

IBM PCjr
A HANDS-ON REVIEW

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FAMILY COMPUTING™

Computers and Careers

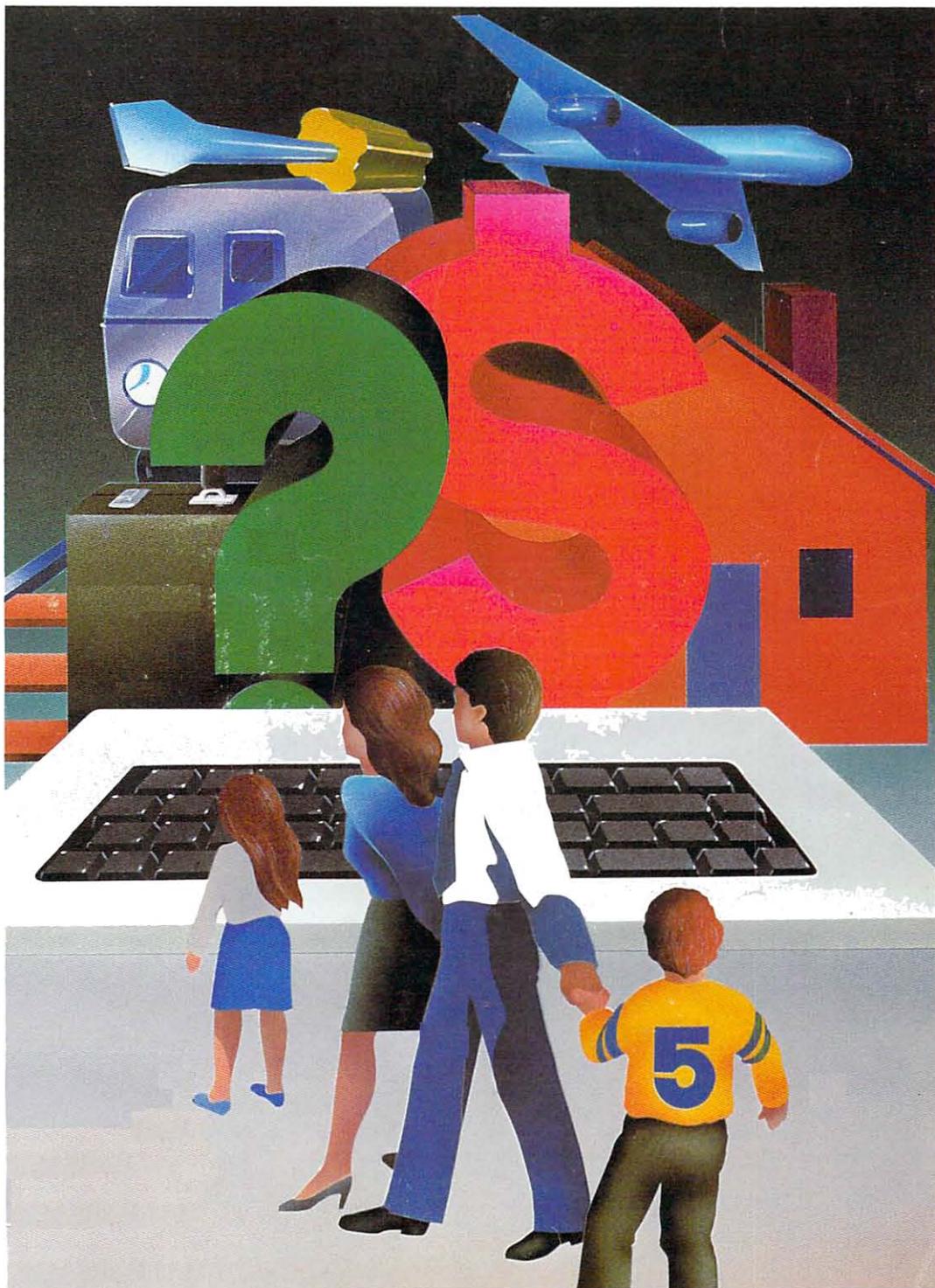
**Computer
Camps**

**How to Make
Your Taxes
Less Taxing
with Software**

**Buyers' Guide
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**Herbie Hancock
Talks About
Making Music
with Computers**

