

## CONTENTS:

Apple Basic ..... 21 ..... 49
Apple Logo4 Delta Drawing
Atari Basic ..... 41
Dr. Logo ..... 2010
Atari Logo ..... 14
Lady Bug Logo ..... 20
Atari Pilot ..... 13
MIT Logo
Color Computer Basic ..... 52
TI Basic ..... 50
Commodore 64 Basic ..... 43
Commodore Logo ..... 16
Turtle Graphics Zips ..... 11TI Logo18

"Hi, I'm Logy, the YPLA Turtle."
"And I'm Morf, the YPLA Rabbit."
"Tell me, Logy, what are we doing here?"
"Don't you remember? It all started a long, long time ago. Our great-great-great grandparents met in the forest one day, and your loud-mouth ancestor challenged my ancestor to a race. Grandpa Tortoise was sort of slow. He went along slowly but steadily, step by step, while your Grandpa Hare hopped hither and yon doing cartwheels and all sorts of other nonsense."
"Actually, what he did was tire himself out, because it wasn't long before the Hare stopped to take a nap. In the meantime, here comes Grandpa Tortoise. And guess who met whom at the finish line?"
"You got it! Grandpa Tortoise was the Champ that day. And that just goes to show that faster isn't always best. Sometimes it pays to be smarter, not faster."

Today's young people are a very important part of the information explosion. And the computer is a very important tool of that revolution.

Some children hop around like rabbits, picking up all of the information they can -- and then wonder how to use it. Others are turtles, moving slowly, continually exploring their changing world, learning to learn from their new experiences. This is the world of the YPLA Turtles -- young people the world over sharing the fun and excitement of new technologies, learning to use the computer as nothing more or less than what it is, a marvellous "Tool of the Mind."

From a group of junior high school students working at a ping-pong table in a Richardson, Texas garage, the Young Peoples' Logo Association has grown into a multi-national organization of young people, parents, and teachers from every state and more than 25 other countries. The original goal of serving all of the young peoples of the world is fast being met.

The YPLA seeks to help all young people have fun learning just what today's computer technlogy can do for them. Most anyone can learn to program by memorizing the commands of a computer language. But without the challenge, the guidance, the motivation to learn to use the computer and its languages, it can be very easy for young people to rationalize the simplest programming effort as a major achievement. The YPLA offers these young people the chance to become more than just
computer literate -- the chance to explore their imaginations and creativity to become self-literate, the chance to learn to think, to excel.
Just as importantly, the YPLA looks to promote the use of computers in the education and training of the disabled. Through the Center for Computer Assistance for the Disabled (C-CAD), the YPLA seeks to demonstrate how, with a little creativity and imagination, readily-available technologies can help the disabled become more productive citizens.

Logo is, of course, the primary language used in association newsletters and other publications. But Logo may not be the answer to all problems. Thus, the YPLA uses Pilot, BASIC, and other languages on Apple, Atari, Commodore, IBM, Radio Shack, and TI computers. Public domain software for many of these computers and languages is available to members through the YPLA Software Exchange.

Membership is open to anyone interested in sharing the fun and excitement of the microelectronic revolution. Individuals 18 and under pay dues of $\$ 9.00$ per year. Schools and adults are the primary financial support of the association through annual dues of $\$ 25.00$. (Add $\$ 5.00$ for First Class delivery and for Canadian and Mexican memberships, $\$ 15$ for international air mail delivery.) Schools and adults receive Turtle News, access to the YPLA Software Exchange and bulletin board, plus an insert to Turtle News featuring tips on learning activities both on and off the computer, book and software reviews, industry news and events plus news from C-CAD.

# Advertising in Turtle News 

$$
\begin{gathered}
\$ 150 \underset{\left(7^{\prime \prime} \times 10^{\prime \prime}\right)}{ } \text { page full page } \\
\$ 100 \text { per one-half page } \\
\left(3^{1 / 2} \times 10^{\prime \prime} \text { or } 5^{\prime \prime} \times 7^{\prime \prime}\right) \\
\$ 75 \text { per quarter page } \\
\left(3^{1 / 2^{\prime \prime}} \times 5^{\prime \prime}\right)
\end{gathered}
$$

## $\$ 35$ for each added process color

Rates are for camera-ready materials. Advertising rates for typesetting are $\$ 25.00$ per page. No bleed ads allowed. Advertising deadline is the first of the month of publication. The YPLA reserves the right to reject any advertising not deemed suitable for a family audience, and not in keeping with the educational purpose of the association.

The mailing list of the association is not available to other organizations.

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The YPLA Software Exchange is growing by leaps and bounds!
We have doubied the size of the exchange in just the past few months, thanks to all of you active programmers and to some user groups from around the country. This catalog replaces the other catalog pages we have printed in Turtle News recently and adds a number of new disks. We have a lot more software to evaluate. This will be listed in another catalog supplement to be published in mid-1984.

To remind you of the rules, send us a program of yours, or one you have converted from another source. Please do not send us any copyrighted programs. They belong to the original programmer. If that person, or that company, has made that software public, then you are free to submit that to our exchange. Please send all orders for Softswap disks to Softswap, SMERC Library and Microcomputer Center, 333 Main Street, Redwood City, California 94063.

Send us your programs on disk or tape. We cannot accept printouts in exchange. Also, please include return postage. Select the disk you want from the catalog. We will copy your choice from the catalog onto your disk or tape and return it to you. If you submit two or more programs, put them on separate disks or tapes. Or blank disks ort tapes along so we can copy your selections on to them.

If you don't have a program to exchange, you can purchase our disks or tapes for the duplication fee of $\$ 1 \varnothing . \emptyset \emptyset$ each. This fee is to cover the cost of the disks and tapes, plus the shipping and handing costs of the Software Exchange. There is no charge for the software itself.

YPLA Software Exchange programs range from the very simple to the very complex. Some have instructions, some don't. Some have slight bugs, but that is half the fun of an exchange. Find the bugs and fix them. And then send them back for exchange. The YPLA can not be held responsible for the software in the exchange. Also, the YPLA claims no rights to any of the programs and does not seek in any manner to infringe on the rights of others.

And finally, purchases of YPLA software are final. We can not accept returns or offer refunds. However, if you get a faulty disk or tape, we will exchange it for the same disk.

CATALOG

APPLE LOGO \#5

STUDENT APPOINTMENTS: Writes a letter from your entries to the computer. A good example of list processing.

DEMO: a good Apple Logo demoonstration by Rob Muir.
SEASONS GREETINGS: Just in time for Christmas. A multi-color greeting from Rob Muir's fifth grade class.

TARGET: One of the many games in the exchange asking you to place the turtle in a small circle.

COORDINATE: Another excellent Rob Muir gameprocedure, this one teaching $X$ - $Y$ coordinates.

SUN: A very interesting first Logo experience.
SENTENCES Have fun with Logo grammar exercises.
DYNING BUG: RAID does it again.
ANNJURZ: Turtle Graphics exercises, or maybe we should call this "Frog Graphics."

WIZARD: Here is the home of the wizard of Oz.

GRAPH: Draw a graph paper pattern to your own specifications.
PUFF: Puff, the Magic Dragon
TURTLESCENE: This is one of the winning entries to Graphics Contest \#2.

Star, Camping Trip, Carmark, My House, and Snowman: These are all beginning Logo exercises -- great places to start from on your own Logo explorations.

APPLE LOGO

JULIE.DEMOTTE
EMILY.SINGER
LAUREL.SCHMIDT
BENJI. DEMOTTE
JAMIE.WHITE
TODD. RECTOR
JONATHAN.VIKSNE
PATRICK.COLLINS
MICHAEL. COLLINS
KRIS.LOEB
JOSEPH.COLLINS

These rocedures were submitted to Graphics contest \#2. They are all well done, some are really excellent. They are all good teaching tools.

LAUREN.CAISTER
SARTAH.MALIN
ERIN.CAISTER
NATHAN.HARRIS
BARBARA. PLAMER
GETCOOL: A real cool dude!
CASTLE: Home of the fogo wizard.
GAMBLER: No, this isn't kenny Rogers!
WEIRDO: No, this isn't Kenny Rogers either.
SPEKELSEY: Another Contest \#2 entry.
OVALS 3: Want to learn how to draw ovals on the computer?
TURTLE: Logy on the computer screen.
SOCCER: Our favorite jump from two to three dimensional thinking.
FLASHY.LOGO: A flashing Logo sign.
TOP.SECRET: The movie, War Games, hits the Logo scene.
WRITEl: A very interesting use of graphic letters.
DNE.ON.ONE: A simulation of One-On-One basketball without graphics.
DYNABALANCE: A very interesting simulation of dynamics -- also a very good game. Don't let the turtle fall off of the see-saw.

APPLE LOGO PRESCHOOL \# I:

This disk can be exchanged only for other preschool or primary grade programs or procedures.

DRAW This disk includes a number
INSTANT.DRAW
INSTANT. PLUS
PRESCHOOL
SHAPE.DRAW of variations of the "Instant" procedure from Harold Abelson's books. Some of these let you save and recall
PLAY procedures.
TODDLERS: The Toddler's Turtle is a simplified version of "Instant" which allows users to name, save, and recall procedures. FREDDIE, SHIP \& BIKE are examples.

NUMBERS: Preschool exercises in counting and numbers.
RANDOM.NUMBERS: Where NUMBERS goes from 1 to 10 in sequence, this proceduue selects numbers at random.

TARGET. PLUS: Put the turtle in the small'circle.
CONNECT: A connect-the-dot game.
TYPE-A-WORD: A BASIC program that makes it fun to practice spelling.

APPLE LOGO \#7:

ORBIT CHASE: This determines how well you can navigate in
space. Can you get your spacecraft safely from one orbit to another to save your comrades in distress?

APPLELOGO.SORT: READ.ME.APPLE gives you the details of this Logo sorting program. While slow, it shows the more practical applications of the language.

RUBICUBE: This procedure is almost as bad the the real puzzle. JAPANESE: Can you solve these Logo procedures written in Japanese?

