



Bumble Games™

*Author/Designer:
Leslie Grimm, Ph.D.
The Learning Company
545 Middlefield Road
Menlo Park, CA 94025*

Bumble Games

Bumble Games runs on:

- Apple II, 48K with
Applesoft or Language Card
- Apple II+, 48K
- Apple IIe
(with CAPS LOCK key down)

With:

- Disk][
- Monitor or TV
(color recommended)

For:

- Ages 4-10

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Attn: Disk Return Dept.

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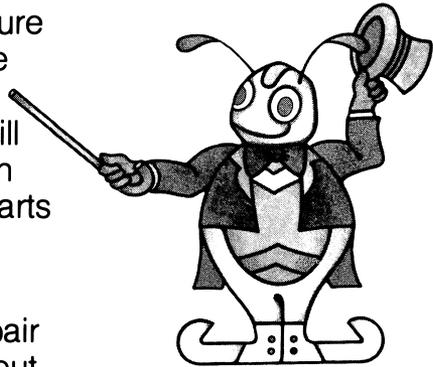
WELCOME TO BUMBLE GAMES

Meet Bumble, a friendly creature from the planet Furrin. Bumble will help you learn to locate points on lines or grids. You will need this skill to find streets on maps and to read or make charts and graphs.

Play the games and you will become a powerful number-pair plotter! You can also learn about graphics. That means drawing pictures with your computer. Bumble will show you how.

If this is the first time you have used Bumble Games, start at the beginning. Play each game in order so you can learn everything step by step.

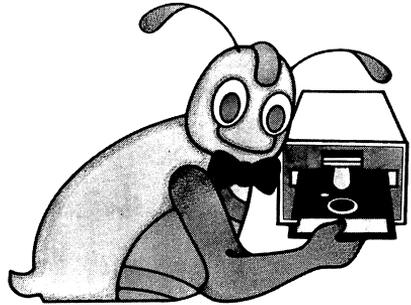
P.S. Some people may think that Bumble Games is just for fun. To see what you are learning, turn to THE LEARNING LIST on page 16.



GETTING STARTED

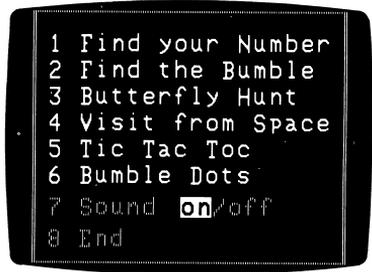
Put your Bumble Games disk in the disk drive and close the door. Turn on the computer.

If you are using an Apple IIe computer, be sure the CAPS LOCK key is pressed down.



CHOOSING A GAME:

You will see a list of games. This is called the "menu." The games are listed in order of difficulty from 1 to 6. Is this the first time you have played Bumble Games? Bumble suggests that you play the games in order, starting with the first one.



Press the number of the game you choose. Wait for it to load.

SOUND OPTION:

Notice the number 7 on the menu. The white box around "ON" tells you the game will have sound. Press to turn off the sound. Press again to turn the sound back on.

ANSWERING BUMBLE'S QUESTIONS:

Bumble likes to ask questions. Here is one example: "WOULD YOU LIKE INSTRUCTIONS? (Y OR N)." Each question is followed by a blinking square. This square is your "cursor." It is a signal for you to answer. Press **[Y]** for "YES." Press **[N]** for "NO."

SPECIAL KEYS:

When you are playing a game you can:

- press **[ESC]** to return to the menu to choose another game.
- press **[SHIFT]** and **[?]** at the same time to see the game's instructions.

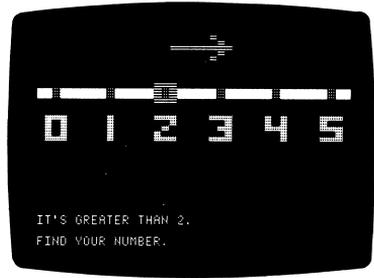
[SPACEBAR] can be pressed in some games to skip the opening pictures. This lets you move immediately to the game.

THE GAMES

1. FIND YOUR NUMBER

Bumble has a special number for you. The number can be 0, 1, 2, 3, 4, or 5. Can you find it?

