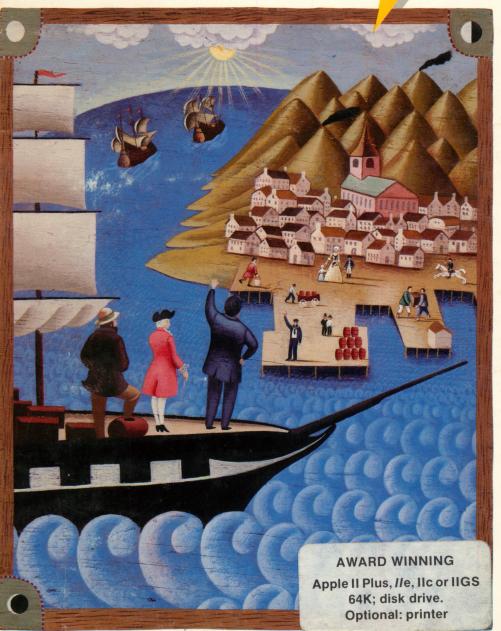
HICTO HO



A Computer Learning Library on a Disk™

Featuring:

Captains of the China Trade

An historical adventure

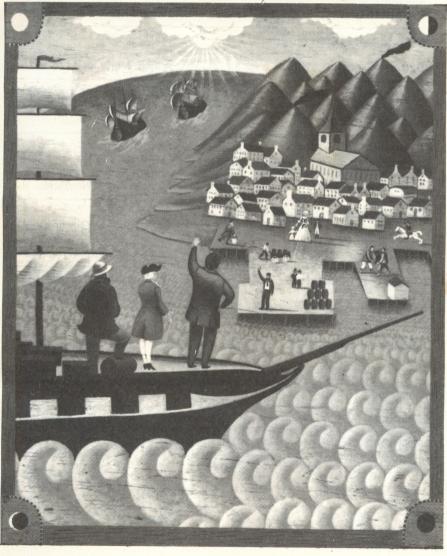
Banner Per Page
Maker To print
Create and print
your own banners

Dr. Maxwell's Molecule Magic

Create a formula to launch a rocket

Monitor Mystery Solve a baffling mystery

Student Handbook and Teacher's Guide



| Software Design and Development | The <i>Microzine</i> team and Pelican Software Farmington, CT 06032 ("Banner Maker") |
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| Publisher | Scholastic Software 730 Broadway New York, NY 10003 |
| President | Richard Khaleel |
| Director of Technology | Walter Koetke |
| Senior Product Editor | Amy E. McKinley |
| Programming Manager | Cary Hammer |
| Associate Editor | Lisa Mandel |
| Contributing Editor | Rose Trivisonno |
| Programmers | Andrew Kaplan, Mark Nichols, Alissa Nordlicht |
| Contributing Programmers | Jim Markowich, Christopher McQuilkin |
| Art Director | Linda Gottfried |
| Computer Illustrators | Davideo, Jim Markowich, Roberta Schwartz |



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GETTING STARTED

Read this handbook for clear instructions on how to use each *Microzine* feature.

Equipment You Need

- 1. Monitor or TV
- 2. 64K Apple II Plus, Ile, IIc, or IIGS
- 3. Disk drive

Apple[®] is a registered trademark of Apple[®] Computer, inc.

Loading Microzine

- 1. Open the disk drive door.
- 2. Hold the disk with the label end facing you.
- 3. Insert the disk slowly with the label facing up.
- 4. Close the drive door.
- 5. Turn on the computer and monitor (or TV).

NOTE: Never remove or insert a disk while the disk drive's red light is on.

If Microzine does not appear on the screen:

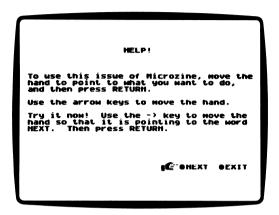
- Turn the computer off. Turn it back on and try again.
- Make sure the disk drive door is closed.
- Check to see that the disk drive is hooked up correctly.

Using the Microzine Hand

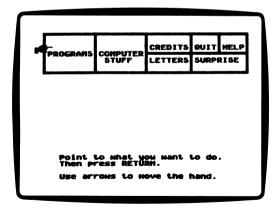
You will use the *Microzine* Hand icon in most of the programs and features in this issue of *Microzine*. Use the arrow keys, or the I, J, K, M keys to move the Hand.

Use the Hand to point to what you want to do, and then press **RETURN**. There are three different ways to point to what you want to do:

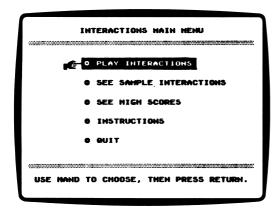
 Make the Hand touch some part of the word that describes what you want to do. If you wanted to exit a program or screen, you would make the Hand touch the word "EXIT," or the circle in front of "EXIT," and then press RETURN.



2. Make the Hand point to a box that contains a word that describes what you want to do, such as the boxes on the Table of Contents. The Hand may touch any part of the box. Make the Hand touch the box, and then press RETURN.



3. Make the Hand move a highlight bar over what you want to do. Main menus will use highlight bars. Make the Hand move a highlight bar over what you want to do, and then press RETURN.



The Table of Contents

The Table of Contents lists the *Microzine* features in a collection of boxes at the top of the screen. Each box is labeled.

Use the Hand icon to point to the box that describes what you want to do. For example, to read the Credits, use the Hand to point to the box labeled "Credits," and then press RETURN.

