out your new spreadsheet. (EXAMPLE 12 is a print-out from "Budget 2.")
12. Design calculation formulas so that you can get yearly totals of money to spend, expenditures, and balance.
13. Examine the use of other functions not covered in this section. Examples are: @MAX, @MIN, @AVG, @ABS, @SQRT, @COUNT, etc. (Use

Month	To Spend	Paid: To Whom	Books	AV	Mags.	Supplies	Software	Total
Jan	\$1,000.00							\$1,000.00
Jan		369 Supply				\$36.00		
Jan		B. Dalton	\$36.25					
Jan		EBSCO			\$190.00			
Jan		Highsmith				\$200.00		
Jan		Scholastic		\$300.00				
Tot. Exp.			\$36.25	\$300.00	\$190.00	\$236.00		\$762.25
Percent			3.62%	30.00%	19.00%	23.60%		76.22%
Balance								\$237.75

EXAMPLE 11. A Print-Out of "Budget 1" with Some Revision

Month	To Spend	Paid: To Whom	Books	AV	Mags.	Supplies	Software	Total
Jan	\$1,000.00							\$1,000.00
Jan		369 Supply				\$36.00		
Jan		B. Dalton	\$36.25					
Jan		EBSCO			\$190.00			
Jan		Highsmith				\$200.00		
Jan		Scholastic		\$300.00				
Tot. Exp.			\$36.25	\$300.00	\$190.00	\$236.00		\$762.25
Percent			3.62%	30.00%	19.00%	23.60%		76.22%
Balance								\$237.75

=====

Feb	\$2,546.00							\$2,783.75
Feb		Baker & Taylor	\$57.98					
Feb		EBSCO			\$160.00			
Feb		NYT			\$48.50			
Feb		Quark					\$120.00	
Feb		Tersh				\$250.00		
Feb		Vanguard AV		\$300.00				
Feb		West Office				\$70.00		
Feb		Worldwide Computer					\$178.00	
Feb		Compwise					\$55.00	
Tot. Exp.			\$57.98	\$300.00	\$208.50	\$320.00	\$353.00	\$1,239.48
Percent			2.08%	10.78%	7.49%	11.50%	12.68%	44.53%
Balance								\$1,544.27

EXAMPLE 12. A Print-Out of "Budget 2"

@MAX to get the largest value, @MIN, the smallest value, @AVG, the arithmetic mean of the values in the list. @ABS gives you the absolute value in a cell. @SQRT calculates the square root of the value in a cell. @COUNT can count the number of non-blank entries in the list.)

14. After you are familiar with all the features in AppleWorks spreadsheet, try to design the spreadsheet that can be used in your center.

Exercise II

1. Create a budget proposal which includes proposed amounts to be spent in the following categories:

Social Studies Science Fine Arts Reading/Lit. Total

Books
AV
Comp.software
Periodicals
Supplies
Equipment

Total

Print out your proposal. Save your file on disk to be used in SECTION V, exercise #1.

2. Create a statistical spreadsheet which analyzes the number of times that the library media specialist planned, executed, and evaluated a unit of instruction with a teacher. Calculate the total number of minutes spent in each activity by teacher and by curriculum area. Your spreadsheet will include the following columns: Teacher Name, Department, Unit Title, Min. Planning, Min. Executing, Min. evaluating, Total Time Spent. After you set the template, enter sample data, then arrange by department and subarrange by teacher name. Then insert categories for each department which will calculate total hours (by department) and grand total hours (Time for planning, executing, and evaluating).
3. Create an index to the templates on your own data disk using the following categories: Title, Function, Type, and Use. There is a list of applications of word processor, data base, and spreadsheet in SECTION VI. The list was created in spreadsheet. You can use the similar format to design your index. After entering some data in the spreadsheet, arrange your entries in the following order: first arrange by title, next by use, then by type, finally by function. Print out your spreadsheet. Then arrange the entries in different order, and analyze the differences caused by the different order you use. If the order does matter to you, you need to decide which category you want to highlight before you do any arrangement.

Then you will start arranging the entries from the least important category to the most important category.

4. Create a spreadsheet which analyzes the results of the following questionnaire which was answered by ten students. There are five questions in the questionnaire.
 1. How many times did you visit the LMC last week?
 2. How many times did you visit the LMC last week because your teacher made an assignment to use the center?
 3. How many times did you find what you needed when you came to the LMC last week?
 4. How many books did you read last weeks?
 5. How would you rate the services of the LMC? (Circle one)
 1. Very poor
 2. Mediocre
 3. OK
 4. Good
 5. Excellent

Use the following labels in your template:

STUDENT QUEST.1 QUEST.2 QUEST.3.....

Calculate the average responses for each question, the maximum and minimum response for each question. Be careful, what should you do if the answer to question #1 is zero?

5. Is it possible that the spreadsheet can be used as a data base? If it is, will it fulfill the basic requirements a data base should have? What will be the advantages and disadvantages of using AppleWorks spreadsheet as a data base?

SECTION V.

CUT AND PASTE

In addition to creating files separately in data base, word processor, or spreadsheet, you will be able to transfer files from one place to another (cut and paste) in AppleWorks. You'll use the "Clipboard" to hold the information for cut and paste. Basically, you will transfer (cut) information from a file to the clipboard. Then you will transfer (paste) that information from the clipboard to another file. The following are the possibilities you will have in transferring files:

1. You can transfer information between two word processor files.
2. You can transfer information between two data base files.
3. You can transfer information between two spreadsheet files.
4. You can transfer information from a data base file to a word processor file.
5. You can transfer information from a spreadsheet file to a word processor file.

You are going to use six files on the Template Disk to learn how to cut and paste. The six files are as follows: young adult, child literat, letter, list, April, and May.

Cut and Paste Between Two Data Base Files

You are going to merge two data base files (child literat, and young adult) together. The following are the procedures to cut and paste between two data base files:

1. First add "young adult" to the Desktop. Press ESC to get the MAIN MENU, then add "child literat" to the Desktop. (Be sure you are in the Multiple-Record Layout.)
2. Now on the screen, you'll see the "child literat" data base file. You will move or copy the whole file to the clipboard. (If you want to copy this file, skip Step 3, and go directly to Step 4.)
3. You are going to move the whole file to the clipboard. AppleWorks won't let you do so, unless you create a blank record at the end of the file that you want to move. Here is how:
 - (a) First move the cursor to the last record of "child literat." (This should be record 15.)
 - (b) Press Open Apple Z to get this record.
 - (c) Press RETURN or the down arrow key 3 times to pass the record.
 - (d) Choose "Yes" to start record 16.