The remaining programs are graphic exercises from which many other procedures can be developed.

DODO OLI
GLASSES SWIRL
A.DESIGNS LOOK.NICE

JEDI DESIGNS
AUTHOR ROCKET.R.TSO\&S.TOY
BUILDING STOPSIGN
CIRCLE SPIRAL
SEARS CUBE
SKYWRITER SLOOP

## APPLE LOGO \#8:

This disk contains a number of programs from The Computer Learning Center in Caldwell, Idaho, and from the "Up, Up, and Away" Balloon Contest.

MADITBl: Add your own words to this story.
MADLIB2: Try it again with this tory!
QUILT. PATTERN: Self-explanatory.
PUFF: Another version of the procedure from Turtle News.
FILL.INS: A "fill" procedure.
HELOCOPTER: A redo of the Graphics Contest \#2 winner which puts the rotors in motion.

PLANETS: Learn what life wouold be like for you on the other planets of our Solar System.

The remaining procedures are graphics programs:
ASTRO STARS BB
From the Balloon contest*

BALLOONB
BIRD
HOLLY'S BALLOON
POLYS
AI RBALLOON
USA5

BLOCF
SEEN
BALLOON13
KATLOOON
STAR.BALLOON
TRINITY.SCHOOL. BALLOON. CONTEST
L.TANSILL\&M.KIRSHBAUM
N.CALTON\&J.EISENBERG
M. ROTH
D. FEBLE\&J.AVIDON
P.NIEVES\&R.SCAVONE
R.AHRENS
J. LEERAK\&S.ARWADE
J.WALENTAS\&E.DOBSON

APPLE LOGO \#9:
mhanks to Judith Scothmoor, Computer Coordinator at The Carey School, San Mateo, California, and her 7 th and 8 th grade students, we have a number of "one-liners."

MISTAKE PROPELLER
STARRIEBACKS THE.SPINNING.STAR
SCARLET - BLADE
STARS SIRSTAR
STARLIGHT
SPACEY
A.STAR.IS.BORN

DERJOHN
BLOB
SNOWFLAKES
SHIP\&SEA: A view of the ark at sea.

VILLAGE: Here's what you can do with the house procedures -make a village!

Also included are some of the procedures from past issues of Turtle News.

| SALLY | FILL. POLY |
| :--- | :--- |
| MESSAGE | LEMONADE |
| LOONEY.BIRD | STAR.PATH |

This disk also includes a number of entries into our "Up, Up, and Away" competition.

BALLOON. 2 WAVING.BALLOONS
KIM.BALLOON DON.BALLOON
MS. CHANNEL'S BALLOON (Applesoft)
BALLOON2 (Applesoft)
J.C.C.

APPLELOGO
WILLYSBALLOON BALLOON
ROGER.WOLCOTT.SCHOOL
GERRI.KILDUFE WAYNE.STAPLETON
THELMA. DOWD

Page 8 / Turtle News / December 1983
MIT LOGO \#3 (Krell Logo or Terrapin Logo):

PEOPLE: An intersting number game.
UNIT.CIRCLE: Draw a UNIT.CIRCLE with the line functions you specifiy.

CHATTER: An interesting introduction to AI concepts of "computer learning." Have fun developing sentences.

COORD: A great game to teach coordinates.
WINSLOW'S.PRIMER: This game is similiar to chatter. It provides some interesting reading exercises.

CHRISTMAS.CARD.PICT:
READ.ME: Instructions for Phraser.
PHRASER: Play a variety of Logo tunes.
TUNES. 1
TUNES.A.B.C.D.E
MUSIC.BIN
BEGINNERS.GAME: A great introduction to MIT Logo and Turtle Graphics. Includes a good Target game.

BOAT: Here are some entries to our Boat contest.
BOATI
BOAT2
BOAT3

MIT LOGO \#4:

CAT:
SNOWMAN:
DREAM:
COMPUCOPTER2:
TREE:
JIGSAW:
CROWNS:
BEAR:
SNAIL:
SPIRALSTAR
FILLSTARS
MONKEY
TULIP
WHATEVER
PARK
BILL
JULIE.STREET
SHIP
LOLLYPOP

This disk contains some of entries to Graphics contest 2. Some are excellent. Some are real winners.

All are great fun to work with and develop.

Why not give it a try?
UNICORN. PICT
NANNY
PATTERN
HOUSE. GEORGIE
HOUSES
JEFF.CIRCLE
BOX.TIM
HOUSE
ROBOT

```
ACElØ\emptyset\emptyset TRACTOR.TRAILER.3D
FACE
SPACESHIP
RAINBOW
MIT LOGO #5:
CONSONANT.VARIANTS: Can you find the hard and the soft consonants?
WORDSCRAM: Unscramble misspelled words.
LOGOLANDER: Can you land your spaceship without crashing?
MITLOGO.SORT: A Logo sorting program.
The other prooelures on this disk represent a wide range of entries into the "Up, Up, and Away" Balloon Graphics contest -from the simple to the very complex.
BALLOON EINAL.BALLOON
BALLOON1 GRETCHEN'S.BALLOON
SARA
GENE
GINALBALLOONME FINALBALLOONJS
FINALBALLOONJP EINALBALLOONMR
FINALBALLOONSG EINALBALLOONPW
```

Others will be added to this disk as they are received.

```
MIT LOGO #6:
```

Robert Sweetland of Exeter, Nebraska 6835l, contributed this disk of six animal simulations. They are provided only as a beginning for exploration, not as a finished product. Mr. Sweetland invites correspondence from those who are as fascinated with these procedures as we are!!!

Comprehensive directions are included.

MIT LOGO PRESCHOOL DISK:

This disk includes Logo procedures and other programs which have proven to be successful with kindergarten and younger-aged children.

THE TODDLER'S TURTLE: A version of this single-keystroke procedure for monochrome monitors.

THE TODDLER'S TURTLE: A color version.
BEGINNER'S GAME: A version of the Target coordinate game for
the younger set.
INSTANT.DRAW: Another single keystroke implementation for younger children.

KINDERLOGO: From Compu-Camps comes this kindergarten-level procedure. Instructions are included.

DELTA DRAWING for the Apple II:

We have two disks of Delta Drawing graphics which range from the easy to the complex. They are both good examples of what can be done with the program.

DISK VOLUME 254
A 002 HELLO
B 016 BALLONMAN.BBS.TX
B 016 ROLYPOLYCAT. CMB.TX
B 016 MICKYMOUSE.KEN.TX
B 016 FOOTBALL.FACE!.G.R..TX
B 016 CONTEST.DAVID.TX
B 016 BIRD.SEAN.TX
B 034 GREG.TRI.CIR
B 034 GREG. CONTEST
B 016 STARFLAKE.H.A.TX
B 016 BOKMAN.TX
B 016 CONTEST. BROOKE.TX
B 016 MONITOR.TX
B 034 CONTEST.MB
B 016 BRAMBLEWOOD.CALEB.TX

DISK VOLUME 254
A 003 HELLO
*R 816 ROCKET3.TX
*B 034 ROCKY3
B 034 CITY
B 034 CITY.NIGHT
E 034 FERRISWHEEL
B 034 CIRCLES
B 034 SHOP
B 016 MONITOR.TX
B 034 SNOWFLAKE

TURTLE GRAPHICS ZIPS was designed at ITVC in St. James-Assiniboia School Division, Winnipeg, Canada. ZIPS was written by Gerald Chick and released for distribution to Schools in October, 1982. It is an extension of the TURTLE GRAPHICS program by David A. Krathwohl, 19 Tri St., Ashland, MA Ø172l which appeared in the magazine, NIBBLE, Volume 3, No. l, 1982.

FOR A COPY OF NIBBLE TURTLE GRAPHICS, SEND \$19.95 TO NIBBLE, BOX 325, LINCOLN, MA 01773.

The ZIPS portion of Turtle Graphics is an addition to the original program presented in NIBBLE. The purpose is to permit students to see a finished graphic with its drawing instructions all at once. Then, having observed these ZIPS examples, students can build on them to do more complicated and original work.

The ZIPS are created and placed on disk, and can be run from Turtle Graphics by using the command:

$$
Z P<z i p \text { name> }
$$

where <Zip name> is the name of the picture to be recalled.
The original Turtle Graphics disk contains 60 Zips. Any of these can be executed directly. Others, however, cannot be executed within DO statements (a Turtle Graphics command) because they contain "DO" statements themselves.

The $N$ series of $Z i p s$ is special. Most of these have Do loops. The $N$ at the beginning of the names indicate that the ZIP contains a variable. When you run these programs, you will be asked for the value of $N$. This refers to the size of the picture. A larger number wiill draw a larger NSQUARE, for example.

For thos interested, a program is included to all you to create your own ZIPS.

HAVE FUN WITH ZIPS!
GERALD CHICK

NOTE: If you call-up a ZIP (eg. ZP HAT) and it does not seem to laod and run properly, re-boot the disk by turning the power OFF, waiting a few seconds, and then turning it back ON. This should restore the auto-run feature of any auto-zIP. Don't forget the space between $Z P$ and the filename.

