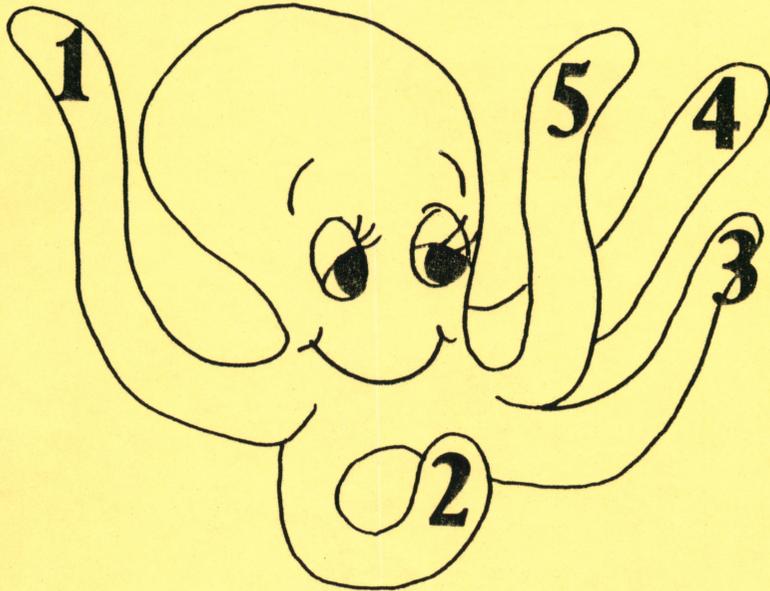


THE WORLD OF COUNTING



A computer program designed especially for the teaching of the learning disabled.

Produced by:

***EDUCOMP
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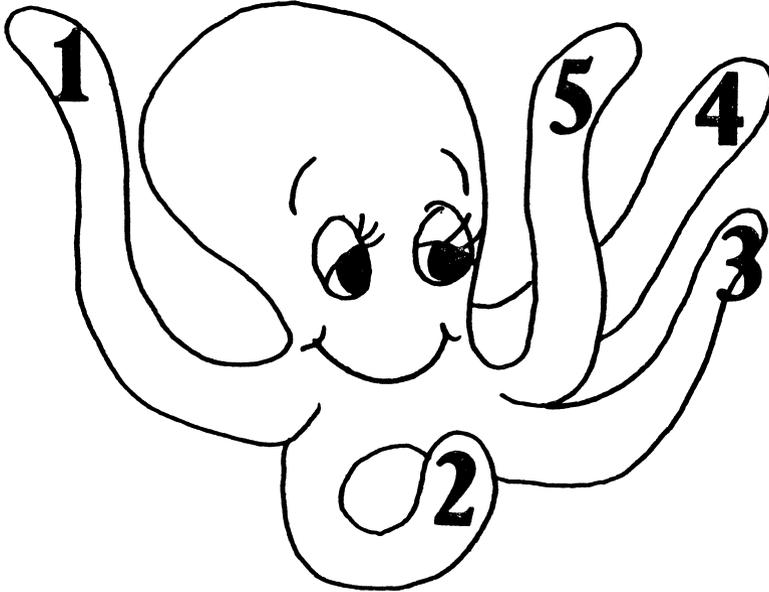
Apple II+

Bountiful, Utah

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DON CROWTHER
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191 North 650 East
Bountiful, Utah 84010
U.S.A.

THE WORLD OF COUNTING



Congratulations on your entry into the newest innovation in teaching--the age of computer technology. Your purchase of The World of Counting educational computer program demonstrates your interest in this amazing new concept. We welcome you to this new world and hope to help you make your computer the teaching tool of tomorrow -- today!

Introduction

The World of Counting is an educational microcomputer program designed to assist you in teaching basic

counting principles to the learning-disabled. It utilizes colorful high-resolution graphics, music, and sound effects to both demonstrate and review the concepts taught.

The World of Counting is different than many of the other educational programs currently on the market. It is much more than a drill-and-practice program. This system uses examples, sequential counting demonstrations, quiz questions, then a final test to assist in teaching the student and then to review his progress.

