

Microzine[®]

A Computer
Learning
Library
on a Disk™

Featuring:

Cosmic Heroes

An adventure
through the
solar system

The Learning Machine

Teach B.E.R.T.H.A.
everything you know

Blueprint Maker

Print and construct
your own
thingamabobs,
gewgaws,
and whatnots

Picture This

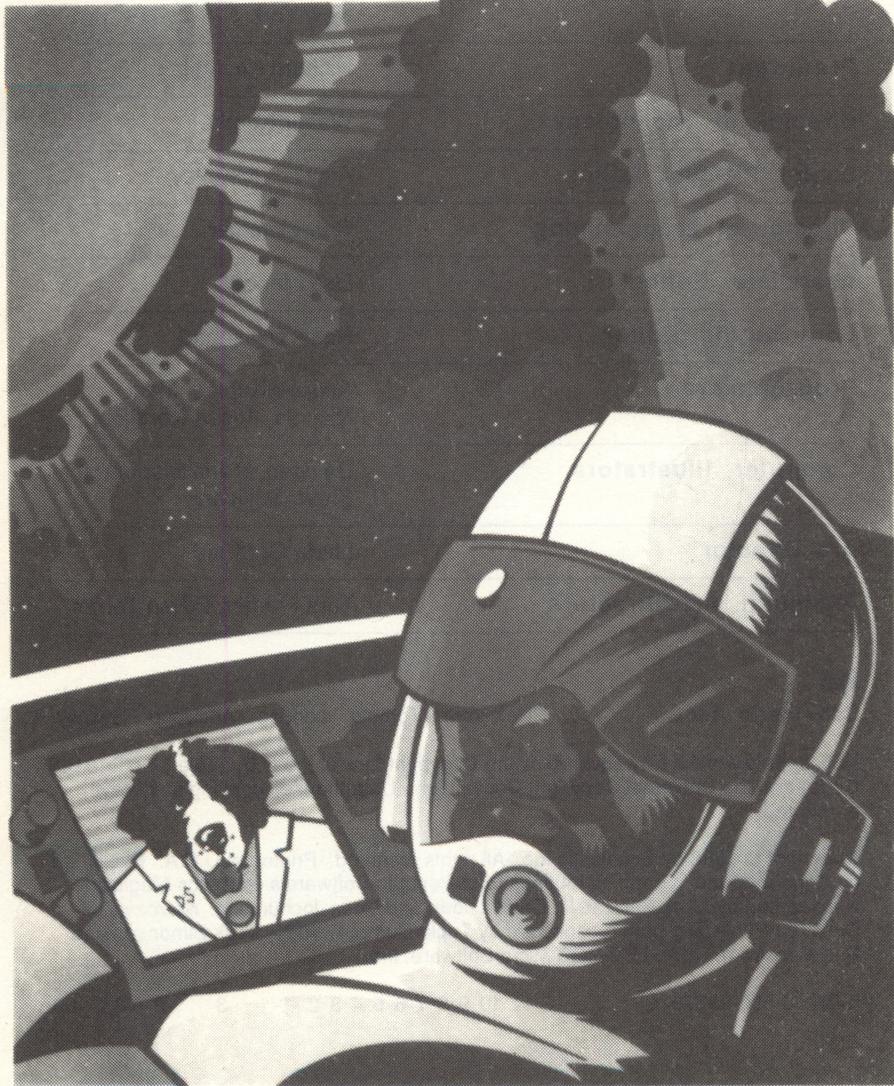
Find out what's
wild in the West

AWARD WINNING
Apple II Plus, IIe, IIc, or IIGS
64K; disk drive
Optional: printer

Microzine®

25

Student Handbook
and Teacher's Guide



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and Development**

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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, IIe, 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:

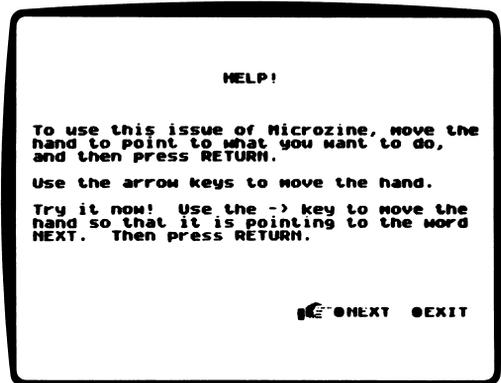
- Turn the computer off. Turn it back on and try again.
- Make sure the disk drive door is closed.
- Check to see that the disk drive is hooked up correctly.

Using the *Microzine* Hand

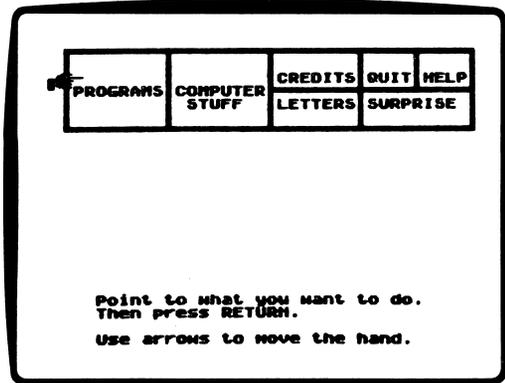
You will use the *Microzine* Hand icon in most of the programs and features in this issue of *Microzine*. Use the arrow keys, or the I, J, K, and M keys, to move the Hand.

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:

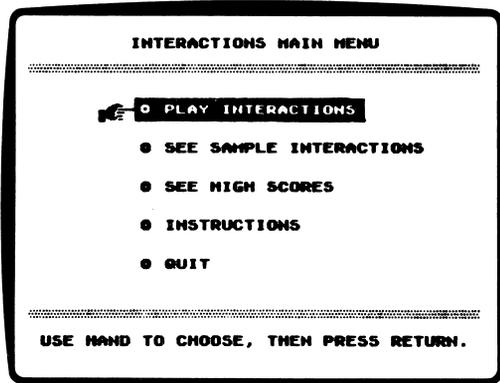
1. Make the Hand touch some part of the word that describes what you want to do. If you wanted to exit a program or screen, you would make the Hand touch the word **EXIT**, or the circle in front of **EXIT**, and then press **RETURN**.



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.