TURTLE GRAPHICS ZIPS requires a 48 K Apple IIt or IIe with one disk drive.

```
T O\emptyset2 ONE.ZIP
T OD2 HAPPYFACE.ZIP
T Q|2 HAT.ZIP
T \emptyset\emptyset2 BOWTIE.ZIP
T O\emptyset2 SADFACE.ZIP
T \emptyset\emptyset2 NECKTIE.ZIP
T Ø\emptyset2 NTRIANGLE.ZIP
T 002 NSQUARE.ZIP
T 0O2 NSPIRAL.ZIP
T Ø\emptyset2 TWO.ZIP
T Ø\emptyset2 NRECTANGLE.ZIP
T Ø\emptyset2 NPENTAGON.ZIP
T Ø02 NOCTAGON.ZIP
T Ø\emptyset2 NBOX.ZIP
T \emptyset\emptyset2 NSTAR.ZIP
T \emptyset\emptyset2 NCROSS.ZIP
T Ø\emptyset2 NARROW.ZIP
T ØD2 A.ZIP
T \emptyset\emptyset2 PENCIL.ZIP
T \emptyset\emptyset2 PAPER.ZIP
T \emptyset\emptyset2 RULER.ZIP
T \emptyset02 TABLE.ZIP
T \emptyset\emptyset2 EIGHT.ZIP
T \emptyset\emptyset2 LEETCHAIR.ZIP
T Ø\emptyset2 RIGHTCHAIR.ZIP
T \emptyset02 LAMP.ZIP
T Ø\emptyset2 ELOWERPOT.ZIP
T Ø\emptyset2 ELOWER.ZIP
T Ø\emptyset2 C.ZIP
T \emptyset\emptyset2 D.ZIP
T Ø\emptyset2 E.ZIP
T Ø\emptyset2 E.ZIP
T \emptyset\emptyset2 G.ZIP
T Ø\emptyset2 H.ZIP
T Ø\emptyset2 I.ZIP
```

| T | $0 \emptyset 2$ | J.ZIP |
| :---: | :---: | :---: |
| T | 002 | K.ZIP |
| T | 002 | L. ZIP |
| T | $0 \emptyset 2$ | M. ZIP |
| T | $\square \emptyset 2$ | N. ZIP |
| T | 002 | O. ZIP |
| T | $\emptyset \emptyset 2$ | P.ZIP |
| T | $\emptyset \emptyset 2$ | Q. ZIP |
| T | $\emptyset \square 2$ | R. ZIP |
| T | $\square \emptyset 2$ | S.ZIP |
| T | 002 | T. ZIP |
| T | 002 | U.ZIP |
| T | $0 \emptyset 2$ | V.ZIP |
| T | 002 | W. ZIP |
| T | $\emptyset \emptyset 2$ | X. ZIP |
| T | 002 | Y.ZIP |
| T | $0 \square 2$ | Z. ZIP |
| T | 002 | SPACE.ZIP |
| T | $\emptyset \emptyset 2$ | THREE. ZIP |
| T | $\square \emptyset 2$ | FOUR.ZIP |
| T | Øø 2 | EIVE.ZIP |
| T | $\square 02$ | SIX.ZIP |
| T | 002 | SEVEN. ZIP |
| T | $\emptyset \emptyset 2$ | B. ZIP |
| T | $\emptyset 02$ | NINE.ZIP |
| T | $\emptyset 02$ | ZERO. ZIP |
| T | 001 | STAR.ZIP |
| T | 001 | PENTAGON. ZIP |
| T | $0 \emptyset 1$ | RIGHTCHAIR . ZIP |
| T | $0 \square 1$ | HAR.ZIP |
| T | 001 | ONE |
| T | 001 | NECKTIE . ZIP |
| T | 001 | SADFACE . ZIP |
| T | $0 \emptyset 1$ | SAD EACE.ZIP |
| T | 001 | HATZP |
| T | $0 \emptyset 1$ | T $\emptyset \emptyset 2$ HAT ZIP |
| T | $0 \emptyset 1$ | HAPPYFACE |
| T | 001 | SPIRAL.ZIP |
| T | 001 | SQUARE.ZIP |
| T | $\emptyset \emptyset 1$ | NBOX . ZIP |
| T | $\emptyset 01$ | BODY.ZIP |

ATARI PILOT:

MENU: Load this program for a directory of the programs on the disk.

DANGEROUS MISSIONS: Here are the pilot programs from Fred D'Ignazio's series of Turtle News articles.

MISSION 1 BLASTWORM FACE
PRESCHOOL: A letter recognition game from Ruth Ellsworth.
CHRIS: $\quad$ This is a series of
MEG: entries to our Graphics
JANET: Contest 2.
MICHAEL:
KIRK:
PICTURE: Jenny Chisholm of New Zealand sent us this beautiful drawing program. Make your own pictures.

Ruth Ellsworth of Eugene, Oregon, has sent us a variety of fine programs in addition to her articles.

RANDOM: Random music, color, and lines combine for an interesting audio visual display.

MUSIC \& MUSIC2: Here are two short programs to show you how to put mood music to your programs.

PILOTPOK: A timed addition exercise.
DESIGNS: Use your joysticks to create interesting pictures using different shapes.

FAMILYSQUARES: Answer the questions to earn your move in this Tic-Tac-Toe game.

ATARI PILOT \#2:

Here are more of Ruth Ellsworth's enjoyable educational programs. Most are written for elementary school children.

RANDOM SPELLING: Enter your own spelling list for drill and practice.

COUNT \& MULTIPLY: Good practice in counting and multiplying. NEXT NUMBER: What comes after the number shown on the screen? NUMBER BEFORE: What comes before the number appearing on the screen?

CHNEXTNO \& CHNOBEE: Similiar to the two programs described above but this allows you to select the number of problems you wish to solve.

PLUSONE: Addition practice.
MINUSONE: Subtraction practice.
ADDITION: Arithmetic
SUBTRACTION: Practice.
MULTIPLICATION:
DIVISION:
TIMED MATH: Select addition, subtraction, multiplication, or division for a timed math drill.

SPELLACE: Spelling practice.

ATARI PILOT \#3:

From the Eugene, Oregon, Atari Computer Enthusiasts, comes this Pilot Christmas Disk, 1983:

INSTRUCTION: Instructions for GEOMETRY.
GEOMETRY: An excellent tutorial for teaching geometry concepts. Includes the ability to rotate the figure.

SKETCH.HLP: The instructions for the SKETCH program.
SKETCH: Use your joysticks to create interesting drawings on the screen. Pictures can be saved and recalled.

PIANO.PIL: This program displays the staff and piano keys of notes available in PILOT.

SNBIGLET: A letter matching game for preschoolers.
SNLETTER: A lower case version of the game above. This can also be used to match upper and lower case letters, and for typing practice.

PRETURT: A preschool program designed for the very young. Children can draw using the arrow keys plus others for diagonal lines.

DUNGEON: A tutorial in the simple use of PILOT to create adventure type games.

ATARI LOGO \#l:

Our list of Atari Logo procedures is beginning to grow very
rapidly. You can expect to see a number of new disks appear here very soon. We want to give special thanks to Ruth Ellsworth and Atari, Inc. for their contributions.

LOGOLAND: Here is the Atari version of our Logo Lander game. This has some minor bugs in it. Can you fix it?

RACE: Watch the four turtles race around the screen.
SOUNDFUN: Music, color, and graphics combine for an interesting audio-visual display.

LOGO.TUNES: Some interesting background music for your procedures.

START: An introduction to this YPLA disk.
VIDEO.TURTLE: Move the turtle around the screen using joysticks.

GRAPHICSDUMP: Dump your pictures to an Epson printer.
FLASHCARDS: Electronic flash cards.
TARGET: Can you zap the turtle? You'll never know where it will turn up next?

ATARI LOGO \#2:

ANIMAL: The well-known animal game.
ARGUE: Have you ever argued with a computer?
WAR.GAMES: If you saw the movie, you'll enjoy this one.
MADLIBS1, MADLIBS2: Make up your own story from these fun procedures.

GONGRAMS: A beautiful recursive graphics procedure.
TRACK: Move the Turtle around the screen to avoid hitting other objects on the screen.

COORD: A good game to learn about $X-Y$ coordinates.
PATTERN: A mesmorizing graphics procedure.
DALLAS: The Dallas skyline.
PUFF: Puff, the magic dragon huffs and puffs.
THE TODDLER'S TURTLE: A single-keystroke procedure for preschoolers.

These first Commodore Logo disks are translated from MIT Logo. We're looking for many more procedures which will show off Commodore Logo to best advantage.

YARD: A colorful house and yard very nicely done by Josh Hacker. This was a winner in the first graphics contest.

LINEDRAWING: A beautiful line drawing in your choice of colors by Lewis Kofsky.

BATTLE \& DEFENDER: Two action-packed pictures in living color by Peter Marking.

BOLT: Robert Duncan brings us a Logo Thunderstorm.
DISPLAY: From David Greene comes this utility procedure to display picture files.

The following procedures were submitted to the YPLA Software Exchange by friends at the University of Michigan. They were developed at seminars introducing people to Logo.

POSTCARD: When you go on vacation, take this procedure and your computer along. It will write all of your postcards for you with random messages.

PICTURE2: Watch colorful optical illusions evolve on the screen.

SPRAY: An accumulation of colorful Turtle Graphics exercises which can be expanded or inodified to suit your own whims.

DOCTOR: Ever want to talk to a friendly psychiatrist? This one doesn't charge much.

QUEST20: Logo's answer to the famous TV game, Twenty Questions.
ANIMAL: The well-known computer game that learns as it asks you questions about the animal you are thinking about.

SQUARES: This simplistic exercise shows how you can listen to the Turtle as well as tell it do things.

PICTURE: It was from this procedure that PICTURE2 evolved. The comparison is quite interesting.

RAIN: A very short but graphic representation of raindrops falling.

CITY: A unique use of the RANDOM command to generate a colorful pattern resembling a city map.

UNICORN: This procedures draws the head of a unicorn in various
positions.
TWO.TWO.TWAIN: A simplistic train.
WOLVERINE: A game of animal tracks. can you avoid the traps?

COMMODORE LOGO \#2

SHAPES: An interactive list processing and graphics procedure. The computer draws any type of polygon you specify.

SEE.SAW: An entry into Graphics Contest \#2 showing two figures on a see-saw.

KARL.ZINN: Karl Zinn wrote these procedures, developing them from Harold Abelson's book (Chapter 2, Section 4). DUO, HH, CC, \& DRAGON all put unique recursive patterns on the screen.

TRAINS, TRAIN1, \& TRAIN2 are each entries from our challeage published in SOFTALK magazine last year. Each represents a good use of variables to form a complex shape from one basic procedure.

PERSONAJES: This is the game of Animal, only played with people -- and in Spanish, thanks to Gustav Jimenez of Santiago, Chile.

TALK: This is a look at list processing for the younger part of the family. Let them answer the computer's questions.

