

Ready, Set . . .

Teacher's Guide



SUNBURST
COMMUNICATIONS

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READY, SET...

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INTRODUCTION

READY, SET... contains six computer programs designed to give children practice in discriminating shapes, upper-and lower-case alphabet letters, and numerals. These programs are planned for use in kindergarten or first grade, but may be used effectively at home, in preschools, or in special education settings. They are appropriate for any child who is not yet ready for formal reading instruction.

The only prerequisites for the use of READY, SET...are the abilities to see the screen and to press a key on the computer. Correct responses cause novel and interesting things to happen on screen with colorful graphics, lively animation, and sound. Incorrect responses are ignored. Knowledge of shapes, alphabet letters, and numerals is acquired along with some eye-hand coordination practice.

Because children improve as they learn, the programs can be modified by the teacher or parent to control how fast, how many, in what order, and what kind of items are presented on the screen. This is done with an easy-to-use TEACHER OPTION. Directions and recommendations for using the TEACHER OPTION are found in the TEACHER and PARENT sections of this booklet.

READY, SET... is designed to be a supplement to existing readiness curricula. It is a tool with the following advantages:

1. constant interaction with the instructional program by the child;
2. the appeal of the familiar video screen with its changing sounds and colors;
3. consistent and immediate feedback for responses;
4. a teaching method that is free of pencil and paper; and
5. a design which insures eventual success for every child.

READY, SET... is designed for a 16K Atari computer with a Basic cartridge, a disk drive, and a color television or monitor. Joysticks or paddles are optional but desirable.

OVERVIEW

The READY, SET... programs are for prereaders and the programs themselves contain no written instructions. However, an adult or older student is needed to select the program and possibly make modifications. Once the game has started, children can play independently since the program will continue until stopped by the teacher.

The following programs are included in READY, SET...:

BEAM UP - a game to train discrimination of shapes;

ALPHASAUROUS - a lower-case letter matching game;

ABC===> - a capital letter discrimination game;

LUNAR LETTERS - a game which requires the matching of capital letters to their lower-case forms;

NUMBER CHICK - a numeral to number matching game; and

MOON MATH - a numeral discrimination game.

All the games involve matching. The settings and special effects differ but the rules are the same: when the item that correctly matches the stimulus item appears on the screen, a press of any key on the keyboard (or the button on the joystick or paddle) will cause a rewarding response. If two or more keys are pressed simultaneously, the program will respond to the first one pressed allowing a group of children to play a game cooperatively. Sound in the program may be controlled by using the television/monitor volume control, and if the television/monitor is equipped with a jack, headphones may be used.

How READY, SET... Works

Start by turning on the disk drive. You will hear a whirring sound. Insert the diskette into the disk drive with the label facing up and the "window" inserted first. Close the disk drive door. Turn on the color monitor or television, adjust the volume, and then turn on the computer.

You will see the SUNBURST logo, the READY, SET... title, and then a menu listing the following choices: the six games, DIRECTIONS, TEACHER OPTION, and END. Press the number of your choice.

If any of the game options are selected, that game will begin with the programs adjusted for an average child.

If the DIRECTIONS option is selected, another screen will appear and you will be asked to select the game for which you want directions. After you receive them, you will return to the program menu.

If the TEACHER OPTION is selected, another screen will appear, and you will be asked to select the game you want to modify. After it has been modified by using the TEACHER OPTION, the game will immediately begin to play with the modifications. For more details on the use of the TEACHER OPTION, see page 10.

Each game begins with a brightly-colored setting and introductory sound. A stimulus item (shape, letter, or numeral) appears on the screen and remains there while a series of items begin to appear. Children signal that an item matches the stimulus by pushing a key; they do nothing if the items do not match. If the child misses a match, another opportunity will soon come along.

Correct Answers

When the child answers correctly, there is a rewarding, animated response. Then a new stimulus appears and play continues.

Incorrect Answers

An incorrect response results in a disappointing absence of any new animation. If a key is held down, all movement will stop until it is released.