(e) Press RETURN or the down arrow key 3 times to pass this record.
(You are creating a blank record!)

(f) Press Open Apple Z to go back to the multiple-record layout.

* Note: If you just want to move part of your file to the clipboard, there is no need for you to create a blank record at the end.

4. Put the cursor on the first record.
5. Press Open Apple M (for moving files) or Open Apple C (for copying files.)
6. Highlight "To clipboard (cut)," press RETURN.
7. Move the cursor to highlight the records you want to move or copy. Since you are moving or copying the whole file, press Open Apple 9. Then press RETURN.
8. If you pressed Open Apple M at Step 5, your whole file will be gone at this point except "- - -" shown on the screen. This is the last blank record you've just created. And "child literat" is now on the clipboard.
9. If you pressed Open Apple C at Step 5, "child literat" will still remain on the screen. The same file also exists on the clipboard.
10. Now you will bring another file (young adult) to the screen. Press Open Apple Q to get the Desktop Index. Choose "young adult" and press RETURN. You should have "young adult" on the screen.
11. Put the cursor at the end of the file (or wherever you want to put "child literat").
12. Press Open Apple M (or Open Apple C). Highlight "From clipboard (paste)," and press RETURN. Your file "child literat" will be moved (or copied) from the clipboard and merged with "young adult."

* Note: If you use Open Apple M, your file no longer exists on the clipboard. On the other hand, if you just copy your file from the clipboard, it will still remain on the clipboard. You can move or copy it again later on.

* Note: The clipboard can hold only one file at a time. Therefore, whenever you move or copy something to the clipboard, it will replace what is already on the clipboard.

13. If you save this new file under the name of "young adult," you will lose the old "young adult" file. To avoid this, you need to rename your new file. Press Open Apple N, type a new name for your file, then press RETURN.
14. Press ESC to go back to your file. You'll find your file name has been changed. Press Open Apple S to save it on your storage disk if

you want to. (You can arrange your file by using Open Apple A before you save it!)

15. Remove all the files on the Desktop and get ready for the next section.

* Note: The categories of the two data base files to be merged should be of the same type and in the same order. Otherwise, some categories might be merged to the wrong places.

Add Data Base Files to Word Processor Documents

Now you will transfer "young adult" (a data base file) to "letter" (a word processor document). The main idea is that you need first to "print" your data base file to the clipboard, then move or copy it back to the word processor document.

1. First add "letter" to the the Desktop, then add "young adult" to the Desktop.
2. Now you have "young adult" on the screen. You will "print" it to the clipboard. You need to create a report format for the data base file before it can be "printed" to the clipboard. Now do the following:
 - (a) Press Open Apple P. Choose option 2: Create a new "tables" format, then press RETURN.
 - (b) Type "Young Adult Books" and press RETURN. You are now in the REPORT FORMAT menu. You are going to adjust the layout of this file.
 - (c) Now add 15 spaces in the Author column, and then add 25 spaces in the Title column.
 - (d) Put the cursor on the ISBN # column, press Open Apple D to delete this column.
 - (e) Press Open Apple P, choose "The Clipboard (for Word Processor)," and press RETURN.
 - (f) Then type today's day and press RETURN. You will get a message telling you the report is now on the clipboard.
3. Now you are ready to get your word processor file. Press Open Apple Q to get the Desktop Index.
4. Choose "letter" and press RETURN. You'll have a short letter on the screen.
5. Put the cursor at the end of the letter.

6. Press Open Apple M or Open Apple C. Choose "From clipboard (paste)," press RETURN.
7. Now you have pasted "young adult" to the letter.
8. Change the new file name as "letter 1" and save it on your storage disk if you want to.
9. Remove all the files from the Desktop and get ready for the next section.

* Note: If your data base report is wider than the word processor document, when the former is transferred to the latter, it will "wraparound" on the display. You may need to adjust the layout after you get the data base file into the word processor document.

Cut and Paste Between Word Processor Documents

The procedure to combine two word processor documents is similar.

1. Add "letter" to the Desktop.
2. Press ESC to get the MAIN MENU.
3. Add "list" to the Desktop. On the screen, you'll have "list." You are going to move it to the clipboard.
4. Press Open Apple M or Open Apple C.
5. Choose "To clipboard (cut)," press RETURN.
6. Use the arrow key to highlight the first 5 items, then press RETURN. The block you've just highlighted will be gone if you pressed Open Apple M at Step 4! (You will highlight the whole document if you want to move or copy the whole document.)
7. Now you are going to get another file. Press Open Apple Q to get the Desktop Index. Choose "letter" and press RETURN.
8. Put the cursor at the end of the letter, Press Open Apple M or Open Apple C.
9. Choose "From clipboard (paste)," press RETURN. The file on the clipboard (list) is transferred to "letter."
10. Change the new file name to "letter 2" and save it on your storage disk if you want to.
11. Remove all the files from the Desktop and get ready for the next section.

* Note: You can also start from Step 3. Then when you come to Step 7, you will press ESC to go back to the MAIN MENU, then add "letter" to the Desktop.

Cut and Paste Between Two Spreadsheet Files

You have two spreadsheet files "April" and "May" on the Template Disk. You are going to merge them together.

1. Add "April" to the Desktop.
2. Press ESC to go back to the MAIN MENU, then add "May" to the Desktop. You are going to transfer part of "May" to the clipboard.
3. Put the cursor on row 2 of "May," press Open Apple M or Open Apple C.
4. Choose "To clipboard," highlight row 2 to row 8, and press RETURN. Now everything except the first row of "May" is on the clipboard.
5. To get another spreadsheet file (April), press Open Apple Q to get the Desktop Index. Choose "April," press RETURN.
6. Place the cursor on row 10 of "April." Press Open Apple M or Open Apple C.
7. Choose "From clipboard," and press RETURN. You've just merged two spreadsheets together!
8. Change the new file name to "purchase order" and save it on your storage disk if you want to.
9. Remove all the files from the Desktop, and get ready for the next section.

* Note: When you try to merge two spreadsheets which contain the same column labels, be careful with the order of the columns in the spreadsheets. If the columns in one spreadsheet are not in the same order as in the other one, information will be merged to a wrong column.