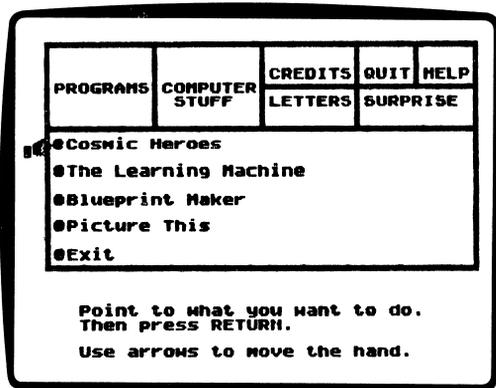


The Table of Contents

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 33.)

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 6.

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

?

Entering Information

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

If you make a mistake while typing, use the ← key to move back. Then type the information correctly.

Control (CTRL) Keys

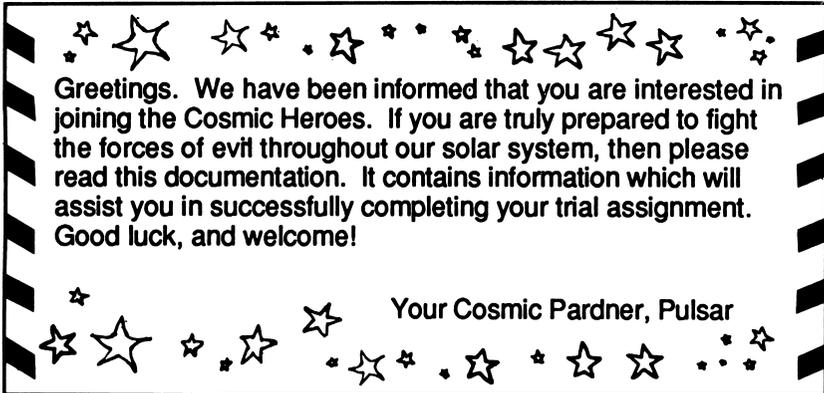
Sometimes you will have to press the **CONTROL (CTRL)** key and another key at the same time. This will be written as **CTRL-(the key)**. For example, if you see **CTRL-N**, it means press the **CONTROL** key and the **N** key at the same time.

Apple IIe/IIc/IIgs

To use *Microzine* on the Apple IIe, IIc, or IIgs press **CAPS LOCK** down.

COSMIC HEROES

A Twistaplot™ Adventure



What You Will Find

You and your companion Dogstar will travel to the different planets in our solar system, searching for pieces of the Soul of the Sun jewel. When you have found all of the pieces, you will meet the evil villain, Sirius Lunatik.

Moving the Hand

See "Using the Microzine Hand," page 6, to learn how to move the Hand to choose options.

Flying on the Planets

Use these keys to fly across the surface of the different planets in the solar system:

Apple II Plus

I to fly up
J to fly left
K to fly right
M to fly down

Apple IIe/IIc/IIIGS

I or ↑ to fly up
J or ← to fly left
K or → to fly right
M or ↓ to fly down

Password

When you have recovered all four pieces of the Soul of the Sun jewel, you will be given a password to read episode two. Remember your password well! Then, when you read "Cosmic Heroes" again, you may enter your password and continue the story starting at episode two.

Super Powers

You will choose your super powers at the beginning of your adventure. When you search for the pieces of the Soul of the Sun jewel on the different planets, you will use your different super powers.

If Sirius Lunatik "touches" you, your super powers will be drained. If your super powers fall to zero, you will have to leave the planet and return to Cosmic Heroes headquarters.

Helpful Hints

Here are a few hints to help you on your trial assignment:

- Consult your amulet often during the game. It contains critical information about the planets in our solar system.
- Listen carefully to what the citizens of each planet have to say. You may learn facts that will guarantee the success of your assignment.
- When you are flying towards the Soul of the Sun, plan your route before you begin to fly. The shortest route is the quickest route!

THE LEARNING MACHINE

The brain in "The Learning Machine" belongs to Binary Electronic Robot to Humanoid Apparatus, also known as B.E.R.T.H.A. She's pretty smart, but the real genius is you because B.E.R.T.H.A. only knows what you teach her!

What You Will Find

"The Learning Machine" is similar to the game "20 Questions." You will think of an object. Then B.E.R.T.H.A. will ask you questions until she can figure out what you're thinking of. The longer you play, the smarter B.E.R.T.H.A. becomes, because she remembers everything you teach her!

Data Disk

To use "The Learning Machine," you will need a data disk initialized by the "Computer Stuff" feature in *Microzine*. Now is the time to initialize a data disk. (See page 35.)

Starting a New Game

To start a new game, type **NEW** and then press **RETURN**. B.E.R.T.H.A. will ask, "What are you thinking of?" Type your response and press **RETURN**.

Remember, B.E.R.T.H.A. doesn't know anything yet, so she can't make any guesses. After you teach her a thing or two, she won't give up so easily!

Playing an Old Game

To play a game that you or a friend has already taught B.E.R.T.H.A., type **REMEMBER** and then press **RETURN**. B.E.R.T.H.A. will say, "Tell me the password."

Type the password of the game you want to play, and press **RETURN**. B.E.R.T.H.A. will instruct you to put your data disk in Drive 1. When she is ready to play, B.E.R.T.H.A. will say, "Think of something for me to guess. Press **RETURN** when you are ready."

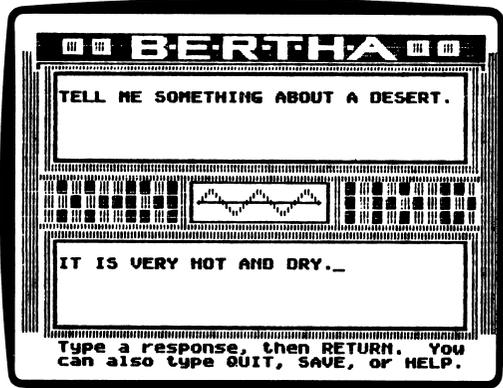
Sample Game

B.E.R.T.H.A. already knows a lot about fruits and vegetables. If you want to play this sample game, type **PRODUCE** and then press **RETURN**. B.E.R.T.H.A. will say, "Think of something for me to guess. Press **RETURN** when you are ready."

Think of a fruit or vegetable, and see if B.E.R.T.H.A. can guess it!