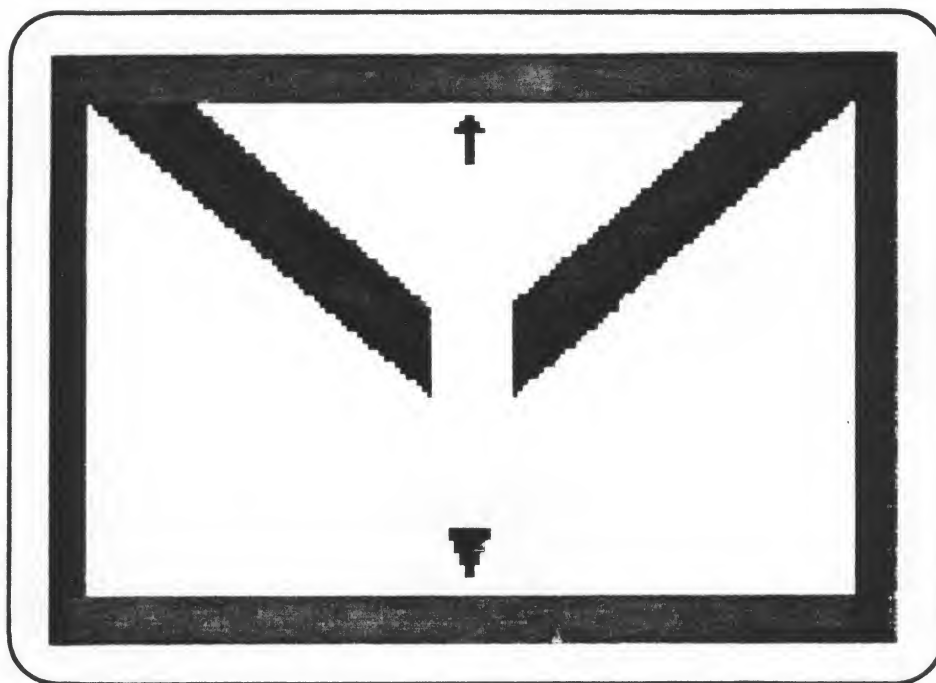
After the Game

After a game (usually a series of eight correct matches), a major reward with graphics and sound is presented, and a new game will automatically begin. A child may play the same game again and again, or a number of children may take turns playing.

Stopping the Game

To stop a game, use Control E (hold the CTRL key down and press the "E" key). If a reward is in progress, the game will end after the reward is over. You will return to the menu list. Then if you want to end the session or use another diskette, select the END option and follow the directions on the screen.

BEAM UP



Description: A shape appears at the top middle of the screen. Then shapes appear one by one at the bottom of the screen. When the top and bottom shapes correctly match, children should press a key. This will cause a beam up effect with varying sound. A longer graphic/auditory effect will reward the child for a series of eight correct responses.

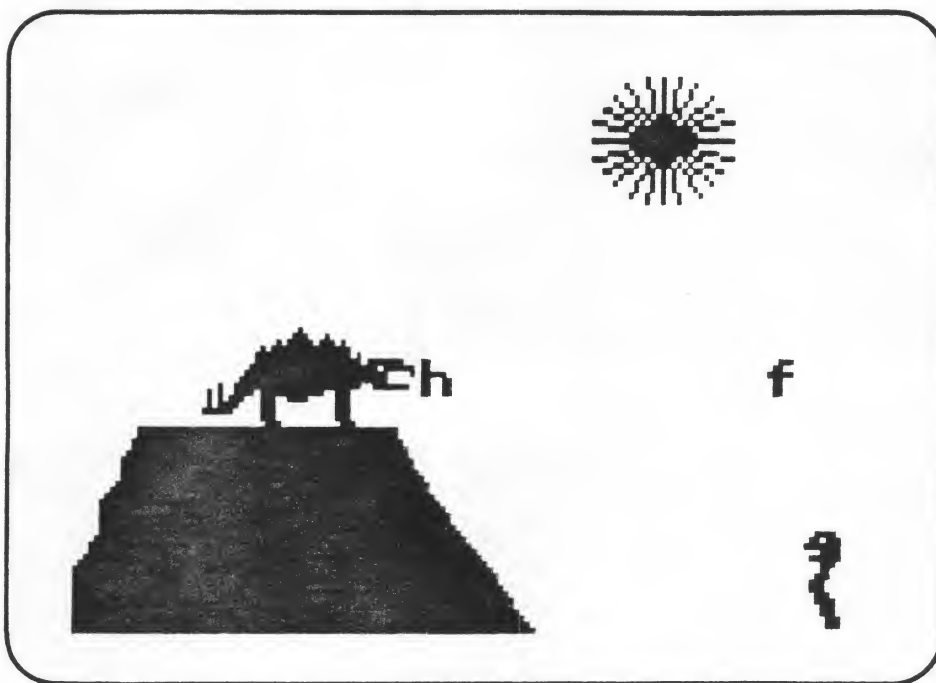
Skills: shape recognition
visual discrimination
matching
eye-hand coordination

Teacher Options: rate of presentation: 1 is fast (about 2 seconds) and 9 is slow (about 9 seconds)
number of shapes in a series (5 to 20)

Objectives:

1. to discriminate among shapes
2. to recognize instances of the same shape
3. to learn a simple use of the computer

ALPHASAURUS



Description: A green sea serpent will push up a letter and a dinosaur will respond by opening his mouth to emit a letter. When the two letters correctly match, the child should press a key. After the child makes four correct responses, the snake will breathe fire or the dinosaur will wag his tail. At the end of a game (eight correct responses), a special auditory/visual reward is given.

