Pre-Reading

verb

noun/nown/n

hello *bonjour* **hola** guten Tag CIAO

äá éè ö ûü

Le Petit Parisien

ATARI®
LEARNING SYSTEMS

Table of Contents

Using This Program at Home

Many ATARI® Learning Systems program manuals were originally designed for use by teachers in the classroom. The programs themselves, however, are no less engaging and instructive for "independent learners"—children, students, and adults—working at home.

Every manual includes a "Getting Started" section that explains how to load the program into your computer system quickly and easily. Since many basic prompts and other instructions are displayed right on your screen, that's all you'll need to begin learning and exploring with most ATARI Learning Systems programs. But whether you're a parent, a tutor, or a home learner teaching yourself, it's a good idea to look through the teaching materials in your manual. You're likely to find important details on using the program, valuable supplementary information on its subject matter, and some creative ideas for getting the most educational and entertainment value out of your ATARI Learning Systems program.

Introduction

This unique six-part primary *Pre-reading*
module will add interest and excitement to the
teaching of pre-reading skills. In Caterpillar
and Train, youngsters will enjoy learning
about letter recognition and alphabetical order.
First Letter provides practice in matching
initial sounds of words with the correct letter.
Pictures, Shapes, and Words will challenge the
memory of young learners and teach them to
look for similarities in a game of concentration.
Pre-reading can be used effectively both for
individual practice and with a group of two or
three students. And many teachers may choose
to use the programs on this diskette as a tool
for large-group instruction.

The module consists of one diskette and this
support booklet. It's designed for use with
students in kindergarten through second grade.
The diskette will operate on all ATARI®
Computers. This support booklet provides
additional activities and information necessary
for using these programs effectively in the
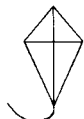classroom.

Index to Programs on Diskette

Caterpillar
A drill on the upper-case alphabet

Train
A drill on the lower-case alphabet

First Letter
A drill on the initial letter used to spell a pictured word

Pictures
A concentration type of memory game using pictures

Words
A concentration type of memory game using words

Shapes
A concentration type of memory game using geometric shapes

Getting Started

Follow these steps to load the Pre-reading program into your ATARI computer system:

1. With your computer off, turn on your television set or monitor and disk drive. Wait for the busy light on the disk drive to go out.

2. If your computer is *not* equipped with built-in ATARI BASIC, insert an ATARI BASIC cartridge in the cartridge slot (the left cartridge slot on the ATARI 800 computer).

3. Insert the Pre-reading diskette in your disk drive (disk drive 1, if you have more than one drive) and close the disk drive door or latch.

4. Turn on your computer. As your disk drive goes to work, you'll hear a beeping sound while the first part of the program loads into your computer. After several moments, a title screen will appear on your screen, followed by a menu of program selections.

Because your computer loads portions of the program as you see them, you must leave the Pre-reading diskette in your disk drive while using the program.

Using the Diskette

Each of the six programs on *Pre-reading* is identified by a symbol, a program number, and a program name. The computer shows the contents of the diskette by listing the symbols, the program numbers, and the program names on the menu screen. At the bottom of the menu,

the question "Which number?" appears. When one of the program numbers is typed, the corresponding program will begin. Nonreaders can start a program by finding the symbol of the program they choose and typing the number that precedes the symbol.

All the programs make use of color but can be used with a black and white television.

For the program descriptions, press **"CTRL A"** (that is, press **A** while holding down the **CTRL** key) and select option 1.

In two programs, First Letter and Words, the teacher has the option of selecting the letters or words to be included in the drill. To use these options, the teacher should press **CTRL A**. Further instructions then appear on the screen and are explained in detail in the support material for Words and First Letter.

The **RETURN** key is *not* used after responses on this diskette, except in the memory games: Pictures, Words, and Shapes. In these games it is needed only when two players enter their names at the beginning of the program.

The escape key (**ESC**) is used throughout this diskette to stop a program at any point. If **ESC** is pressed when the menu is shown, a different diskette may be inserted. When **ESC** is pressed at other points in the programs, the menu reappears.

Caterpillar

Specific Topic: Alphabet

Type: Drill and Practice

Reading Level: Pre-reading

Grade Level: Preschool–Grade 1

Description

Caterpillar assists children in learning alphabetical order and recognizing upper-case letters. A group of five sequential letters is randomly chosen and displayed on the screen, with one letter missing. The student types the missing letter. A caterpillar appears on the screen, one section at a time, for each correct response the student makes.

Objectives

• To match printed upper-case letters with their names

• To determine the missing letter in the alphabet sequence

• To match a letter name with the corresponding key on the keyboard

• To identify the graphemic representation for the sound of a consonant that begins a word

7

Caterpillar

Background Information	Caterpillar provides an opportunity for an individual or a small group of students to practice letter recognition and alphabetical order using upper-case letters.

Ten sequences of letters are given. When a correct response is made, the missing letter is printed in the box, and a part of the caterpillar appears on the screen. A new section is added for each correct response; after ten correct responses, the caterpillar is complete.

When a student makes an incorrect response, the entire alphabet is printed across the bottom of the screen, with a box representing the missing letter. If the student then answers correctly, the caterpillar appears.