Talking To B.E.R.T.H.A.

B.E.R.T.H.A. talks to you on the top part of the screen. You type your answers on the bottom part of the screen.



B.E.R.T.H.A. speaks well, but not as well as you. She will understand you best if you follow this advice:

- B.E.R.T.H.A. doesn't understand the plural form of words. Teach her facts using the singular form of words.

For example, when B.E.R.T.H.A. says "I give up. What are you thinking of?" tell her, "A bear." Do not answer, "Bears."

- Tell B.E.R.T.H.A. one fact at a time about an object.

For example, when B.E.R.T.H.A. says, "Tell me something about an apple," she remembers best when you answer, "An apple grows on a tree." Telling B.E.R.T.H.A., "An apple grows on a tree and an apple is a fruit" is too much for her to remember at one time.

Every time B.E.R.T.H.A. guesses what you're thinking of, she will ask you for another fact about that object. When B.E.R.T.H.A. says, "Tell me something else about an apple" you can tell her, "An apple is a fruit."

- B.E.R.T.H.A. doesn't understand the negative form of words. Always teach her facts using the positive form of a word.

For example, B.E.R.T.H.A. understands best when you say "Apples grow on trees," rather than, "Apples do not grow on vines."

- B.E.R.T.H.A. has trouble understanding the verb "can." For example, instead of describing a bird by saying, "It can fly," tell B.E.R.T.H.A., "It flies."

Or tell B.E.R.T.H.A., "Apples are red, green, or golden" rather than, "Apples can be red, green, or golden."

Options

"The Learning Machine" has three options, or things you may do. They are Save, Help, and Quit.

Save

Type **SAVE** and then press **RETURN** at any time during a game to save all the facts you taught B.E.R.T.H.A. on your initialized data disk. B.E.R.T.H.A. will ask you to think of a password for the game.

The password you choose may be up to ten characters long.

Help

Type **HELP** and then press **RETURN** at any time during a game to read the instruction screens.

Quit

Type **QUIT** and then press **RETURN** at any time during a game to stop playing "The Learning Machine." B.E.R.T.H.A. will ask if you really want to quit.

Type **YES** and then press **RETURN** if you want to quit.

Type **NO** and then press **RETURN** if you want to continue playing. Then B.E.R.T.H.A. will ask if you want to save everything she has learned so far.

Type **YES** and then press **RETURN** if you want to save everything you've taught B.E.R.T.H.A.

Type **NO** and then press **RETURN** if you don't want to save everything you've taught B.E.R.T.H.A.

Helpful Hints

- Try to teach B.E.R.T.H.A. about one subject at a time. This way, she knows everything there is to know about that subject, instead of a few facts about several different subjects.
- It is fun to teach B.E.R.T.H.A. everything you know about a subject. Save your game and then let a friend play it with B.E.R.T.H.A.

BLUEPRINT MAKER

Microzine's Desktop Publishing Series

What You Will Find

With "Blueprint Maker" you will decorate and print your own blueprints for toys and objects. You may add graphics to your "Blueprint Maker" toys using the graphics from any other *Microzine* Desktop Publishing program.

You may make extra copies of the "Blueprint Maker" disk as backup disks or to share with your friends. Use a DOS 3.3 copy program to make copies of this disk.

"BLUEPRINT MAKER" MAIN MENU

"Blueprint Maker" has three functions, or things you may do. They are Choose Blueprint, Change Setup, and Quit.

Choose Blueprint

Choose this function to choose a blueprint of a toy or object.

Use the arrow keys or the **SPACE BAR** to choose "Choose Blueprint," and then press **RETURN**. The program will display the **CHOOSE BLUEPRINT MENU**.

The **CHOOSE BLUEPRINT MENU** has 13 blueprints that you can print. They are:

CUBIE DOLL
DREIDEL
FISH
GLIDER
HORSE
MASK
ANGEL ORNAMENT
RACE CAR
REINDEER
SLEIGH
STEGOSAURUS
TOP
WINDMILL

Use the arrow keys or the **SPACE BAR** to choose a blueprint. The program will ask "Add graphic? (Y/N)"

Type N if you do not want to add a graphic from any of the other Desktop Publishing features to your blueprint.

Type Y if you do want to add a graphic from any of the other Desktop Publishing features to your blueprint.

NOTE: You cannot add a graphic to the Cubie Doll or Reindeer blueprints.

To use the graphics from "Blueprint Maker," leave the "Blueprint Maker" disk in Drive 1 and then press **RETURN**. To use the graphics from another Desktop Publishing feature (issues #22, #23, #24, and #26), put that disk in Drive 1, and then press **RETURN**.

There are 30 graphics you may choose from on "Blueprint Maker."

1

ONE

7

SEVEN



CAWOWOMAN



MOON



SPIRAL

2

TWO

8

EIGHT



DOLLAR SIGN



RAINBOW



STARS

3

THREE

9

NINE



DRAGON



ROCKET



THUMBS-UP

4

FOUR

10

TEN



DUTCHFLOWER



SADDLE



TORNADO

5

FIVE



ARROW



LIGHTNING



SEASHELL



UFO

6

SIX



BOW



LION



SNAKE



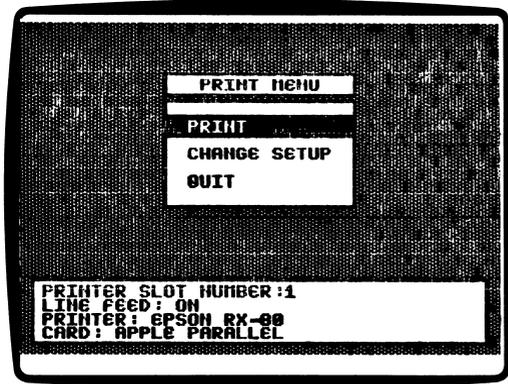
WINGS

Use the arrow keys or the **SPACE BAR** to choose a graphic.

When you have chosen the graphic for your blueprint, the computer will display the **PRINT MENU**.

PRINT MENU

The **PRINT MENU** has three options. They are Print, Change Setup, and Quit.



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

Print Blueprint

Choose this option to print your blueprint. Press any key to start printing your blueprint.

Press the **SPACE BAR** to pause while printing your blueprint. Press any key to start printing again.