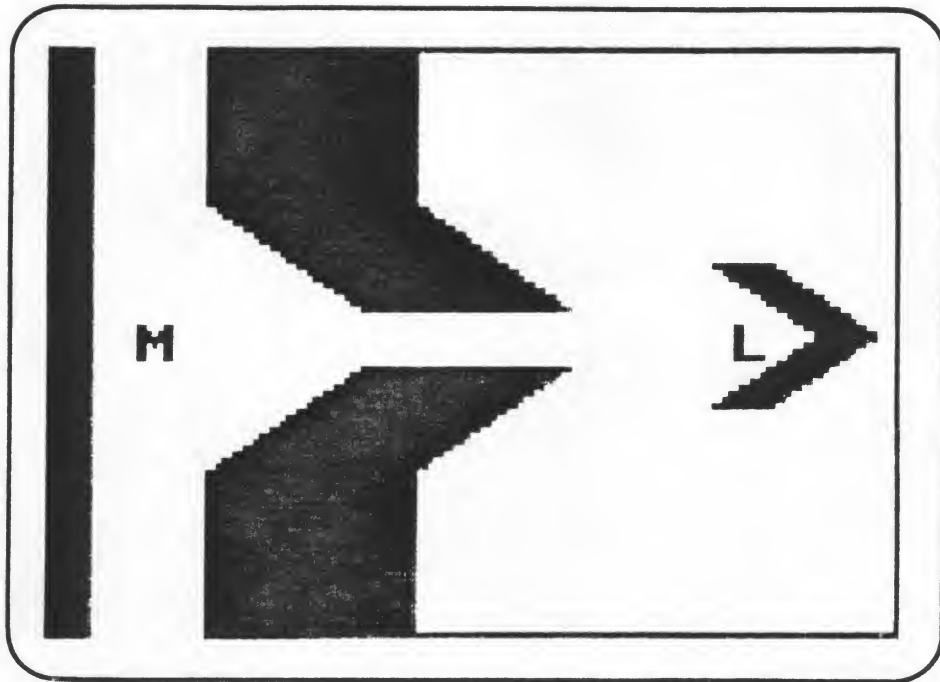
Skills: recognition of lower-case letters
matching of lower-case letters

Teacher Options: the rate of presentation
the number of letters in a game
the specific letters to be used

Objectives:

1. to recognize specific lower-case letters
2. to practice discrimination among lower-case letters
3. (Remedial) to practice correct discrimination of similar letters that are often confused--for example: n, h, m, u, d, b, p, q

ABC=== >



Description: Music plays and a colorful arrow appears on the screen with a capital letter at its point. When the letter coming down the left side of the screen matches the letter at the arrow point, children should press a key. A correct answer will bring an arrow of letters flying across the screen, accompanied by one of three musical scales. When the game is over (after eight correct responses), there is a special effect with brilliant color and calliope-like music.

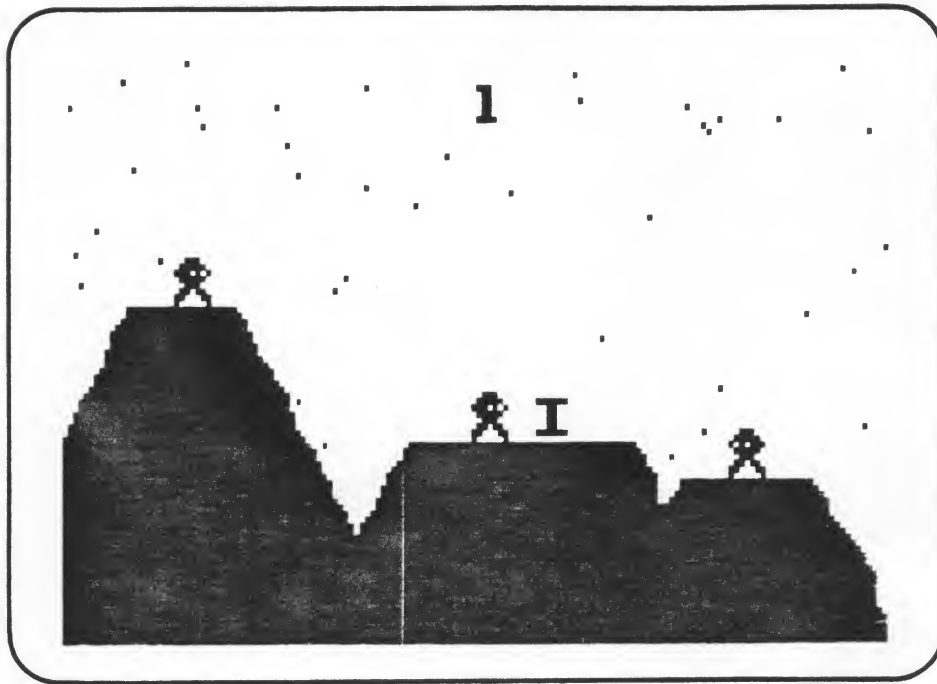
Skills: recognition of capital letters
discrimination of capital letters