A list of items "inside" that box will appear. Use the Hand again to point to what you want to do. For example, if you point to the box labeled "Programs" and press **RETURN**, a list of the programs in this issue of *Microzine* will appear. Use the Hand to point to the program you want to use, and then press **RETURN**. If the program you select is on the other side of the disk, you will be told to turn the disk over.



To choose another box from the Table of Contents, point to the word "Exit" at the bottom of the list, and press **RETURN**. Now you may choose another box from the Table of Contents.

Using Microzine

Programs

Use the Hand to point to "Programs" on the Table of Contents, and then press **RETURN**, to see a list of the programs in this issue of *Microzine*.

Computer Stuff

Use the Hand to point to "Computer Stuff" on the Table of Contents, and then press **RETURN**, to see a list of the functions in "Computer Stuff." (See "Computer Stuff," page 29.)

Credits

Use the Hand to point to "Credits" on the Table of Contents, and then press RETURN, to see the credits for this issue of *Microzine*.

Quit

Use the Hand to point to "Quit" on the Table of Contents, and then press RETURN, to quit using *Microzine*.

Help

Use the Hand to point to "Help" on the Table of Contents, and then press **RETURN**, to learn how to use the *Microzine* Hand. (Also, see "Using the *Microzine* Hand," page 4.)

Letters

Use the Hand to point to "Letters" on the Table of Contents, and then press **RETURN**, to read letters from the *Microzine* Editor and Programmer, and from *Microzine* readers.

Surprise

7

Entering Information

Whenever you are asked to enter information, type it in and press RETURN.

If you make a mistake while typing, use the \longleftarrow (left arrow) key to move back. Then type the information correctly.

Control (CTRL) Keys

Sometimes you will have to press the CONTROL (CTRL) key and another key at the same time. This will be written as CTRL-(the key). For example, if you see CTRL-N, it means press the CONTROL key and the N key at the same time.

Apple IIe/IIc/IIGS

To use *Microzine* on the Apple *II*e, IIc, or IIGS, press **CAPS LOCK** down.

CAPTAINS OF THE CHINA TRADE

A TwistaplotTM Adventure

You'll need good business sense and a good sense of direction to successfully steer through the "Captains of the China Trade!"

What You Will Find

You and your crew will sail the seas, stopping at foreign ports as far away as exotic China! As Captain of the *Astrea*, it's your job to trade your cargo and navigate the ship. Beware of pirates!

Sailing Through the "Captains of the China Trade" In this Twistaplot,™ you can communicate with the computer by typing words (commands) on the command bar at the bottom of the screen. When you see the command bar at the bottom of the screen, it means the computer is waiting for you to type in a command.

You may command the computer to talk to people you meet, listen to people you meet, view the maps of the world, trade your cargo, read about navigation, or review all your choices.

Talking to the Computer

The computer will understand the following (commands):

Type ?, and then press RETURN, to read the instructions.

Type NAVIGATION BOOK, and then press RETURN, to learn how to read the maps and figure out the coordinates of a port you want to visit.

Type CHARTS or CHART COURSE, and then press RETURN, to leave a port and chart a course to your next destination.

Type TALK TO and the name of the person or people to whom you wish to speak, and then press RETURN to talk to the characters you meet. For example, in Salem, you would type TALK TO BOWDITCH and then press RETURN.

Type TRADE CARGO, and then press RETURN to visit the trading center of a port.

Type VIEW MAPS, and then press RETURN to see all three maps of the world.

Type CHOICES, and then press RETURN to see all the things you can do at a port.

If you type a command the computer can't answer for that screen, you will see the message, "I DON'T UNDERSTAND!" If this happens, make sure you spelled the command correctly, or try typing another command.

Privateers

Sometimes the *Astrea* will come across other ships at sea. You decide if you want to investigate these ships, or sail on to your destination.

Correcting Mistakes

If you make a mistake while typing a command, use the left arrow key to erase over your mistake.

To replace a character, type over it.

To delete a character, space over it.

Helpful Hints

- After your ship anchors at a port, type the command CHOICES. This will show you all the things you can do at the port.
- When a character gives you advice about navigation, trade, or pirates, write it down. You never know when that knowledge will be useful. It might even save your life!

BANNER MAKER

Microzine's Desktop Publishing Series



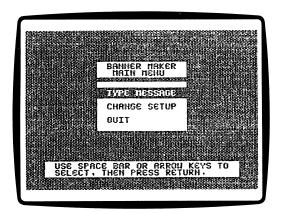
What You Will Find

With "Banner Maker," you will write, edit, and print your own banners.

You may make extra copies of the "Banner Maker" disk as back-up disks, or to share with your friends. Use a DOS 3.3 copy program to make copies of this disk.

"BANNER MAKER" MAIN MENU

"Banner Maker" has three functions, or things you may do. They are Type Message, Change Setup, and Quit.



Type Message

Choose this function to type the message for your banner.

Use the arrow keys or the **SPACE BAR** to choose "Type Message," and then press **RETURN**. Your message may be up to 108 characters, or three lines, long.

The computer will tell you to type in your message. Type your message and then press **RETURN**.

The computer will ask, "Is this message correct? (Y/N)."

Type N, and then press RETURN, if the message is not correct.

Use the arrow keys to move the cursor on an Apple *Ile*, Ilc or IIGS. Use the left and right arrow keys, and CTRL-A and CTRL-Z, to move the cursor on an Apple II Plus.