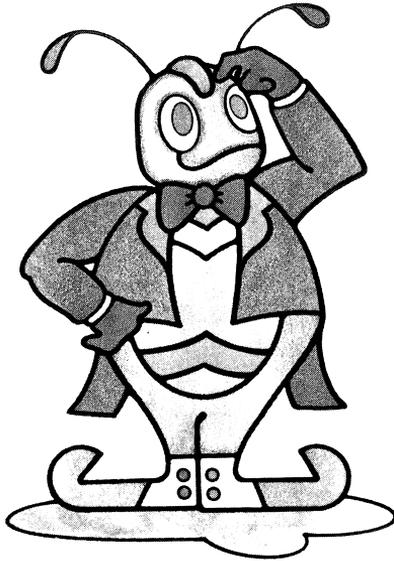
Bumble will give you arrow clues next to a line called a "number line."



→ means guess a number that's greater.

← means guess a number that's less.

Pick any number to start. Then follow the clues. You can play alone or with a friend. If you play with a friend, Bumble will have a different secret number for each of you.



2. FIND THE BUMBLE

HUNT! HUNT! HUNT! Guess where Bumble is hiding! Bumble is hiding in one of the boxes!

- Pick a box.
- Type the letter you see below. It will be A, B, C, or D. Watch the line light up.
- Type the number you see on the left. It will be 0, 1, 2, or 3. That line will light up, too.

The place where the two lines cross is the box you picked.

Bumble will give you arrow clues:

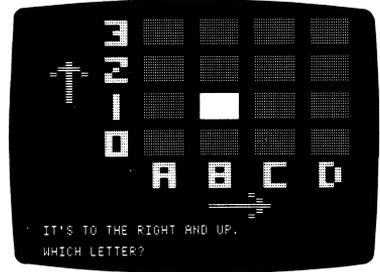
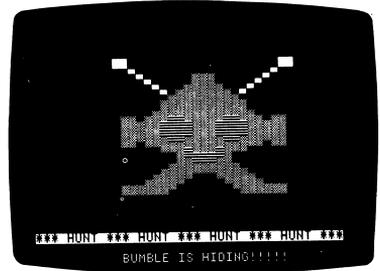
↑ means pick a bigger number.

↓ means pick a smaller number.

→ means pick a letter to the right.

← means pick a letter to the left.

When you find the box where Bumble is hiding, you'll see Bumble again.



3. BUTTERFLY HUNT

Bumble's butterfly is lost! Can you find where?

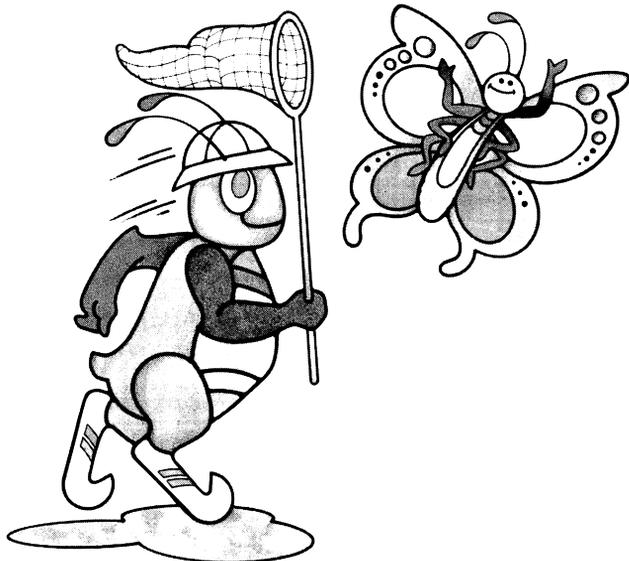
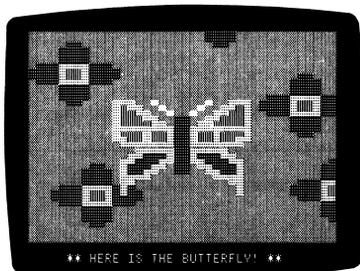
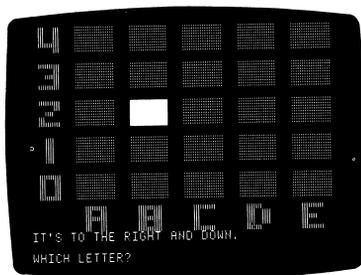
Here's how:

- Pick a box.
- Type the letter you see below it: A, B, C, D, or E. Watch the line light up.
- Type the number you see on the left: 0, 1, 2, 3, or 4. That line will light up, too.