Teacher Options: the rate of presentation
the number of letters in a game
the specific letters to be used

Objectives:

1. to recognize specific capital letters
2. to practice discrimination among capital letters
3. (Remedial) to practice correct discrimination of similar letters that are often confused (M,N,W,E,F)

LUNAR LETTERS



Description: Against a starry sky, three space creatures stand on moon mesas. Next to the middle space creature is a large capital letter. The other two space creatures shoot lower-case letters into the sky one by one. When the correct match appears, a press of a key will make the middle space creature retrieve the letter and do a trick. At the end of the game (after eight correct responses), all three space creatures take turns performing.

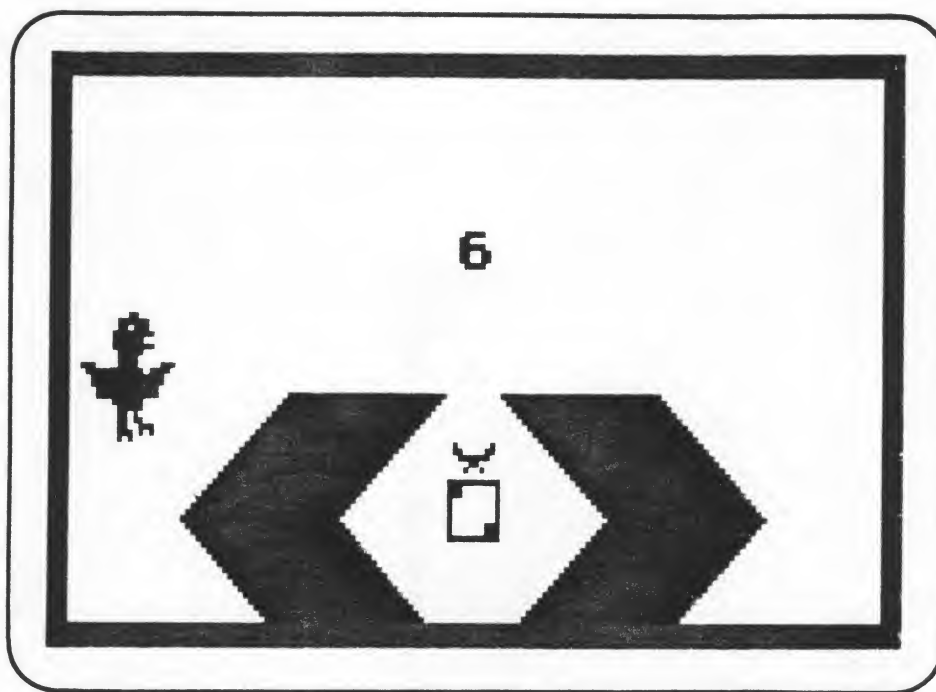
Skills: association of capital letters with their lower-case forms
recognition of letter forms

Teacher Options: the rate of presentation
the number of letters in a game
the specific letters to be used

Objectives:

1. to associate capital letters with their lower-case forms
2. to practice making quick associations

NUMBER CHICK



Description: NUMBER CHICK features a yellow chick who opens its beak to send numerals across the screen one at a time. The child should press a key when a numeral correctly matches the number of dots on the die. Then a small bird will flap up, retrieve the numeral, and place it below the die. NUMBER CHICK will chirp the same number of times as the numeral to celebrate the successful match. At the end of the game (six correct responses), a flock of small birds appear.