**Original New
Programs
for Adam,
Apple, Atari,
Commodore 64
& VIC-20, IBM,
TI, Timex, and
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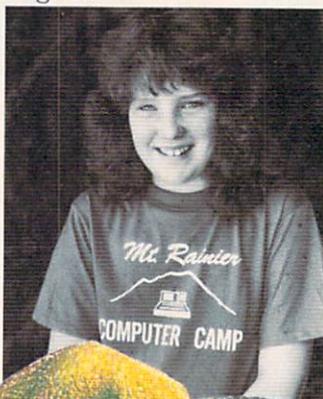
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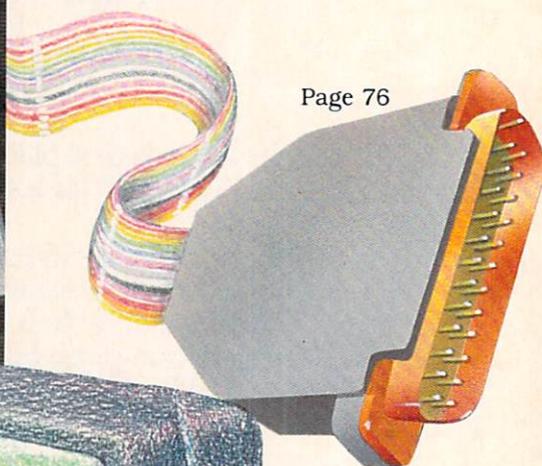
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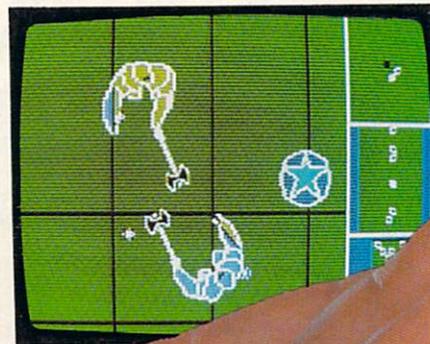
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GAMES

BRINGING HOME THE BLIPS AND BLEEPS Arcade Translations for the Personal Computer

BY JAMES DELSON

Visit the neighborhood video arcade sometime and drop a few quarters in pursuit of beeps, buzzes, and blips. If you've wondered or forgotten about the origins of that computer sitting in your living room, you'll find such a visit worthwhile. For besides being a reminder of the computer game's roots, the video arcade also offers a bit of a glimpse into its future. Today's popular arcade games are sure to be picked up and translated for use in the home tomorrow.

The first home game systems from Atari and Intellivision were spawned by the incredible success of the modern arcade experience. To game-making companies, crowds flocking to consoles stationed in pizza parlors and arcades across the country meant hordes of potential home arcade-game players. Only thing was, home systems were limited in their ability to accurately re-create the more intricate arcade games. Something better was called for.