The place where the two lines cross is the place you picked.

Bumble will give you clues telling you to look to the right or left, and up or down.

(You can press **SPACEBAR** when the butterfly is flying to make it hide sooner.)

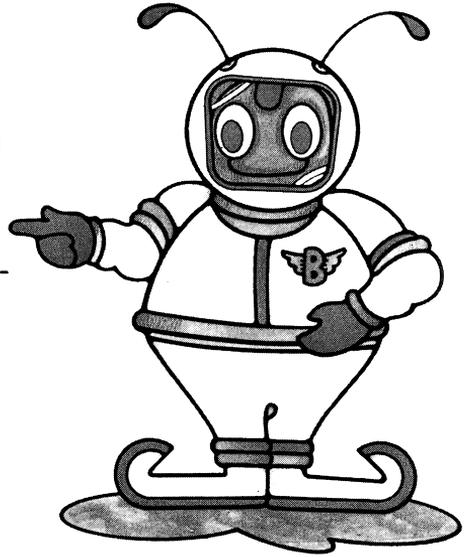
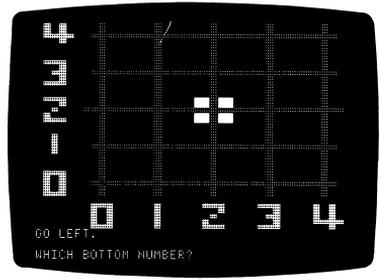


4. VISIT FROM SPACE

Bumble's cousin has flown in from outer space. See the crossing lines? The spaceship is hidden where two lines cross. Guess where!

- Pick a point where two lines cross.
- Type the bottom number. It will be 0, 1, 2, 3, or 4. Watch that line light up.
- Type the side number. It will also be from 0 to 4 and that line will light up.

Bumble will give you clues telling you which direction to try.

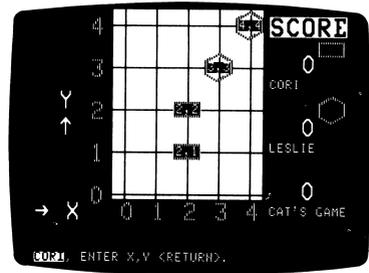


5. TIC TAC TOC

This is a two-player game. Take turns with a friend. Type your name. Press **RETURN**. Have your friend type his or her name. Press **RETURN**.

You play Tic Tac Toc on a set of points made by lines that cross each other. The "X" numbers along the bottom tell you how far you are from the left. The "Y" numbers along the side tell you how far you are from the bottom.

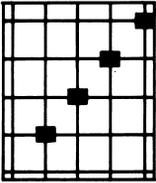
To win Tic Tac Toc you try to choose four points on the grid in a straight line: up and down, left to right, or along a diagonal. It has to be a straight line. On each turn you can only choose one point that has not been used before.



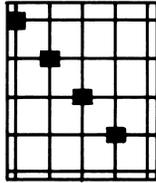
CHOOSING A POINT ON THE GRID:

First type the X number. Watch the dot move to the X number you chose. Next type a comma (,). Then type the Y number. Watch the dot move to the Y number you chose. Here is an example of what to type: 2,1. Be sure to remember the (,).

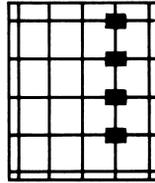
If you make a mistake press ← . This erases what you typed. Type the X and Y numbers you want. Then press RETURN .



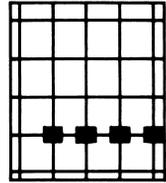
THIS IS A WIN



THIS IS A WIN



THIS IS A WIN



THIS IS A WIN

If it looks like neither player can win, press ESC (escape). Then you can start a new game. The cat will win the game you stop.

6. BUMBLE DOTS

Bumble lets you choose:

Bumble's Pictures: Bumble will help you draw a picture.