Add Spreadsheet Files to Word Processor Documents

Spreadsheet files can also be pasted to a word processor document. Before you transfer a spreadsheet to a word processor document, you need to format the spreadsheet report, print it to the clipboard, then move or copy it to the word processor document. Here are the procedures:

1. Add "letter" to the Desktop. This is a word processor document.

2. Press ESC to get the MAIN MENU. Add "May" to the Desktop. This is the spreadsheet. You'll put it on the clipboard.
 - (a) Press Open Apple P. Choose "All," and press RETURN.
 - (b) Choose "The clipboard (for the Word Processor)," press RETURN.
 - (c) Type report date, the press RETURN. You will receive a message telling you that the report is now on the clipboard.
3. You are ready to get the word processor file. Press Open Apple Q to get the Desktop Index. Choose "letter," and press RETURN. The letter should be on the screen.
4. Sometimes the spreadsheet you are going to paste is wider than the word processor file. You will need to arrange the format before you get the spreadsheet from the clipboard. Put the cursor at the end of the letter. Press Open Apple O to get the Printer Options. Type "ci," and press RETURN. Then type the appropriate number. Here, type "15" and press RETURN. Then press ESC.
5. Now you are ready to get the spreadsheet from the clipboard. Press Open Apple M or Open Apple C. Choose "From clipboard (paste)," and press RETURN.
6. You've put the spreadsheet at the end of the letter. Change the new file name to "letter 3" and save it on your storage disk if you want to.

Up to now, you've tried to transfer files from different types of files. You might use some of the files you've created or the files on the Template Disk to practice "cut and paste" until you are comfortable with the techniques. Always remember to change file names before you save your new files, otherwise you'll run the risk of losing your original files!

Exercises

1. Using the word processed budget proposal created in SECTION II, exercise #6, and the budget spreadsheet created in SECTION IV, Exercise II, #1, mail the spreadsheet to the word processor document, and create a readable and pleasingly formatted budget proposal.
2. Using the play index data base created in SECTION III, exercise #5, write a letter to the state library supervisor asking if a published version of your index would be feasible in a state-wide networking effort. Cut and paste a sample of your data base to the word processor and place it in the middle of the letter.

SECTION VI.

UTILIZATION OF APPLEWORKS

The utilization of AppleWorks for school library management is limited only by your imagination. The more you use it, the more uses you will find. Since AppleWorks contains three components, you need to decide beforehand which one to use so that your task can be performed efficiently and appropriately. The decision usually depends on whether certain features in the component you choose can do the job the way you want it done. Basically, data bases are used to store and sort information: bibliographic, inventory, personnel, membership and mailing lists, serials control, union lists, and so on. Any group of facts or data that you want to keep together is a candidate for a data base file. Word processing can be used for creating correspondence, handouts, bulletins, manuals, indexes, or reading lists. Spreadsheet allows you to do calculations on all kinds of numbers: budgets, statistics, expense reports, circulation reports, cost estimates, checkbooks balancing, inventories, etc.¹

Simply stating, however, that word processors are for writing, data bases are for storage and retrieval, spreadsheets are for calculating is a gross oversimplification. Each piece of AppleWorks has certain characteristics in common. For example, you can calculate in the data base, you can store and arrange words and sentences in the spreadsheet. Deciding which part of AppleWorks to use for a given application is not cut and dried. One application may be handled well in two or all three parts of AppleWorks. The better you know how to operate each of the parts, the better you will be able to select the right part for your application. That's the fun of learning integrated programs -- they foster creativity and imagination.

Another advantage of learning an integrated program well is that library media specialists can actually gain influential positions of power in their schools as a result of their expertise. The person who knows library applications for AppleWorks also knows management techniques for teachers and administrators. Being the "resident expert" in automating management functions may be a definite "plus" in the status of the library media position. Bernhard states in his treatise, "As part of the instructional team of the school, it is important that you (the library media specialist) be able to assist teachers and others with resources for planning and evaluation as well for direct instruction. Teachers can be assisted in maintaining records on student performance, and in the planning of class projects, field trips, etc. Administrators can be assisted with records on student attendance, the cost analysis of projects and programs, the preparation of proposals, etc. Even students can be assisted as they tabulate data for research reports. In short, a spreadsheet analysis program can support nearly all of the school library media specialist's administrative and instructional development functions."²

In order to help library media specialists generate ideas for the use of AppleWorks, a lengthy list of applications has been compiled. Some were suggested by the author of this book, others by Loertscher³, Clark⁴, or Naumer⁵. Most of the applications were indicated by the current library media specialists who competed for the 1985 Microcomputer in the Media Center Award sponsored by the Follett Library Book Company and AASL.

References

1. Yearkey, A. Neil. "Small Business Microcomputer Programs: Tools for Library Media Center Management," School Library Media Quarterly, Vol. 12, No. 3, Spring 1984, pp. 212-216.
2. Bernhard, Keith E. "Computer Applications in the Library Media Center: An Introduction to Electronic Spreadsheets," School Library Media Quarterly, Vol. 12, No. 3, Spring 1984, pp. 222-226.
3. Loertscher's list came from his analysis of 68 library media specialists who applied for the 1985 Microcomputer in the Media Center Award sponsored by the Follett Library Book Company and AASL.
4. Clark, Philip M. Microcomputer Spreadsheet Models for Libraries. Chicago: ALA, 1985.
5. Naumer, Janet Noll. Media Center Management with an Apple II. Littleton, Colorado: Libraries Unlimited, 1984.

APPLICATIONS OF WORD PROCESSOR, DATA BASE, AND SPREADSHEET

Function	Type*	Use	Reference
acquisition	db	acquisition/on order file	Naumer p. 69
acquisition	db	bid list	
acquisition	db	book orders	
acquisition	db	consideration file	
acquisition	db	continuations file	Naumer pp. 26, 72, 73
acquisition	db	film order	
acquisition	db	film rental file	Naumer p. 28
acquisition	db	film/videotape rental file	Naumer p. 74
acquisition	db	on order file	Naumer p. 25
acquisition	db	review file	
acquisition	db	review sources	
acquisition	db	serials check-in	
acquisition	db	supplier information file	Naumer p. 75
acquisition	db	want lists	
bibliographies	db	bibliography	
bibliographies	wp	bibliography	Naumer pp. 208-209
bibliographies	wp	bibliography - specific subject	
bibliographies	wp	bibliography of materials for library skills	
bibliographies	wp	list of new materials	
bibliographies	db	read-aloud lists	
bibliographies	db	reading lists	
budget	sp	accounting - declining balance	Naumer pp. 125-127
budget	sp	book encumbrances	Naumer pp. 128-130
budget	sp	budget	
budget	sp	budget proposal	
budget	wp	budget request	
budget	sp	expenditures	
budget	sp	grants, funds, gift	