If the second response is incorrect, the missing letter flashes in the alphabet list, as well as in the box. The caterpillar will not appear.

Notice that because the missing letter of any sequence is never the first letter, the letter A will never be a correct response.

Caterpillar

Preparation

Students should be able to recognize and name the letters of the alphabet and recite them in order. Students not familiar with the keyboard may need help with it.

You may wish to prepare the students for this program by covering one letter of an alphabet chart and asking the students which letter is covered.

Using the Program

The program may be used by an individual student or by two or three students working together. A student already familiar with the operation of the program might help other students during their first use of the program. Or the teacher may allow individual students to discover for themselves how the program functions, an approach that provides practice in developing higher-level thought processes, as well as alphabet skills.

This program might also be used with slightly older students who are learning English as a second language and are not familiar with this alphabet. However, you should determine whether the caterpillar animation is appropriate for these older students.

Follow-up

Sorting letters according to the alphabetic sequence is one way of classifying letters. In addition, students could separate the letters into piles according to similarities in shape, demonstrating another classification scheme. They could also describe the similarities and differences they found.

This program could begin a unit on elementary alphabetizing skills. Cards with a picture and the initial letter of the corresponding word could be arranged in alphabetical order. Later, words starting with five alphabetically consecutive letters might be printed on cards (perhaps with pictures) and given to the student, who would arrange them in alphabetical order.

Example: H, I, J, K, L

Hat   Ice   Jam   Kid   Look

Groups of five or six students could alphabetize their first names. You could extend this activity to include the first names of all students in the class. The order of lining up for recess could be alphabetical by first name.

Beginning readers could examine school directories or local telephone directories to discover that listings there are in alphabetical order.
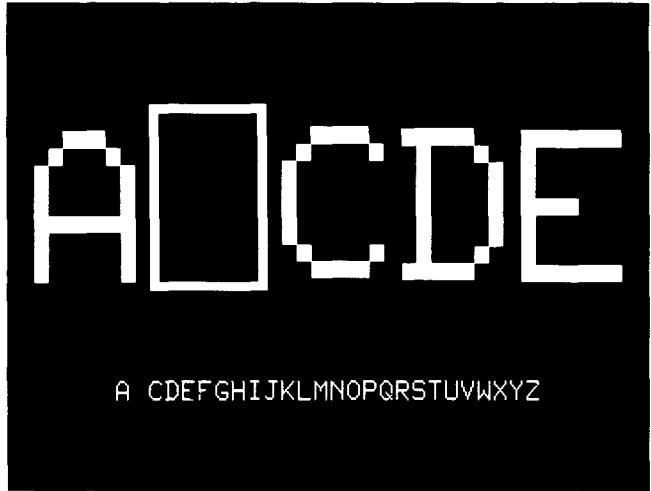
Kindergarten and first grade students might apply their alphabetizing skills in the school media center, perhaps as part of a unit on library skills.

Caterpillar

A five-letter sequence
is presented with one
letter missing.

The missing letter
may occur in any
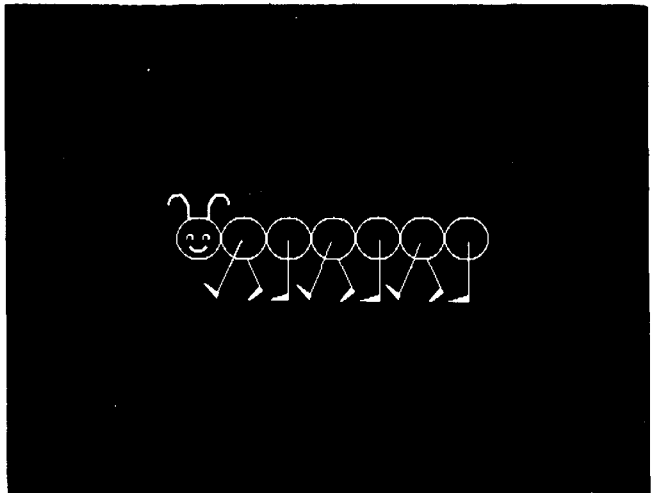position except the
first position.

Examples of Screen Output

11

Caterpillar

When an incorrect
response is made, the
entire alphabet
except the missing
letter is printed on
the screen.

When a correct
response is made, a
section of the
caterpillar is added.

Examples of Screen Output

Train

Specific Topic:	Alphabet
Type:	Drill and Practice
Reading Level:	Pre-reading
Grade Level:	Preschool–Grade 1

Description

Train assists children in learning alphabetical order and recognizing lower-case letters. A group of five sequential alphabet letters is randomly chosen and displayed on the screen with one letter missing. The student types in the missing letter. After each correct response, train cars appear one by one. An engine automatically appears at the beginning of the program, and a caboose at the end.

Objectives

• To match printed lower-case letters with their names

• To determine the missing letter in the alphabetic sequence

• To match a letter name with the corresponding key on the keyboard

• To match the lower-case and upper-case symbols for a given letter

• To identify the graphemic representation for the sound of a consonant that begins a word

13

Train

Train provides for an individual or a small group to practice letter recognition and alphabetical order using lower-case letters. Because there are no printed instructions on the diskette, you may wish to demonstrate this program with a group.