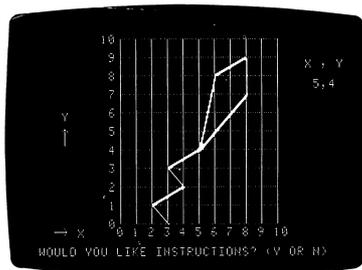
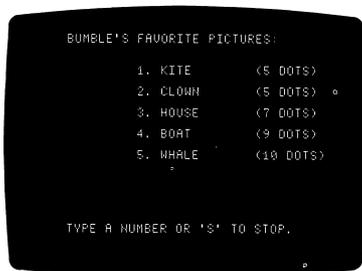
Make Your Own: You can make a picture for a friend.

If you choose Bumble's Pictures:

You will see a list of Bumble's favorite pictures.

- Choose a picture and type its number. Bumble will show you a dot on the screen.
- Name that dot. First type the number on the bottom (X number). Then type a comma . Next type the number on the left (Y number).
- Keep naming the dots Bumble shows you. Bumble will draw a line connecting each one. If you make a mistake, Bumble will tell you how to correct it.

Watch the picture grow! When the picture is finished, Bumble will color it and play a tune.



If you want to make your own picture:

- Your picture may have two to ten dots.
- When Bumble says, "ENTER DOT #1," type the first number, comma, and the second number for your first dot. Bumble will show you your dot. If it's where you want it, press **RETURN**. If not, press **←** and the dot will disappear. Choose another dot.
- After each dot Bumble will tell you how many dots are left. If you want fewer than 10 dots, just press **RETURN** without naming a dot.
- Bumble will connect the dots you name until all your dots are on the grid.
- Bumble will ask you to name your picture when it is done.
- Bumble will ask if your friend wants to make your picture. If your answer is "YES," then follow the instructions for BUMBLE'S PICTURES. If your answer is "NO," then Bumble will color your picture and play you a tune.

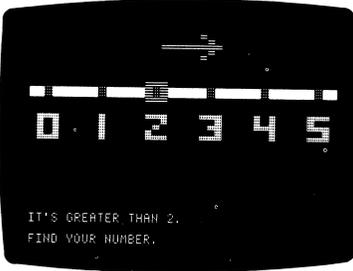
THE LEARNING LIST

Here are some of the things you can learn game by game. If you are just beginning, be sure to start with game 1, then 2, and so on. Take your time. Let Bumble show you every-thing step by step.

GAMES

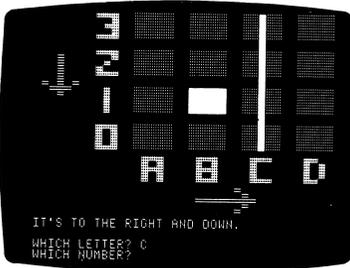
CONCEPTS AND SKILLS PRESENTED

1. FIND YOUR NUMBER



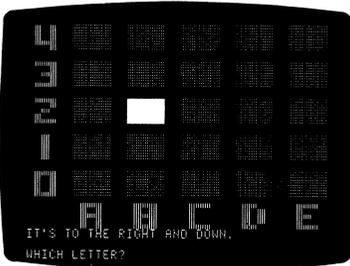
- Using numbers from 0 to 5.
 - Using a number line.
 - Picking a number greater or less than another.
 - Discovering the game strategy.
-

2. FIND THE BUMBLE



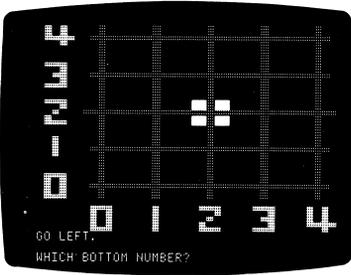
- Using a 4 x 4 array.
 - Locating a box by identifying its horizontal and vertical location.
 - Using the concept of ordered pairs.
 - Gaining spatial awareness: up/down; right/left.
 - Discovering the game strategy.
-

3. BUTTERFLY HUNT



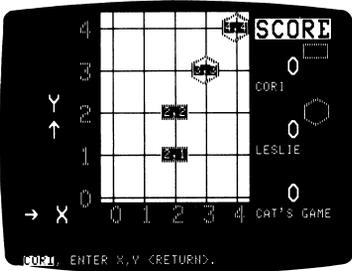
- Using a 5 x 5 array.
 - Using the concept of ordered pairs.
 - Gaining spatial awareness: up/down; right/left.
 - Discovering the game strategy.
-

4. VISIT FROM SPACE



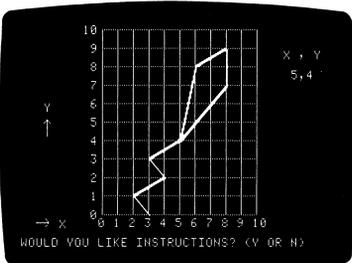
- Using a 5 x 5 grid.
- Using ordered pairs.
- Gaining spatial awareness: bottom/ side; up/ down; right/left.
- Developing problem solving skills.