Press **ESC** to quit printing.

Change Setup

Choose this option to tell "Blueprint Maker" what kind of computer setup you have.

Quit

Choose this option to leave the **PRINT MENU** and return to the "BLUEPRINT" MAIN MENU.

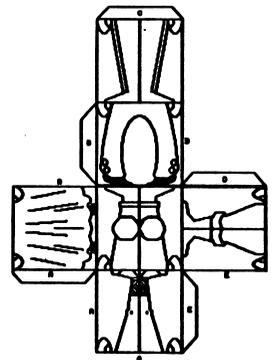
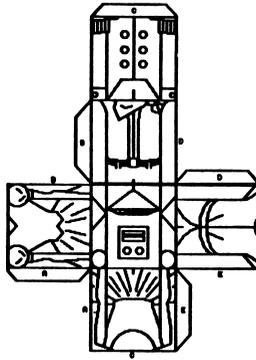
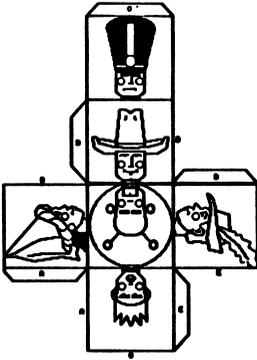
Making Your Blueprint

Your blueprint will print with instructions on how to cut, fold, and glue it together.

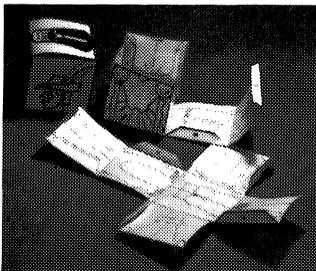
IMPORTANT: Always cut on the solid lines and fold on the dotted lines.

Look at the photos of the blueprints on the following pages to see what each blueprint should look like when it is completed.

