MAZE MASTER
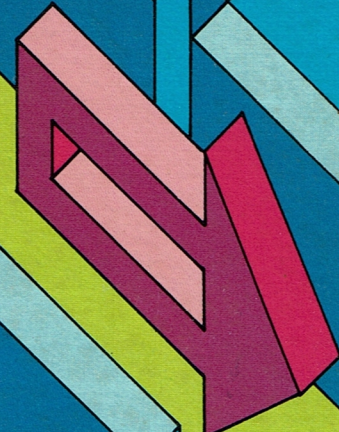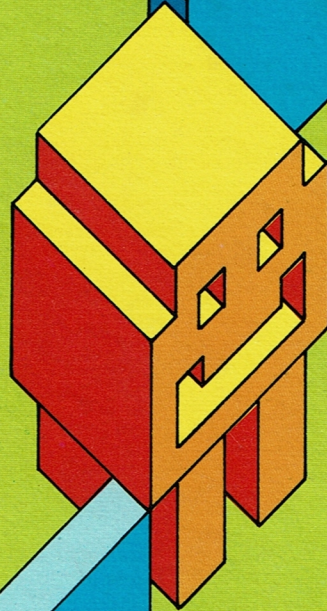
A Thinking Game
and Computer Literacy
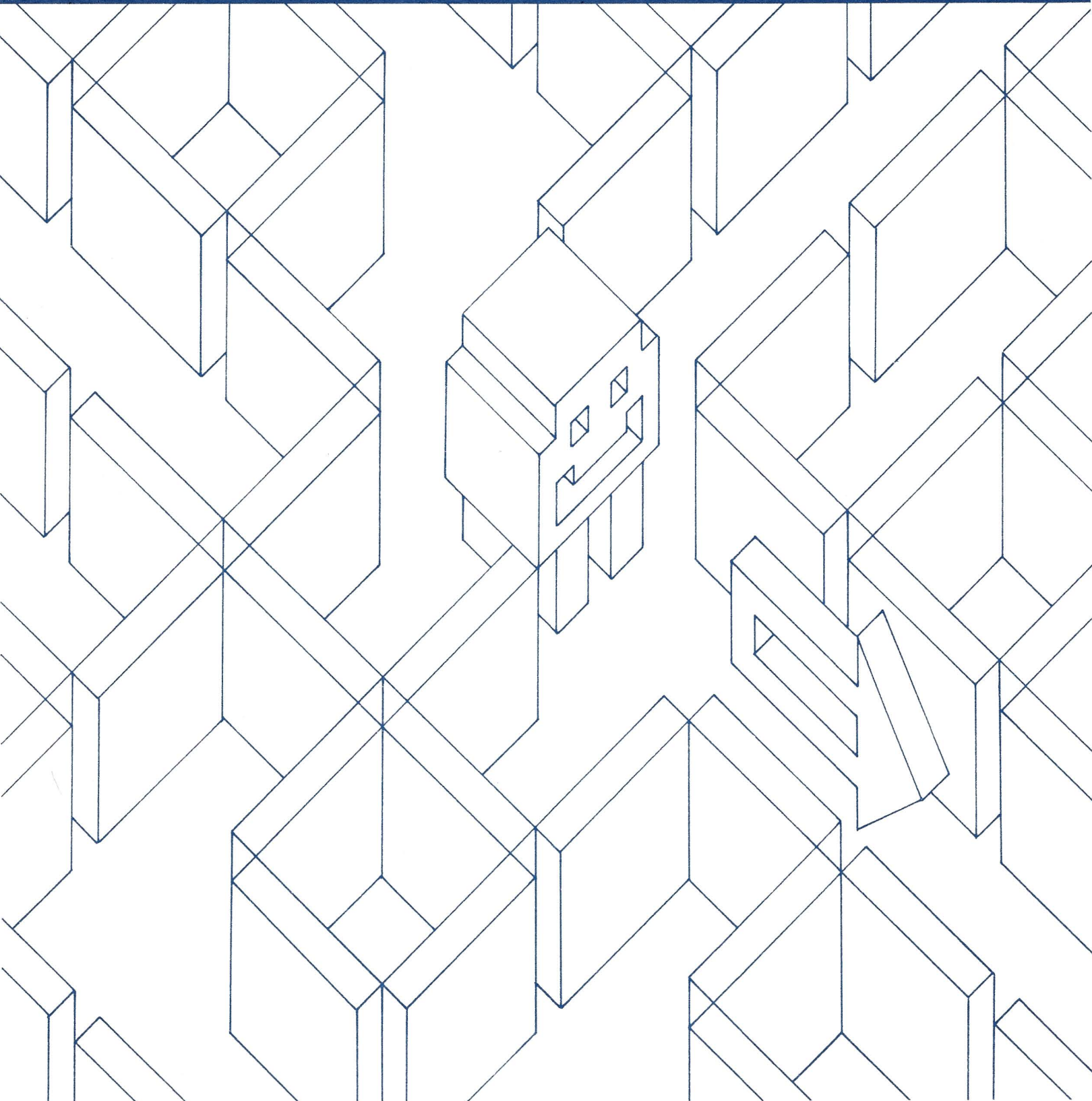Activity for the
Radio Shack
Electronic Book™