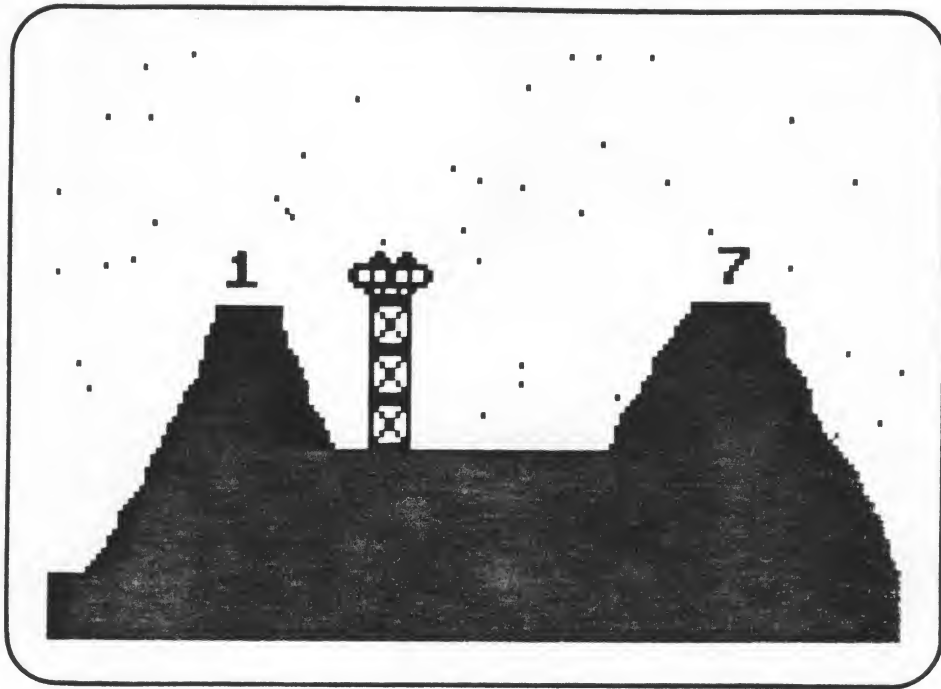
Skills: counting
recognition of numerals
association of numbers with numerals

Teacher Options: the rate of presentation
random or numerical order of presentation

Objectives:

1. to count correctly (dots on a die and the chirps of the chick)
2. to recognize numerals
3. to associate a number with the appropriate numeral automatically

MOON MATH



Description: In MOON MATH, a lunar landscape contains two moon mesas and a moon base. A small space transport delivers a numeral to one of the mesa tops. On the other mesa, numerals will materialize one by one. If the student presses a key when the two numerals correctly match, the large moon base in the center of the screen will glow and laser beams will zap both numerals. At the end of the game (nine correct responses), the moon base rises amidst a spectacular moon quake.

Skills: recognition of numerals
matching of numerals

Teacher Options: the rate of presentation
random or numerical order of presentation

Objectives:

1. to recognize the numerals from 1 to 9
2. to match numerals

How To Use the TEACHER OPTION

Frequent use of the TEACHER OPTION will enhance the effectiveness of READY, SET... games.

To use the option, type "8," the number of the Teacher Option, when the program menu is presented. You will be shown a screen which asks, "Which program do you want to change?" Type in the number of the game you want to use and follow the directions on the screen to make changes. All games are set for the average child.

How Fast?

All the games have an option for speed of presentation. Children vary considerably in response time. Many children will know the correct answers but miss signalling them if the speed is set too fast; later, they may become impatient if the speed is too slow. You will be given a choice of speeds ranging from one to nine. One is the fastest and nine is the slowest. Type in the speed you consider appropriate, and the TEACHER OPTION will move on to the next question.

How Many?

In BEAM UP, you will be given a choice of the number of shapes (from five to twenty). Most children will do best with six to nine different shapes. As the number of shapes increase, the time it takes to locate the match increases also. Using many shapes might be appropriate as children's abilities to discriminate quickly and maintain attention increase.

In the alphabet programs (ALPHASaurus, ABC==>, and LUNAR LETTERS), you will have a choice of the number of letters you want to use. You will be asked to enter a number between five and twenty-six. Again, six to nine letters is a good starting point for most children. Type in the number of letters you want.

Which Letters?

Your next question on the alphabet programs will be: "Do you want to select the letters to use?" (This option provides you with an opportunity to select specific letters for practice.) If your answer is yes, you will be asked to type in upper-case letters. Type in your choice of letters from the keyboard. Type upper-case letters even for ALPHASaurus, the lower-case matching game.

It is possible to type in the same letter more than once. You might, for example, want to enter "MMMWWW" if you are helping a child learn to distinguish between the letter "M" and the letter "W," or type "ANNETTE" if you were teaching a child named Annette the letters in her name.

What Order?