Ten sequences of letters are given. When a correct response is made, the missing letter is printed in the box. Then a part of a train appears on the screen, and another car is added each time there's a correct response. The train cars contain sequential letters of the alphabet. The correct response will appear in the last car in the train. After ten correct responses the train is complete, with a caboose at the end.

When a student makes an incorrect response, the alphabet appears across the bottom of the screen with a box in place of the missing letter. If the student then answers correctly, the train car appears. If the second response is incorrect, the missing letter flashes in the alphabet list, as well as in the box. The train car will not appear.

Notice that because the missing letter of any sequence is never the first letter, the letter "a" will never be a correct response.

Students not familiar with the keyboard may need help finding the letter on the keyboard. Notice that the Atari keyboard has only *upper-case* letters, while this program uses lower-case

Train

letters. The student must choose the lower-case letter to fit the sequence on the screen and locate the corresponding upper-case letter on the keyboard. If this causes difficulty, you may wish to use adhesive labels to apply lower-case letters to the keys.

Train

Preparation

The student should be able to recognize and name both upper and lower-case letters of the alphabet.

Using the Program

The program may be used by an individual student or by two or three students working together. A student already familiar with the operation of the program might help during another student's first try. Or the teacher may allow individual students to discover for themselves how the program functions—this approach provides practice in developing higher-level thought processes, as well as alphabet skills.

This program might also be used with slightly older students who are learning English as a second language and are not familiar with this alphabet.

It may be beneficial to have students try the Caterpillar program, which uses upper-case letters, before using this program.

Have students name the letters on the train cars as they wait for a new letter to join the train. They can check to see if the computer has it right.

Train

Follow-up

Have students discuss the advantages and disadvantages of having both upper and lower-case letters. They could list ways in which upper-case (capital) letters are used—for example, names, cities, I, the first word of a sentence, road signs. Why do we use both upper and lower-case letters? Would you rather be an upper-case or a lower-case letter?

Train

Use TRAIN to begin a unit on elementary alphabetizing skills. Cards with a picture and the initial letter of the corresponding word could be arranged in alphabetical order. Later, words starting with five alphabetically consecutive letters might be printed on cards (perhaps with pictures) and given to the students, to be arranged in alphabetical order.

Example: a b c d e

ant   ball   cat   dog   egg

If the students use spelling lists, those words could be put in alphabetical order.

Beginning readers could examine a children's dictionary to discover that dictionary words are arranged in alphabetical order.

More advanced students might extend their alphabetizing skills to include several words having the same initial letters—for example, bed, ball, boy. Ask the students how they would order these words; then let them check how the dictionary orders them.
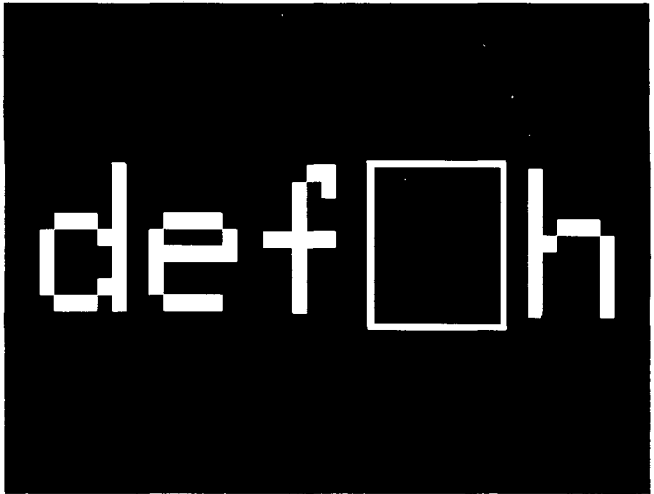
Train

Sample Runs

A five-letter sequence is presented with one letter missing.
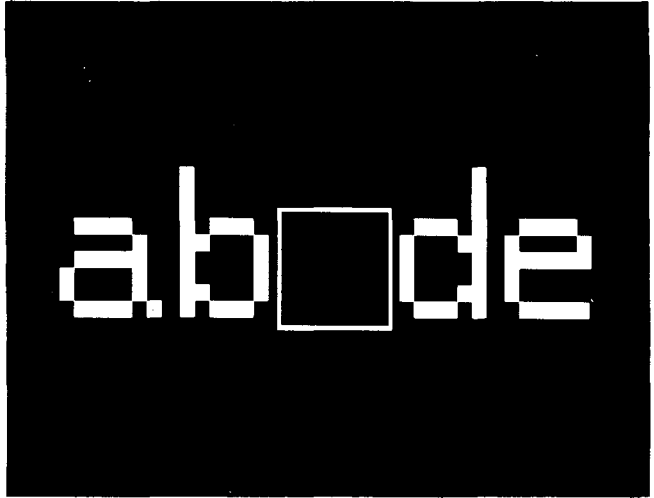
The missing letter occurs in any position except the first position.
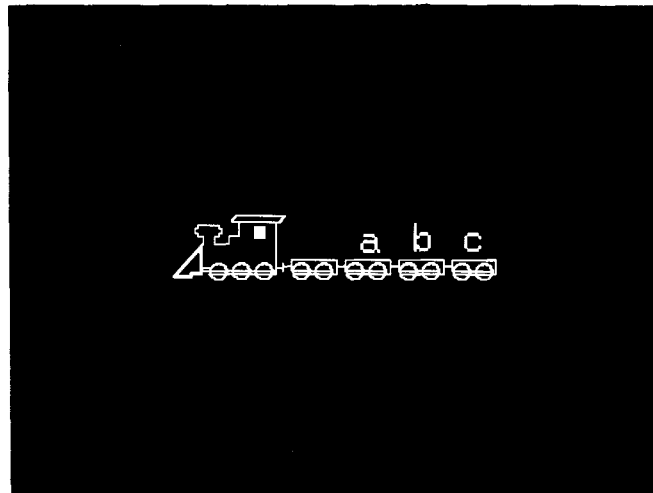
Examples of Screen Output