Function	Type	Use	Reference
budget	sp	library expenditure status report	Clark pp. 16, 18
budget	sp	LMC budget	Naumer pp. 123-124
budget	sp	media center budget summary	Naumer pp. 121-122
budget	sp	month-by-month survey of cash disbursements	Clark p. 25
budget	sp	monthly cash disbursements journal	Clark pp. 20, 22, 23
budget	sp	projected prices	Naumer pp. 131-133
budget	sp	public library expense budget	Clark pp. 13, 14
catalogs	db	16 mm film holdings	
catalogs	db	archival holdings	
catalogs	db	best books for young adult	
catalogs	wp	catalog - av materials	
catalogs	wp	catalog - computer software	
catalogs	db	catalog - computer software	Naumer p. 27
catalogs	wp	catalog - curriculum guide	
catalogs	wp	catalog - films	
catalogs	wp	catalog - magazines	
catalogs	wp	catalog - videotape	
catalogs	db	classroom collection	Naumer p. 66
catalogs	db	index - collective biographies	
catalogs	db	index - historical collections	
catalogs	db	index - holiday file	
catalogs	db	index - magazine	
catalogs	db	index - MECC computer programs	
catalogs	db	index - reference materials	
catalogs	db	index - school district micro programs	
catalogs	db	index - short stories	
catalogs	db	index - vertical file on persons	
catalogs	db	index - play	
catalogs	db	index - slide	
catalogs	db	inventory - library non-print materials	

Function	Type	Use	Reference
catalogs	db	inventory - library print materials	
catalogs	sp	inventory of items in the center	
catalogs	wp	inventory records and reports	
catalogs	db	library media center disk file	Naumer p. 78
catalogs	db	periodical holding file	Naumer p. 26
catalogs	sp	periodical records	
catalogs	db	periodicals file	Naumer pp. 70, 71
catalogs	db	special collections file	Naumer p. 86
catalogs	db	textbook inventory	
catalogs	db	TV program file	Naumer pp. 83-85
catalogs	db	union list	Naumer p. 76
catalogs	db	vertical file holdings	
catalogs	db	video cassette holdings	
circulation	db	circulation control file	Naumer pp. 52-55
circulation	db	film reservation file	
circulation	sp	finest	
circulation	db	overdue file	
circulation	wp	overdue notice	
circulation	db	periodicals circulation	Naumer pp. 60-65
correspondence	wp	committee notices	
correspondence	wp	correspondence	
correspondence	wp	correspondence with professional associations	
correspondence	wp	form letter - free materials letter	
correspondence	wp	form letter - publisher's catalog	
correspondence	wp	form letter - thank you for library donation	
correspondence	wp	form letter - volunteers letter	
correspondence	wp	form letter to publishers	Naumer p. 184
correspondence	wp	form letters and memos	Naumer pp. 188-191
correspondence	wp	form templates	
correspondence	wp	letters	
correspondence	wp	memo - new materials arrival	
correspondence	wp	memo - special activities notice	
correspondence	wp	memos	

Function	Type	Use	Reference
correspondence	wp	newsletter	
correspondence	wp	notes and memos to faculty and staff	
correspondence	wp	personalized invitation	
curriculum	wp	course outline	
curriculum	wp	curriculum plan for class	
curriculum	db	curriculum unit file	Naumer p. 87
curriculum	db	curriculum unit survey file	
curriculum	wp	curriculum unit survey form	
curriculum	wp	examination	
curriculum	wp	handouts	
curriculum	wp	lesson plans	
curriculum	wp	library skill instruction materials	
curriculum	wp	orientation materials	
curriculum	wp	outlines for seminars or workshops	
curriculum	wp	pathfinder	Naumer p. 211
curriculum	db	pathfinders for biography	
curriculum	db	pathfinders for history	
curriculum	wp	research paper	
curriculum	wp	search guide	Naumer p. 213
curriculum	sp	source sheets and path finders	
curriculum	wp	student worksheets	
curriculum	wp	teaching/training materials	Naumer p. 217
curriculum	wp	training manuals for staffs	
curriculum	wp	training manuals for students	
equipment	db	AV equipment inventory	
equipment	db	AV hardware holdings	
equipment	db	equipment distribution	Naumer p. 67
equipment	db	equipment inventory	Naumer p. 27, pp. 35-50
equipment	db	equipment repair records	
evaluation	wp	annual report	
evaluation	wp	evaluation form for junior great book program	
evaluation	wp	monthly report	
evaluation	wp	reports - circulation	
evaluation	wp	reports - television & computer usage	
evaluation	wp	survey form	Naumer p. 215
evaluation	sp	teacher survey - services	Naumer pp. 152-154

Function	Type	Use	Reference
management	db	class lists	
management	wp	class lists	
management	sp	grades	
management	sp	media center student assistants	Naumer pp. 147-148
management	wp	parent volunteer's manual	
management	wp	procedure manual	
management	wp	reports	
management	db	room schedules	Naumer p. 68
management	db	school/community calendar file	Naumer p. 94
management	db	student aide file	Naumer p. 79
management	sp	student help - work/study funds	Naumer pp. 145-146
management	db	student/faculty data base	
management	db	volunteer help	Naumer p. 81
reference	db	bibliographic information file	
reference	db	book talk file	
reference	db	career information data base	
reference	db	copyright file	
reference	db	community resources file	
reference	db	computer software review index	
reference	wp	fact sheets	
reference	db	field trip file	Naumer p. 81
reference	wp	guide cards	Naumer p. 194
reference	db	historical materials in local schools & public libraries	
reference	db	human resources file	Naumer p. 80
reference	db	information & referral file	Naumer p. 96
reference	db	reference bank file	Naumer pp. 89-92
reference	db	reserve request file	Naumer p. 93
reference	db	selective dissemination of information file	Naumer p. 95
reference	wp	weekly educational television schedule	
statistics	sp	analysis - budget/use and price/title	
statistics	sp	analysis - circulation per user	
statistics	sp	analysis - dollar value / budget per user	
statistics	sp	analysis - titles per user/circulation per user	