In the two number games, NUMBER CHICK and MOON MATH, you will have two choices: the items can be presented in numerical order, or they can be presented in numerical order the first time around with all subsequent plays in random order. When asked, "Do you wish the order of the numbers to be random?", type "Y" for random order or "N" for numerical order.

What Next?

After you have made all the changes you wish in a program, the game will automatically begin and continue with your modifications. When you end the game session and turn off the computer, all programs will return to their original settings.

If you should decide that you would like to make additional changes after a game is running, hold down the Control (CTRL) key and push the "E" key (CTRL E) during the game. You will return to the program menu where you may select the Teacher Option. Then follow the directions to make your changes.

SUGGESTIONS FOR TEACHERS

READY, SET... offers the classroom teacher two special features:

1. the programs are easily adapted to enhance any readiness curriculum you may be using, and
2. they are easy to use.

Adapting READY, SET... to a Readiness Curriculum

Many teachers use readiness activities from a basal reading series in their kindergarten or first grade classrooms. Most of these prereading curricula urge and often supply alternative teaching methods such as filmstrips, manipulative activities, charts, games, and cassette recordings in addition to the usual consumable workbooks and texts. READY, SET... games may be used to complement any basal curriculum, as well as any teacher-created readiness curriculum. Selecting appropriate games and varying them through the TEACHER OPTION adds a motivating support system to the daily routine and gives an alternative to paper and pencil tasks.

The recognition of visual differences, an essential early skill, may be demonstrated and practiced with BEAM UP. BEAM UP may be used frequently with differing numbers of shapes in a game series and with an increasing rate of presentation to add challenge. In addition to training visual perception, the game will develop eye-hand coordination and provide practice in left-to-right eye movement. Success is insured even for the slowest learners; if a correctly matching shape is missed the first time, it will soon reappear.

The alphabet letter games, ALPHASAURUS, ABC==>, and LUNAR LETTERS, can be matched closely to whatever sequence of letter introduction is offered in your basal readiness program. Not only will these games be an alternative to paper and pencil seatwork for practice, but they have the added bonus of immediate feedback on accuracy.

Basal series prereading programs differ in order of alphabet letter introduction. The sequence of introduction in your readiness program should be followed carefully. At the beginning, when only a single letter has been introduced, the ALPHASAURUS game might be modified so that the series of letters chosen in the TEACHER OPTION include three or four items containing the key letter and three or four items of other letters (for example, CCMCPRC). A lesson might be taught like this:

Teacher: I see a sea serpent bringing up a letter.
I think it's a...

Class: It's a "c."

Teacher: Right, it is a "c." And now the dinosaur
is going to say something else. Is that a "c"?

Class: Yes!

Teacher: Oh dear. I should have pushed a key. Now the dinosaur is saying something else. Is that a "c"?

Class: No!

Teacher: Is this one a "c"?

Class: Yes!

Teacher: Now I'll press a key. Look what happens!

At first, the letters could be referred to as "c" and "not a c." As the readiness program adds more letters, the teacher (using the TEACHER OPTION) may add more, too.

Some readiness programs will insist upon the use of letter sounds (/k/) rather than letter names ("c"). Others will urge the consistent use of a key word with each letter. Be consistent with the method of your basal series when using READY, SET....

Most series will begin with lower-case letters; some will intersperse upper-case letters with them. Choose among the READY, SET... games and modify them to meet the objectives of your series. Monday might be the day to use ALPHASAUROUS; Tuesday, ABC==>; and Wednesday, LUNAR LETTERS. Creative mixing and regular use of the TEACHER OPTION will insure ongoing interest in the games. A sample reproducible record sheet to register your modifications is included in this guide on page 16.

The number games will need little adaptation to complement most math readiness curricula. Begin using the math games at a slow speed of presentation and in numeric order and move on to rapid speed and random order as skills develop.

Some Ways to Use READY, SET...

If you are comfortable placing a disk in the disk drive and turning on the computer, there is little more you need to remember when you use the READY, SET... games. They have been tested to insure trouble-free operation, even when being played independently by immature young children. Only one thing--hitting CTRL E to return to the menu--will stop the game's continued replay. Holding down a key will cause a pause in the game, but the game will resume when the key is released.

Here are some ways to use the READY, SET...games:

1. whole class instruction by the teacher to introduce a symbol or a concept,
2. small group instruction led by the teacher, and
3. Learning Center practice with games played either independently by a child(ren) or under the supervision of a paraprofessional, adult volunteer, or older student helper.