19

Train

V W X □ Z

ABCDEFGHIJKLMNOPQRSTUVWX■Z

If an incorrect
response is made, the
entire alphabet is
printed at the bottom
of the screen.

When a correct
response is made, a
train car is added
with that missing
letter. Adjoining cars
are in letter
sequence, or are left
blank if there aren't
enough preceding
letters to fill them.

Examples of Screen Output

20

First Letter

Initial Sounds of Words

Specific Topic:	Reading Readiness
Type:	Drill and Practice
Reading Level:	Pre-reading
Grade Level:	Preschool–Grade 1

Description

First Letter provides practice in matching letters with the initial sounds of words. There are 26 objects, one for each letter of the alphabet. A picture appears on the screen with a letter in each corner, one of which corresponds to the initial sound of the picture. The student selects the appropriate letter and types it.

Objectives

• To state an object's name when shown a picture of the object

• To identify the initial sound of the object's name

• To recognize the letter that is associated with the initial sound

• To identify the graphemic representation for the sound of a consonant that begins a word

• To understand the principles of word recognition and word identification

First Letter

First Letter provides an opportunity for
students to match the correct initial letter with
the initial sound of a word. You may wish to
provide instruction to individual students, or
give a large group demonstration before using
the program.

You may choose the type of letters (upper or
lower-case), which letters, and how many
letters will be included in this drill and
practice. The program contains a "default
list"—a random selection of ten upper-case
letters. To specify the letters used, follow this
procedure:

• Make sure the write-protect tab has been
removed from the diskette.

• When the menu appears, type "CTRL A"
(press CTRL and type A). The title "Teacher
Options" will appear.

• Select option 2, Edit First Letter file.

• Select the operation you want:
1) Add letters
2) Delete letters
3) Select upper or lower case
4) Return to menu and save letters

• To change to lower-case letters, press **CAPS
LOWER** key and then add or delete lower-
case letters.

The list you choose will be stored on the
diskette and will be available for use even after
another program is run or the computer is

First Letter

turned off. In order to save the letters selected
for First Letter, you must return to the teacher
options menu before returning to the main
menu. Therefore, use option 4 and then select
the correct program from the main menu.

Four letters and one picture appear on the
screen. The student is expected to select the
correct beginning sound. These letters are
chosen randomly, but certain letters that might
cause confusion have been eliminated. For
example, when the queen is shown, the letters
L (lady), W (woman), and P (princess) will not
appear among the three extra letters
accompanying the Q.

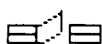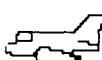# First Letter

Apple Bed Car Dog Elephant Fish

Gate House Igloo Jet Kite

Lamp Monkey Net Octopus Pig

Queen Rabbit Sun Tree Umbrella

Vase Wagon Xylophone Yarn Zebra

First Letter

Use in an Instructional Setting

Preparation

Before using this program, the students should be able to recognize or help each other recognize and name the objects shown on the screen. You may wish to use the page of this documentation that illustrates all the objects or you may prefer to run the program with the class, naming the objects aloud as they appear.

The students should have received instruction in the sounds that letters represent. This program provides practice in matching letters with sounds, but it doesn't teach which sounds are represented by each letter.

Using the Program

Using the Teacher Options described in the Background Information, you can modify the drill to fit specific classroom objectives.

The letters selected for drill and practice could be those currently being taught in class, those with which an individual student needs work, or a specific portion of the alphabet.
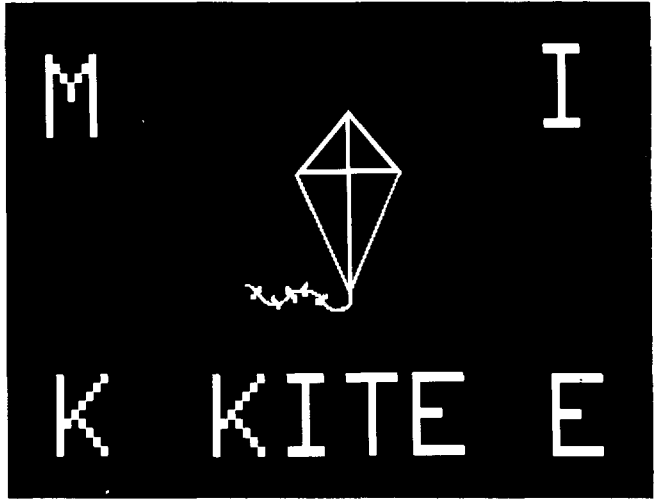
Follow-up

The students could draw pictures of other objects beginning with the letters they used in this program.