RECURSION, RECURSION2, COLOR.TOWER, \& TOWER.FRAME are all examples of tessellations -- recursive mosaic patterns. Adding color to these patterns can be quite a challenge.

COMMODORE LOGO \#3

PEOPLE: An intersting number game.
UNIT.CIRCLE: Draw a UNIT.CIRCLE with the line functions you specifiy.

CHATTER: An interesting introduction to AI concepts of "computer learning." Have fun developing sentences.

COORD: A great game to teach coordinates from Rob Muir.
WINSLOW'S.PRIMER: This game is similiar to chatter. It provides some interesting reading exercises.

BEGINNERS.GAME: A great introduction to MIT Logo and Turtle Graphics. Includes a good Target game.

BOAT: Here are some entries to our Boat contest.

WORDSCRAM: A great scrambled word game.
INSTANT.DRAW: A version of INSTANT for the Commodore from David Malmberg.

LOGO LANDER: Play Lunar Lander with Commodore Logo. Another one from David Malmberg.

MASTER \& MASTER2: Two exciting entries inio Graphics Contest \#2.

OUTINSPACE: A very graphic space station.
SMOKEY: Smokey, the bear.
TODDLERS: The Toddler's Turtle.

TI LOGO \#5:

COLORES: Here are three procedures
ESPANOL2: for practicing your spanish.
NUMERO:
DRAGON: Move a green drgaon around the screen with joysticks. KITT: The car of $T V$ fame goes through some maneuvers.

LOGOBOAT: This was one of the winning entries in our boat graphics challenge.

AMAZING: Look at the two procedures first. Can you tell what each will do before running them?

CIRCLES: Look at some of the neat designs circles will make.
DRAGON: Here is a mini-adventure game. Can you escape the dragon?

FACE: Here's a real unhappy face by Cory Quinet, age 8.
HANOI: The Towers of Hanoi game demonstrated.
SHAPES: This procedure asks you what shapes you want to see.
SHAMROCK: Save this one for St. Patrick's Day.
SPELLING: Who likes spelling tests?
SPORTSCAR: Watch a house turn into a car.
TALK: Have you ever had a conversation with a computer?

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TI [DGO PRESCHOOL #l
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THE TODDLER'S TURTLE: A single keystroke version of Turtle Graphics using the arrow keys and others.

BRIDGE: Develop directional skills OVERUNDER: moving the Turtle over, under, and through.
FREDDIE: A most distinguished gentleman drawn with the Toddler's Turtle.

HOUSE: Another drawing done with the Toddler's Turtle.
PARK: Here are some excellent procedures
PEOPLE: from Lamplighter School.
PRESCHOOL:
TARGET:
A target game for young children.

DR. LOGO \#I.

Dr. Logo \#l is a Logo demonstration which describes many of the features of the language and their application. It includes demonstrations for all ages, ranging from preschoolers to adults. Each of the following procedures may be called from the menu within the auto-loading demonstration procedure:

DOODLE: A preschooler's doodling program which allows users to direct the turtle as it moves around the screen.

TODDLERS: A version of The Toddler's Turtle for the IBM PC.

SHAPES: Interactive Turtle Geonetry where the computer draws the shapes you ask it to draw.

ARGUE: Have you ever argued with a computer? This is an excellent example of list processing capabilities of Logo.

PRIMES: Determine the prime numbers between 1 and any other up to 110 .

BLACKJACK: Play Blackjack with the computer.

LADYBUG LOGO:

LADYBUG LOGO has been given to the Young Peoples' Logo Association for evaluation and distribution by the author, David N. Smith, 44 Ole Musket Lane, Danbury, Connecticut ø68lø. The彐uthor retains rights to the program.

LADYBUG LOGO requires an IBM PC, and IBM PC/XT, or other compatible system with the following:

128K of memory.
one single-sided disk drive.
A graphics adaptor.
Color is supported only by a color adaptor.
$8 \emptyset$ column editing is supported only on a RGB or other highresolution monitor.

DOS 1.1, 2.0, 2.1

LUNAR LANDER: Lunar Lander from Japan. Use your paddles to land on the moon.

DEATH STAR I: Another great game from The Baked Apple Corps.
ALIENS UFO: This is another japanese game -- in Japanese! But you can still run it.

FLY KILLER: Spray the flys in this graphic game.
FLYING BIRD: A hi-res demo.
COMBS \& BONES: Hi-res patterns by Mad MC's.
RECTANGLES: Geometric exercises using paddles. Lots of fun.
SILLY SAMPLE: Here is a text program just like its name -- a silly sample.

MULTIPLICATION HELPER: Arithmetic exercises with some interesting graphics to go along with the problems.

ADDITION HELPER: Like the above program only this is addition.
LOW-RES: Great graphics fun.
PUZZTE-MAKER: Make up your own wordsearch problems.
MERRY CHRISTMAS: Here's one customized for us.
PENTOMINOES: Watch the computer play "pentominoes."
PLANE GAME: Shoot down planes as they cross the screen. Different skill levels included.

SPACE RACE: A great action game to race across the asteroid belt. Use your paddles for this one.

MUSKONYBBLE: A game like Wumpus but with a few added features. Get the monster before it gets you.

HORRIBLE HARRY: You have to see this to believe it!
MAZEl: Find your way out of a 3D maze.
E.T.: Watch ET move across the screen.

APPLE BASIC \#13:

CHRS FUNCTION: A random locatable character function.

COLOR MATH: Here are your math tables -- in color!
PINBALL: A great lo-res game of pinball.
OTHELLO: Another good version of the old favorite.
HEX CONVERTER: Convert au nbers from and to decimal, hexidecimal, and binary.

CATCH: A pong-like game in lo-res graphics.
TWENTY-THREE BRICKS: A colorful game of NIM. Don't get caught with the last one.

SEVEN: Here is a card game like "crazy eights," but this has a few more twists.

CURVES: Hi-res curves
TOWERS OF HANOI: All of the fun of the ageless favorite. A coloctul game for all ages.

NIGHTMARE \#6: The nightmare is figuring out what you are supposed to do with this game??????????

SINK THE SHIP: A low-res game to bomb the ships before they can get away.

YAHTZEE: Here are more versions of
BLACKJACK: these age old favorites.
HAMMURABI:
BONE TUMOR DIAGNOSIS: This one is for doctors but is an interesting programming exercises to study.

## APPLE BASIC \#14:

INTERCEPT: A low-res interceptor game.
AIRFOIL: Design your own airfoils with this high resolution graphics program.
-MICROLISP: An interesting introduction to Lisp. Needs instructions.

SHOOTOUT: A shootout on the desert. Are you faster with the paddle than your opponent?

HI-RES CHARACTER DEMO: A curve plotting demo.
ENGINE: See the workings of the internal combustion engine.
KALEIDOSCOPE: Another hi-res demo.

FILE CABINET: A very useful data base program.

APPLE BASIC \#l5:

LOGIC QUIZ: Here are several interesting tests of your logic skills.

MADLIBS: Add some of your own words to these crazy stories.
FRENCH: Translate short sentences from English to French.
MULTIPLE CHOICE: Some intersting educational games.
SLOTS: More Las Vegas fun.
CHASE GAME: You can figure this one out. But it needs instructions. Nrite some and send it in again!

TARGET PRACTICE: Another version of the artillery game.
APPLE SKETCH: A hi-res sketch pad.
RUBIC B\&W: The frustrating cube in even more frustrating balack and white.

BOWLING: Black and white bowlingwith automatic scoring.
CHASER: A great game to test your reaction speed.
DRIVER'S TEST: Test your knowledge of the rules of the road.
MISSION: U-BOAT: Sink the subnarines before they get you!
APPLE ORGAN: A great musical demonstration.

APPLE BASIC \#16:

CLOCK: Can you tell time? Here is a simple test.
COLOR RECTANGLES: Lo-res graphics fun
APPLE ONE LINER: A one line graphics program that can fascinate you.

ADD-LIBS: Like Madibs, add some of your own people to this "gossip column" for sone parity fin.

THE GREAT AMERICAN PROBABILITY MACHINE:
THE INFINITE NUMBER OF MONKEYS: These two programs have to be seen to be enjoyed.

CUCKOO: Watch the cuckoo in this lo-res clock.

FAITH'S SURVEY: See what happens when you take this survey about cafeteria food.

CRAIG COOPER'S FINAL: An enjoyable computer test.
T\&D'S BODYBUILDING QUIZ: Like it says, a bodybuilding test.
MERRIE'S FINAL--VOCAB.: Test your vocabulary skills.
FOURTH GRADE SOCIAL STUDIES: Test your knowledge of social studies.

COMPUTER WIZARD BY LISA RAUBER: The computer knows the number you're thinking of.

JR. $\mu I G H$ WORD PROBLEM QUIZ: Some not-so-easy arithmetic problems.

JAMES' HOMONYM TEST: A fun-type test.
LONER TEXT PLUS: Load "Instructions" to see how to use this large character program. Make your own posters.

## APPLE BASIC \#17:

A public domain spreadsheet program from the publishers of SOFTALK magazine.

APPLE BASIC \#18:

QUADRATIC FORMULA: For those having trouble learning to use guadratic equations, here is a program to provide practice.

TEST GENERATOR \#2: This program generates a quadratic formula test and provides the answers.

CONICS: A study of conical shapes -- the circle, ellipse, parabola, et al.

TEST GENERATOR \#l: This is like Test Generator \#2, only on a nore basic level. Tests involve problems using one variable.

INTEREST: Calculate various type of interest, from simple interest to the various types of compound interest.

LOCKER: If you like "brain-teasers," you'll love this program.
HELICOPTER CHASE: The police helicopter is hot on the trail of the get-away car. Can you stop it? Here is a great action game for your Apple.

BOZEK'S ANIMATION: A great demonstration of how you can use the
graphics of your Apple for animation.
ANALYSIS: Meet Sigmund Freud. He'll help you solve all of your problems.

MY SPELLING DRILL: Enter up to 100 words for spelling drill.
MATH DRILL: Run through colorful flas cards of basic acithmetic.