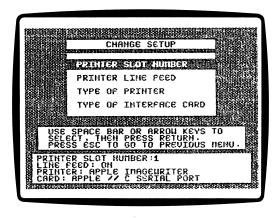
To delete a character on an Apple *Ile*, Ilc or IIGS, move the cursor in front of the character and press the **DELETE** key. For example, to delete the "m" in "bannmer," move the cursor over the "e," and then press the **DELETE** key.

To delete a character on an Apple II Plus, move the cursor in front of the character, and then press CTRL-D. For example, to delete the "m" in "bannmer," move the cursor over the "e," and then press CTRL-D.

Type Y and then press RETURN if the message is correct. The computer will display the SELECT FONT MENU. (See "SELECT FONT MENU," page 16.)

Change Setup

Choose this function to tell the program information about your computer setup. The program will display the CHANGE SETUP MENU. The CHANGE SETUP MENU has four options, or things you may do. They are Printer Slot Number, Printer Line Feed, Type of Printer, and Type of Interface Card.



Printer Slot Number

"Banner Maker" assumes that your printer is connected to Slot number 1. If your printer is connected to a different slot, use the arrow keys or the SPACE BAR to choose Printer Slot Number, and then press RETURN. The program will display the PRINTER SLOT MENU.

Use the arrow keys or the **SPACE BAR** to choose a Slot number, and then press **RETURN**.

Printer Line Feed

"Banner Maker" assumes that you want the Line Feed Option turned On. If you want the Line Feed Option turned Off, use the arrow keys or the SPACE BAR to choose Printer Line Feed, and then press RETURN.

The program will display the LINE FEED MENU. Use the arrow keys or the SPACE BAR to choose On or Off, and then press RETURN. (See "Line Feed" in the Computer Stuff section of the handbook, page 31, for more information.)

Type of Printer

"Banner Maker" assumes that you have an Apple Imagewriter® printer. If you have a different printer, use the arrow keys or the SPACE BAR to choose Type of Printer, and then press RETURN. The program will display a list of printers.

"Banner Maker" is compatible with the following printers:

ANADEX DP-9000 ANADEX DP-9500 ANADEX DP-9001 ANADEX DP-9501® APPLE IMAGEWRITER® APPLE IMAGEWRITER II ® APPLE SCRIBE BLUE CHIP M120/10 **BROTHER M-1009** APPLE DOT MATRIX (DMP) APPLE DOT MATRIX (DMP) C.ITOH PROWRITER C. ITOH PROWRITER II C. ITOH 7500 C. ITOH 8510 **CENTRONICS 739 DATASOUTH 180** EPSON AP-80 **EPSON FX-80 EPSON FX-85** EPSON JX-80 EPSON LQ-800

EPSON LQ-1000

EPSON LQ-1500 EPSON LO-80 **EPSON MX-70 EPSON MX-80 WITH GRAFTRAX** EPSON MX-100 EPSON RX-80 **GORILLA BANANA HPTHINKJET** IDS MICROPRISM IDS PAPER TIGER 440 **IDS PAPER TIGER 445 IDS PAPER TIGER 460 IDS PAPER TIGER 560** IDS PRISM 80 IDS PRISM 132 LEGEND 1385 MALIBU 200 MANNESMANN TALLY 160 MANNESMANN TALLY 180 MANNESMANN TALLY SPIRIT-80 **NEC PC-8025**

OKIDATA MICROLINE 84 **OKIDATA MICROLINE 92** OKIDATA MICROLINE 93 **OKIDATA MICROLINE 192** OKIDATA MICROLINE 83A OKIDATA MICROLINE 83A PANASONIC KX-P1090 PANASONIC KX-P1091 PANASONIC KX-P1092 SEIKOSHA SMITH CORONA D100 SMITH CORONA D200 SMITH CORONA D300 STAR DELTA 10 STAR DELTA 15 STAR GEMINI 10 STAR GEMINI 15 STAR PADIX 10 STAR RADIX 15 TRANSTAR 315 TRS-80 DMP-105 TRS-80 DMP-400

Use the arrow keys or the SPACE BAR to choose a printer, and then press RETURN.

OKIDATA MICROLINE 82A

Type of Interface Card

"Banner Maker" assumes that you have an Apple Super Serial interface card. If you have a different interface card, use the arrow keys or the SPACE BAR to choose Type of Interface Card, and then press RETURN. The program will display a list of interface cards.

"Banner Maker" is compatible with the following printer interface cards:

APPLE IIC SERIAL PORT APPLE III SERIAL PORT APPLE CENTRONICS PARALLEL APPLE COMMUNICATIONS APPLE FIRMWARE APPLE PARALLEL APPLE SERIAL APPLE SUPER SERIAL APRICORN PARALLEL APRICORN SERIAL CCS 7710A SERIAL CCS 7720 PARALLEL CCS 7728 PARALLEL DISPATCHER **DUAL-COMM PLUS** DUMPLING 64 DUMPLING GX FPSON API FINGERPRINT FINGERPRINT+ PARALLEL FINGERPRINT+ SERIAL FRANKLIN DUAL PORT

GRAFSTAR GRAPHICARD GRAPPI FR GRAPPLER+ GRAPPLER C GRAPPLER SERIAL K-T PARALLEL MBI VIP MICROBUFFER II MICROSYSTEMS MSE 1022 PARALLEL MICROTEK RV-611C MICROTEK SV-622C MOUNTAIN PARALLEL MOUNTAIN SERIAL MPC AP-80 MPC AP-GRAPH MPC AP-810 MPC GRAPHWRITER OMNIGRAPH ORANGE **PKASO** PKASO/U

PRINTER PRO PRINTERFACE **PRINTERMATE PRINTMAX** QUADRAM-APIC SPIES NICEPRINT SUPER-MX SSM-AIO-II PARALLEI SSM-AIO-II SERIAL SSM-APIO SSM-APPIC SSM-ASIO **TEXPRINT PRINT-ITI** TRANSTAR PICS **TYMAC** VERSACARD PARALLEL VERSACARD SERIAL VIDEX PSIO PARALLEL VIDEX PSIO SERIAL VIDEX UNIPRINT WIZARD-IPI WIZARD-BPO

PRETTY PRINT

Use the arrow keys or the SPACE BAR to choose a printer interface card, and then press RETURN.