Pictures cut from magazines could be classified according to initial sound.
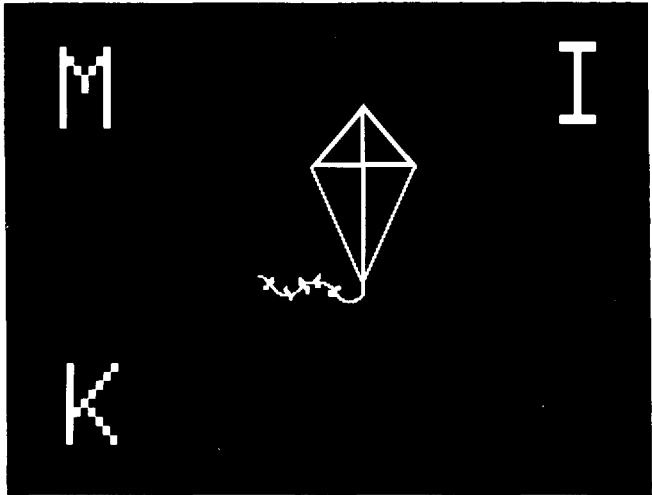
First Letter

Sample Runs

When a correct response is made, the name is written below the picture.

When an incorrect response is made, that incorrect letter is removed from the screen.
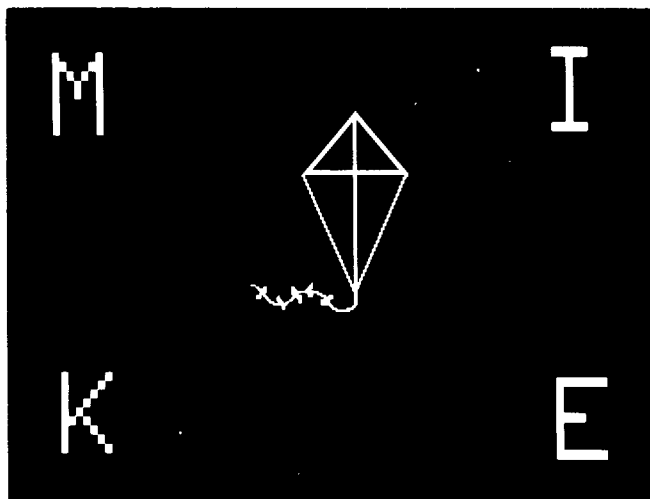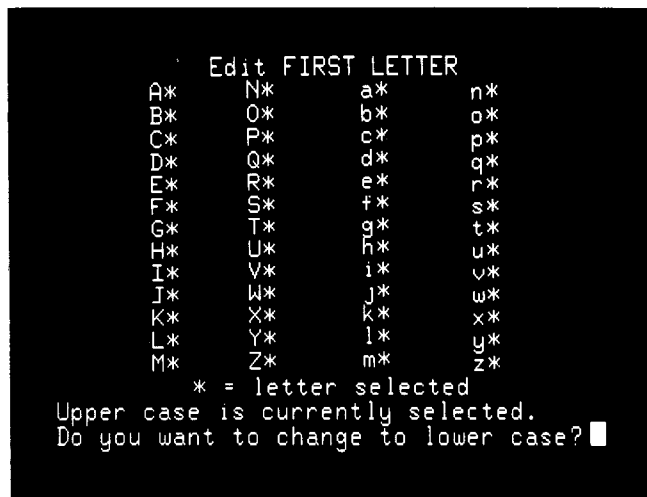
Examples of Screen Output

First Letter

Sample Runs

A picture and four letters are displayed. One letter is the initial letter of the name of the picture.


```
          Edit FIRST LETTER
A*    N*    a*    n*
B*    O*    b*    o*
C*    P*    c*    p*
D*    Q*    d*    q*
E*    R*    e*    r*
F*    S*    f*    s*
G*    T*    g*    t*
H*    U*    h*    u*
I*    V*    i*    v*
J*    W*    j*    w*
K*    X*    k*    x*
L*    Y*    l*    y*
M*    Z*    m*    z*
     * = letter selected
Upper case is currently selected.
Do you want to change to lower case?█
```

The teacher can specify upper or lower-case letters by using the **CAPS LOWER** key.

*indicates the selected letters

Examples of Screen Output

27

Pictures

Memory Game

Specific Topic: Memory, Problem-
                      solving

Type: Educational Game

Reading Level: Pre-reading

Grade Level: Preschool–Grade 2

Description

Pictures reinforces memory of pictures and
their locations as well as providing an
opportunity for developing problem-solving
skills. It uses a concentration game format
with an assortment of pictures in twenty boxes.
The game may be played by one or two
students.