5. TIC TAC TOC



- Locating points on a 5 x 5 grid.
- Using standard number pair notation.
- Using game strategy.

6. BUMBLE DOTS



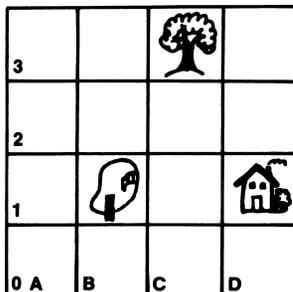
- Locating points on a 10 x 10 grid.
- Using standard number pair notation.
- Using computer graphics techniques.
- Thinking creatively.

ADDITIONAL ACTIVITIES

BUMBLE MAP GAME:

Draw a map of a new town for Bumble. Use 8-1/2" x 11" paper. What do you think Bumble would like in his town? A place to swim and fish? A ball park? A nice little house? What about a spaceport so Bumble's cousin can land his spaceship?

Fold the completed map in half. Then fold that in half three more times. Your fold marks will turn your map into a 4 x 4 grid. Label the bottom squares A, B, C, and D. Label the side squares 0, 1, 2 and 3.



Play a map game with a friend.

One player asks questions like:
"Where is Bumble's new house?"

Player Two tries to name the

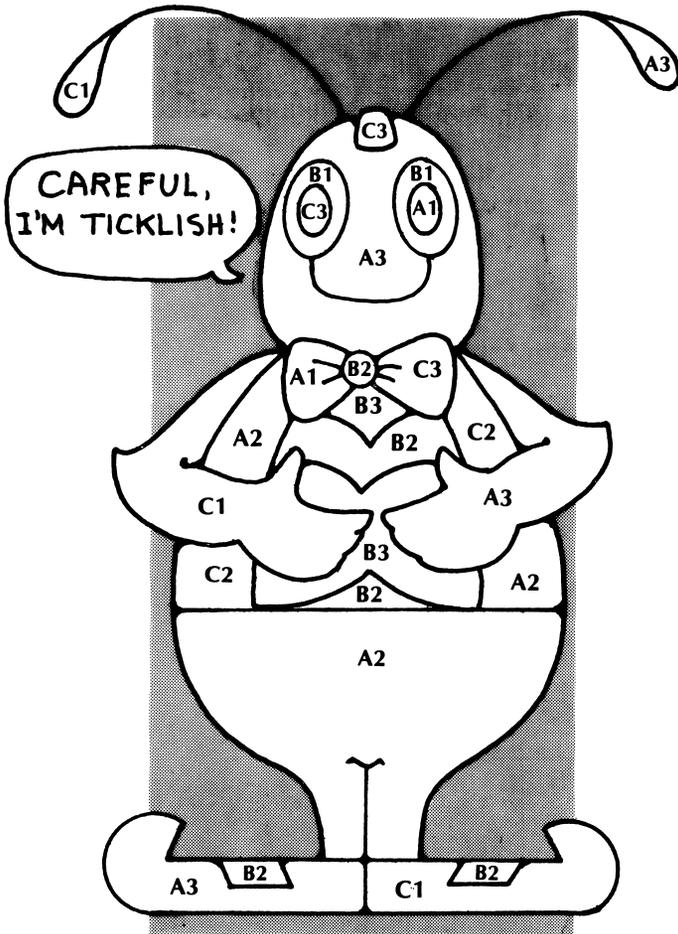
location using the letter/number coordinates (for example, the house is in square D,1). Make different maps and play the game again and again. Try folding your paper in half five times. You will then have a 4 x 8 grid. When you really get good at map reading, use a real map of your town or city.

You can also look at a globe to see how locations all over the earth can be described by points on a grid.

COLOR BY CODE:

Make a color grid like this. Use the number pairs on the color grid to show how to color pictures in a coloring book. Can a friend follow your code and color the picture correctly? This is how a coded picture might look before it is colored.