The rest of this disk contains dome interesting graphics submitted for our Graphics Contest \#2 and from others interested in graphics.

MULE KICK
BLASTER
THE DUCKS
FROGGER
POWER-BLOCK MAN
UNION JACK
THREE D -- Graphics in motion.
HOURGLASS
FIRECRACKER

Apple disks \#19 through \#43 come to us from Region 4 Teacher Education/Computer Center, 9738 Lincoln Village Drive, Sacramento, California 95827. Because some programs suit more than one age-group, you will find some duplication of programs. PLEASE BE CAREFULL!!!!

APPLE BASIC \#19:

Grades 9-12: Science/Problem Solving. Requires Applesoft Language.

CRAYFISH EX. ANATOMY: Identify parts of crayfish anatomy.
ASTRONOMY-EXPOSURES: Calculate exposure times for photographing astronomical objects.

ARTILLERY: Calculate angle and force vectors for an artillery duel.

MICROSCOPE: Name the parts of a microscope.
TITRATION: Simulation of acid/base titration tests.
FORECAST: Input data to get a weather forecast.
SURVIVAL: Drill on survival knowledge and techniques.
CHARGE: Simulation of Millikan Oil Drop experiment.
MAD CHEMIST: Drill on ratios:

GRAZE-HUNTINGTON SIMULATION: Figure the ecological balance on grazing land.

ROSE: Problem solving using simulated ran $\mathrm{Zom}_{\mathrm{m}}$ number generators. INSPECTOR CLEW-SO: A logic simulation from the infamous detective.

TRAP: Identify a computer-generated number.
BAGELS: Identify a computer-generated 3 to $1 \varnothing$-digit number.
REVERSE: A problem solving exercise similiar to the Tower of Hanoi.

APPLE BASIC \#20:

Grades 9-12, General Math. Requires Applesoft Language. ADVANCED GUESS-MY-FRACTION: Find the computer-generated fraction.

FRACTIONS-TO-DECIMALS: Practice in changing fractions to decimals.

SEQUENCE: Drill in extending numerical sequences. MATH DECATHLON: 10 math problem-solving exercises.

PRIME: Practice in prime numbers and factors.
FRACTION DRILL PROGRAM: Drill on mixed numbers, fraction reducing.

MIXED: Change mixed numbers to improper fractions.
RFDJCE: Drill on lowest common denominator.
IMPROP: Change imporper fractions to mixed numbers.
MULTIPLICATION: 2-level drill.
DIVISION: 2-level drill.
METRIC: Metric/English conversion practice.
SIEVE: A fast method for finding prime numbers.
MATH QUIZ: Drill on addition, subtraction, multiplication and division.

MULTIPLICATION BINGO: Multiply your way to Bingo!

DISTANCE: Drill on squares and square-roots.
DICE: Four-function math exercises.

APPLE BASIC \#2l:

Disk Utilities. Requires Integer Basic.
IMPROVED CATALOG: Generate a catalog.
UPDATE 16: Convert Apple II disks to II+ disks.
DISK LABELER: Print labels of disk files to printer.
COPY II plus: Copy disk utility.
WOZ'S UPDATE 16: Similiar to Update 16.
DOS COMMAND FINDER: Gives you the memory locations of DOS commands.

DISASSEMBLE MACHINE CODE: Programmer's aid.
INTEGER INSTRUCTION SET: Listing of integer codes $\varnothing$ - 127.
TEXTEILER: Set up a text file and save it to disk.
TEXTCOPY: Retrieve text file created by Textfiler.
INTEGER RENUMBER/APPEND: Renumbering utility, et al.
SWEET 16 DISASSEMBLER: Look at hexidecimal addresses.
DISK RENUM APPEND: This is like the renumbering/append program above.

APPLESOFT 1 TO 2 CONVERTER: As it says.
DISK LOCK: Lock programs on disk.
DISK PROGRAM ELIMINATOR: Erase unlocked programs.
DOS UTILITY \#1: Change DOS commands.
MENU WRITER: Set up a meny on program disk.
MULTICOPY: Copy programs from disk to disk.
SLOW MEM TEST: Test all memory locations asked for by user.
FAST MEM TEST: A faster version of the above test.
HEX CODES LIST: Mnemonic codes for hexidecimal.

SHORTEN COMMANDS: Assembly language program.
MEMORY SPY: assenbly program.
DISK SPEED INFO: Test disk speed.
DISK SPEED TEST: Same as above.

APPLE BASIC \#22:

GRADES 7-8. Science, outdoor education, logic, typing, music, economics, etc. Requires Applesoft BASIC.

ARTILLERY: Figure angle and force vectors.
MICROSCOPE: Drill on microscope parts.
MAD CHEMIST: Drill on ratios.
GRAZE-HUNTINGDÓN SIMULATION: Find ecological balance ongrazing land,

CRAYFISH EX. ANATOMY: Drills on parts of crayfidh.
TEMPERATURE: Convert Fahrenheit to Centigrade.

FORECAST: Input data, to get weather forecast.
HIRES ROTATION: Rotate geonetric figures in space.

ROSE: Problem solving using simulated random number generator.
CLEWSO: Logic simulation exercise.
TRAP: Find computer generated number in 6 tries.
BAGELS: Find computer generated number of $3-10$ digits.
REVERSE: Tower of Hanoi exercise
DECISION MAKER: Aid to choosing best options.
TYPING: Typing drill, 6 levels.
SAVING \& LOAN: Figure interest on Savings and Loan deposit.
BEETHOVEN: Short tutorial on music history.
SURVIVAL: Drill on knowledge of outdoor survival.
CONCENTRATION: Memory matching game. ITse PBe and $\rightarrow$ to move cursor, RETURN to set choice.

APPIE BASIC \#23:

Grades 4-6, General Math. Requires Applesoft BASIC.
CIRCLES: Find the limits of this program's ability to draw circles.

APPLE ROSE: Input numbers to get various figures.
MULTIPLICATION BINGO: Multiply to play Bingo.
SEQUENCES: Drill in extending number sequences.
TRAP: Find a random number from 1-1øD.
MATH DECATHLON: 10 Math problem solving exeroises.
PRIME: Practice with prime numbers and factors.
SIEVE: A fast way to find prime numbers.

GJESS MY FRACTION: Strategy to guess computer-generated fractions.

ADVANCED GUESS MY FRACTION: A more difficult version of the above.

DICE: Eour function math game.
METRIC: Metric/English conversion drill.

APPLE BASIC \#24:

Grades 7 - 8 General Math. Requires Applesoft BASIC.
This disk includes the following prograns described above. Some allow you to easily change the problems presented.

GUESS MY FRACTION
MULTIPLICATION
ADVANCED GUESS MY FRACTION
MULTIPLICATION BINGO
SEQUENCES
PRIME
METRIC
SIEVE
APPLE ROSE
DICE
THE FUNCTION GAME: Find hidden math functions.
MATRIX: Operations on numbers in matched matrices.

MEET THE ROMANS: Roman/Arabic numeral conversion practice.

APPLE BASIC \#25:

Grade 9-12 Business/Home Economics. Requires Applesoft BASIC. PLANTMAN: Home plant selection and description.

Financial Analysis: A package of 28 financial analysis programs.

Black-Scholes Option Pricing: Stock market analysis.
BUSINESS FINANCIAL SERIES: Depreciation, interest, loans, investments, deposits, amortization.

Database: Data base and file management system.
BUDGET: Home budgeting practice.
DISCONTINUOUS OPTION PRICING: Technical supplement to Business Financial Series above.

HOME MORTGAGES: Figure mortgage payments.

APPLE BASIC \#26:

Grades 9 - 12 Algebra, trigonometry, graphing and plotting. Requires Applesoft BASIC.

ROOTS: Find roots of equation by bisection.
SEQUENCE: Input terms of seguence; get computation.
SERIES: Input series and get computation.
SKETCH: Graph plot program.
SYSTEMS: Linear equations.
TANGENT LINE: Graph plot program.
ZEROS: Graph plot program.
LIMITS: Advanced math program.
MATRIX: Inverse of coefficient matrix.
INSTANT SCREEN: Trigonometric program.
FACTORING: Tutorial and drill on factoring trinomials.

QUADRATIC: Tutorial and drill on solving quadratic equations. FUNCTION PLOTTER: Practice in setting up plotting of functions. FACTOR TRINOMIALS: Drill on factoring trinomials. FUNCTIONS: Identify hidden function in equation.

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APPLE BASIC #27:
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All grades: Demonstrations of music, poetry, graphing, tutorials. Requires Integer BASIC.

These demonstration programs will provide you with good ideas for other programs.

OLD GLORY: Graphics and music.
BACH MUSIC: Music
BACH WITH GRAPHICS:
MUSI-KEYS: A simple aplbetical-music program.
LINCOLN 2: Music.
RANDOM COLOR: Graphics.
WORMS: Sound, graphics
POETRY: Poetry line generator.
HAIKJ POETRY: Poetry generator.
APPLE POOP PLOT: Graphic demo.
YES NO AND PAUSE: "Get" command tutorial.
CHRS FUNCTION: Tutorial.
RANDOM SORT: Demo of sorting program.
BIT BUCKET: Random/Probability demo.
TOP DOWN PROGRAMMING: Tutorial

APPLE BASIC \#28:

Grades 4-12: The programs on this disk provide good raw material for investigation problems in probability and statisitcs. They are not lessons in themselves. Requires Applesoft BASIC.

BALLDROP
ALL SIX
TOTAL > $2 \emptyset$
BDAY
MARBLE
LOTTERY
RUNNING TOTAL
REDPPIUUSGREEN
POOL
ENVELOPES
TRANSISTORS
DICE
DA'ГA
SAMPLING
BI RTHDAY
RANDOMTEST
MONTE CARLO PI

APPIEE BASIC \#29:

All grades. The programs on this disk are graphic demonstrations requiring Applesoft BASIC. They will provide some excellent ideas for other prograins.