Objectives

- To recognize identical pictures

- To recall the locations of matching pictures

- To devise strategies for playing the game

Pictures

Background Information

The pictures used in this program include:

a cone	a heart
a tree	a kite
a sailboat	a television set
a truck	a flag
a house	a crayon

When one person plays, the object is to clear the boxes—that is, make all the matches—in as few plays as possible. At the end of the game, the screen shows the number of tries taken.

When there are two players:

1. Players enter their names.

2. An arrow will flash left and right to pick the first player.

3. Press **RETURN** after each name.

4. An arrow on the screen points to the name of the person whose turn it is.

5. When a player gets a match, a star appears under her or his name on the screen and that player takes another turn.

6. At the end of the game, when all boxes are blank, the score for each player is printed and the winner (or a tie) is announced.

Pictures

Preparation

The student needs to be able to find the appropriate keys on the keyboard and to discriminate between a matching and nonmatching pair of pictures.

If the students aren't already familiar with concentration games, explain the basic idea of matching boxes and remembering where pictures are located.

Using the Program

Since most children enjoy this type of game, Pictures is useful in helping students develop a positive attitude toward computers. It is also useful in helping to reinforce matching and recall skills necessary for reading.

However, a greater value is to help students develop problem-solving skills, or strategies. Each student might play the game alone and be given instructions to develop a strategy or method for winning. Strategies might include proceeding alphabetically, choosing the corner boxes first, or developing various methods to remember which picture was seen in which box. Then two students could test their strategies by playing against each other. If interest is high, a tournament might be played.

Pictures

Follow-up

Play another, more difficult concentration game, such as Shapes or Words.

Discuss whether some pictures (such as a cone) or some locations on the screen (such as corners) were easier to remember—and why.

Discuss whether the students found it easier after playing several games—and why. (It may prove confusing to play two games in a row, since the pictures appear in different boxes each game.)

Ask the students what methods (strategies) they used to remember which pictures were in which boxes. These are problem-solving behaviors. Help the students see that different people use different methods, and no methods are "wrong."

Pictures

Ask students to name some games of strategy, games of luck, and games of skill (motor skill). For example:
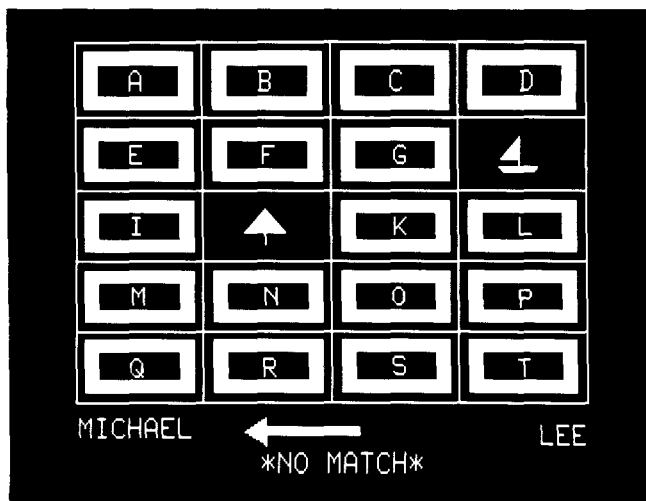
Strategy	Luck and Strategy	Motor Skills
Checkers	Board games using dice or a spinner	Baseball
Chess		Soccer
Ticktacktoe	Card games	Electronic games

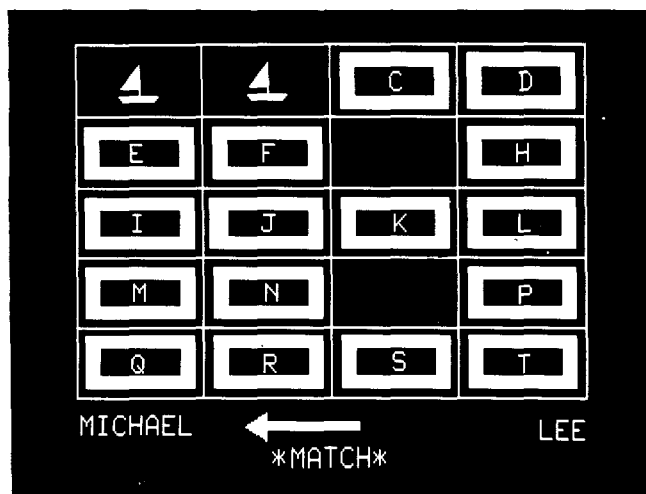How are they alike? How different? Notice that some games combine luck with strategy or skill.