NOTE: "Banner Maker" is not compatible with the TexPrint printer card. If you have this card, tell "Banner Maker" that you have a Grappler+™ card. Then "Banner Maker" will allow you to print your banner.

Select FONT MENU

There are three fonts, or type styles, you may choose from on the "Banner Maker" disk.

Bold looks like this: TAUS US BOLD

Courier looks like this: THIS IS COURIER

Helvetica looks like this: THIS IS HELVETICA

Use the arrow keys or the **SPACE BAR** to choose a font, and then press **RETURN**.

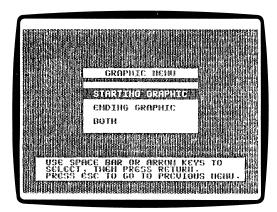
The computer will ask if you want to add graphics to your banner.

Type Y and then press **RETURN** if you want to choose one or two graphics for your banner. The computer will display the SELECT GRAPHIC MENU, (See "SELECT GRAPHIC MENU," page 17.)

Type N and then press RETURN if you do not want to choose a graphic for your banner. The computer will display the PRINT A BANNER MENU. (See "Print the Banner," page 20.)

SELECT GRAPHIC MENU

There are three options on the Select Graphic Menu. They are Starting Graphic, Ending Graphic, and Both.



Use the arrow keys or the SPACE BAR to choose an option, and then press RETURN.

Starting Graphic

Choose this option to have one graphic appear at the beginning of your banner.

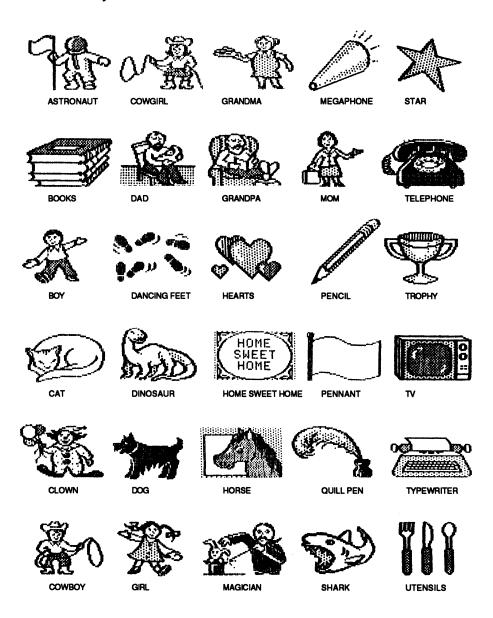
Ending Graphic

Choose this option to have one graphic appear at the end of your banner.

Both

Choose this option to have one graphic appear at the beginning of your banner and one graphic appear at the end of your banner.

There are 30 graphics you may choose from on the "Banner Maker" disk. They are:



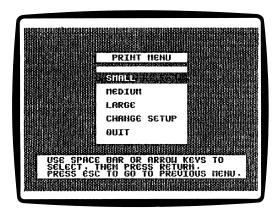
Use the arrow keys or the SPACE BAR to choose a graphic, then press RETURN.

Four other issues of *Microzine* include Desktop Publishing features. You may use the "Banner Maker" graphics with all of these features except "BluePrint Maker," and you may use the graphics from the other features with "Banner Maker."

When you have chosen the graphics for your banner, the computer will display the PRINT MENU.

Print Menu

The PRINT MENU has five options. They are Small, Medium, Large, Change Setup, and Quit.



Use the arrow keys or the SPACE BAR to choose an option, and then press RETURN.

Small

Choose this option to print a banner with small-sized type and graphics.

Medium

Choose this option to print a banner with medium-sized type and graphics.

Large

Choose this option to print a banner with large-sized type and graphics.

Change Setup

Choose this option to tell "Banner Maker" what kind of computer setup you have. (See "Change Setup," page 13.)

Quit

Choose this option to leave the PRINT MENU and return to the "BANNER MAKER" MAIN MENU.

Print the Banner

Follow these steps to print a banner:

- 1. Choose CHANGE SETUP and tell "Banner Maker" what type of printer and printer interface card you have.
- 2. Type the message for your banner and choose a type font.
- 3. Choose the graphic(s) for your banner.
- 4. Choose to print a small, medium, or large banner.

When you have chosen what size banner to print, the program will tell you to press any key to print your banner.

Make sure your printer is turned on and the paper is aligned. Then press any key to print your banner.

IMPORTANT: You will not be able to save your banner on a data disk. When you create a banner, you must print it or you will lose it.

Quit

Choose this function to guit "Banner Maker."

The program will ask, "Are you sure you want to quit? (Y/N)."

Type N to continue using "Banner Maker."

Type Y to quit. If you chose "Banner Maker" from the *Microzine* Table of Contents, the program will tell you to put the *Microzine* disk in drive 1 and press RETURN.