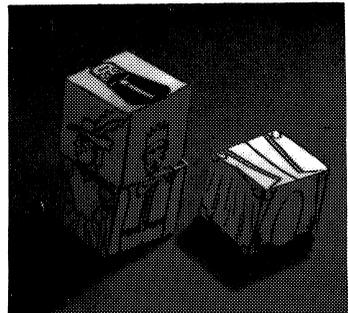
CUBIE DOLL - can't add graphics



1. The Blueprint

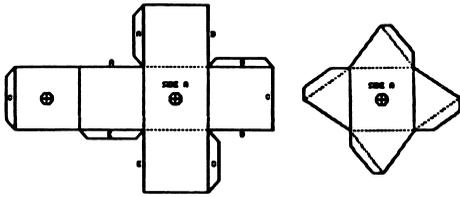


2. Making the Blueprint

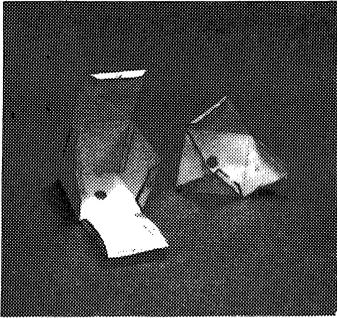


3. The finished Blueprint

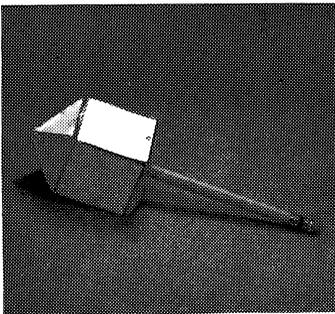
DREIDEL



1. The Blueprint

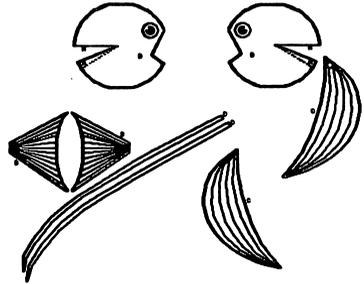


2. Making the Blueprint

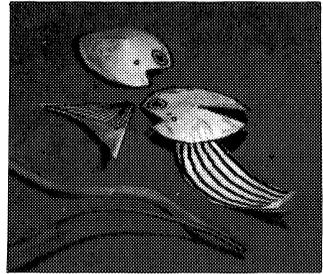


3. The finished Blueprint

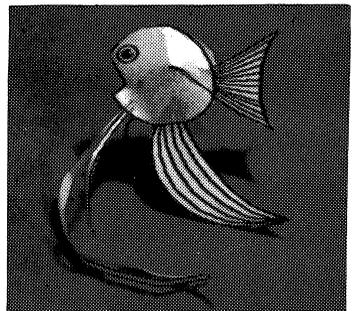
FISH



1. The Blueprint

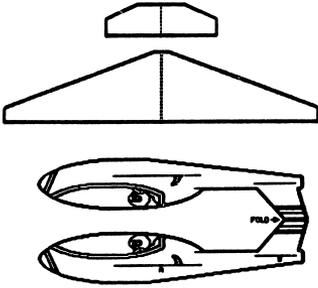


2. Making the Blueprint

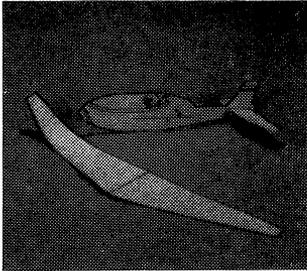


3. The finished Blueprint

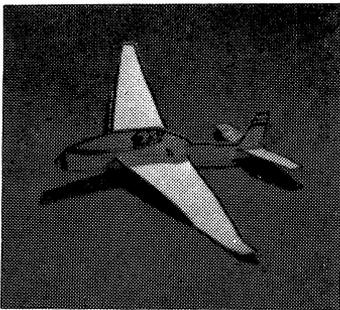
GLIDER



1. The Blueprint

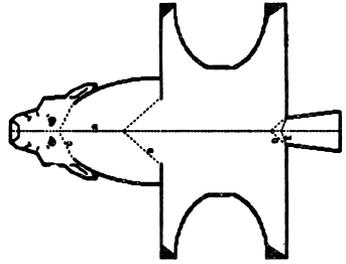


2. Making the Blueprint

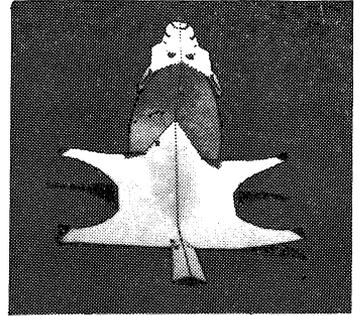


3. The finished Blueprint

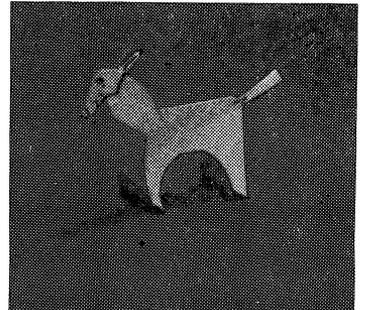
HORSE



1. The Blueprint

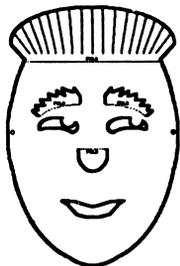


2. Making the Blueprint

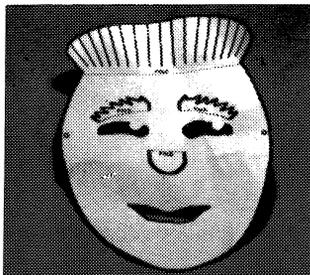


3. The finished Blueprint

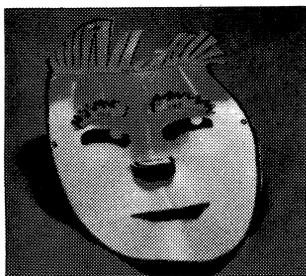
MASK



1. The Blueprint

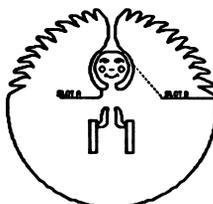


2. Making the Blueprint

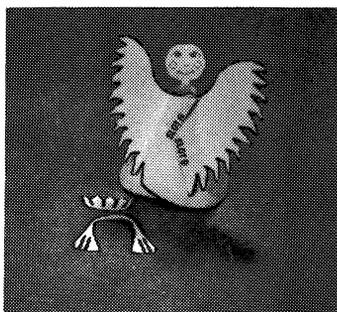


3. The finished Blueprint

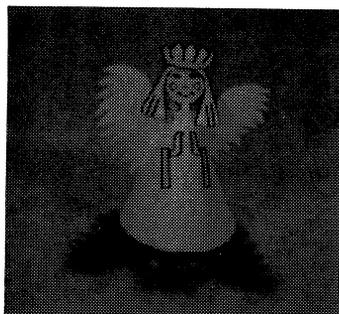
ANGEL ORNAMENT



1. The Blueprint

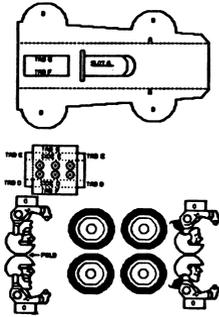


2. Making the Blueprint

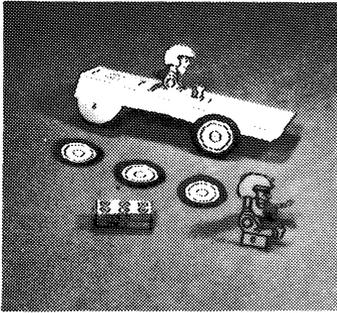


3. The finished Blueprint

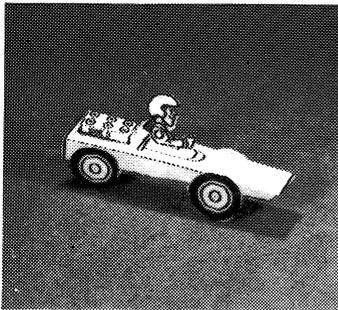
RACE CAR



1. The Blueprint

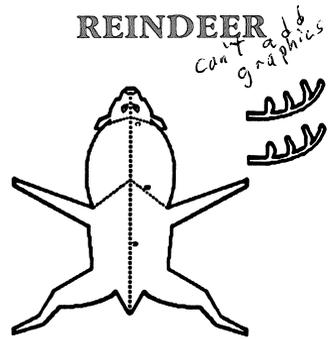


2. Making the Blueprint

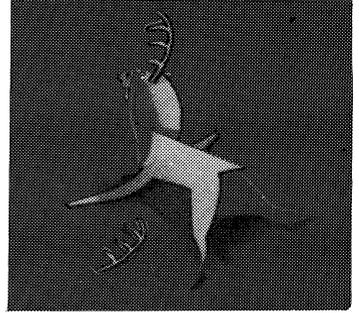


3. The finished Blueprint

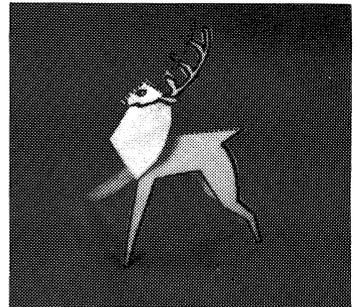
REINDEER



1. The Blueprint

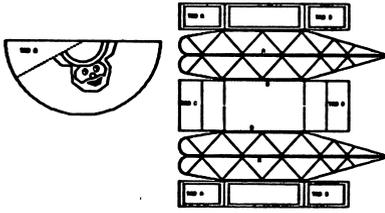


2. Making the Blueprint

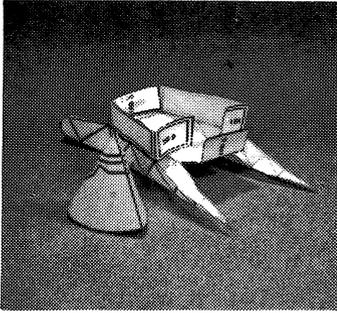


3. The finished Blueprint

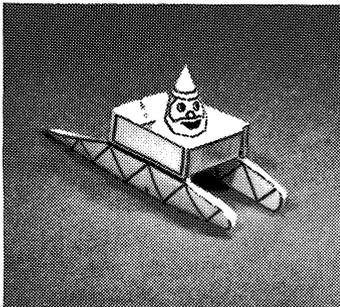
SLEIGH



1. The Blueprint

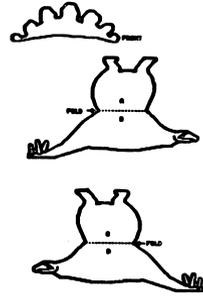


2. Making the Blueprint

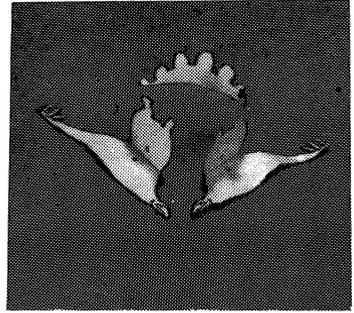


3. The finished Blueprint

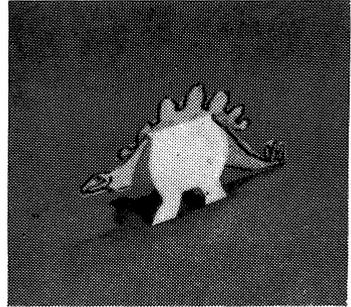
STEGOSAURUS



1. The Blueprint

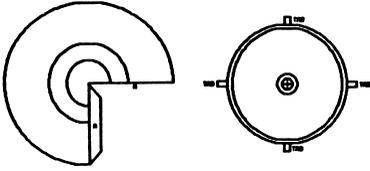


2. Making the Blueprint

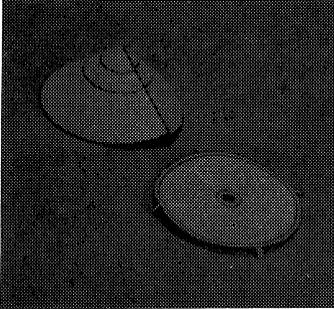


3. The finished Blueprint

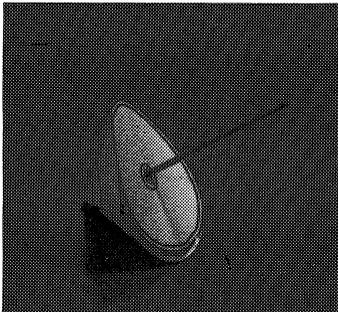
TOP



1. The Blueprint

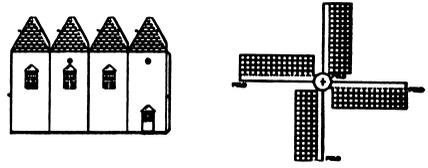


2. Making the Blueprint

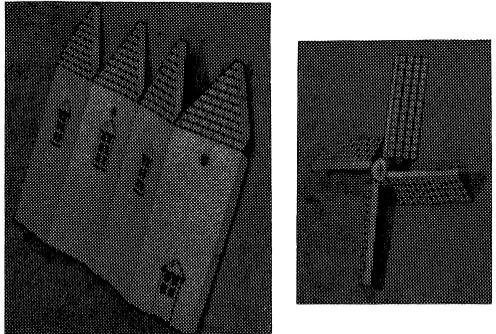


3. The finished Blueprint

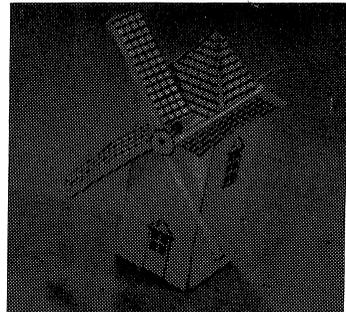
WINDMILL



1. The Blueprint



2. Making the Blueprint



3. The finished Blueprint

Change Setup

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

Printer Slot Number

"Blueprint 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 the correct slot number, and then press **RETURN**.