SHAPE MEDLEY
CHRISTMAS CARD
FLYING MAXWELL
GRAPHICS TRIVIA
RELATED RATES
CHAR
DEMO
HELIX
APPLE TREE
ADVANCED PICTURE
CLYDE 3
CLYDE 4
DEMOSOFT
HAPPY BIRTHDAY JB
ONE-LINER 8øl1ø6
SINE WAVE
YANG 2
PARABOLA
IMPOSSIBLE FIGURE
EASTER EGG (CALL 54514)
MENSCHEL HI-RES
STAR PATTERN

APPLE BASIC \#30:

Grades 7 - 8. Language arts, social studies. Requires Applesoft BASIC.

MADLIB: Computer produces story from user inputs. APPLE WORD PUZZLE: Generate a word search puzzle. BUBBLE SORT: Sorts a list of words alphabetically. DECODER \#l: Input a message and get a leter substitution code. ENCODER \#l: Similiar to the program above. HANGMAN ALGEBRA: Practice with math vocabulary. PET PIT DAT POT: Vocabulary drill. A \& AN: Drill on indefinite article usage.

SCRAMBLED WORD: Practice in unscrambling misspelled words.
CINQUAIN: Generate five-line poems.
MTHSPL: Spelling dril on geometric figures.

HEAPSORT: Alphabetizes words and/or ordinates numeric data.

APLHABETIZE: Ás it says!
HANGPERSON: Non-sexist hangman game.

NAME STATES: Test memory of state names.
STATES \& CAPITALS: Match states with capitals.
GEOGRAPHY: Test knowledge of world geographical names.
STATES \& CAPITALS: Another drill program on states and capitals.

NATIONS \& CAPITALS: Drill on nations and capitals.
LAF ISLAND: A decision-making simulation.

APPLE BASIC \#3I:

All grades. Graphics demonstrations requiring integer BASIC. These programs are a good source of ideas for your own graphics programs.

MAD GREETING
DECK THE HALLS
SAMPLER
DOT WORLD
COLOR SHOW S
ROD'S COLOR PATTERN
SUPER KALEIDOSCOPE

COLOR GRAPHICS
T.V. PATTERN GENERATOR

COLOR STROBE
COLOSSUS
ENTERPRISE
PAGE 1 \& 2
FAST WORMS
A???
AIIMATION
DANCING BUTTERFLIES

APPLE BASIC \#32:

Grades 4 - 6. Math, music, logic, economics, language arts, memory, graphics. Requires integer BASIC.

ELASH CARD: speed drill inarithmetic.
MATH TUTOR: User's choice of math drills.
JIVE TURKEY: Variant oE the number trap exercise.
DYNOMATH: Drill on addition and subtraction.
LONG DIVISION: Input problems and get answers.
MUSIC GENERATOR: Program your own music.
COLOR MATH: Math operations drill.
GUESSING GAME: Computer guess letter or numbers of the user's choice.

DRAGON MAZE: Logocal maze solving problem.
PLANTS \& LEMONADE: Two marketing simulations.
SHOOT STARS: Logic puzzle.
TYPING PRACTICE: The user has a choice of skill levels.
STAY-AFLOAT: An aquatic version of Hangman.
ADD-LIBS: The computer generates text after you enter words.
IQ TEST: Plexer-type brain teasers.
PIZZA: Practice in finding map coordinates.
COLOR PATTERN: A memory game.
OBJECT DRAWING: Draws shapes at user command.

APPLE BASIC \#33:

Grades 9 - 12. French, music, English, typing, driver educ., science, logic, math, etc. Requires integer BASIC.

HANGMAN: In Erench.
CALIFORNIA DRIVFR 'ГEST (24K)
ECHOCARDIOGRAPH: Calculate blood flow.
THIEF 1: A problem solving program.
EQUATIONS: A graph plotting program.
RANDOM NUMBER EREQUENCY: Statistics/probability generator.
BJJGGY . 33: Find operation bugs.
This disk also includes the following programs described above:
MUSIC GENERATOR
IQ TEST
TYPING PRACTICE
SHOOT STARS
DRAGON MAZE
PLANTS AND LEMONADE
GREAT AMERICAN PROBABILITY MACHINE

APPLE BASIC \#34:

Miscellaneous utilities. ReQuires integer BASIC.
FORMAT SUBROUTINE: Restore trailing zeroes to decimals.
FILE CABINET II: Data base file generator.
S.T.A.R.: Fog index analyzer.
E. D.STATS: Demonstration of statistical tabulation for special/Vocational Education students.

CURVE V: Raw score to standard score conversions.
CURVE X: Similiar to above.
CURVE XX: Similiar to above.
FINAL GRADES: Self-explanatory.
GRADE AVERAGER ø2: Obtain class average for letter grade.
ITEM SORT: Sort alpha $\&$ numeric $\& / o r$ mixed data.

MAKE TEXT: Makes files based ontext strings.
RETRIEVE TEXT: A companion to the above.
SICH JNTERHALTEN: Allows the user to enter endless trings of data.

MASTER MENU: Quizmaker utility.
CREATE: Another quizmaker utility.
STUDENT: Computer managed instruction quiz filer.
APPLE TEST: Test color and paddles.

APPLE BASIC \#35:

Grade 7-8. Math drill. Requires Applesoft BASIC. Most of these prograns are self-explanatory.

DISTANCE: Determine the distance between two points.
MATH QUIZ:
WHOLE NUMBER ADDING GAME:
WHOLE NUMBER MULTIPLY GAME:
WHOLE NUMBER SUBTRACTION GAME:
MULTIPLICATION: 2-level drill.
DIVISION: 2-level drill.
FRACTION DRILL PROGRAM:
MIXED: Change mixed numbers to fractions.
REDUCE: Reduce fractions to lowest cominon denominator.
IMPROPER: Change improper fractions to mixed numbers.
MATH DECATHLON: 10 math exercises.
FRACTIONS TO DECIMALS: Change fractions to deicmals.

APPLE BASIC \#36:

GRADES 4 - 6. Math drill. Requires Applesoft BASIC. This disk is similiar to \#35 described above.

APPLE BASIC \#37:

Grades K - 3. Requires Applesoft BASIC.

ABC: Key in the alphabet and get the alphabet song.

APPLE WORD PUZZLE: Generate and print a word search puzzle using your own words.

COLOR SPELL: User spells 5 simple words flashed on the screen.
CIRCLES: How big a circle can you draw?
This disk also contains the following programs described above:

DECODER 1
ENCODER 1.
A \& AN
HANGPERSON
BUBBLE SORT
LAF ISLAND
TAP
ROSE
APPLE ROSE
BAGELS
HIRES ROTATION
WHOLE NUMBER ADDING GAIME
WHOLE NUMBER SUBTRACTION GAME
CONCENTRATION

APPLE BASIC \#38:

Grades K - 3: Requires Integer Basic. These prograns are similiar to some of those described on other disks.

COLOR PATTERN: This is a memory game like the Milton Bradey game, "Simon."

DRAGON MAZE: Here is a semi-blind maze to solve.

TYPING PRACTICE: Learn the keyboard.

DRAWING: The user tells the computer what to draw.
STAY AFLOAT
ADD-LIBS
MUSIC GENERATOR
PLANTS AND LEMONADE
PIZZA
JIVE TURKEY
MATH TUTOR
FLASH CARDS
DYNOMATH

Grades 4 - 5. Language arts, social studies, typing. Requires Applesoft BASIC.

This disk is essentially the same as Apple basic \#30.

APPLE BASIC \#4D:

Grades 9-12. This disk is essentially the same as \#30.

APPLE BASIC \#41:

Grades 7 - 8. Typing, math, music, language frts, nusic, economics. Requires Integer BASIC.

EQUATIONS: A graph plotting program.
GUESSING GAME: The computer guesses a user-selected letter or number.

Other programs include:
TYPING PRACTICE
FLASH CARD
MATH TUTOR
MUSIC GENERATOR
ADD LIBS
LONG DIVISION
RANDOM NUMBER FREQUENCY
SHOOT STARS
IQ TEST
PLANTS \& LEMONADE
COLOR MATH
JIVE TURKEY
DRAGON MAZE

APPLE BASIC \#42:

These programs require a printer and paddles. They run in Integer BASIC.

DISK LABELER: List disk file names.
DECISION MAKER: Statistical analyses.
APPLE WORD PUZZLE: Word search puzzle generator.
SNOOPY POSTER
HEBREW POSTER

## BIORHYTHM PRINTER

CHECKERS: Self-explanatory.
FLAGS: Identify national flags.
BATTLESHIP: The age-old strategy game.

ADDITION RACE: A competitive drill program.

GO BACK: Eye-hand coordination.
OREGON TRAIL: Simulation exercise.
VINCENT: Drawing program (This one has a bug in it.)

COLOR SKETCH: An electronic etch-a-sketch in color.

APPLE BASIC \#43:

Grades 7-12. Graphing and plotting. Requires Applesoft BASIC.