3	GREEN	ORANGE	RED
2	BLUE	PURPLE	BLUE
1	RED	YELLOW	GREEN
	A	B	C

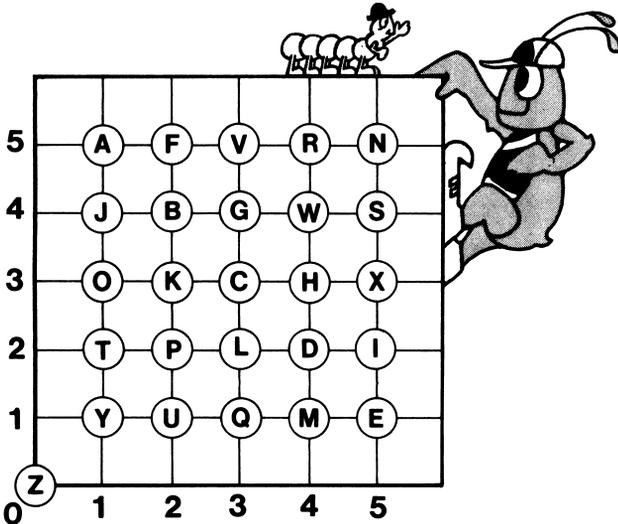


SECRET MESSAGE GRID:

Below is a secret message grid. Make two copies of the grid, one for you and one for a friend. Think of secret messages to send to your friend. Write the number pair for each letter in your message under its blank.

Only you and your friend will be able to decode the message. Bumble wants you to see what a secret message looks like. Can you decode his secret message to you?

$\frac{\quad}{2,4}$ $\frac{\quad}{2,1}$ $\frac{\quad}{4,1}$ $\frac{\quad}{2,4}$ $\frac{\quad}{3,2}$ $\frac{\quad}{5,1}$
 $\frac{\quad}{3,2}$ $\frac{\quad}{5,2}$ $\frac{\quad}{2,3}$ $\frac{\quad}{5,1}$ $\frac{\quad}{5,4}$
 $\frac{\quad}{1,1}$ $\frac{\quad}{1,3}$ $\frac{\quad}{2,1}$!



SPECIAL KEYS

ESC

Allows you to return to the menu. In some games, **ESC** gives you a new game option (for example, restarting the game). In Bumble Dots it allows you to change pictures.

SHIFT **?**

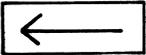
Returns you to instructions for the game you are playing. You must press **SHIFT** and **?** at the same time.

SPACEBAR

In some games, lets you skip the opening pictures.

RETURN

Press this key to enter your number pairs. If you don't, nothing will happen!



Erases mistakes if you have not yet pressed **RETURN**.

SOUND OPTION

7

Turns sound on or off. (You must return to the menu to make **7** work.)

GLOSSARY

ARRAY



An orderly arrangement of objects in rows and columns. In Bumble Games, arrays are arrangements of boxes.

COLUMN



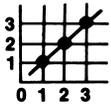
In Bumble Games, the arrangement of boxes on a vertical line of an array.

DIAGONAL



The line of points slanting from one corner to the opposite corner on the TIC TAC TOE grid.

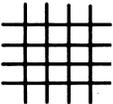
GRAPH



Example:
1,1; 2,2; 3,3

A set of points associated with a given set of numbers or number pairs.

GRID



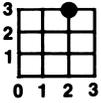
A set of intersecting lines, usually at right angles.

NUMBER LINE



A line with numbered points that shows the order between numbers, that helps demonstrate which numbers are greater or less than other numbers.

NUMBER PAIR



Example: 2,3

In Bumble Games, a pair of whole numbers that names a location on an array or grid.

POINT



Shown by a dot in Bumble Games to mark a location on a grid. The position is named by a number pair.

ROW



In Bumble Games, an arrangement of boxes in a horizontal line.

X AXIS



In this program, the horizontal direction on a grid. The X number names a horizontal distance from the left.

Y AXIS



In this program, the vertical direction on a grid. The Y number names a vertical distance from the bottom.

MORE FROM THE LEARNING COMPANY

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Children develop reading and math readiness skills by playing with dancing rainbows, butterflies and windmills. Ages 3-6.

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