Whole class demonstrations can be used to introduce a concept to the class. Some examples of this include how to use the games, the concept of "same" and "different," teaching a new letter of the alphabet, or practice in numeral recognition. A large television set or a series of them is recommended. The slowest speed in the TEACHER OPTION should be selected to allow time for explanations, or you may hold down a key to make the game pause while you talk. You may select the responses or allow the children to make them. You can "talk through" a game that uses an alphabet or number skill the class is working on and in this way model the sort of thinking you wish the children to develop. By calling for whole class verbal response, you can give everyone a sense of participation.

In smaller group settings, it is possible to give each child a key or a button to push. Paddles, joysticks, and the keyboard will convey a response. Several children could simultaneously play the games. When several buttons are pushed at once, the computer responds to the first one, but all the children see the correct response being reinforced with a reward. This is probably the best way to teach the use of the computer and of these games.

After they have learned to play the games and use the computer, children are able to work independently with READY, SET... in a Learning Center. To avoid distracting children who are doing other things, the television set or monitor should be placed so it is turned away from the rest of the class.

Children should be encouraged to say the names of the letters (and numbers) they recognize while using the games. Children should leave a mark next to their names or use some other record-keeping device to indicate a turn at the Learning Center that day. If you are fortunate and have a paraprofessional, a volunteer helper, or an older student to assist you, the supervision of a computer center can be an appropriate assignment. Then monitoring how long each child uses the computer becomes simpler.

When no one is using the Learning Center, the television set can be turned off without losing the program as long as the computer is left turned on. When the television is turned on again, the game will be waiting, ready to use. It will be in "attract mode," that is, changing colors to protect the television screen, but this will stop at the push of a button or a key.

Follow-up Activities

1. Place a writing center next to the computer Learning Center. Children may practice writing the letter(s) or numerals they have been recognizing in the READY, SET... games.
2. Use a sound table or box filled with objects that begin with the letter(s) being practiced. Children can name the objects to each other.

3. Give children newspaper pages containing large print, such as advertisements or headlines. Have them find and cut out the letter or number they are learning and paste it in a letter or number book.

4. Have a mystery picture hung out of reach and backwards on the wall with its beginning letter (for example, "P" or "p") written on the back of it. During the day let the children guess what the picture might be (penny, picnic, pie, pumpkin). Then write their guesses on the chalkboard. At the end of the day, reveal the picture.

5. During waiting times, play word games using the letters the children are learning. For example, you might say, "I'm thinking of something (or someone) that begins with "B" (or /b/). What do you think it might be?"

6. Let the children make large letters with their bodies; sometimes several children will be needed for letters such as "H." Let other children guess the letters that have been made. Or use this activity and substitute numerals for the letters.

7. Chalk letters on the pavement or place lettered cardboard squares on the floor. Have the children take "alphabet walks" naming the letters as they go.

Students													
													Game: Games
													Date: Options:
													Game:
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SUGGESTIONS FOR PARENTS

Some suggestions for using READY, SET... with your child are listed below. All of them will not apply to every child; you know your own child and will be able to decide which of the suggestions are most appropriate for you. Experiment and don't worry about going wrong.

You child's responses to the games will let you know when you need to add challenge. Start slowly and increase the rate of presentation as your child gains confidence.

Choose a time when your child is rested and wants to play; stop the session while it's still fun. Frequent, short sessions are better than long ones.

You can follow through with other activities that practice skills used in these games. Provide paper and crayons or pencils for practicing writing letters and numerals. The best reinforcing activities are the ones that seem to happen spontaneously: recognizing letters on a sign or a cereal box, counting toes or fingers, putting a crayon mark on all the "As" on a newspaper page, "reading" the letters and numbers on a telephone dial.

Introducing the Concept of Matching

You could prepare for the first game by making sure your child understands the concept of matching. Show your child several combinations of two objects. You might try two spoons, a fork and a spoon, two balls, a ball and a doll--whatever you find handy. Have your child tell you which objects are the same and which are different. Use the words "same," "different," "match," "like this one," "not like this one." You might point out why the two objects are different by demonstrating something that one has that the other doesn't. For example, "This is a ball. It is different from the doll. The doll has a face (or legs, or arms...)." .

When you are fairly certain your child understands same and different, try playing BEAM UP. After the game is on the video screen, you might point to the target shape and name it:

"This is a rectangle (or whatever name is appropriate). When you see one like it here (point to the bottom middle of the screen), press a key."

Show your pleasure at each success. You might say, "That's right! You're doing fine. You matched the rectangle!"

BEAM UP can continue to be an entertaining game even when all the shapes are mastered if you increase the speed of presentation.