Cat. No. 26-2541

TANDY™
COMPUTER
PRODUCTS

MAZE MASTER
Parents' Guide

TERMS AND CONDITIONS OF SALE AND LICENSE OF TANDY COMPUTER SOFTWARE PURCHASED AND
LICENSED FROM RADIO SHACK COMPANY-OWNED COMPUTER CENTERS, RETAIL STORES AND RADIO
SHACK FRANCHISEES OR DEALERS AT THEIR AUTHORIZED LOCATIONS

LIMITED WARRANTY

TANDY Software is licensed on an "AS IS" basis, without warranty. The original CUSTOMER'S exclusive
remedy, in the event of a Software manufacturing defect, is its repair or replacement within thirty (30) calendar
days of the date of the Radio Shack sales document received upon license of the Software. The defective
Software shall be returned to a Radio Shack Computer Center, a Radio Shack retail store, a participating Radio
Shack franchisee or a participating Radio Shack dealer along with the sales document.
**EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO EXPRESS WARRANTIES, AND ANY IMPLIED
WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN ITS
DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES SET FORTH HEREIN.**
Some states do not allow limitations on how long an implied warranty lasts, so the above limitation(s) may not
apply to CUSTOMER.
**RADIO SHACK SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER
PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED OR ALLEGED TO
BE CAUSED DIRECTLY OR INDIRECTLY BY "SOFTWARE" LICENSED OR FURNISHED BY RADIO SHACK,
INCLUDING, BUT NOT LIMITED TO, ANY INTERRUPTION OF SERVICE, LOSS OF BUSINESS OR
ANTICIPATORY PROFITS OR INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES.**
Some states do not allow the limitation or exclusion of incidental or consequential damages, so the above
limitation(s) or exclusion(s) may not apply to CUSTOMER.

SOFTWARE LICENSE

RADIO SHACK grants to CUSTOMER a non-exclusive, paid-up license to use the Tandy Software on **one**
computer, subject to the following provisions:
A. Except as otherwise provided in this Software License, applicable copyright laws shall apply to the Software.
B. Title to the medium on which the Software is recorded is transferred to CUSTOMER, but not title to the
Software.
C. CUSTOMER shall not use, make, manufacture, or reproduce copies of Software except for use on **one**
computer and as is specifically provided in this Software License. Customer is expressly prohibited from
disassembling the Software.
D. CUSTOMER is permitted to make additional copies of the Software **only** for backup or archival purposes or if
additional copies are required in the operation of **one** computer with the Software, but only to the extent the
Software allows a backup copy to be made.
E. All copyright notices shall be retained on all copies of the Software.

The warranties granted herein give the **original** CUSTOMER specific legal rights, and the **original** CUSTOMER
may have other rights which vary from state to state.

8/84

How to Use Maze Master

Congratulations! By purchasing MAZE MASTER for your children, you have taken an important first step in preparing them for success in the computer age. MAZE MASTER is more than a game—it is also an opportunity for children to learn some of the basic principles involved in programming a computer to perform a task.

Before you start, be sure to read through the directions carefully. With your help, your child will soon be able to start and run MAZE MASTER on his or her own.