PTOTTER: Plot using rational functions. .
MULTIGRAPH: Input numbers and plot figures on graph.
DERIVATIVE: Fast display of graphing derivatives.
EIGEN: Fast Eigen values/vectors solution generator.
FOURIER: Fast Fourier graphing procedure.
INTEGRATE: Integrate Function $F(x)$ over Interval (A,B)
LIMITS 1: Input functions; get evaluation.
LIMITS 2: Behavior of functions as they approach limits.
LINEAR TRANS: Linear transformations of the plane.
MATRIX: Coefficient matrix inversion.
MOTIONS: Input isometry/dilation; get plot points/images.
MULTINTEGRATE: 3-AXIS GRAPH.
PARAMETRICS: Define values and get a graph.
POWER SERIES: Input data for display.
LINE: These
PARABOLA: figures
HYPERBOLA: on a

```
CIRCLE: graph.
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ELLIPSE:

SKETCH: A plotting program.
SYSTEMS: A matrix program.

REFLECTIONS: Plotting program.
MIDPOINT: Find midpoints of $X, Y$ coordinates.
X - Y GRAPHER: Graph plotting program.
SLOPES: Calculate slope of $X, Y$ coordinates.

APPLE BASIC \#44:

This disk contains low resolution graphics pictures by the third grade students from the Douglas school District, Ellsworth Air Force Base, South Dakota.

| PANDY | ALLEY CAT |
| :--- | :--- |
| APPLE PICTURE | COWGIRLs |
| CRASHING CAR | DARTH WITH LASER |
| DOUGLAS PATRIOTS | HANGMAN |
| HAPPY FACE | HP |
| MOVEALONG | R2-D2 |
| SKATING | SNOOPY'S PLACE |
| STILE PICTURES2 | THE HEART OF TEXAS |
| THE ROSE | THE SHIP |
| TRI | TYLOSAURUS |
| U.S TEXAS | URBAN COWBOY |
| VALENTINE'S DAY | BRAVE HEART'S HAPPINESS |
| ET | JAN GIRAFFE |
| LIEE FORM | MERRY MOUSE |
| MERRY MOUSEI | VFAT |
| THE SIOUX TIPI | VICUNA |
| WINYAN |  |

APPLE BASIC \#45:

FIRE ORGAN

This disk will introduce you to a new art form -- abstract graphics in notion to accompany music. The graphics "scores" on the disk will demonstrate virtually everything you can do with the Apple II graphics. It is one of the - if not THE most exciting disk in the software exchange. It includes complete documentation onthe disk.

ATARI BASIC \#21:

DISKDUMP: Dump disk files to your printer.
DIIRECTRY: Print a catalog of your disks.
RROUL: Play Russian Roulette with the computer.
MARQUE: Here is a sample Marque you can use for titling your programs.

OCTADRAW: Control eight lines with your joystick to create fantastic graphics.

LINEPRO: A line-by-line word processing program.
NITEMARE: This one is!!!!!

DUPL: Duplicate all files on a disk except the DOS.
COPY: Copy files from disk to disk.
DISKTEST: Test your disks and drives. This program reformats the disk destroying all data.

MATH: Math drill and practice.
ARTILL: Another great artillery game.
MARQUE2: Another Marque to introduce your programs.
NUKE: Can you control this nuclear reactor?
JLANDER: Land you spacecraft successfully on the moons of Jupiter.

ATARI BASIC \#22:

KINGDOM: Like the game of Hamurabi, you must rule your kingåm wisely to survive.

MOD2: This program saves text files to disk.
TYPTUNE2: The Atari keyboard becomes a piano keyboard to play music.

STARBASE: Protect your starbase from invading aliens. They keep coming faster and faster!

PRINTCALC: Print a calendar.

OBJCONV: Object to BASIC text string.

BUDGET: A simple household budgeting program.
THREED: Fantastic 3-D graphics display.
FIVESTUD: Five card stud poker.
BUILDNEW: Create an autoload file.
PRINT: Print out a BASIC or assembly language file.
BOMBARD: Here is a version of "Missile Command" in BASIC -slower, but still lots of fun.

LUNAR2: Another great lunar lander game.

ATARI BASIC \#23:

This disk contains some great graphics programs to really show off your system.

ATARI ATARI8øø
MARKl ANIMATE
ENCOUNT JOYCOLOR
RAINBOW GALACTIC
NAME
GRAPHMARER
REFLECTIONS
RANDOM
AGAIN: A game very much like SIMON.
DATABASE: A datbase program.
STOPSND: Gues the sounds the computer is making. This really shows off the sound effects of the Atari system.

DATASTAT: Lod data subroutine.
ANGLECAN: A really great game. Angle your shots to beat the clock.

ATARI BASIC \#24:

This disk contains a variety of assembly language files which will give you a lot of samples to work with. From Norm Draper, Dallas Atari Users Group.

Run the basic program "DOC" for an introduction to the disk.

ASMEDT.BØ1
ASMLDR.Bø1
MICROASM.Bøl
ASMIN.TXT
ASMTMP.TXT
NUM.OBJ

```
MICROASM.DOC
PRINTNOP.ASM
CHECKERS.OBJ
COLOR.ASM
PATTERN.OBJ
PATTERN.B0l
MEMTEST.DOC
MEMTEST.PRT
PRINTNOP.DOC
DOC.DOC
COLOR.B@I
DOC
COMMODORE 64 #3
```

LOADOBJ.Bø1
CHECKERS.ASM
COLOR.OBJ
PATTERN.ASM
PATTERN.DOC
COLOR.BO1
MEMTEST.ASM
MEMTEST.OBJ
CHECKERS.DOC
COLOR.DOC
AMS. DOC

An educational program disk from Com:nodore:

```
VERBS 6 Match your skills with
VERBS 7 Mr. Mugs.
VERBS 8
VERBS }
WORD MEANS
NOUNS
PROBLEM PRONOUNS
PARTS OF SPEECH
PLURALS
```

NEW TACHISTO: Improve your reading skills.
REMEMBERING: Here is a another version of the well-known TV
game, Concentration. Match numbers, letters, or shapes.
COMMODORE 64 \#4:

Some great games from Commodore. Some need better instructions. CLOWN: Control the jumping clowns.

JUPITER LANDER: This is a lander game like the cartridge game. MUSIC MACHINE: Enjoy the great music sounds of the commodore 64.

SOLOR SYSTEM: Patrol the Soloar System.
KICKMAN: Bring the arcade gaine into your home with this one.
MOTOR MANIA: How good a driver are you?
SPACE RAIDER: How good a shot are you?
MATCHMAKER: Another Concentration game with great graphics and sound effects.

MONOPOLE: This is like the famous board game.
VOODOO ADVENTURE: An enjoyable adventure in the caves of doom. GREENHOUSE: Test your green thumb.

COMMODORE 64 \#5:

GRADE AVERAGE +: Average grades for up to 26 students.
BACH-A-ROCK: A so-so music program.
BASIC MATH: As the title says, basic math exercises.
OTHELLO: Another version of the favorite computer game.
BOGGLER: Another game like Othello but with some new twists.
TEDDY: Some interesting graphics
SEALY: programs.
POLLY:
3D TIC TACT TOE: A tough version of the age old favorite.
ROLLERI: This is a great dice game like Yahtzee in some ways.
EASYMAIL: A simplified mailing list program using tape storage.

PROBLEM: To tell you about this one would give it away. SOLVED:

COMMODORE 64 DISKS:

We recently received software from Commodore User's Groups in exchange for ours. Much of it is Commodore public domain software. Some of the games, however, have been developed by individuals.

Some of the software requires a Pet Emulator. A public domain program is included on each of our disks. If you need the emulator, load the program but do not run it. Enter "SYS49152" and then press <Return>.

A number of the programs will run on the VIC-20 if you have a 40-column adaptor on your computer. These adaptors are available through your local Commodore dealer. The VIC-2ø disk, however, does not require the $4 \emptyset$-column board.

This disk, contains a number of business education programs from Commodore:

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ACCOUNTING AMORT'N TABLE
BONDS BUDGETACCOUNT
CREDIT UNION DEPREICATION
FIFO GROSS PAY
INVESTMENTS LIFE TABLES
```

CALENDAR: Print a calendar for any month and year.
DATES: Find the number of days between dates.
ICE CREAM: Learn to run an ice cream parlor profitably.
LEMONADE: Similiar to ICE CREAM, only this is a lemonade stand.

COMMODORE 64 \#7:

BAGELS: Pick the 3-digit number the computer has selected.
ENDGAME2: A challenging math game. Put the proper arithmetic operation signs in between a list of numbers to achieve the correct answer.

MASTERMIND III: Another version of this popular favorite.
BLACK BOX: You must track down the marbles inside the Black Box using light rays. By watching where and how they exit the box, you can discover where the marbles are hidden.

CIVIL WAR QUIZ: Refight the Civil War. Who knows, the South may rise again!

WEIGHT IN SPACE: Take a trip through the Solar system to find out what life would be like on the different planets.

MUSIC MAKER 64: Here is a program that really shows off the sound effects and graphics of the 64. Compose, play, and save your own music.

HI-RES PLOT: Plot trigonmetric functions or your own in Hi-res graphics.

SPRITE MAKER: A sprite definition program.

COMMODORE 64 \#8:

BREAKOUT: A tennis-like game.
SNAKES: A better version for you evasion lovers.

LASER LIGHT: A fast-action arcade game.
FIf: A flight simulator.
KENO: Las Vegas, here we come!
BLACKJACK: Keno, move over!
STAR TREK: Another version of the favorite computer game.
MONOPOLY: Play the famous board game on your computer.
PINBALL: You may need the pet Emulator to play this pinball game.

ART INTEL: Talk to Eliza!

COMMODORE 64 \#9:

SHAKESPEARE: How well do you know your Shakespeare?
FAMOUS PEOPLE: Trivia buffs will love this one.
METRICS QUIZ: Isn't it about time you learned the new system?
CHANGE TO METRIC: If you really don't know, let your computer do it for you.

MATH IQ: For those brave souls who don't care if they embarrass themselves.

READER: Adjust your own reading speed.
NUCLEAR DEMO: A great demonstration but prone to have a bug or two.

ENTERTAINER: Great music on your computer.
BACH DUET: A great way to learn the music capabilities of your computer.

BIORYTHM SERIES: Three programs to plot and print your biorythm.

COMMODORE 64 \#19:.

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A challenging series for slightly older children -- Jr. High and above.
BIG BINARY: Learn to convert to and from binary numbers.
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THE ELEMENTS: Not the weather -- this is a quiz on the chemical elements!

DERIV. POLY: This is about polynomial derivation and distribution.

PERCENTS: Test your skills in calculating percentages.
GEOMETRY: An introduction to geometry and different shapes.
HISTORICAL ANALYSIS: Use a tren line to analyze user-input data.

WORLD WARS: A history drill on the two world wars.
PARTS OF SPEECH: If you don't know your parts of speech, this will help.

T-HYPHEN: Learn all about hypenation.

COMMODORE 64 \#ll:

BATTLESHIP: That same old favorite in new clothes for the $\mathrm{C}-64$ ! BILLIARDS: A challenge for all brave souls!

CARD SNAP: Can you Snap faster than the computer? Yes, if you're fast enough.