Printer Line Feed

"Blueprint 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.

The program will display the **LINE FEED MENU**. Use the arrow keys or the **SPACE BAR** to choose ON or OFF, then press **RETURN**. (See "Line Feed" in the Computer Stuff section of the handbook, page 33, for more information.)

Type of Printer

"Blueprint 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.

"Blueprint Maker" is compatible with the following printers:

ANADEX DP-9000
ANADEX DP-9500
ANADEX DP-9001
ANADEX DP-9501
APPLE DOT MATRIX (DMP)
APPLE IMAGEWRITER
APPLE IMAGEWRITER II
APPLE SCRIBE
BLUE CHIP M120/10
BROTHER M-1009
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 LQ-80
EPSON MX-70
EPSON MX-80 WITH GRAFTRAX
EPSON MX-100
EPSON RX-80
GORILLA BANANA
HP THINKJET
IDS MICROPRISM
IDS PAPER TIGER 440
IDS PAPER TIGER 445
IDS PAPER TIGER 480
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-8023
NEC PC-8025

OKIDATA MICROLINE 82A
OKIDATA MICROLINE 83A
OKIDATA MICROLINE 84
OKIDATA MICROLINE 92
OKIDATA MICROLINE 192
OKIDATA MICROLINE 193
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 RADIX 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**.

Type of Interface Card

"Blueprint Maker" assumes 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.

"Blueprint Maker" is compatible with the following 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
EPSON APL
FINGERPRINT
FINGERPRINT+ PARALLEL
FINGERPRINT+ SERIAL
FRANKLIN DUAL PORT

GRAFSTAR
GRAPHICARD
GRAPPLER
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-SIO
MPC GRAPHWRITER
OMNIGRAPH
ORANGE
PKASO
PKASO/U

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

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

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

Quit

Choose this function to quit "Blueprint Maker."

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

Type Y for yes, or N for no.

If you chose "Blueprint Maker" from the Microzine Table of Contents, the program will tell you to put Side 1 of Microzine in Drive 1 and then press **RETURN**.

If you booted "Blueprint Maker" separately, the program will tell you to take the "Blueprint Maker" disk out of the drive and turn off your computer.

PICTURE THIS

"The Old West"

Hop on the next stagecoach headed west, because something wild has happened in "The Old West." We're counting on you to examine the picture and uncover everything that doesn't belong.

If you do a bang-up job finding all the errors, you can collect a reward!

What You Will Find

You will look at a picture and then use a magnifying glass to uncover the errors you find in "The Old West."

Moving Around "The Old West"

Use the magnifying glass to point to what you want to do, and to point to errors in the picture. Use these keys to move the magnifying glass.