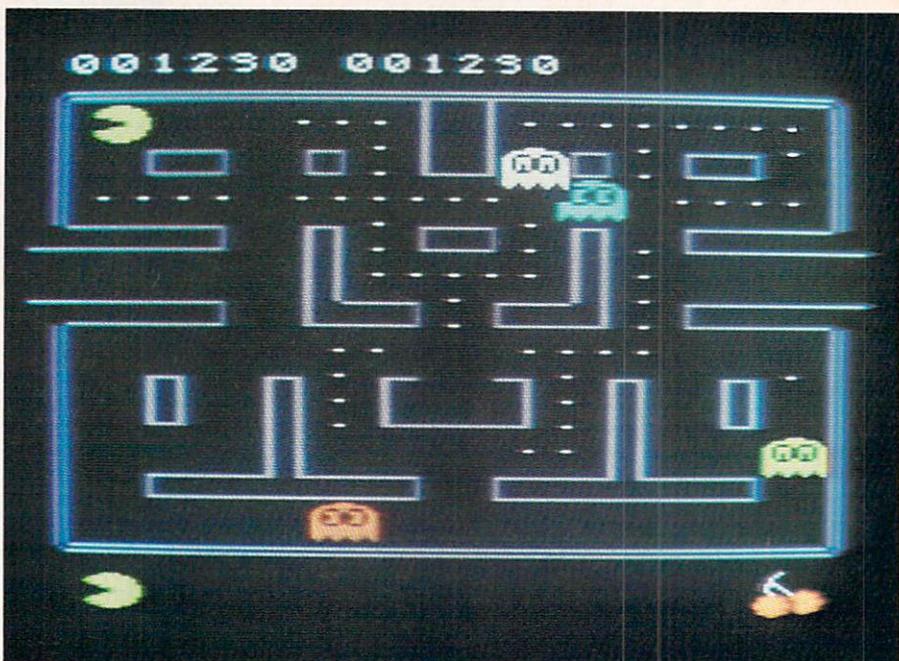
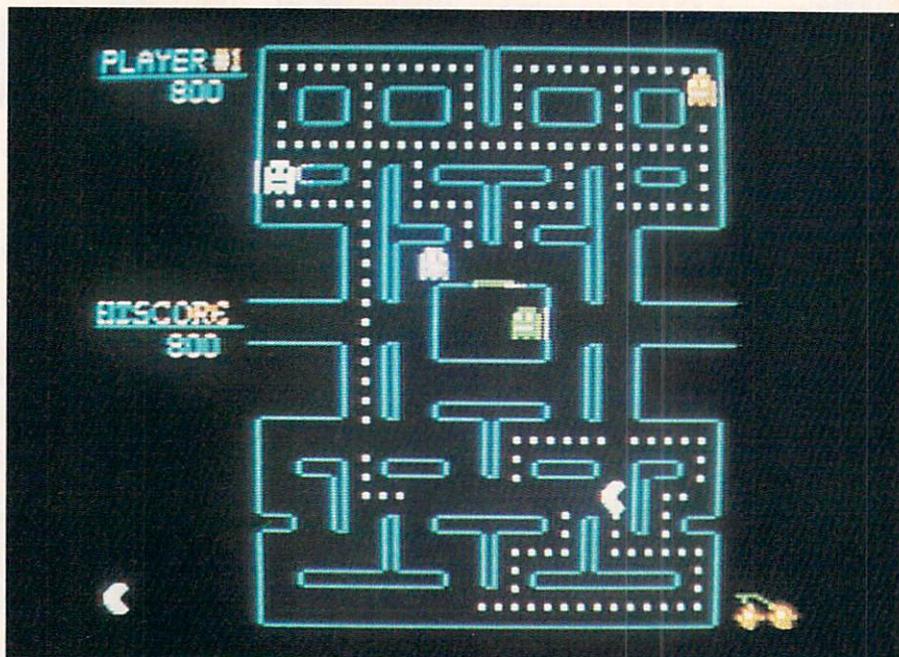
Enter the home computer, a breakthrough that finally provided owners the opportunity to sample their arcade favorites.

PAC-MAN IN THE REC ROOM

The field has grown enormously in the past two years. Of special note is Atari's decision last fall to go ahead and manufacture licensed arcade titles for most of the popular home computers, not just their own systems. Understandably, many families will breathe a collective sigh of relief at the prospect of *Pac-Man* in the rec room. The latest addition to the arcade library could pay for itself within months, in terms of quarters saved.

But just because a game is familiar and it has a thrilling video arcade ancestor doesn't mean it will automatically be a hit. What you saw at the arcade may have been fast-paced and hard-hitting, but if its personal computer translation doesn't live up to your expectations,

JAMES DELSON is FAMILY COMPUTING's games critic. He welcomes the opportunity to discuss the state of the art with anyone who has strong opinions.



Two remakes of the celebrated arcade hit, *Pac-Man*, with the Apple translation on top and the VIC-20 version underneath.

your new acquisition will wind up in the closet.

I recently play-tested a bunch of home computer translations of arcade games. On the whole, they faithfully duplicated their forebears: They had the look and feel, the timing and graphics, of the originals.

I'm talking about the actual licensed versions of the real thing, not the thinly disguised clones that pass through my home-testing grounds month to month. Included among the games I played were IBM, Apple, Atari, and Commodore VIC-20 versions of *Pac-Man*; Atari, Apple, and

GAMES

VIC-20 versions of *Centipede*; Commodore 64 and VIC-20 versions of *Q*bert*; Commodore 64 translations of *Robotron* and *Frogger*; VIC-20 versions of *Tutankham* and *Defender*; an Atari version of *Donkey Kong*; and Coleco ADAM translations of *Subroc* and *Victory*.

This is only a small sampling of the home computer games born amid the bongs and beeps of the arcade parlor. But it is indicative of the advantages and faults of the genre. It may give you an idea of the strengths and weaknesses of various machines and their arcade-game playing capabilities.

FORGET YOU'RE AT HOME

By far the strongest contender in the home computer market as far as arcade playability is concerned is the Atari. With *Pac-Man*, for instance, it's only when you come to the Atari version that you reach a game so similar to its original that you forget you're playing at home. The graphics and sounds (poor in both VIC-20 and IBM versions) and the play action are first-rate, as are most of the Atari adaptations of arcade games I've seen.