CONCENTRATION: That old favorite TV game on the C-64 screen. DICE.PIG: How greedy are you? Roll dice against the computer to see!

FAWLTY: An adventure-type game. Needs some help!
GRUNGY TOWERS: Another game like Fawlty, only this is a murder mystery!

GUNNER: Another great artillery duel.
KILLER BUNNIES: Can you survive the battle with the Killer Bunnies? Not as easy as you think.

MOUSEMAZE: REM statements give you directions for finding your way out of this maze.

OSERO: A game much like Othello.
QUANDRY: A PET game which will put you in a Quandry!
QUBIC: Three-dimensional tic-tac-toe.
SPADE.INSTRUCTS: Instructions for the game of Spades.

SPADES: An intriguing card game.
TARGET: A keyboard target game.

COMMODORE 64 \#l2:

ARTILLERY TRAP: An artillery game.
BOGGLE: Like the Parker Brothers hiddne word game, this one challenges you to find as many words as you can within the time limit.

BOMBER: Knock the bomber out of the air before it bombs you.
BOXING: Fight in an olympic boxing match.
'BREAKOUT 3.l: You'll need paddles for this game of Breakout.
BRIDGE Bid TRAINER: Practice bidding in bridge.
CHECKERS: Another great game of Checkers.
GOLF: Play a round at the Commodore Country Club.
HORSERACE: Try your hand with the ponies. A PET program.
HURKLE: Find the invisible Hurkle in the grid.
KNIGHT'S TOUR: Chess lovers will like this Knight's tour of the chessboard.

MUGWUMP: Another old favorite. Find the Mugwump.
POP SHOT: You'll have to be fast and accurate to play this one.
QUBIC2: Three-D tic-tac-toe.
ROAD RALLY: Balance your speed against your gas consumption to win this road rally.

SINNERS: Can the sinners beat the devils?. It's up to you.
SOLITAIRE POKER: Draw Pker for one.
TANK BATTLE: Tanks battle it out among the walls and obstacles.

COMMODORE 64. \#13:

DEF.MATCH: Match definitions.
ENG.MONSTER: Match pairs of words.

FLASHER: Can you figure out what the computer flashed on the screen?

HAIKU: Enjoy the oriental form of verse.
HOMOCONC: This is an interesting variation of the game, "Concentration."

TOTTO: This is the game of Mastermind, only with words.
LETTER SQUARE: This is the game of fifteen letters in a square of sixteen spaces. Put them all in the right order.

LETTER: Can you guess the letter the computer has selected?
MADLIB: Here is the well-known Logo game in BASIC. What kind of stories can you and the computer create?

MATCH: Can you match words correctly?
ACCELERATION: This is a game like Lunar Lander or Logo.Lander. Can you get the ball down a slope into the cup?

CASCADE: A fun program to watch -- and to learn the effects of gravity.

BALLISTICS: Study the ballistics of artillery shells.
Commodore VIC-2ø Disk \#l:

DISKCHECK: A useful disk checking utility.
RACE: Race around the course without hitting the walls.
GRAND PRIX: A lot like RACE but a bit more challenging.
ARITHMATTACK: A fun-type arithmetic game.
STAR CHASER: You have to move fast in this game to catch all the stars you can.

SAMU: How good are you at multiplication? Here is a fast-moving game to test your skills.

BLACKJACK: The card game to test your Las Vegas skills.
LUNAR LANDER: A nice graphic game of Lunar Lander.
FOREST DRIVER: How well can you drive through the woods?
BANDIT l: A one-armed bandit (slot machine) from Europe.
JR'S MATH: How much arithmetic can you do before supper?

TI BASIC \#20

AMERICA: Todd Auerbach sent us this picture of the American Flag. Has music, too!

BOMB: Find the bomb in this fun gme.
DRAGON: A great picture from Michael Hamilton.
E-TO-M: Change English measurements to metric measurements.
HORSE: An exciting horse race game.
JUSTIFY: A routine to justify numbers to the right.
MOTHER: Mother goose rhymes. Requires TE-2.
QUINTUS: Todd Auerbach sent this game from.99'er. Cature as many squares as you can.

SAVE: Use TE-2 to hear synthetic speech demonstrations.
SCRAMBLE: Unscramble words as fast as you can.
SL: Here is a great game of "Snakes \& Ladders."
SLOTS: Lisa Rossi sent us this game of Slots. How can you do with \$500?

SNOOPY: FANTASTIC!!!!!! Great graphics with music.
SOCSTUDS: Another fun program from Lisa Rossi. Test your social studies knowledge.

TIXBASIC \#2l: (Requires Extended BASIC)

BOATSONG: Some terrific music and
ORGAN: graphics.
PUPPY TOWN
ROBOT BOOGIE
WESTERN BOOGIE
PIANO
SCOREBOARD: Requires speech synthesizer. A great bowling game.

TI XBASIC \#22: (Requires Extended BASIC)

BASKET:
BDATA:
INSTRUCT:

Keep basketball player statistics.

GRAPHMSG: Plot bargraphs -- from Dan Schell
PENGUIN: Penquins protect their home from invading paratroopers. From Eric Peterson and Diego Cornehls, Astroware.

PIRING: A great game with fantastic graphics. This is a "pie-ring squad" not a firing squad. But look out for the gorilla. his bananas are deadly.

RESCUE: Save the planet's population from the invading Robotoids.

TRUCKER: How good a driver are you? this game will tell you.
VENUS: Ever wonder what Venus looks like?

TI XBASIC \#23: (Requires Extended BASIC)

BASEALERT: Good graphics in this target game from william Groezek.

BATTLEGROUND: Missiles battle aircraft in this two-player game. COMP/MED: Helpful hints for common medical problems. From D. B. Fischer.

DGBW/X: Dog-gone boogie woogie with fun-graphics.
ESCAPE: Can you maneuver through the robots? It isn't easy! From Julian Wan.

INSANITY: If you think Rubic's Cube is bad, try this! From G. Mineo.

INVASION: Get the dragon before it gets you!
MOON/TAG: A good game with nice graphics. Weave your way through the asteroids to play tag with the moons.

SPACEPILOT: Another from G. Mineo. Clear Gamma Sector of Imperial Novatron Mines.

WLD/MAP: A great way to practice working with latitude and longitude on an excellent World Map.

TI XBASIC \#24: (Requires Extended BASIC)

XBASICDEMO: A good demonstration of what can be done with Extended Basic.

TEXT-TO-SPEECH: A demonstration of text-to-speech technology. Requires speech synthesizer.

TI XBASIC \#25: (Requires Extended BASIC)

STOCK RECORDS: This disk maintains records of your stock portfolio. There's a lot here in a small space -- a valuable program.

TRS-80 COLOR COMPUTER SOFTWARE:

COCO \#1:
WUMPUS: Play the popular game, Hunt the wumpus.
CYCLE: Want to play Evel Knievel? Test your motorcycle skills. SUNDANCE: Catch as many Suns as you can in this fast-moving game.

DRAW: Use the arrow keys to draw on the screen.
SKETCH: This is like DRAW only you use joysticks to create pictures.

DAY/WEEK: Find the day of the week that any date fell on, from 1600 to 2000 .

HORSERACE: HOW can you do at the race track? Here's an easy way to find out.
pILLBOX: Can you knock the invaders out of the sky? This game tests your accuracy.

SLOTS: A very colorful version of the Las Vegas game.
CONVERT: Convert from English to Metric and back again -- or vica versa, or whatever you want.

UFO: Your tank does battle with anvading saucers.
CALENDAR: Print a calendar for any month.
DOT: Can you move your dot across the screen without being hit? It isn't easy.

ILLUSION: A very tricky optical illusion.

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COCO #2:
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CAGE: Here's a game where you have to build a cage around your opponent before he builds one around you.

WORDPRO: This is an easy word processing program for letter writing and other short documents.

BACH: Bach on the Coco.
DEFEND: Play the arcade game on your Coco. It's a bit slower then Defender but lots of fun.

CHECKERS: Play checkers with joysticks.
CLOCK: Add another clock to your home.
TREK: An adventure game aboard the Enterprise.
BACCARAT: Play the popular card game just as you would in Las Vegas or Monaco.

SORCERER: Play the Sorcerer's Castle Adventure.
SURVIVAL: Can you survive after a crashlanding on the moon?
ANIMAL: Here is the very popular game for the Coco.
METRIC2: Another metric conversion program.
TEMPERATURE: Convert temperatures: Centigrade, Fahrenheit, Kelvin, Rankine.

TEMPCOMP: Use with Temperature to compare temperature values on a graph.

CoCO \#3:

EDITOR: Here is a real convenient mini-text editor program for simple word processing.

PEGWARS: Here is a game like Hustle and Cage. Use your joystick to trap your opponent before you get trapped.

KING'TUT: Solve the mystery of King Tut's Tomb in this adventure game.

INVENTORY: Here is a convenient sales and inventory program which can be altered to serve a variety of needs.

ACCREC: Accounts receiveable.

COCO \#4:

MATH: Practice your math tables.
MEMO: A memo writing program with a very colorful introduction.

ORDER: This goes along with the Memo program to write an order form.

DISKMAP: Find out how much space you have left on a disk and where it is.

JOYFOUR: Here is the old favorite for joysticks. Can you get four-in-a-row?

MATH2: Have a math competition between friends!
STARTREK: Play the famous game on your Coco.
CASTLE: Play the Wizard's Castle Game.
CONVERT: Convert land, electrical, heat, pressure, and cubic measurements.

GAMES: Play Hi-Lo and Blackjack.
REFLEX: Test your reflex actions with this super program.
MAZE: Use your joystick to get through the maze as fast as you can.

COLORTRAP: Here is another version of the trapping game, Hustle.


Turtle News and TLComputing are published monthly by the Young Peoples' Logo Association, 1208 Hillsdale Drive, Richardson, Texas 75081. (214) 783-7548. James H. Muller, Editor and Publisher.

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P.O. Box 855067

Richardson, Texas 75085
(214) 783-7548

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