If you used "Banner Maker" separately from the *Microzine* disk, the program will tell you to remove the "Banner Maker" disk from the drive and turn off the computer.

DR. MAXWELL'S MOLECULE MAGIC

Have you ever flown to the moon? No? Well, if you can discover Dr. Maxwell's secret, you will launch your own rocket to the moon! You will see, and hear, some amazing things in this program.

What You Will Find

In "Dr. Maxwell's Molecule Magic" you will experiment with the temperature, density and volume of air molecules to create enough air pressure to launch your rocket to the moon.

Moving the Hand

See "Using the *Microzine* Hand," page 4, to learn how to move the Hand to set values and choose prompts.

Play "Dr. Maxwell's Molecule Magic"

The goal of this program is to create enough air pressure in your rocket to successfully lift off and fly to the moon.

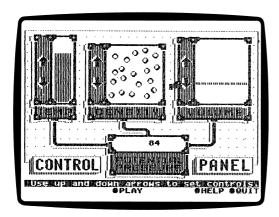
First, set the values on the Control Panel. Choose the temperature of the air molecules. Next, choose the density, or number, of the air molecules. Then choose the volume, or size, of the box in which the air molecules will be trapped.

Then choose Play. Trap the air molecules in the lower part of the Volume box to build the air pressure in your rocket.

When you think you have enough air pressure, choose Launch. See, and hear, what happens!

Control Panel

Use this screen to set the values for the air molecules. The values are Temperature, Density, and Volume. These values will affect the Potential Pressure in your rocket.



Temperature

Use the Hand to change the temperature of the air molecules.

To raise the temperature, point to the Up arrow, and then press **RETURN**.

To lower the temperature, point to the Down arrow, and then press **RETURN**.

Density

Use the Hand to change the density, or number, of the air molecules.

To increase, or raise, the number of air molecules, point to the Up arrow, and then press **RETURN**.

To decrease, or lower, the number of air molecules, point to the Down arrow, and then press RETURN.

Volume

Use the Hand to change the volume, or size, of the box in which you will trap the air molecules.

To make the volume of the box larger, point to the Up arrow, and then press RETURN.

To make the volume of the box smaller, point to the Down arrow, and then press **RETURN**.

Potential Pressure

The number inside the Potential Pressure box shows the amount of pressure you could make by capturing all of the air molecules on the Play Screen. As you change the Temperature, Density and Volume of the air molecules, the number inside the Potential Pressure box will change.

Experiment to find out how much Potential Pressure you need to launch your rocket.

Control Panel Options

These are the options on the Control Panel that you will use:

Play

Choose this option to go to the Play Screen.

Help

Choose this option to read the Control Panel Help screens.

Quit

Choose this option to quit playing "Dr. Maxwell's Molecule Magic."

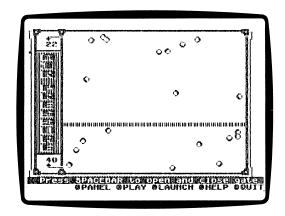
The program will ask "Are you sure you want to quit? (Y/N)"

Type N to continue playing "Dr. Maxwell's Molecule Magic."

Type Y to return to the *Microzine* Table of Contents.

Play Screen

Use this screen to trap the air molecules in the lower part of the Volume box.



Use the SPACE BAR to open and close the gate.

The number in the upper-left corner of the screen shows the amount of air pressure in the upper part of the Volume box.

The number in the lower-left corner of the screen shows the amount of air pressure in the lower part of the Volume box.

When you think you have enough air pressure in the lower part of the Volume box, choose Launch to launch your rocket.

Play Screen Options

These are the options on the Play Screen that you will use:

Panel

Choose this option to go to the Control Panel.

Play

Choose this option to go to the Play Screen.

Launch

Choose this option to go to the Launch Screen.

Help

Choose this option to read the Play Screen Help screens.

Quit

Choose this option to quit playing "Dr. Maxwell's Molecule Magic."

The program will ask "Are you sure you want to quit? (Y/N)"

Type N to continue playing "Dr. Maxwell's Molecule Magic."

Type Y to return to the *Microzine* Table of Contents.

Launch Screen

Use the Launch Screen to launch your rocket.

If you do not have enough air pressure in your rocket, the rocket will not be able to lift off successfully.

If you do have enough air pressure in your rocket you will see, and hear, amazing things!

Good luck!

MONITOR MYSTERY

"The Case of the Missing Wheel"

We at the *Microzine* Mystery Society used our powers of observation and logic to deduce that you would be using "Monitor Mystery" today. Last night one of our agents secretly turned your everyday computer into a Sherlock 221B Mystery-Solving Computer! Can the two of you work together to solve this baffling "Monitor Mystery"?

What You Will Find

You will read a Story, look at a Picture, and then answer Questions to solve "The Case of the Missing Wheel."

"MONITOR MYSTERY" MAIN MENU

"Monitor Mystery" has two functions, or things you may do. They are Instructions, and The Case of the Missing Wheel.

Instructions

Choose this function to learn how to solve "The Case of the Missing Wheel."

The Case of the Missing Wheel

Choose this function to solve "The Case of the Missing Wheel." "The Case of the Missing Wheel" is divided into three parts: the Story, the Picture, and the Questions.

The Story

Read the Story to learn the facts you will need to solve the mystery. Type **P** to see the Picture. Type **Q** to answer the Questions.

The Picture

Study the Picture and search for clues. Type **S** to read the Story. Type **Q** to answer the Questions.