In contrast, Apple's *Pac-Man* is weak, with sluggish joystick response hampering play in what should be a fast-moving game. But its translation of *Centipede*, while not as fine as Atari's, is a solid little program that fans of the long-lived shoot-'em-up will enjoy. The VIC-20 *Centipede* was also a good translation, a close approximation of the real thing, though somewhat toned down due to its limited memory. The best of the VIC-20 adaptations, *Defender*, was both exciting and absorbing, a true rendition of the original's look and feel within the confines of the machine's capability.

CONTROL PROBLEMS

Some of the fault must lie with the limited playing capacity of the VIC-20, but the greatest disappointments I found were in the adaptations of *Tutankham* and *Pac-Man* for this Commodore machine. The scrolling effects on *Tutankham*, a sort of *Raiders of the Lost Ark* spin-off in which you must navigate through several levels of an ancient tomb in search of treasure, are weak. Jerky movements from its joystick operation are a definite drawback in a game that relies so heavily on character control to stay alive.

Much the same control problem

ARCADE TRANSLATORS:

AtariSoft, P.O. Box 3427, Sunnyvale, CA 94088-3427; (800) 538-8543.

Pac-Man, *Defender*, *Donkey Kong*, *Robotron*, and *Centipede* for Apple II, all Ataris, Commodore 64 and VIC-20, IBM PC, TI-99/4A. [Atari versions manufactured by Atari Inc.]

Coleco, 999 Quaker Lane S., West Hartford, CT 06110; (203) 725-6000. *Subroc* and *Victory* for the ADAM.

Parker Brothers, 50 Dunham Rd., Beverly, MA 01915; (617) 927-7600. *Frogger* available for Atari 400/800/1200XL; *Q*bert* available for Atari 400/800/1200XL, Commodore 64 and VIC-20, and TI-99/4A; *Tutankham* available for Atari 400/800, and Commodore 64 and VIC-20.

exists in the VIC-20 *Pac-Man*, but it's compounded by the game's having been decreased in size to fit the VIC format. As a result, you are left with a difficult-to-handle central character, working his way through a screen that isn't really the *Pac-Man* play field at all. It's a pity, but this is worse than many uncredited *Pac-Man* clones I've played. IBM's *Pac-Man* board is similar in size to the VIC-20's. This is a drawback, but the play action is considerably better.

THE ANGLE ON Q*BERT

I played Commodore 64 and Texas Instruments versions of *Q*bert*, the hopping game that Parker Brothers is marketing for a number of different systems, and found both excellent in approximating the arcade game's lively colors and play action. (You have to move a hopping creature about a three-dimensional pyramid without letting it jump off the edge.)

Unfortunately, there's a drawback to both versions: You have to turn the joystick controller on a 45-degree angle to hop up, down, left, or right across the pyramid. This results in unending frustration. Your inclination to turn the joystick back the way it "should be" screws up your play and sends *Q*bert* over the edge time after time. The game requires extra concentration, which is bothersome when all you want is a good time, but for many, *Q*bert* is worth the additional effort.

Donkey Kong on the Atari, *Frogger* and *Robotron* on the Commodore 64, and ADAM's *Subroc* and *Victory*

are all first-rate adaptations of the arcade games from which they were drawn. They all provided hassle-free play for hours. (In fact, they were so much fun that I was loath to get back to the lesser translations.) This was my first encounter with ADAM, and I found its Intellivision-like controllers easy to use. [Next month's FC will feature a short review of ADAM's action game *Rocky*.]

Home translations of classic arcade games will be with us for the long haul. They're fun, they're addictive (when properly translated), and they can be played as soon as you open the package. All I can say is you should be sure to test them before you shell out the money. You know the limitations of your own machine. It would be a shame to waste the equivalent of several rolls of quarters that could have been better spent on the real thing. **FC**

A FEW COMMENTS AND NOTES:

In my column in January's FAMILY COMPUTING, Microsoft was erroneously credited for the creation of an outstanding IBM PC game called *Flight Simulator*. Bruce Artwick and his company, SubLogic, created it and own the rights to the program. It was recently translated into an Apple version, an outstanding program, worthy of the kudos I gave its IBM counterpart. Apologies to Bruce and his SubLogic associates for the misunderstanding. —J.D.