Function	Type	Use	Reference
statistics	sp	analysis - value of materials / budget per user	
statistics	sp	analysis of needed duplicate copies	
statistics	sp	AV statistical recording holdings	
statistics	sp	calculation of acquisition rates	Clark pp. 48, 50
statistics	sp	circulation analysis - most frequently loaned books	
statistics	sp	circulation records	
statistics	sp	circulation statistics	Naumer pp. 106-119
statistics	sp	collection analysis - age/circulation	Naumer pp. 133-134
statistics	sp	collection analysis - by curricular area	Naumer pp. 135-137
statistics	sp	college library monthly activity report	Clark pp. 35, 36
statistics	sp	daily library activity data entry form	Clark pp. 26, 28
statistics	sp	equipment depreciation report	Naumer pp. 142-144
statistics	sp	holdings vs standards - software comparison - per user	Naumer pp. 138-139
statistics	sp	in-library materials use per capita	Clark pp. 52, 54
statistics	sp	library visits per capita	Clark pp. 57, 58
statistics	sp	LMC services - monthly report	Naumer pp. 149-151
statistics	sp	materials availability	Clark pp. 64, 65
statistics	sp	monthly library activity summary report	Clark pp. 30, 31
statistics	sp	monthly summary of collection activity	Clark pp. 38, 39
statistics	sp	overdue statistics	
statistics	sp	payroll distribution record	Clark pp. 41, 43
statistics	sp	program attendance per capita	Clark pp. 59, 60
statistics	sp	reference transactions per capita	Clark pp. 61, 63
statistics	sp	statistical comparisons - circulation/budget/holdings	Naumer p. 120
statistics	sp	report on output measures for public libraries	Clark p. 66
statistics	sp	yearly inventory report	Naumer pp. 140-141
statistics	sp	yearly library activity summary report	Clark pp. 32, 34
technical serv.	wp	catalog cards	Naumer pp. 192-193
technical serv.	wp	list of uncatalog items	
technical serv.	db	subject authority file	Naumer p. 77

* db = data base sp = spreadsheet wp = word processing

SECTION VII.

COLLECTION MAPPING

The Collection Mapping Technique by David Loertscher

The library media specialist who wishes to build a collection of books and AV materials systematically should remember the sage advice, "If you want to eat an elephant, cut it up into little pieces." Why not divide the collection into a number of small manageable segments which match the various parts of the curriculum? Each of these pieces could then be built, weeded, or maintained as curriculum needs dictated. Each segment would have a corresponding piece of the total budget pie depending on the priorities assigned to the goal of expansion, replacement only, or de-emphasis.

For the school library media center, it would seem theoretically defensible to divide collection development into three main areas:

1. The building of a basic collection to serve a wide variety of interests and needs;
2. The creation of broad emphasis areas which would contain materials in a particular curricular area such as U.S. history to support courses of instruction;
3. The collection of materials for in-depth coverage of specific curricular units such as the Civil War. Each of these main areas could be subdivided as many times as necessary to match the needs of a particular school.

Step #1: Create a collection map which will put in graphic form the various segments of the collection.

A collection map is a visual supplement to the card catalog which graphically displays the breadth and depth of a library media collection. Such a map would be displayed on a large poster in the library media center for all to review. It would serve as a key to the collection showing strengths, collection targets and collection size in a single chart. Each school's collection map might be completely different from the collection map of a neighboring school. In fact, several schools could coordinate their selection policies to create complementary collections which would be shared regularly.

The technique to create a map is basically this:

1. Count the total number of items both print and audiovisual in each of the Dewey Decimal areas. Divide the result by the number of students in the school and chart it at the bottom of the map.
2. Decide what general emphasis areas support whole courses such as U.S. history, Chemistry, General math, etc. Count the number of items for each topic.

3. Decide what specific emphasis areas support specific units of instruction such as Civil War, insects, dinosaurs, etc. Count the number of items for each topic.
4. Divide the total size of each emphasis area by the number of students in the school. Chart the resulting items/student figure on top of the total collection, with general emphasis areas on the left and specific emphasis areas on the right.

Step #2: Use the collection map as a planning tool, a bragging tool, and a begging tool.

The collection map which may have several or numerous segments could be used for:

1. showing faculty and students the strengths of a collection;
2. evaluating whether the strengths of a collection match the curriculum of a school;
3. suggesting the most logical areas of the curriculum that can be served the most effectively;
4. suggesting purchasing targets;
5. suggesting areas of the collection that might be irrelevant; and
6. demonstrating areas of needs and areas of excellence.

Step #3: Evaluate how well each of the segments is reacting to the demands made upon it.

The best evaluative tool of a collection is how it responds to usage demands. Every time a major demand is placed upon one of the emphasis areas of the collection, the library media specialist and the teacher should evaluate how well the collection responds. With input from the students, these two people can quickly rate the collection on the following points:

1. Diversity of formats available (both books and AV).
2. Recency of the collection (Were the materials up-to-date?)
3. Relevance of the collection to unit needs.
4. Duplication (Were there enough materials for the number of students taught?)
5. Reading/Viewing/Listening level (Was it OK for all students?)

The scale used to evaluate is as follow:

- 5 = excellent
- 4 = above average
- 3 = average
- 2 = below average
- 1 = poor

If the average rating is above 4.5, then put a "gold medal" sticker on the collection map on that particular area. Give "silver medals" for 4.0, "bronze medals" for 3.5, and "frowny faces" for below 3.5. By using the procedures described previously, the collection target can be evaluated on both quality and quantity.

Step #4: Use the evaluation technique from step #3 to build a sound acquisition program.

Short and long range collection goals are easy to build when the collection is segmented. Some essential questions could be asked which would lead to goal statements:

1. Do the emphasis areas fit the curriculum of this school?
2. If not, would it be better to give or trade these emphasis collections to another school which would have more use for them?
3. What emphasis areas should be built in the next five years?
4. Which emphasis areas should be improved?
5. What curricular trends will affect the emphasis areas of the collection as they now exist?

Step #5: Build a budgeting system which matches the segments of the collection map.

There are a number of types of budget systems which can easily be adapted to the collection target system advocated here. Breaking a lump sum of money into segments which supports certain collection targets is much easier to understand by administrators and certainly easier to defend. Budget cuts or improvements can be decided jointly by administrators and library media specialists with full knowledge of exactly what parts of the collection will be affected.

The following two pages are the collection chart and the collection map for an elementary school. You can load "sample 1" and "sample 2" from the disk to see how they look on the screen.

