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Review

Reviewed Work(s): Computer FUNdamentals by Barbara Kurshan and Nancy Healy

Review by: Jeff Bloom

Source: *The Arithmetic Teacher*, September 1985, Vol. 33, No. 1 (September 1985), p. 52

Published by: National Council of Teachers of Mathematics

Stable URL: https://www.jstor.org/stable/41192677

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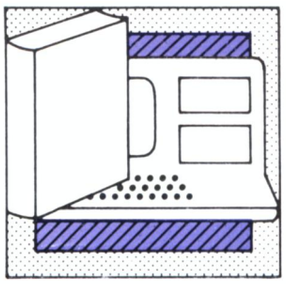

Reviewing and Viewing

- Computer materials
- New books for pupils
- New books for teachers
- Etcetera

Computer Materials

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Computer EdGame Challenge: Dr. Oz's Cavern, *John Cunningham III;* **Inchworm,** *Helen Adams and John Russ; and* **Spell-Off,** *Ennio Murroni. Apple II, III, 48K RAM. 1984, $3.50. Verbatim Corp., Suite 228, 4966 El Camino Real, Los Altos, CA 94022.*

This two-sided diskette contains the winners of the First International Computer EdGame Challenge sponsored by the Verbatim Corporation. The games were selected for duplication by the Professional Software Programmers Association. The diskette has three programs—"Dr. Oz's Cavern," "Inchworm," and "Spell-Off." "Inchworm" and "Spell-Off" deal with language arts and geography. "Inchworm" contains MS Spell, which focuses on word recognition, spelling, typing skills; Vocabuilder for foreign-language drill; and questions and answers about states and fairy tales.

"Dr. Oz's Cavern," which occupies an entire side of the diskette, is a mathematical game. The student moves through four different rooms in an underground cavern by answering arithmetic problems. The game has nine skill levels and offers addition, subtraction, and multiplication problems and a combination of the three. The student can select the level of difficulty and the type of problem at the beginning of the game.

In the first room the player is on a conveyor belt and takes a step forward for each correct answer until he or she reaches the exit and waves or falls into the pit. The second room has an elevator operated by a pulley. Each correct answer causes the pulley to move up. A pair of scissors moves toward the rope when the player is in this room. The third room has walls that close in. Each correct answer moves the person away from the danger. The last room in the cavern has a bomb that the player must get to and kick into a pit before it explodes.

Depending on the difficulty level chosen, the problems contain one or two digits in each operation. The more difficult levels also require the player to give more correct answers to get out of each room.

If students successfully complete the game, the program tells them the number of problems tried, the number and percentage answered correctly and incorrectly, and the units of time taken for each problem. It also shows the correct answers to the problems that were missed. If more than one game is played, the number of problems accumulates. If the student is not successful and meets his or her end in one of the rooms, the program plays an appropriate tune and then asks if the student would like to be "reincarnated."

The main problem that some students may encounter is the order in which the answer must be keyed—the digits are to be put in from right to left. If they do the problem in their heads, it is tempting to key in 21 instead of the 1 and then the 2 as the program expects. Some students may find the loading time between rooms frustrating. The program accesses the disk drive for each different room.

When the game is over, the student gets a final score and then the high scores for the game are shown. The program keeps track of the ten top scores and lists them in order.

The documentation consists of a two-sided sheet that is attached to the back of the diskette folder; it gives information on the two language arts games; "Dr. Oz's Cavern" needs little explanation.

This diskette is fun and definitely affordable.—*Beverly Rich, Illinois State University, Normal, IL 61761.*

Computer FUNdamentals. *Barbara Kurshan and Nancy Healy. 1984, 208 pp., $16.95. ISBN 0-8359-0939-5. Reston Publishing Co., 11480 Sunset Hills Rd., Reston, VA 22090.*

The authors suggest that *Computer FUNdamentals* is for children aged nine to fourteen and their parents to use at home. It is organized into four sections: history and architecture of computers, logical thinking, programming, and applications. At the beginning of each section is a list of suggested software that can be used with the activities. Each section contains six or seven activities that present and develop the concepts and skills related to the theme of the section. Each activity includes several parts: (1) "Why?"—a short introduction with the objectives; (2) "What?"—a list of materials; (3) "How?"—a list of several alternative subactivity titles, descriptions of which are found on subsequent pages; (4) "When?"—often humorous suggestions of when to plan and do the activities (after a holiday or birthday when you will have some extra cardboard boxes); and (5) "What else?"—a list of follow-up ideas and suggestions. An answer key and a list of resources are included.

This gem is one that every teacher would like to have on the top of the "active" stack of materials. Many of the activities do not require a computer, yet they address some essentials of computing and computer literacy. Some of the topics covered are numbering systems and coding, construction and use of an abacus, "egg carton" computers, flowcharting, logic (logic cards), the binary system, the Logo turtle, data processing and other programming routines, and the use and organization of applications programs (data bases, word processing, etc.).

Although targeted at families, this book can serve as a valuable source of enrichment activities for teachers in upper elementary and middle schools. The activities range from fairly simple to very challenging, and all appear to be well designed, motivating, and easy to set up. Even if only one or two activities were completed in a term, that in itself would be worth the price of this book.—*Jeff Bloom, University of Houston, Houston, TX 77004.*

Getting Ready to Read and Add. *Marjorie Cole for Softcole. Apple II+, 48K or IIe, DOS 3.3. Also available for Commodore 64, IBM PC, PCjr, and Atari. Diskette, backup, and 21-page teacher's guide. 1984, $55 (network disk $165). Sunburst Communications, 39 Washington Ave., Pleasantville, NY 10570.*

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