A review of Electronic Arts' *The Last Gladiator* appears in this month's Software Guide (see p. 122). It's an enjoyable, if difficult, game in which you take on a series of bizarre monsters, including giant snakes, vampire bats, robots, octopuses, and spiders. You also come up against a humanoid objectionably named "Mordo the Spaz," a character that flails its arms about in mad pursuit of its prey. Spastics are afflicted with a nervous disorder that causes involuntary muscle contractions. It has taken years for the handicapped to reach some level of acceptance in our society. What a shame that a company like Electronic Arts, which ordinarily produces games of such high quality, would demonstrate that kind of insensitivity. I hope that at the first available opportunity they will issue a public apology and change the character's name. It's silly, in poor taste, and never should have reached the market in the first place. —J.D.

IF YOU'RE LIKE MOST BUY A SINGLE



YOU'LL BUY LOTS OF SPINNAKER GAMES.

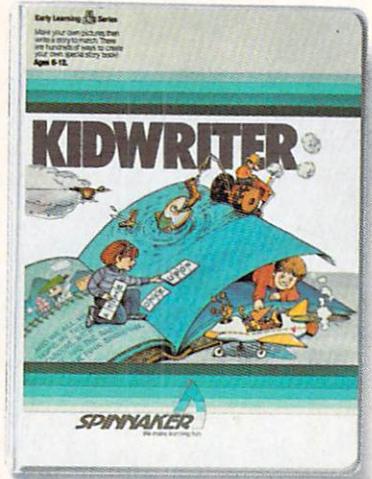
And not just because they're educational, but also because they happen to be a lot of fun to play.

In fact, they're so much fun, parents have been known to sneak in a few hours of play when the kids are asleep.

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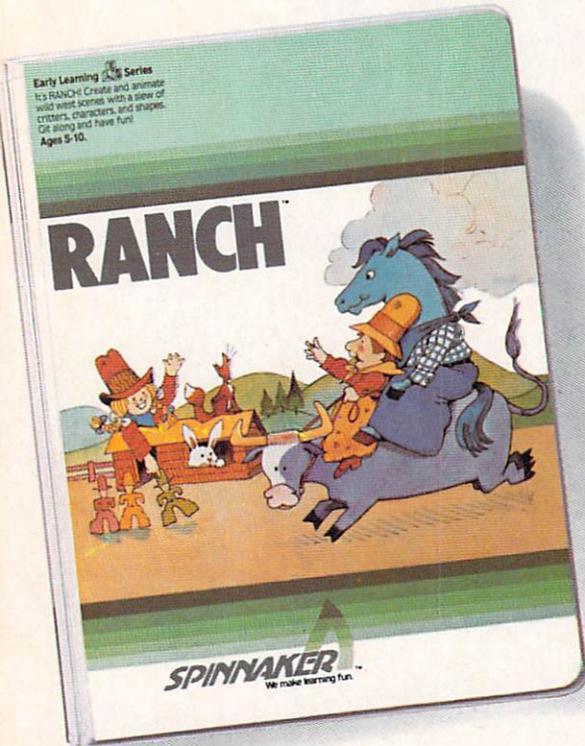
So if you're looking for a line of learning games that are as much fun to play as they are to buy, consider Spinnaker Games. They're compatible with **Apple, Atari, IBM PC, PCjr, Commodore 64, Coleco Adam** and parents who don't mind their kids having fun while they learn.



It's new! KIDWRITER™ lets kids make their own storybook. Ages 6 to 10.

KIDWRITER gives children a unique new format for creating their own stories. With KIDWRITER, kids make colorful scenes, then add their own story lines. It's as versatile and exciting as your child's imagination!

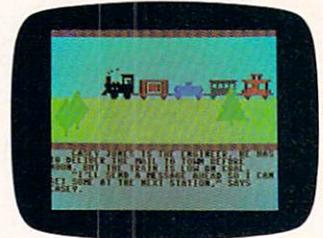
Best of all, while it encourages children to create word and picture stories, it also introduces them to the fundamentals of word processing. KIDWRITER will bring out the storyteller in your children—and in you!



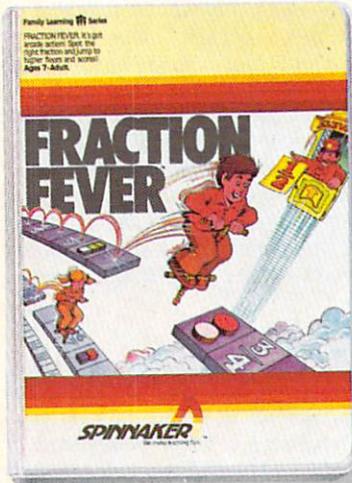
It's new! RANCH™ lets kids create wild west scenes. Ages 5 to 10.