Total Collection Chart

Date: May 6, 1985
 School Name: Butterfly
 No. of Students: 597
 Total Collection Size: 8289
 # of Items Per Student: 13.8844221

Emphasis Area Name	# of Items	# of Items/Students
1. Folklore & fairytales	305	.5108878
2. Animals	263	.440536
3. Dinosaurs	53	.0887772
4. Frontier & pioneer life	79	.1323283
5. Indians of North America	150	.2512563

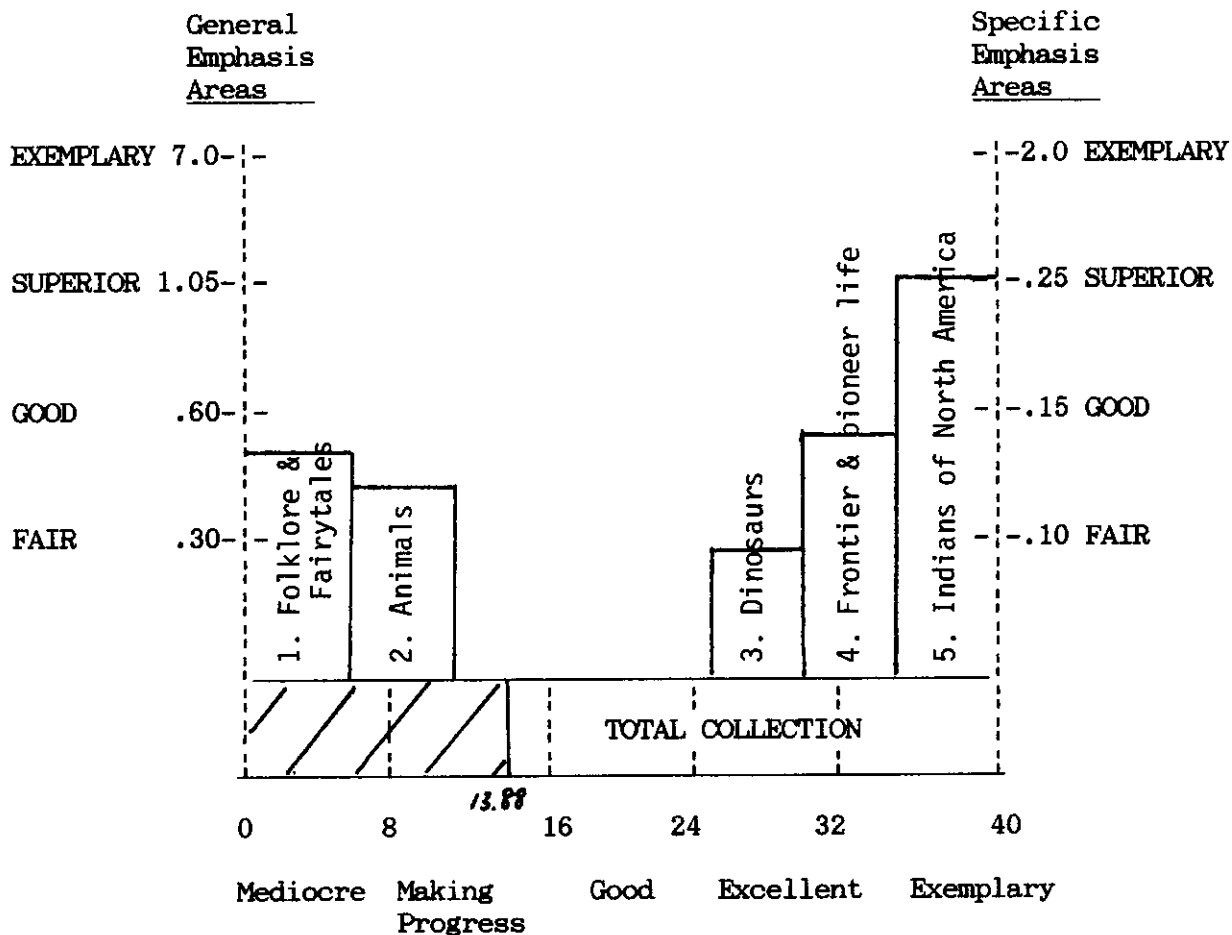
Dewey Area	Recommended List %	Actually Have	Should Have	Discrepancy
Ref.	2%	259	151	108
000	1%	86	68	18
100	1%	39	90	-51
200	1%	56	90	-34
300	5%	407	422	-15
398.2	6%	305	506	-201
400	1%	110	66	44
500	10%	1112	853	259
600	7%	499	555	-56
700	6%	516	523	-7
800	3%	247	207	40
900	5%	981	452	529
B	3%	496	288	208
Fic	24%	1343	1950	-607
SC	1%	61	94	-33
Easy	16%	1641	1315	326
Period.	2%	19	136	-117
Prof. Coll.	6%	112	524	-412
Total	100%	8289	8289	

EXAMPLE 13. Total Collection Chart

Total Collection Map

Date: May 6, 1985
 School Name: Butterfly
 No. of Students: 597
 Total Collection Size: 8289
 # of Items Per Student: 13.8844221

Emphasis Area Name	# of Items	# of Items/Students
1. Folklore & fairytales	305	.5108878
2. Animals	263	.440536
3. Dinosaurs	53	.0887772
4. Frontier & pioneer life	79	.1323283
5. Indians of North America	150	.2512563



(Note: All numbers charted in items per student)

EXAMPLE 14. Total Collection Map

Mapping Your Collection

Now you are ready to map your collection. The following are the instructions to do this.

1. Load "Worksheet" from the Template Disk to the Desktop.
2. Print "Worksheet" out. (You can also use the worksheet included at the end of this section.)
3. Count the number of items you have under the categories specified on the worksheet. Write down the results on the worksheet.
4. Identify general and specific emphasis areas.
5. Count the number of items you have in each of the areas you identify. Write down the results on the worksheet.
6. Now you are ready to create your collection chart. You will use one of the three templates on the Template Disk: Elem.Chart (for elementary schools), Junior.Chart (for junior high schools), or Senior.Chart (for senior high schools). Load the appropriate template for your school to the Desktop.
7. The total collection chart template is now on the screen. You are using the spreadsheet to do some calculation. You will find "0" or "ERROR" in several cells on the spreadsheet. Those are the cells embedded with calculation formulas. Once the information needed for calculation is entered, the "0" or "ERROR" will be gone.
8. Before you start, you might want to give your file a new name so that you can save the original template for future use. Type Open Apple N. Then type Open Apple Y to delete the old file name. Type a new file name such as "85 chart" or any name you want to use.
9. Now enter the date in cell C6, school name in cell C7, and number of students in cell C8.
10. Move the cursor to row 13. In the emphasis area section, you will be allowed to enter eight emphasis areas. If you happen to have 8 emphasis areas, you can skip Step 11 and 12, and go right on to Step 13.
11. If you just have three areas identified, you need to delete five rows (row 16 - row 20). Put the cursor on row 16. Press Open Apple D, choose to delete rows. Then highlight row 16 to row 20, press RETURN.
12. On the other hand, if you have more than 8 emphasis areas, say 10, you need to insert 2 more rows and copy the formula to the appropriate cells which will produce # of items per student figure for you. Here are the steps to do this:

- (a) To insert 2 rows after row 20, first put the cursor on row 21, then press Open Apple I. Choose "Rows," then press RETURN. Type "2," then press RETURN.
 - (d) After you insert two rows, move the cursor to cell E20. There is a formula in this cell: +d20/c8. Cell D20 stores the number of items in the eighth emphasis area, while cell C8 is the number of students. You need to copy the structure of this formula to cell E21 and cell E22.
 - (c) Press Open Apple C, highlight "Within spreadsheet," press RETURN, and RETURN.
 - (d) Type a period ("."), move the down arrow to highlight cell E21 and cell E22, and press RETURN.
 - (e) To answer "Reference to D20?," choose "Relative," then press RETURN.
 - (f) To answer "Reference to C8?," choose "No change," then press RETURN. You have just put the appropriate formulas in cell E21, and cell E22.
13. You are ready to type the emphasis area names and the number of items in each area. If you just want to type the area names, you won't have any problem. But, if you want to number your area names, you need to remember one feature in the spreadsheet. That is, whenever you start an entry with a number, AppleWorks will automatically take it as a value entry. If you try to type any letter after it, AppleWorks will beep on you. Therefore, you need to tell AppleWorks you are starting a label entry with a number, not a value entry. You can do this by typing " (a quotation mark).
14. Now type area names under column A and # of items under column D in the appropriate cells. (If any of your area names is very long, it can go beyond to columns B and C). Then the spreadsheet will calculate # of items per student for you.
15. After you've finished the emphasis area section, move the cursor to cell C28. (If you've deleted or inserted rows for the emphasis areas, you need to find the appropriate cell to start.) Starting from C28 to C45, you can enter the number of items you have under different categories in your collections.
16. Once you enter what you actually have, the spreadsheet will calculate what you should have according to the recommended list percentages, and the discrepancies between the two. The Elementary School Library Collection, Junior High School Library Catalog, and Senior High School Library Catalog were used to obtain the recommended list percentages for different levels of schools. The recommended list percentage for each category was calculated by counting the number of items under that category in the recommended catalog, dividing it by the total number of items in the catalog, then, converting the result into percentage.

17. You have just created the collection chart for your center. Save your collection chart on your storage disk under the name you gave it.
18. Now your collection chart is ready to be printed out. Use the techniques you've learned in the Spreadsheet section to do your printing. You might need to adjust some printer options before you print it out.
19. You are ready to work on your collection map. First you need to copy to the Clipboard the information you have in the spreadsheet from row 6 to the end of your emphasis areas. Press Open Apple C, choose "To clipboard (cut)," Press RETURN. Highlight row 6 to the row where your emphasis areas end. Press RETURN. You've copied the information you will include in your collection map to the clipboard.
20. Now load "map" from the Template Disk. The map will look "weird" on the screen because of the "wraparound" of each line. When printed out, the map will be allright. Use Open Apple N to rename the file. You can name your file "85 map."
21. You are ready to move back (or copy) what you have just put on the clipboard. Put the cursor several lines below the title. Press Open Apple C or Open Apple M, choose "From clipboard (paste)," then press RETURN. You should have copied (or moved) to your file what you have put on the clipboard. You will find the layout of the materials (especially in the emphasis area section) from the clipboard is wider than what you have in the word processing document. You can use DELETE key to adjust the layout for each line.
22. When you are satisfied with the layout of your map, you can save it on your storage disk and print out your Total Collection Map.
23. Now you are ready to chart your map. First chart the total number of items per student figure at the bottom from left to right.
24. Then, chart # of items/students figures on the top of the total collection, with general emphasis areas on the left and specific emphasis areas on the right. (You can use the sample provided previously as an example to chart your map.)
25. The scale you are using on the Total Collection Map is based on the results of a research on the collection mapping by May Lein Ho and David Loertscher. You might want to change the scale to meet your local standards or needs. If your collections are classified differently, you might also want to adjust the recommended list percentages and redo your collection chart and map. Those who are interested in the collection mapping technique may review the related articles in the October issue 1985 of the Drexel Library Quarterly for more details.

26. Now add "emphasis.area" from the Template Disk to your Desktop. The emphasis areas listed here were indicated by the library media specialists who participated in the collection mapping research. Go through the list to see whether the terms listed can be used to map your own collection.

27. After mapping your collection, you can create a budget spreadsheet to keep track of your expenses on the emphasis areas highlighted in your collection map. Now add "budget.report" from the Template Disk to your Desktop. This is a sample budget file designed for the school whose collection map was used as an example in this section. The spreadsheet was divided into two parts. On the left-hand side of the spreadsheet, the income and expenses of books, AV, software, periodicals, supplies, equipment, and repairs were calculated month by month. Then on the right-hand side of the spreadsheet, the amounts of money spent on the general collection and four emphasis areas were recorded. At the end of each fiscal year, the total amounts of money spent on the emphasis areas will be totaled. By doing so, the library media specialist can easily evaluate whether the emphasis areas are reinforced and improved. Can this technique be used in your center?

COLLECTION MAPPING WORKSHEET

Definitions:

- A) Total collection: The approximate total number of items in your collection.
- B) General emphasis area: The materials in a general emphasis area can support a large curriculum area such as home economics, American history, and western art. The collection can be multimedia or a single medium.
- C) Specific emphasis area: A specific emphasis area usually supports one or several units of instruction and can be multimedia or a single medium. Examples are: Civil War, cookbooks, American poetry, and American painting.

Suggested rules for entering collection size:

- 1) Include print and AV materials.
- 2) Include duplicated.
- 3) Count sets as one item.
- 4) Count a periodical subscription as one item.

Now, please turn to the next page and fill out the questions.

1. Total number of students in the school _____

2. Total collection size in the following categories:

Reference	_____	
000	_____	
100	_____	
200	_____	
300	_____	
398.2	_____	(Elementary only)
400	_____	
500	_____	
600	_____	
700	_____	
800	_____	
900	_____	
Biography	_____	
Fiction	_____	
Story collection	_____	
Easy	_____	(Elementary only)
Periodicals	_____	
Professional collection	_____	

3. Emphasis areas:

	Area Name	General or Specific	# of items
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____

SECTION VIII.