Many other special features are included in this program package. The operator has the option to jump anywhere in the program to provide special review or practice on a number or set of numbers. The program has the capability of running completely on its own with no adult supervision over the student using the program. A final test is provided to test the student's comprehension of all of the information presented in the lesson, as well as individual number reviews at the end of each number presentation. Music is used throughout the program to provide transition between numbers as well as a break from the material presentation. Student scores are automatically recorded as well as the time they spent in answering each question; this information is accessible to the teacher at the end of the lesson for academic records.

Educomp Enterprises is proud to present this program to the educational world. We have worked many hours in its conceptual development and programming stages. We are committed to providing the best service and software support possible.

Teaching Methodology

The World of Counting is based on the theory that learning-disabled students require far greater amounts of repetition to learn new concepts than the average student. The computer is an ideal source for that

constant, yet slightly varied repetition. Computers have the capacity to repeat and reexplain concepts hundreds of times without becoming irritated or impatient. This capacity makes them an invaluable assistant in the special education classroom.

The World of Counting utilizes this fact to its best advantage. Each number is presented with several different example to demonstrate the concept. Then sound and the numeral itself are brought into play to reemphasize the number being taught. For example, in teaching the number two the student may first see two birds drawn on the screen followed by two beeps, the numeral two being drawn in one corner, then two more beeps to reemphasize the number. This sequence is presented throughout the lesson to teach each new number.

After all of the examples are presented the student is quizzed to determine his comprehension of that number. He will see a certain number of shapes drawn then will be asked how many there are. If he responds correctly, he is greeted by a rewarding sound and the screen is colorfully cleared. An incorrect response brings a groan from the computer, followed by a reinforcement of the number with beeps and the numeral, and a second quiz to test his knowledge. Another feature of this program is contained in the transition stage from one number to another. The student receives two stimuli at this point. First, he sees each one of the numbers to be covered in the lesson displayed on the screen. The next number to be taught is emphasized as a bright white number, while the other numbers are a darker color. This helps to teach him the shape of the number, where it falls in numerical sequence, and the manner in which the number is drawn. Second, he hears a counting song such as "Ten Little Indians" or "Three Blind Mice" that can help to reinforce the usage and purpose of the numbers.

Overall, The World of Counting is packed with different teaching methods to aid you in teaching your students faster and more effectively.

Directions

The World of Counting is one of the easiest programs to operate that you will ever encounter. It requires no previous computer experience to operate. It's as easy as turning the machine on, then following a few simple instructions--and you're teaching!

The first step in running this program is inserting the diskette into the machine. This is done by carefully grasping the diskette by the corner with the label on it and inserting it label side up into the disk drive. Always remember when working with this or any other computer disk to handle it with great care. Never bend, crimp, or otherwise damage the diskette. Never touch the disk surface itself through the hole in the bottom of the disk with your fingers or any other object. There's no quicker way to destroy a valuable investment!

After inserting the diskette into the disk drive, shut the door of the drive, then make sure that your video monitor is on. Then turn on the machine with the switch located on the back left hand corner of the machine. A red light should come on on the face of the disk drive and you will hear some whirring and possibly some clanking sounds coming from the drive itself. Don't worry; it's not eating your disk! After a few seconds you will see a copyright notice come up on the screen. When that happens, you will know that your machine is operating properly.

The first thing that you will see after the introductions and copyright notices will be a question asking if you need directions for this program. Answer this and all other questions in this program by simply typing a y or an n, then pressing the return key. Since this

is the first time that you have gone through this program, press y (return) to see the directions.

After you see several pages of general information and instructions, you will be told that you have the option to skip to any point in the program. It will then ask if you want to do that at this time. Usually you will answer this question with an n (for no), at which point you will go directly into the program. But since we are just learning right now, press a y and let's see what else we can do.