RANCH lets your kids create and animate their very own ranch. They'll start with a blank screen, and populate it from a range of people, objects, and critters.

RANCH encourages children to experiment creatively with composition and design. Plus it teaches them to access information using a simple command menu. And they're sure to enjoy the activities workbook that outlines all sorts of fun western projects!



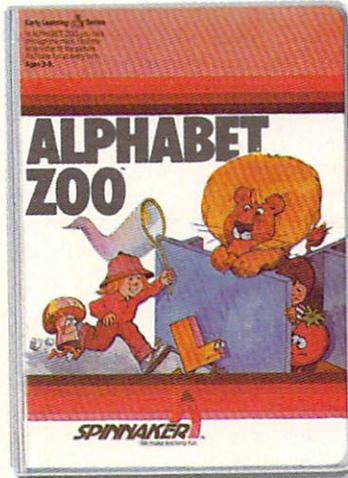
PARENTS, YOU WON'T SPINNAKER GAME.



FRACTION FEVER™ brings fractions into play. Ages 7 to Adult.

FRACTION FEVER is a fast-paced arcade game that challenges a child's understanding of fractions. As kids race across the screen in search of the assigned fraction, they're actually learning what a fraction is and about relationships between fractions.

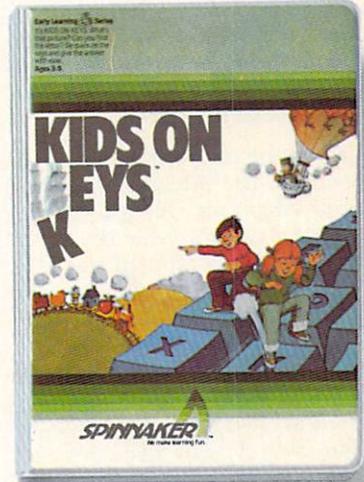
All in all, FRACTION FEVER encourages kids to learn as much as they can about fractions—just for the fun of it!



A trip through ALPHABET ZOO™ Ages 3 to 8.

It's a race. It's a chase. It's Alphabet Zoo, a game that sends your kids zipping through the maze, after letters that fit the picture on the screen.

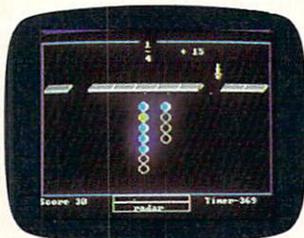
Your kids will have fun learning the relationship of letters and sounds, and sharpening their spelling skills. They'll be laughing at every turn.



KIDS ON KEYS™ helps kids catch on to letters, numbers—and computers. Ages 3-9.

KIDS ON KEYS offers children three terrific games that teach them the location of the letters and numbers while they have fun with the computer.

The games are fast and fun, with exciting sound effects and colorful graphics. It's a great way for kids to enjoy learning to identify numbers, letters, and words and associating them with images on the screen. And KIDS ON KEYS certainly do have fun!

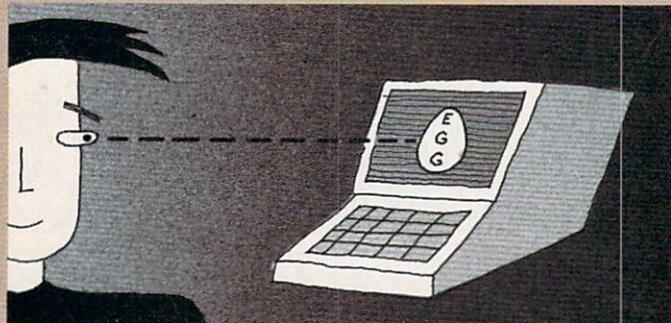


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We make learning fun.

Disks for: Apple, Atari, IBM PC and PCjr, Commodore 64.
Cartridges for: Atari, IBM PCjr, Commodore 64, Coleco Adam.

EGG HUNT

BY JOEY LATIMER



Thanks to your computer, your child can be assured of the fun of an Easter *Egg Hunt*, regardless of the weather. All it takes is a little help from a parent:

Separately color seven hard-boiled eggs each of these colors: Blue, green, yellow, red, orange, white, and purple. Next, hide the eggs in the locations indicated in lines 1000–1060. (For example, the yellow egg should be hidden under the child's pillow.) Place a surprise, such as a chocolate egg, in the last location indicated in line 1070 (your bedroom). Then set your computer to all uppercase letters.