C for Clues

Type C to search for clues in the picture. A magnifying glass will appear. Move the magnifying glass over each object in the picture, and then press RETURN. Clues will appear at the bottom of the screen.

Use these keys to move the magnifying glass.

| Apple II Plus | Apple //e/llc/llgs | | | | |
|-----------------|----------------------------------|--|--|--|--|
| I to move up | lor ↑ to move up | | | | |
| J to move left | J or ← to move left | | | | |
| K to move right | K or \rightarrow to move right | | | | |
| M to move down | M or ⊥ to move down | | | | |

The Questions

Answer the questions to solve "The Case of the Missing Wheel." Your Sherlock 221B computer will tell you if your deductions are correct.

If one or more of your deductions is wrong, your Sherlock 221B computer will ask you to type in the number of the answer you want to change.

When all your answers are correct, your Sherlock 221B computer will ask you one final question.

Final Question

Answer the final question to solve the mystery. If your answer is wrong, your Sherlock 221B computer will ask you if you want to try the final question again. Type Y for yes or N for no.

When you answer the final question correctly, your Sherlock 221B computer will ask if you want to compare your deductions with it. Type Y for yes or N for no.

You will then read the final story screens.

Microzine Mystery Society Mystery-Solving Tips

- A smart sleuth reads the Story carefully to learn all the facts.
- An inventive investigator checks each object in the Picture for clues.
- If the Sherlock 221B computer says that at least one answer is wrong, a daring detective carefully re-examines each answer to make sure an "obviously" right answer is not, in fact, dead wrong!
- After answering the final question correctly, a magnificent mysterysolver always compares deductions with the Sherlock 221B computer to see how logical minds think alike.

COMPUTER STUFF

Welcome to "Computer Stuff!"

Moving the Hand

See "Using the *Microzine* Hand," page 4, to learn how to move the Hand to choose functions and options.

Use the Hand to choose "Computer Stuff" from the *Microzine* Table of Contents, and then press **RETURN**. A list of "Computer Stuff" functions will appear.

What You Will Find

"Computer Stuff" has three functions, or things you may do. They are Options, Initialize Disk, and Exit.

Options

Use the Hand to choose "Options," and then press RETURN. The "Options" screen will appear.

Use the Hand to choose the correct options for your computer setup.

Disk Drives

Microzine assumes you have one disk drive. If you have two disk drives, use the Hand to point to "Disk Drives," and then press **RETURN**. The "1" will change to a "2."

The advantage of having two drives is that when you need to use a data disk, you will be able to put it in the second drive. You will not have to take the *Microzine* disk out of its drive.

You don't have to change the number of drives each time you use *Microzine*. It remembers.

Printer

Microzine assumes that you have a printer. If you do not have a printer, use the Hand to point to "Printer," and then press RETURN. The "YES" will change to "NO."

You don't have to tell *Microzine* that you do or do not have a printer each time you use *Microzine*. It remembers.

Printer Setup

If you have a printer, then *Microzine* assumes you also have a serial interface card.

If you have a different interface card, then use the Hand to point to "Printer Setup," and press **RETURN**.

Each time you press **RETURN**, a different interface card will appear. Press **RETURN** until the interface card that is in your computer appears.

The interface cards are:

Standard parallel interface card: This card is usually used with printers like the Epson printers.

Serial card: This card is usually used with the Imagewriter or Scribe printer. (If you have an Apple IIc, choose the SERIAL CARD option. In the IIc, the printer card is built-in.)

Pkaso card ™: Choose this if you have a Pkaso card in your computer.

Grappler + TM: Choose this if you have a Grappler + card in your computer.

Silentype card ™: Choose this if you have a Silentype card in your computer. (Silentype cards are usually used with a Silentype printer.)

If you do not know what interface card you have, ask someone who does know, or do not choose the "Printer Setup" option. *Microzine* will then assume that your computer has a serial interface card.

You don't have to change the printer setup each time you use *Microzine*. It remembers.

NOTE: To print your "Banner Maker" banners, use your "Banner Maker" Desktop Publishing disk. That disk offers a wider variety of printers and printer cards. (See "Print the Banner," page 20.)

Printer Slot

Your printer must be connected to Slot 1 to print material from this issue of *Microzine*.

Sound

Microzine assumes that you want to hear the sound effects in each program. If you do not want to hear the sound effects, use the Hand to point to "Sound," and then press **RETURN**. The "YES" will change to "NO."

You don't have to turn the sound effects off each time you use *Microzine*. It remembers.

Line Feed

Microzine assumes that you want the line feed option turned on. If you do not want this option turned on, use the Hand to point to "Line Feed," and then press **RETURN**. The "YES" will change to "NO."

Line Feed moves the paper through your printer one line at a time. Some hardware (printers, or printer cards, for example) automatically moves the paper through the printer one line at a time. In this case, you will want the line feed option turned off ("NO").

Some hardware does not automatically move the paper through the printer one line at a time. With this hardware, you will want the line feed option turned on ("YES").

To test whether you need the line feed option turned on or off, print a graphic or text.

If the graphic or text appears as one solid black line, you need to have the line feed option turned on ("YES").

If the graphic or text appears with white line spaces between lines of the graphic or text, you need to turn the line feed option off ("NO").

You don't have to turn the line feed option off each time you use *Microzine*. It remembers.

Exit

Use the Hand to point to "EXIT," and then press RETURN, to go back to the list of "Computer Stuff" functions.

Initialize Disk

A data disk is a blank disk (or one that you don't mind erasing) that has been initialized by *Microzine*.