Your screen should now be displaying a message that you may skip to any of the numbers from one to five or directly into the test material. This feature makes it possible for you to skip the first few numbers and jump directly into one of the later numbers such as four or five. This is done by entering the number at this point. (Example: type four or 4, then press the return key if you want to skip directly to the section of the program covering the number four.) You also have the option to skip directly into the test portion of the disk to give a student a pre-test or review your student's progress on some past material. This is done by typing the word test then pressing the return key. (Note: if you ever have a desire to return to the beginning of this program from any location in the material, simply press the CTRL (control) key located on the far left hand side of the key board and while holding it down press the reset key in the top right hand corner. This should return you immediately to the beginning of the program.) For right now let's go directly into the teaching portion of the disk by typing the number one.

The Program Itself

The official teaching part of this program starts with a student training period. This process is to help you to train the student to answer the questions

asked by the computer in the quiz and test sections in this program. You are to train the student that when he sees the words HOW MANY? and hears a certain set of sounds, that he is to enter the numbers that he sees on the screen into the computer. (NOTE: In programming The World of Counting we were faced with the question of how to best ask the student to answer a question when he obviously can't read yet the PILOT programs can't speak. It was finally decided that since the student would have to learn to respond to certain visual and audio cues, that the words themselves would be just as good of a cue as any. In fact, using the words as a cue can possibly help the student to learn those words faster at a future date.) You will be given two examples to train the student. Then set him free and let him learn!

At the very end of this program there is a screen that gives you the student's score on the quiz questions that he was asked. This screen comes up at the end of the program if you press return after the student has finished the lesson. Four different scores will be displayed. The first two are the student's score and time spent answering the questions in the individual number quiz portion of the lesson. The second two are the student's score and time spent on the final test portion. These figures are provided for your records and student progress reports.

A Note on Apple Pilot

This program is written using the Apple Pilot program development language. (Apple Pilot and Apple are both trademarks of Apple Computer Inc.) Apple Pilot is a programming language developed especially for educational computer programming. This program is intended to be an example of some of the many things that can be done with computers in educating students. It is not protected, (except by copyright) and can

easily be listed by anyone who has access to the Apple Pilot Master programming disk. Please feel free to list the program to see an example of how programming can be done in this language, though we rely upon your honor not to copy this disk for use by yourself or anyone else, including copies that will be used for educational purposes only!

Because this program was written in the Pilot language there are a few inherent disadvantages in this program based upon that language. Specifically, some of the pictures are not created with the same speed that you would expect from an arcade-type machine. We feel that this disadvantage is greatly outweighed by the example of a usage of the Pilot language and the option to personalize this program that that language provides.

Technical Requirements

Technical requirements for this program include:

- 1 Apple II+ or IIe with at least 48k of memory.
- 1 disk drive.

A color monitor (preferred, though not required.)

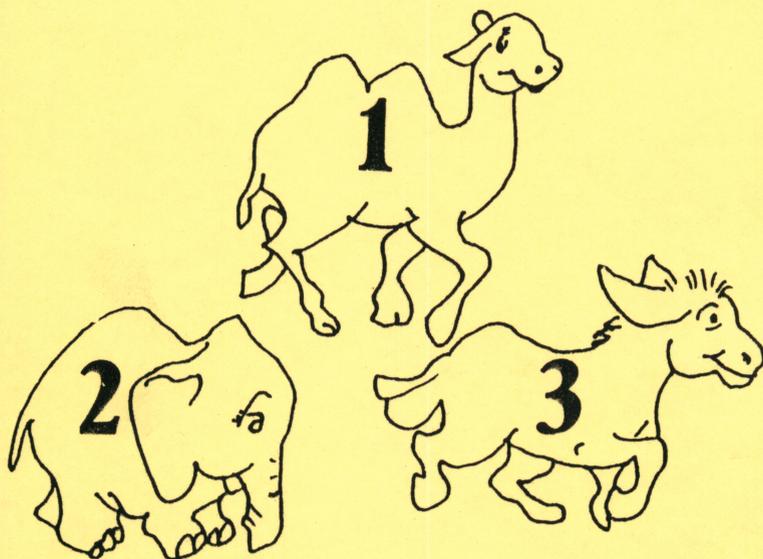
No other accessories are needed.

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ADVANTAGES OF COMPUTER
TECHNOLOGY IN YOUR HOME AND
CLASSROOM!



Produced by:
EDUCOMP ENTERPRISES
191 North 650 East
Bountiful, Utah 84010

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products!