Apple II Plus

I to move up
J to move left
K to move right
M to move down

Apple IIe/IIc/IIgs

I or ↑ to move up
J or ← to move left
K or → to move right
M or ↓ to move down

If you have a mouse attached to your computer, use the mouse to move the magnifying glass.

Options

"Picture This" has five options, or things you may do. They are QUIT, YES, NO, HELP, and CHECK UP.

- QUIT: Choose this option when you're finished playing. You will be asked, "Do you really want to quit?"
- YES: Choose this option if you want to quit.
- NO: Choose this option if you want to continue playing.
- HELP: Choose this option to read the directions at any time.
- CHECK UP: Choose this option to see how many mistakes you have found.

COMPUTER STUFF

Welcome to "Computer Stuff!"

Moving the Hand

See "Using the *Microzine* Hand, page 6, 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. The list of the "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 set-up.

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

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 that you also have a serial interface card.

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

Serial card: This card is usually used with the Imagerwriter 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 +™: 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 "Blueprint Maker" toys, use your "Blueprint Maker" Desktop Publishing disk. That disk offers a wider variety of printers and printer cards. (See "Print Blueprint," 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 ("YES"). 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, and so 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, and so 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 "The Learning Machine" or for any *Microzine* feature that requires a data disk.

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

CURRICULUM AREAS/SKILLS	COSMIC HEROES	THE LEARNING MACHINE	BLUEPRINT MAKER	PICTURE THIS	
Reading	•	•		•	
Writing		•			
Math			•		
Science	•	•			
Social Studies					
Fine Arts			•		
Maps/Graphs/Charts	•				
COMPUTER LITERACY					
Computer Applications					
Utilities			•		
Simulations	•	•			
Branching Stories	•				
Games	•	•	•	•	
Why People Use Computers					
Data Storage/Retrieval		•			
Computation/Estimation					
Text Editing		•			
Programming					
Entertainment	•	•	•	•	

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COSMIC HEROES

A Twistaplot™ Adventure

DIFFICULTY LEVEL: Challenging, Average, Easy

VOCABULARY PREVIEW: cosmic, solar system, amulet, consult, generator, thermal

School Activities

RESEARCH: Have students choose one planet to thoroughly research. Suggest that they first note all of the information on the planet contained in the Twistaplot™. Have them compare the factual information found in Dogstar's library, and the fanciful descriptions contained in the story itself. Then have students consult an encyclopedia or other reference book to complete their research. Students should then present their findings to the rest of the class.

WRITING: Have students quiz each other on their knowledge of the planets. Have each student select four planets on which to "hide" the answers to four riddles. Then have students write the first part of the riddle, and up to three clues to the planet where they have hidden the answer, and trade papers with another student. When a student correctly guesses the planet, they are told the answer to the riddle.

Home Activities

ART: Have students draw a group portrait of the Cosmic Heroes with the newest member of the organization: him or herself. Encourage students to draw their self-portrait so that their super powers are apparent. For example, glowing eyes might suggest super eyesight.

Hints for solving "Cosmic Heroes":

PASSWORD TO EPISODE II: COSMOS

ANSWERS TO HARDWARES QUESTIONS:

PLUTO'S MOON - CHARON

MOON WITH A NATURAL ATMOSPHERE - TITAN

LARGEST PLANET - JUPITER

SIXTH PLANET FROM SUN - SATURN

PLANET WHERE SUN RISES IN WEST - VENUS

PLANET TILTED ON ITS SIDE - URANUS

PLANET WITH A STORM BIGGER THAN EARTH - JUPITER

PLANET WHERE THE SUN LOOKS NINE TIMES ITS SIZE - MERCURY

PLANET WHERE A DAY IS 59 TIMES AS LONG AS EARTH'S - MERCURY

PLANET THAT HAS RINGS - JUPITER, SATURN, OR URANUS

PLANET WITH NO LESS THAN 17 MOONS - SATURN

PLANET SCIENTISTS USED TO THINK WAS ONE SEA - URANUS

PLANET WHERE A YEAR IS 365 EARTH DAYS LONG - EARTH

PLANET WITH "CANALS" - MARS

Hints for solving "Captains of the China Trade," issue #24:

THE COORDINATES FOR CADIZ ARE 37N 7W.

TRADE YOUR CARGO FOR OLIVE OIL.

THE COORDINATES FOR CAPE TOWN ARE 34S 18E.

DON'T INVESTIGATE THE FRENCH SHIP.

DON'T TRADE YOUR CARGO FOR GOLD DUST.

THE COORDINATES FOR ISLE DE FRANCE ARE 20S 57E.

TRADE YOUR CARGO FOR COCOA.

THE COORDINATES FOR CALCUTTA ARE 23N 88E.

INVESTIGATE THE SALEM SHIP.

DON'T TRADE YOUR CARGO FOR COTTON CLOTH.

THE COORDINATES FOR SUMATRA ARE 1N 100E.

DON'T TRADE YOUR CARGO FOR PEPPER.

THE COORDINATES FOR BATAVIA ARE 6S 107E.

TRADE YOUR CARGO FOR BIRDS' NESTS.

DON'T INVESTIGATE THE BRITISH SHIP.

THE COORDINATES FOR MACAO ARE 22N 114E.

ASK FOR A PILOT, A PERMIT, AND AN INTERPRETER.

GIVE MRS. CHING YOUR GRANDFATHER'S GOLD WATCH.

OFFER THE INDIAN BEADS FOR THE IVORY BOX.

TRADE YOUR BIRDS' NESTS FOR TEA.

THE LEARNING MACHINE

DIFFICULTY LEVEL: Challenging, **Average**, Easy

VOCABULARY PREVIEW: binary, humanoid, apparatus

School Activities

PROBLEM SOLVING: Play a game of "20 questions" with your class. Have one student think of an object for the others to guess. Write all the questions students ask on the blackboard or overhead projector. After a student guesses the object, review the logic the class used to narrow down the possibilities and figure out the answer. Compare this to the logic B.E.R.T.H.A. uses to guess the objects in "The Learning Machine."

Home Activities

RESEARCH & SOCIAL STUDIES: Have students research a subject of their choosing. Ask them to compile a list of facts about that subject to teach B.E.R.T.H.A. Caution them to word their facts carefully so B.E.R.T.H.A. will understand them. (See "Talking to B.E.R.T.H.A.," page 14.) Explain that one fact can be true for several objects. For example, the fact, "It is often peeled before it's eaten," could be true for a carrot, a potato, or an onion.