Initializing a disk gets it ready to save your data for *Microzine*. The computer sets up a filing system by dividing the disk into sections called tracks and sectors. Each brand of computer uses its own filing system. For instance, a disk initialized by your Apple may only be used on Apple computers.

To initialize a data disk, use the Hand to choose "Initialize Disk," and then press **RETURN**.

The program will tell you that you need a blank disk, or one you don't mind erasing. The Hand will be pointing to "NEXT." Press RETURN.

The program will tell you to put the disk into drive 1. The program will tell you that the disk will be erased. It will ask, "Do you want to go ahead?" Use the Hand to point to "YES" or "NO," and then press RETURN.

The program will initialize the disk. Then the "Computer Stuff" list of functions will appear.

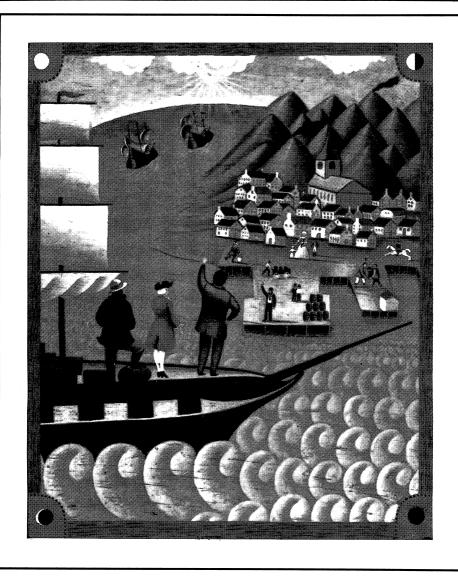
You now have a data disk. You may use it for any *Microzine* feature that requires a data disk.

NOTE: You will not need a data disk with this issue of Microzine.

Exit

Choose this function to clear the "Computer Stuff" list of functions from the *Microzine* Table of Contents.

TEACHER'S GUIDE



MICROZINE SCOPE AND SEQUENCE CHART

| Entertainment | Programming | Text Editing | Computation/Estimation | Data Storage/Retrieval | Why People Use Computers | Games | Branching Stories | Simulations | Utilities | Computer Applications | COMPUTER LITERACY | Maps/Graphs/Charts | Fine Arts | Social Studies | Science | Math | Writing | Reading | CURRICULUM AREAS/SKILLS |
|---------------|-------------|--------------|------------------------|------------------------|--------------------------|-------|-------------------|-------------|-----------|-----------------------|-------------------|--------------------|-----------|----------------|---------|------|---------|---------|-------------------------|
| • | | | • | | | • | • | | | | | • | | • | | | | • | China Trade |
| • | | • | | | | • | | | • | | | | • | | | | • | | Banner Maker |
| • | | | • | | | • | | • | | | | | | | • | • | | | Molecule Magic |
| • | | | | | | • | • | | | | | | | | | | | • | Monitor Mystery |
| | | | | | | | | | | | | | | | | | | | |

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CAPTAINS OF THE CHINA TRADE

A Twistaplot™ Adventure

DIFFICULTY LEVEL: Challenging, Average, Easy

VOCABULARY PREVIEW: longitude, latitude, dowry, helm, bustling, coordinates, barbarous, abacus, mutinous, declare, prime meridian, equator

School Activities

BACKGROUND INFORMATION: Explain to students that every place on Earth has its own unique pair of latitude and longitude coordinates. Point out the prime meridian (0 degrees longitude) and the equator (0 degrees latitude) on the globe, and explain that all other points are measured by the number of degrees they are away from these axes.

GEOGRAPHY: Instruct students to locate all the ports they visited in "Captains of the China Trade" on the world map or globe. For each port, ask students to write down the name of its country, its continent, and the body of water on which it is located.

WRITING: Ask students to keep a captain's log of their adventures in "Captains of the China Trade." Instruct them to note the physical characteristics of each place they visit, and to keep track of all the people they meet and the trades they make. Have students use the "Captains of the China Trade" Activity Page to help them with this assignment.

Home Activities

SOCIAL STUDIES: Have students choose a favorite port. Ask them to research the climate, chief industries, and customs of the people who live there today. Ask students to write a composition comparing life today with life in the early 1800s.

BANNER MAKER

DIFFICULTY LEVEL: Challenging, Average, Easy

VOCABULARY PREVIEW: graphic, type font

School Activities

ART & DESIGN: Students can "dress up" their banners using additional printed graphics, a hole punch, scissors, glue, cardboard, and ribbon. For example, if students create a "Happy Birthday" banner, they can add additional birthday cake graphics to hang from the banner. First, have students print a series of birthday cake graphics without a banner message. Next, mount the banner and the birthday cake graphics on sturdy cardboard. Use a scissors to cut the additional graphics into separate, small squares. Then, using a hole punch, have students punch a series of holes along the bottom edge of the banner, and at the top of each birthday cake graphic. Finally, have students use pieces of ribbon to connect the additional graphic squares through the holes to the banner.

Encourage students to experiment with the different type fonts and the 30 separate graphics available on the "Banner Maker" program disk. Students may also use the graphics from any of the other programs in *Microzine's* Desktop Publishing series while designing their banners.

Home Activities

Have students create a banner to congratulate a friend or family member on a recent event, such as a birthday, promotion, or a homecoming.

DR. MAXWELL'S MOLECULE MAGIC

DIFFICULTY LEVEL: Challenging, Average, Easy

VOCABULARY PREVIEW: molecule, potential, pressure, volume, density, launch

School Activities

SCIENCE RESEARCH AND WRITING: Demonstrate the concepts of air pressure and volume to students by blowing up a balloon. Explain that the more air forced inside the balloon, the greater the volume of air inside the balloon. This makes the balloon expand.