The program is now ready for your child to play. It will start with di-

rections to look under the kitchen sink, where a blue egg should be found. Blue is the code word, which, when typed into the computer, will reveal the next location. (For younger children, you might wish to write the color with magic marker on the appropriately colored egg.)

It's easy to alter the program for various occasions (birthdays, rainy-day activities, etc.) by substituting different locations and code words in lines 1000–1070. When you make these changes, be sure to include the exact line number, the word DATA, the comma between location and code word, and the exact spacing, as in the original program.

Base Version (TRS-80 Model III)/Egg Hunt

```
220 CLS
230 PRINT "WELCOME TO THE EASTER"
240 PRINT "      EGG HUNT!"
250 PRINT
260 FOR R = 1 TO 8
270 READ PLACES$,CODE$
280 IF CODE$ = "END" THEN 570
290 PRINT "LOOK ... "
300 PRINT PLACES$
310 PRINT "FOR A COLORED"
320 PRINT "EASTER EGG."
330 PRINT
340 PRINT "TYPE THE COLOR OF"
350 PRINT "THE EGG, THEN"
360 PRINT "PRESS <ENTER>."
370 PRINT
380 PRINT "WHAT IS THE COLOR?";
390 INPUT ANSWERS$
400 IF ANSWERS$ = CODE$ THEN 460
410 PRINT
420 PRINT "SORRY, WRONG COLOR!"
430 PRINT "PLEASE TRY AGAIN."
440 GOTO 380
450 CLS
460 FOR T = 1 TO 59
470 PRINT "COLOR ACCEPTED ";
480 NEXT T
490 PRINT
500 PRINT
510 PRINT "PRESS <ENTER>"
```

```
520 PRINT "TO CONTINUE."
530 R$ = INKEY$
540 IF R$ <> CHR$(13) THEN 530
550 CLS
560 NEXT R
570 PRINT "GREAT! YOU'VE"
580 PRINT "DONE IT!"
590 PRINT
600 PRINT "LOOK ... "
610 PRINT PLACES$
620 PRINT "TO FIND A SURPRISE!"
630 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

MODIFICATIONS FOR OTHER COMPUTERS

ADAM/Egg Hunt

Use the base version, with the following alterations: Change CLS to HOME in lines 220, 450, and 550. Change <ENTER> to <RETURN> in lines 360 and 510. Change 59 to 42 in line 460. Finally, change line 530 to read as follows:

```
530 GET R$
```

Apple/Egg Hunt

Use the ADAM version, except change 59 to 57 in line 460.

Atari/Egg Hunt

Use the base version, with the following alterations: Change CLS to PRINT CHR\$(125) in lines 220, 450, and 550. Change <ENTER> to <RETURN> in lines 360 and 510. Change 59 to 16 in line 460. Add the following lines:

```
10 DIM PLACES$(30),CODE$(10),ANSWERS$(10)
210 OPEN #1,4,0,"K:"
```

Finally, change lines 530 and 540 to read as follows:

```
530 GET #1,A
540 IF A<>155 THEN 530
```

Commodore 64/Egg Hunt

Use the base version, with the following alterations: Change CLS to PRINT CHR\$(147) in lines 220, 450, and 550. Change <ENTER> to <RETURN> in lines 360 and 510. Change 59 to 60 in line 460. Finally, change line 530 to read as follows:

```
530 GET R$
```

IBM PC/Egg Hunt

Use the base version, except change 59 to 120 in line 460 and add line 200:

```
200 KEY OFF
```

IBM PCjr/Egg Hunt

Use the base version, except change 59 to 46 in line 460 and add line 200:

```
200 KEY OFF
```

TI-99/4A/Egg Hunt

Use the base version, with the following alterations: Change CLS to CALL CLEAR in lines 200, 450, and 550. Change 59 to 28 in line 460. Finally, change lines 470, 530, and 540 to read as follows:

```
470 PRINT "COLOR OK ";
530 CALL KEY(0,KEY,STATUS)
540 IF KEY<>13 THEN 530
```

Timex Sinclair 1000 & 1500/Egg Hunt

Use the base version, with the following alterations: Omit lines 270 and 1000-1070. Change 64 to 15 in line 460.

Add the following lines:

```
10 DIM P$(8,30)
20 DIM C$(8,10)
30 SLOW
40 LET P$(1) = "UNDER THE KITCHEN SINK"
50 LET C$(1) = "BLUE"
60 LET P$(2) = "IN THE REFRIGERATOR"
70 LET C$(2) = "GREEN"
80 LET P$(3) = "UNDER YOUR PILLOW"
90 LET C$(3) = "YELLOW"
100 LET P$(4) = "IN YOUR SOCKS DRAWER"
110 LET C$(4) = "RED"
120 LET P$(5) = "IN THE BATHROOM"
130 LET C$(5) = "ORANGE"
140 LET P$(6) = "IN YOUR CLOSET"
150 LET C$(6) = "WHITE"
160 LET P$(7) = "IN THE MAILBOX"
170 LET C$(7) = "PURPLE"
180 LET P$(8) = "IN YOUR PARENTS ROOM"
190 LET C$(8) = "END"
```

Finally, change lines 280, 300, 390, 400, 410, 530, 540, 570, 610, and 630 to read as follows:

```
280 IF C$(R,TO 3) = "END" THEN GOTO 570
300 PRINT P$(R)
390 INPUT A$
400 IF A$ = C$(R,TO LEN A$) THEN GOTO 460
410 CLS
530 LET R$ = INKEY$
540 IF R$ <> CHR$(118) THEN GOTO 530
570 PRINT "GREAT. YOU HAVE"
610 PRINT P$(R)
630 STOP
```

Timex Sinclair 2068/Egg Hunt

Use the base version, with the following alterations: Replace PLACES\$ by P\$, CODES\$ by C\$, and ANSWERS\$ by A\$ wherever they appear. Change 59 to 32 in line 460.

In lines 1000-1070, surround each data item by quotation marks. So, for example, you would change line 1000 to read

```
1000 DATA "UNDER THE KITCHEN SINK","BLUE"
```

Finally, change lines 280, 400, 530, 540, and 630 to read as follows:

```
280 IF C$(TO 3) = "END" THEN GOTO 570
400 IF A$ = C$ THEN GOTO 460
530 LET R$ = INKEY$
540 IF R$ <> CHR$(13) THEN GOTO 530
630 STOP
```

TRS-80 Color Computer/Egg Hunt

Use the base version, except change 59 to 32 in line 460.

TRS-80 Model 4/Egg Hunt

Use the base version, except change 59 to 120 in line 460.

VIC-20/Egg Hunt

Use the Commodore 64 version, except omit the semicolon at the end of line 380 and change 59 to 16, not 60, in line 460.

TOP SECRET

BY JOEY LATIMER

This program is so *Top Secret*, we can't say too much about it. We'd like to, understand, but it just isn't safe!

But, let us offer you a few bits of advice. Never, we repeat, *never*, reveal your code number to anyone! Don't run the program if anybody else is in the room. Since it's always better to be safe than sorry, shut the curtains before you begin! And shut the door, too, if you have a loud laugh!



ADAM/Top Secret

```
10 TEXT
30 HOME
40 PRINT "This is a top secret program!"
60 PRINT
70 PRINT "Press <RETURN> after"
80 PRINT "each reply."
90 PRINT
100 PRINT "What is your code name?";
110 INPUT n$
120 IF n$ = "" THEN 70
130 HOME
140 PRINT "Congratulations, "; n$; "!"
150 PRINT "your code has been accepted."
160 PRINT "Now, please type a four digit"
170 PRINT "code number, and"
180 PRINT "press <RETURN>."
200 INPUT "What is the number?"; n
220 IF n > 999 AND n < 10000 THEN 290
240 PRINT
250 PRINT "INVALID NUMBER! TRY AGAIN."
270 PRINT
280 GOTO 200
290 HOME
300 PRINT "Your name is: "; n$
310 PRINT
320 PRINT "Your number is: "; n
330 PRINT
340 PRINT "Is that right (Y/N)"
350 GET a$
370 IF a$ <> CHR$(89) AND a$ <> CHR$(121) THEN RUN
380 HOME
390 PRINT "O.K., "; n$; ", press <c> to"
400 PRINT "begin a quick hardware check."
420 GET a$
430 IF a$ <> CHR$(67) AND a$ <> CHR$(99) THEN 420
440 HOME
450 FOR t = 1 TO (RND(1)*8)+5
460 PRINT "LOCATION #"; t; "= OK"
470 FOR d = 1 TO 600
480 NEXT d
490 NEXT t
500 PRINT "LOCATION #"; t; "= TROUBLE"
510 PRINT
520 PRINT "Press <RETURN> for help."
530 GET a$
```

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