Pictures

Sample Runs

Two boxes are uncovered on each play.

```
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ A │ │ B │ │ C │ │ D │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ E │ │ F │ │ G │ │ ⛵ │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ I │ │ ⬆ │ │ K │ │ L │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ M │ │ N │ │ O │ │ P │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ Q │ │ R │ │ S │ │ T │
└───┘ └───┘ └───┘ └───┘
```

MICHAEL ⬅━━━━━ LEE
NO MATCH

After a match is made, the two boxes become blank. When there are two players, score is kept at the bottom of the screen.

```
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ ⛵ │ │ ⛵ │ │ C │ │ D │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ E │ │ F │ │   │ │ H │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ I │ │ J │ │ K │ │ L │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ M │ │ N │ │   │ │ P │
└───┘ └───┘ └───┘ └───┘
┌───┐ ┌───┐ ┌───┐ ┌───┐
│ Q │ │ R │ │ S │ │ T │
└───┘ └───┘ └───┘ └───┘
```

MICHAEL ⬅━━━━━ LEE
MATCH

Examples of Screen Output

Words

Memory Game

Specific Topic:	Memory, problem-solving
Type:	Educational Game
Reading Level:	Grade 1
Grade Level:	Kindergarten–Grade 2

Description

Words reinforces memory of words by visual pattern and location, along with providing an opportunity for developing problem-solving skills. It uses a twenty-box concentration game format. Ten pairs of words (each word not more than eight letters in length) are hidden behind twenty boxes labeled with letters A through T. The words may be chosen by the teacher. The game is played by one or two students.

Objectives

- To recognize identical words
- To recall the locations of matching words
- To devise strategies for playing the game
- To understand the principles of word recognition and word identification

Words

Use the following procedure to specify the ten words (up to eight letters each) to use in the program:

• Make sure the write-protect tab has been removed from the diskette.

• When the menu appears, type **CTRL A** (hold down **CTRL** and type A). The title "Teacher Options" will appear.

• Select option 3 Edit Word file.

• Enter the number of the word you wish to change, and type in the new word.

• When finished, enter 11 to return to the Teacher Options menu. Your changes will be saved.

The program contains a "default list" of words programmed into it, so that it can be played without your selecting words as described above. The list presently contains these words printed in upper-case letters:

AND	GO
THE	GET
SHE	BE
HE	CAN
YOU	DID

• When one person plays, the objective is to find all the matches in as few plays as possible.

When there are two players:

• Players enter their names.

• Press **RETURN** after each name.

35

Words

- An arrow on the screen points to the name of the person whose turn it is.

- On each turn, players select two boxes by typing in the letter of the box, trying to choose boxes that contain the same words.

- When a match occurs, the computer prints "Match" and places a star under that player's name.

- Each star represents one correct match for the player.

- If the answer is correct, that player has another turn.

- At the end of the game, when all boxes are blank, the score for each player is printed and the winner (or a tie) is announced.

Words

Use in an Instructional Setting

Preparation

Students should be familiar with the idea of matching identical words to "score" in a concentration game. They should be able to read the words used in the game, and understand their meanings. They need to be able to locate letters on the keyboard.

Using the Program

This program provides practice in recognizing spelling words or a reading word list. It can use students' names (of eight letters or less) to help students learn names of classmates. Words can be used that relate to a topic of study or time of year—for example, cold, snow, winter, shovel, boots.

A greater value may be to help students develop problem-solving skills—that is, strategies. Each student might play the game alone and be given instructions to develop a strategy or method for winning. Strategies might incude proceeding alphabetically, choosing the corner boxes first, or developing various methods to remember which picture was seen in which box. Then two students could test their strategies by playing against each other. If interest is high, a tournament might be played.

To aid in vocabulary building, you might vary the game by having the students pronounce or define the words as they uncover them.

Words

The word list could be made up of general categories, and the students could be asked to give an example of each word they uncover. For instance, if "tree" and "animal" were uncovered, the student might say "pine" and "dog."

The word list could use four-letter nonsense syllables, such as tbok or ralb, which would be more difficult to remember than real words.

Follow-up

If the students have also used Pictures or Shapes, discuss whether words are easier to remember than pictures or shapes.

Discuss what methods (strategies) the students used to remember which words were in which boxes. (These are problem-solving behaviors.)

Use these problem-solving behaviors to help students see that different people use different methods, and no method is wrong. Does using a method make it easier to win this game?

Discuss which is easier to remember, a four-letter word or four random letters (a nonsense syllable), and why. Ask whether the students had a mental picture of the meaning of a word or whether they used the pattern of the letters, or both.

Words
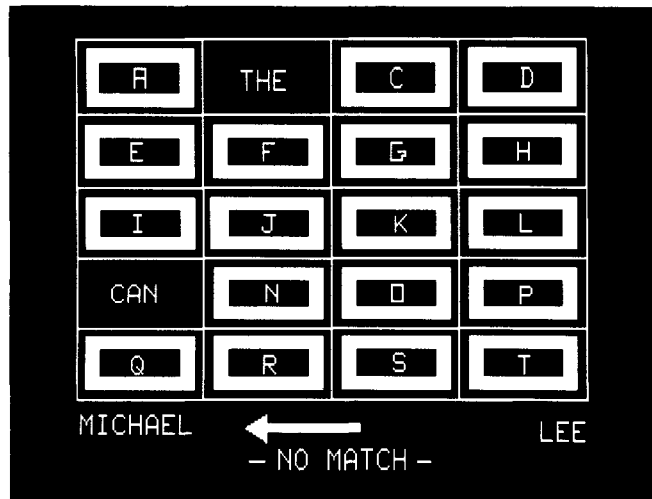
Two boxes are uncovered on each play.

After a match is made, the two boxes become blank.