CURRICULUM MAPPING

The main purpose of the collection in a school library media center is essentially one of the curricular support.¹ In order to provide relevant and sufficient materials to ensure that the collection meets the curricular and instructional needs of the school, the media specialist must know the priorities and understand the constraints of the curriculum and teaching methods in the school.² One way to be informed about the current curriculum topics being taught is to conduct curriculum surveys in the school. These surveys are filled out each grading period by the teaching staff and returned to the media specialist. The media specialist organizes these and displays them on the poster to promote coordination of interdisciplinary units. The poster could be displayed in either the teacher's lounge or in the media center. On your Template Disk, the templates to produce curriculum survey form, unit planning guide, and LMC instructional involvement worksheet are provided for you to use. After you gather the information from the teachers involved, you can store all the information in data base. You can also utilize the statistical capabilities of the spreadsheet to analyze the curriculum materials needed in your school.

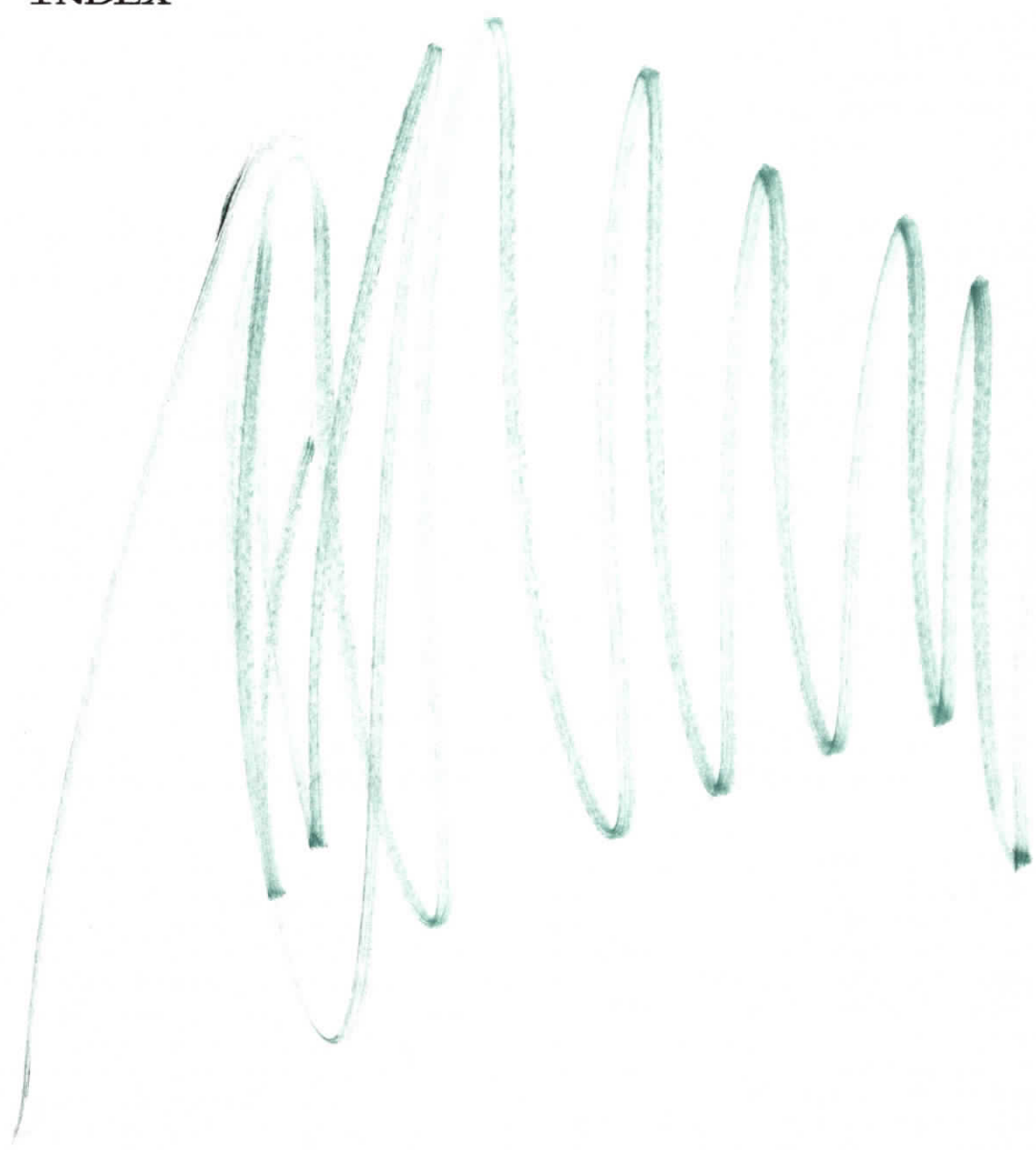
Another approach to identify the existing curriculum is to use the curriculum mapping technique developed by Fenwick English.³ According to English, a curriculum map is a "descriptive portrait of what tasks and how much time were spent on any given set of items, concepts, skills, or attitudes."⁴ A curriculum map can document the instructional unit or topic, unit sequence, total time allotted, instructional methods, resources, the organization of instruction, and evaluation procedures.⁵ A curriculum mapping worksheet adapted by Michael Eisenberg to help the elementary school library media specialist gather and evaluate information about the curriculum is included on the Template Disk. You might want to modify it to meet your local needs. After you collect information from teachers, you can use Appleworks to store information and analyze data, too.

References

1. Mancall, Jacqueline C. and Christopher C. Swisher. "Developing Collections for the Eighties and Beyond," in School Library Media Annual, Vol.1, Edited by Shirley L. Aaron and Pat R. Scales. Littleton, Colorado: Libraries Unlimited, 1983, pp. 255-274.
2. Van Orden, Phyllis J. The Collection Program in Elementary and Middle Schools: Concepts, Practices, and Information Sources. Littleton, Colorado: Libraries Unlimited, 1982.
3. English, Fenwick W. Quality Control in Curriculum Development. Arlington, Virginia: The American Association of School Administrators, 1978.
4. English, Fenwick W. "Re-tooling Curriculum with On-going School Systems," Educational Technology, May 1979, pp. 8-9.

5. Eisenberg, Michael. "Curriculum Mapping and Implementation of an Elementary School Library Media Skills Curriculum," School Library Media Quarterly, Vol. 12, No. 5, Fall 1984, pp. 411-418.

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Key: DB = Data Base SP = Spreadsheet WP = Word Processor

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