Introducing the Alphabet

If your child is just beginning to learn the alphabet, you may want to use the TEACHER OPTION to introduce the letters gradually. You might want to

1. separate letters that look alike (b and d, p and q, n and m, n and h, n and r) and the letters that sound alike (t and d, b and d, b and p, k and g, m and n).
2. present the more useful letters first. The letters in a child's name are more important than rarely used letters like q, z, y, x, v, and w.
3. begin with the lower-case letters; most reading matter is presented in lower case.
4. introduce capitals along with the lower case when their forms are similar (C,c and S,s), but wait until the lower case is mastered before introducing distinctly differently formed capitals (A,a, H,h, F,f).

ALPHASaurus, ABC==>, and LUNAR LETTERS may all be modified using the TEACHER OPTION to choose the letters you want your child to learn first. The following sequences could be used:

For ALPHASaurus: a m t s i f d r o g l h u c b n k v e p w j y x q z

For ABC==>: S O U C K V P W Y X Z T L M F D I N A R H G B J E Q

For LUNAR LETTERS: S O U C T L M F D V I P W N A R H G B K J E Y X Z Q

This sequence avoids presenting similar letters together, since these letters can be confused. For example, you might use the first six or eight letter in ALPHASaurus for the first lesson, and when these letters are mastered drop the first one or two of them and add more.

Another sequence which could be used is:

c o a d g m l h t i j k p u b r f n e s w y v x z q

This sequence is a good one to use if you are teaching your child to write the letters because letters formed with similar strokes are learned at the same time.

You may also want to teach a letter along with its sound and a key word that your child will remember, such as "T says /t/, as in 'tiger' or 'tickle.'" When consonants have more than one sound, use the more common one such as "cat" instead of "city" and "game" instead of "giant." Avoid choosing key words that begin with blended sounds. "Sorry" or "sing" is better than "snake" or "shirt."

Counting and Numbers

You might prepare for the number games by counting aloud. Then when NUMBER CHICK's dots (on the die) appear on the screen, you and your child might count them. Count the number of times the CHICK chirps after each correct response, too.

In MOON MATH you and your child can call out the names of the numerals together. This makes learning the names of the numerals fun.

ATARI: WORKING WITH THE COMPUTER

- (1) Turn on the disk drive. You will hear a whirring sound.
- (2) Insert the diskette into the disk drive with the label facing up and the "window" inserted first.
- (3) Close the door to the disk drive.
- (4) Turn on the color television or monitor and adjust the volume.
- (5) Turn on the Atari. If joysticks or paddles are available, you may plug them into the ports.
- (6) The SUNBURST logo will appear on the screen, then the program name.
- (7) The main menu will appear. Enter your choice of games by typing a number.

Attract Mode

To protect the video screen, the Atari will change colors and reduce brightness after seven minutes without typing something. This is called "attract mode." Pressing any key will restore the normal screen.

Shutting Off the System

- (1) Remove the diskette from the disk drive and return it to its place of storage.
- (2) Turn off the disk drive.
- (3) Turn off the Atari.
- (4) Turn off the television or monitor.

NOTE: READY, SET... programs will run on any Atari computer with at least 16K of memory, but not on Atari game machines. Computer model numbers include Atari 400, 800, 800XL, 600XL, 1200XL, 1400XL, and 1450XL. Since the 400 and the 800 models contain four game ports (while the other models contain only two), they will accommodate the largest number of simultaneous players. Eight paddles may be plugged into the four ports.

"WHAT HAPPENS IF...?" -- SUNBURST COURSEWARE AND WARRANTY

- (1) What happens if a program will not load or run?
Call us on our toll-free number and we will send you a new diskette.
- (2) What if I find an error in the program?
We have thoroughly tested the programs that SUNBURST carries so we hope this does not happen. However, if you do find an error, please note what you did before the error occurred. Also, if a message appears on the screen, please write the message down. Then fill out the evaluation form or call us with the information. We will correct the error and send you a new diskette.
- (3) What happens if the courseware is accidentally destroyed?
SUNBURST has a lifetime guarantee on its courseware. Send us the product that was damaged and we will send you a new one.
- (4) How do I stop a program in the middle to go on to something new?
Hold the Control (CTRL) button down and press the E key. This will return you to the main menu. You may then select a different program to play. If you want to use a new diskette, select the END option.
- (5) Can I copy this diskette?
The material on the diskette is copyrighted. You should not copy the diskette.
- (6) Can I take this diskette out of the computer after the program has loaded and put it into another computer?
Yes, after the game has been selected and is on the screen, the diskette can be removed. After the game is finished, it will automatically begin again. However, if a different game is desired, the diskette must be reinserted in the disk drive.