Examples of Screen Output

39

Words

```
         TEACHER OPTIONS

   1. Program descriptions

   2. Edit FIRST LETTER

   3. Edit WORDS

   4. Return to menu

   Which option? ■
```
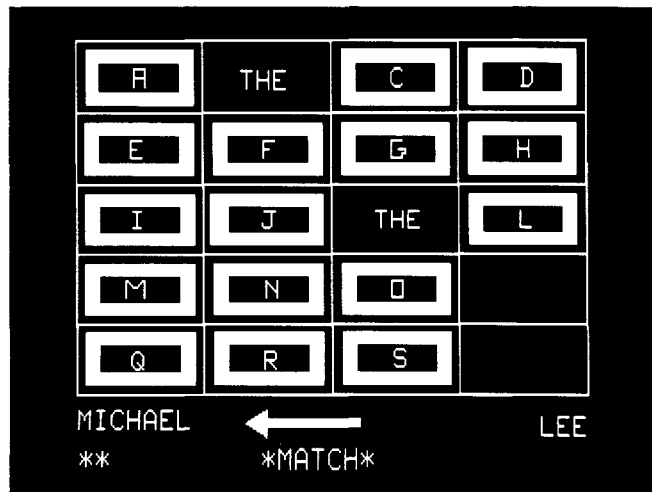
Typing **CTRL A** accesses the teacher selections.

```
         Edit WORDS

   1. AND        6. GO
   2. BE         7. HE
   3. CAR        8. SHE
   4. DID        9. THE
   5. GET       10. YOU
      11. Return to menu
          and save changes

   Enter the number of the
   word which you want to
   change, or enter 11 to
   return to the menu.
```

The teacher can enter any ten words of eight letters or fewer.

Examples of Screen Output

40

Shapes

Memory Game

Specific Topic:	Memory, Problem-solving
Type:	Educational Game
Reading Level:	Pre-reading
Grade Level:	Preschool–Grade 2

Description

Shapes reinforces memory of shapes and location while providing an opportunity for developing problem-solving skills. It uses a concentration game format with an assortment of geometric shapes. The game may be played by one or two players.

Objectives

- To recognize identical shapes
- To recall the locations of matching colored shapes
- To devise strategies for playing the game

Shapes

A match is made when the shape is the same.
These shapes are used:

triangle
square
rectangle
circle
hexagon
octagon

When one person plays, the objective is to clear the boxes—that is, make all the matches—in as few plays as possible. At the end of the game, the screen shows the number of tries it took.

When there are two players:

• Players enter their names.

• Press **RETURN** after each name.

• An arrow on the screen points to the name of the person whose turn it is.

• When a player gets a match, a star appears under his or her name on the screen, and that player takes another turn.

• At the end of the game, when all boxes are blank, the score for each player is printed and the winner (or a tie) is announced.

Shapes

Preparation

To use Shapes, the student must understand that in order to match two figures, they must have both the same shape and the same direction, as well as the same color.

For example, right triangles facing opposite directions are not a match.

The concentration program Pictures is easier than Shapes and provides preparation for using this program.

Using the Program

Shapes can help students develop problem-solving skills, or strategies. Each student might play the game alone and be given instructions to develop a strategy or method for winning. Strategies might include proceeding alphabetically, choosing the corner boxes first, or developing various methods to remember which picture was seen in which box. Then two students could test their strategies by playing against each other. If interest is high, a tournament might be played.

You could vary the game by asking the students to name the shapes they uncover or to name an object that has that shape. For example:

square/window   hexagon/floor tile
rectangle/door   triangle/house roof
circle/clock

Shapes

Follow-up

Play another concentration game, such as Words.

If the students have also used Pictures, discuss whether pictures or geometric shapes are easier to remember.

Discuss whether the colors make the game easier or harder.

Discuss what methods (strategies) the students used to remember which shapes were in which boxes. (These are problem-solving behaviors.) Help them see that different people use different methods, and no methods are "wrong."

Shapes

Sample Runs

Two boxes are uncovered on each play.
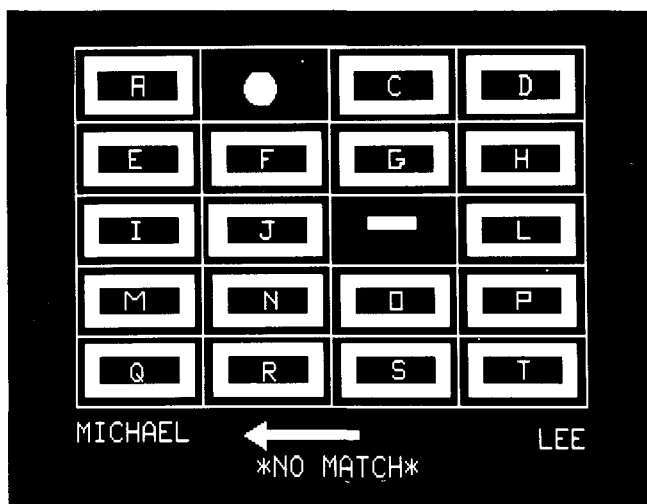
When two uncovered objects are the same in color, shape, and direction, a match is made. The two boxes then become blank.

Examples of Screen Output

45

AED80059