Required Equipment

- Color Computer with at least 16K RAM and Extended Color Basic
- Cassette player/recorder
- Electronic Book™
- MAZE MASTER color pages one through ten (five sheets)
- MAZE MASTER program cassette (Use side 1 for 16K RAM; side 2 for 32-64K RAM.)

Getting to Know Maze Master

FIRST:

1. Attach the Electronic Book™ to the right joystick port of the color computer, and insert pages one to ten into the Electronic Book binder.

2. Turn on the attached TRS-80 Color Video, or any attached color television.

3. Plug in the cassette recorder and set the volume at 5. (If an error occurs, you may need to make a slight adjustment to the volume.)

4. Turn on the TRS-80 Color Computer.

5. Place the MAZE MASTER cassette tape in the cassette recorder and press REWIND. When the tape is rewound, press STOP, and then PLAY.

6. Type **P** **C** **L** **E** **A** **R** **2** at the Color Computer keyboard and press **ENTER** . Then type **C** **L** **O** **A** **D** and press **ENTER** .

7. When *OK* appears on the screen, type **R** **U** **N** and press **ENTER** .

NEXT:

1. After the copyright screen appears briefly, the question— "Do you want the scoreboard displayed until you respond?"— will appear on the screen.

2. If you press **Y** (YES) on the computer keyboard, you will be able to check your child's progress after each set of problems. The scoreboard will remain on the screen until *you* press **C** (for continue) on the keyboard to continue the program.

3. If you press **N** (NO) on the keyboard, the child will be able to repeat the activity without interruption. The program will automatically resume after the scoreboard is displayed.

THEN:

1. When *Page 3 GO* is displayed, you are ready to turn the operation of the computer over to your child and the Electronic Book.

2. Have your child turn to page 3 and press **GO** . If—after a while—no one presses **GO** , the computer will show a short demonstration of MAZE MASTER. Then it will display *Page 3 GO* again. (The demonstration may be interrupted by pressing **GO** .)

Using Page 3

Page 3 is where the action starts. The challenge is to solve mazes by directing a character to an exit in the fewest possible moves. Your child can choose from three different modes of play. Page 3 is used to select one of the modes. Your child will come back to page 3 whenever he or she wants to choose a different mode. The three modes are:

- Solo:
  Work on your own to solve the maze. (4 levels of difficulty)

- Beat the Computer:
  Try to find a more direct way out of the maze than the computer does. (4 levels)

- Group play:
  Compete with up to three others *and* the computer. (4 levels)

When **GO** is pressed on page 3, the words *Press Key* are displayed on the screen.

- If children press **SOLO** , they will see *Page 5 GO* on the screen.

- If children press **BEAT THE COMPUTER** , they will see *Page 7 GO* on the screen.

- If children press **GROUP PLAY** , they will see *Page 9 GO* on the screen.

In each case, they should turn to the designated page and press **GO** on that page. If no activity is selected, the computer will show a demonstration program.

Using Page 5 (Solo):

On page 5, you will find all the keys needed to play in the Solo mode. To begin:

1. Press **GO** and the words *Player 1/Level 1* will appear.

2. Select one of four levels of difficulty by pressing **LEVEL** until the number of the level you want is displayed; then make a new maze at that level by pressing **NEW MAZE** .

3. If you'd like to see a different maze, press **NEW MAZE** again. All the mazes are selected at random.

4. Now press the arrows **↑** **↓** **→** or **←** to create a "program" of steps leading the character out of the maze. The arrows will appear on the left side of the screen

5. If you make a mistake, press **ERASE** , or press **NEW PROGRAM** to start over. (Note: **NEW PROGRAM** will only function before **RUN** is pressed for the first time.)

6. When you have completed your program, press **RUN** to see how your program works.

7. If your program stops because of an error or "bug," press **ERASE** , and then program your way out of the maze from where you stopped.

8. Press **RUN** again, and your whole corrected program will be executed. You must successfully find a way out of the maze before you can go on to another try or another mode.

9. Your score (the number of steps it took to leave the maze) will appear on the screen. When the program is restarted after the scoreboard, the same maze reappears.