BLUEPRINT MAKER

DIFFICULTY LEVEL: Challenging, Average, Easy

School Activities

ART & DESIGN/WRITING: Have students participate in a Package Design contest. Students should create a product, then write a description of what the package looks like including the information and pictures on each "face" or side of the package. Then have students draw a blueprint of the package on a piece of paper, add the text and the pictures, then cut the package out and fold it. Students will most likely make mistakes in laying out their package on their first attempt.

Use their mistakes as a starting point for discussing the transition from two dimensions to three dimensions. Help them visualize the transition by taking a cardboard package, cutting it apart, and laying it flat.

Home Activities

WRITING: Have students each print out a racing car to enter in an imaginary race. Students could decorate their cars as they choose, then display them where everyone can see them. Then have students write a short story about a race between all of the cars and its outcome. Have students read their stories aloud.

PICTURE THIS

"The Old West"

DIFFICULTY LEVEL: Challenging, Average, Easy

VOCABULARY PREVIEW: heralded, tenderfoot, sidewinder, rabble-rousing

School Activities

LANGUAGE ARTS: Teach your class what an anachronism is. Discuss why each "error" in "The Old West" is an anachronism.

SOCIAL STUDIES & ART: Ask students to draw their own pictures of a particular period in history and to add some things that would be anachronisms in that period.

Have students exchange pictures and identify "the things that don't belong" in their drawings. Ask them to point out things in the picture that are correct for that time period, but that would be anachronisms today. For example, at the table of the first Thanksgiving, an electric carving knife would be an anachronism. Today, wooden plates, which are correct in the picture, would be considered anachronistic.

Home Activities

WRITING & CREATIVITY: Choose a time period with which your students are familiar. Ask them to write a short story about what their lives would be like if they had lived during that time period. Suggest that they include two everyday objects from their "real" lives that would be considered anachronistic in the time period they are writing about.

"Cosmic Heroes" Activity Page

PLANET PLANNER

Below is a chart to help you keep track of your mission to find the Soul of the Sun.

Planet Visited	Planet's Position From the Sun (1-9)	Number of Moons	Super Powers I Used Here	Did I Find a Piece of the Jewel?

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"Picture This" Activity Page

ERROR ROUNDUP

All of the errors in "Picture This" are too modern to belong in "The Old West." Use the chart below to list all the mistakes you found. Then consult an encyclopedia or other reference book to research each mistake in the scene, and list the year it was invented or the correct time period in which each object might be found.

MISTAKES FOUND

CORRECT TIME PERIOD/YEAR

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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Microzine™

25 QUESTIONNAIRE

Photocopy
this
questionnaire
and give it to
another
Microzine
user!

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 _____



RATE EACH PROGRAM IN THIS ISSUE

1 = Terrific! 2 = Good 3 = Okay 4 = Not So Hot

_____ Cosmic Heroes _____ Blueprint Maker

_____ The Learning Machine _____ Picture This

1. Sirius Lunatik was the villain in "Cosmic Heroes." Imagine another outer-space villain. What is your villain's name and what does the villain do that is especially villainous?
2. Did you create a game with "The Learning Machine"? Share it with us!



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



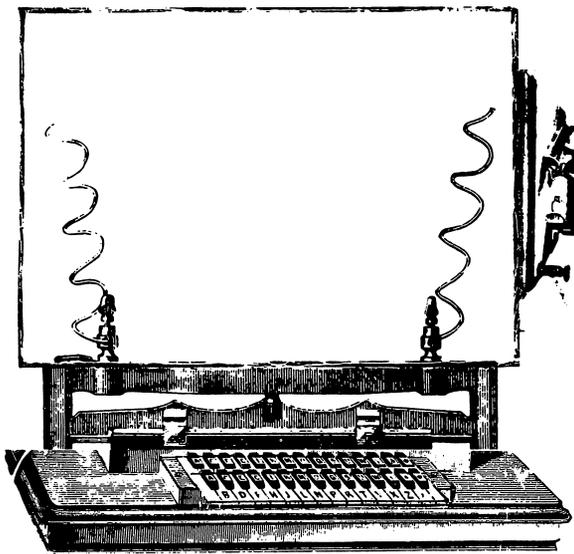
One of the Cosmic Heroes' name is Pulsar. If you joined the Cosmic Heroes, what would your new superhero name be? What powers would you have?



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**USE THE SPACES BELOW TO WRITE
YOUR COMMENTS**

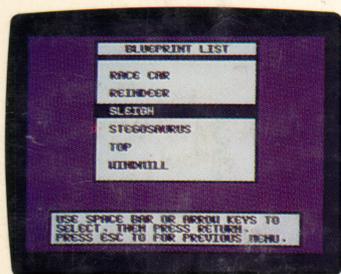




Cosmic Heroes



The Learning Machine



Blueprint Maker



Picture This

On this disk:

Cosmic Heroes

Calling all Cosmic Heroes! Sirius Lunatik, the most evil villain of them all, has stolen all of the knowledge in the solar system. Your trial assignment is to defeat Lunatik and his wicked computer Hardwar. Your knowledge of the planets in our solar system will help you win the day. All of the decisions, and risks, are yours in this interstellar reading adventure.

The Learning Machine

B.E.R.T.H.A. wants to play a game—if you'll teach her! Teach her about something you know—animals, types of transportation, or any other topic. Then play a guessing game with B.E.R.T.H.A. She learns more about your topic every time you play! Save your games on a data disk, and play over and over.

Blueprint Maker

This feature is another in *Microzine's* Desktop Publishing series. Choose a gadget, knickknack, or toy, decorate it with a decal from the other Desktop Publishing features, and print your blueprint. Then cut, color, fold, and paste until your blueprint is a three-dimensional object! "Blueprint Maker" is on a separate disk that you may copy and share.

Picture This

The West has never been wilder! Use a magnifying glass to search the picture. If you see something that doesn't look quite right, investigate it! Find all of the mistakes in the picture, and you'll get a reward.

Learning Opportunities: Reading for detail and comprehension, science, problem solving, writing skills, art and design, computer literacy.

Art Director: Linda Gottfried
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