Have students research and write definitions for pressure, volume and density. Have students suggest other examples that demonstrate these concepts.

Have students keep notes describing their experiments, successes, and failures in launching the rocket. Have students read their notes aloud, and identify any deductions they might have made that led them to a successful launch. Point out that scientists create and invent by making hypotheses, experimenting with, and observing, just as the students did with this program.

Have students research Dr. Maxwell in your school's library. Have them write reports about his life and work.

Home Activities

Have students write a short story describing their experiences in launching their rocket, and what they found on the moon when they finally landed.

MONITOR MYSTERY

DIFFICULTY LEVEL: Challenging, Average, Easy

VOCABULARY PREVIEW: competitor, sculpture, deduction, suspiciously, peering, ordinary

School Activities

READING: Tell students that mystery writers often include several details in their stories, called red herrings, that are designed to distract readers from the real solution. In "Monitor Mystery," for example, the clue that Mr. Vinchy would do anything to get his hands on the Turbo-Bike plans is a red herring because it could lead the reader to think Mr. Vinchy stole the bicycle wheel.

Explain that the term "red herring" comes from the practice of dragging a red herring fish across a trail to confuse hunting dogs. Students can use the "Monitor Mystery" Activity Page in this guide to list the red herrings and the important clues that lead to the mystery's solution.

Home Activities

Have students read other mystery stories and compile a list of red herrings and important clues from each. Students may use the "Heroes and Villains" data base (*Microzine* #20) and the "Bookstore" data base (*Microzine* #3) to find books they can read that feature well-known detectives.

"Captains of the China Trade" Activity Page

CAPTAIN'S LOG

Use the chart below to write down the coordinates (latitude and longitude) for all the ports you visit on your adventure to China. Keep track of your business affairs, too! Write down whether or not you decided to trade your cargo, and if you did trade, write down what kind of cargo you received. Did you make wise trades?

| PORT | COORDINATES | CARGO TRADED | CARGO RECEIVED |
|-------------------|-------------|--------------|----------------|
| Cadiz | | | |
| Isle de France | | | |
| Cape Town | | | |
| Calcutta | | | |
| Sumatra | | | |
| Batavia | | | |
| Масао | | | |
| Canton | | | |

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"Monitor Mystery" Activity Page

DISTRACTING DETAILS

Many mystery writers include some details in their mysteries that are designed to distract you from finding the real solution. These details are called "red herrings". As you read the Story, search the Picture, and answer the Questions, keep a sharp eye out for red herrings.

Use the table below to list the important clues that lead to the solution of "The Case of the Missing Wheel," and the red herrings that distract you from the real solution.

| Important Clues | Red Herrings |
|-----------------|--------------|
| | |
| | |
| | |
| | |
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| | - |
| <u></u> | |

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Send this questionnaire to: Microzine Scholastic Inc. 730 Broadway

New York, NY 10003



| Name | | Age | |
|------------------|------------------|--------|--|
| Address | | | |
| City | State | Zip | |
| Where do you get | Microzine? Home_ | School | |

| 6. 3 | |
|-------|--|
| | |
| THE P | |

RATE EACH PROGRAM IN THIS ISSUE.

1 = Terrific!

2 = Good

3 = Okav

4 = Not So Hot

| Captains of the China Trade | Banner Maker |
|------------------------------|----------------|
| Dr. Maxwell's Molecule Magic | Monitor Myster |

- 1. Would you have liked being a captain of a trading ship in 1806? Why or why not?
- 2. Did you make a banner? Share it with us!
- 3. Did you launch the rocket successfully? What happened when you landed on the moon?



MY COMMENTS AND OPINIONS (write on the back, too):



If you could make a banner large enough for aliens on other planets to see, what would your banner say?

USE THE SPACES BELOW TO WRITE YOUR COMMENTS.





Captains of the China Trade



Banner Maker



Dr. Maxwell's Molecule Magic



Monitor Mystery

TEACHER EDITION ISBN: 0-590-97800-4

Microzine® A Computer Learning Library on a Disk™

On this disk:

Captains of the China Trade

It's 1806 and you are the captain of a Salem ship bound for the Orient! Trade your cargo wisely, and navigate carefully from port to port. If you're careful, you'll avoid notorious pirates and privateers and return safely to Salem. All of the decisions, and risks, are yours in this reading adventure.

Banner Maker

This feature is another in *Microzine's* Desktop Publishing series. Write a message for your banner, choose from among 30 different graphics to decorate it, then print it! You can print your banner in three different sizes. "Banner Maker" is on a separate disk that you may copy and share.

Dr. Maxwell's Molecule Magic

You must launch a rocket and fly to the moon. Your only fuel is air pressure! Experiment with the temperature and density of the air molecules, and the volume of the box in which the molecules are trapped. If you can find the right formula: Lift Off! You will see, and hear, some surprising things.

Monitor Mystery

A wheel is missing from Mr. Wright's bicycle shop. Was the thief trying to turn his unicycle into a bicycle, or was there sinister industrial espionage behind the theft? Use your magnifying glass to examine every detail of the scene of the crime. Then answer a series of questions to determine if you know the solution to "The Case of the Missing Wheel."

Learning Opportunities: Reading for detail and comprehension, map skills, math skills, creative writing, art & design, history, deductive reasoning, computer literacy.

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