10. Children can play again by trying the same maze a second time (just begin pressing arrows), by pressing **NEW MAZE** or **LEVEL** to try a new or harder maze, or by pressing **RESTART** to go back to page 3 to choose another mode.

11. Pressing **RESTART** at any time while entering a program will return the player to page 3. Once **RUN** is pressed, however, you must wait until the maze is solved to press **RESTART** .

Using Page 7 (Beat the Computer):

On page 7, you will find all the keys needed to play in the Beat the Computer mode. To begin:

1. Press **GO** , and follow the same directions as for Solo play.

2. Pressing **RESTART** at any time while entering a program will return the player to page 3. Once **RUN** is pressed, however, you must wait until the maze is solved to press **RESTART** .

3. After you have successfully found your way out of the maze, the computer will automatically respond with a program of its own for the same maze. The computer's program will be good, but not usually perfect; *it can be beaten.*

4. Your score and the computer's score will appear on the screen.

5. After the scoreboard is displayed, you will have a chance to better your score on the same maze, or you can press **NEW MAZE** and begin again.

Using Page 9 (Group Play):

On page 9, you will find all the keys needed for Group Play. To begin:

1. Press **GO** . Then Player 1 should enter a program.

2. Instead of pressing **RUN** , press **NEXT PLAYER** after each player enters his or her program. The computer will store all of the programs (up to four) that are entered before **RUN** is pressed.

3. After the last player enters a program, press **RUN** . Each player's program, and the computer's, will be executed in turn. The scoreboard will display the players' scores, the computer's score, and the best score achieved.

4. If one player's program stops because of an error, that player must press **ERASE** and correct his or her program (just as in Solo play). When a player's corrected program succeeds in finding the way out of the maze, the next player's program will be executed.

5. Players can also edit their programs in Group play, to improve their scores, by pressing **NEXT PLAYER** after the scoreboard is displayed. Each player can then change his or her program.

6. Pressing **RESTART** at any time while players are entering their programs will return them to page 3. Once **RUN** is pressed, however, you must wait until all players have solved the maze to press **RESTART** .

The Educational Value of Maze Master

MAZE MASTER exposes children to a key concept in computer literacy. One of the first things children have to learn about computers is that the computer can only do what it is told to do. Computers follow a detailed set of directions given to them by people. These directions are called programs. Without them, computers cannot *do* anything. MAZE MASTER allows your children to learn how to write short programs of instructions for the computer, and to watch the computer as it follows or ("executes") their instructions.

With MAZE MASTER the Electronic Book is used to "program" a character's path out of a maze. The maze and the character appear on the screen, and the children help the character escape from the maze by giving the computer a simple string of commands from their Electronic Book.

As in any computer program, the MAZE MASTER character does not move until the program of instructions is "run." This feature, known as "delayed execution," helps children see that planning and organized thinking are necessary in working with computers.

Another MAZE MASTER feature that corresponds to computer programming is the ability to edit or change a program. If the program a child builds fails to lead out of the maze, he or she can make revisions and run the program again. Errors in computer programs are sometimes called "bugs." The process of finding and correcting bugs ("debugging") is one of the most important tasks that computer programmers engage in.

MAZE MASTER is fun, but it is also a challenging educational tool. While children are enjoying the game, they are learning the principles and developing the skills that are basic to understanding and feeling comfortable with computers.

As your children work with MAZE MASTER and the Electronic Book, they will learn that computers:

- can do only what people tell them to do.
- need special instructions before they can do anything.
- have to have directions in a certain form.
- cannot *run* a program until told to do so.
- will stop whenever they receive a command that they cannot follow.
- will not continue a program until an error is corrected.
- cannot make decisions by themselves.
- can be programmed to compete with people.
- don't always win.

And they will also learn that they:

- can give a set of commands to a computer.
- can watch the computer carry out their commands on the screen.
- can improve their eye-hand coordination and their recognition of left and right by working with the computer.
- have to think ahead when they are writing the steps for a computer system.
- have to write the steps for a computer program in a logical sequence before the computer can follow their commands.
- can put their commands into a form the computer understands.
- can easily correct their mistakes.
- can change any or all of the steps in a program if they want to.
- can master one level of skill with computers, and move on to more difficult and challenging levels.