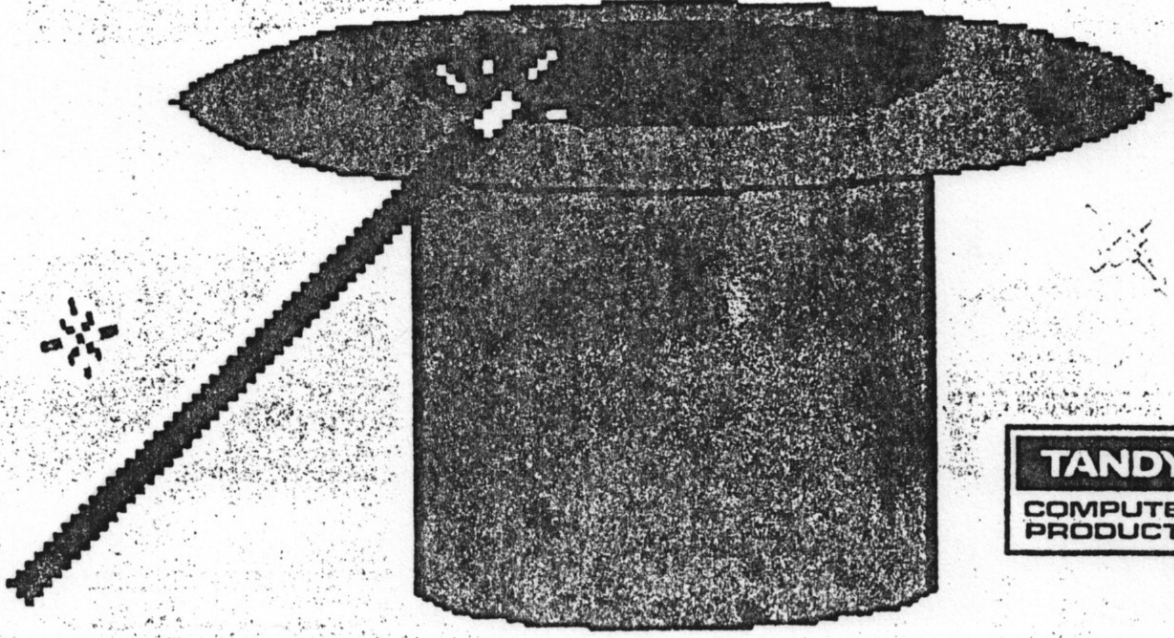


M A G I C

W O R D

Z O N E



TANDY
COMPUTER
PRODUCTS

TABLE OF CONTENTS

Introduction.....	1
System requirements.....	1
Choice of words presented.....	2
A note to parents.....	2
A note to teachers.....	3
Learning with Magical Words 2.....	4
Operating instructions for the cassette version.....	5
Operating instructions for the diskette version.....	6
Printer option.....	7
Choosing the word cassette.....	8
Magical Words 2-The game begins.....	9
The three levels of difficulty.....	9
Level 1	9
Level 2.....	10
Level 3.....	10
Piloting the helicopter.....	11
Control of magnetic hook.....	11
Letter unhooking.....	12
Helicopter flight time.....	12
Saving a crew member.....	12
Flight of the flying saucer.....	13
To play a new game.....	13
Stopping the game.....	14
Reset button.....	14
Control of "I/O" errors.....	15
Word list.....	16

Magical Words 2

Introduction

Magical Words 2 is a bilingual word game designed to assist children in learning to read and write, by associating words with pictures. Because this method of learning is widely used in schools, Magical Words 2 is a useful complement to the material used in classrooms. Teachers and educators who are looking for a teaching tool to adapt to their own curriculum will find this program particularly helpful.

This program was developed to help the child who has difficulty learning to read and spell as well as providing extra stimulation to the child whose vocabulary is more advanced. In addition it will assist children in learning the French equivalents of English words (or the English equivalents of French words). Children are allowed to progress at their own rate and the learning they do at home will support their school work.

Magical Words 2 is designed for children in the second grade. In order to use the program, children must be able to recognize the alphabet, but this is generally the case with second grade students.

System requirements

To use Magical Words 2, you must have:

- A TRS-80 Color Computer with Extended Color BASIC and a minimum of 32K memory.
- One joystick (Radio Shack's Deluxe Joystick is recommended, but is not necessary).
- A cassette recorder and interface cable

OR

- Color Disk Drive #0

Optional equipment includes a Radio Shack serial printer and printer cable (if a detailed account of the results is desired).

Choice of words presented

Magical Words 2 contains 40 English and 40 French words, each represented by a picture (the word list is on page 16). In one segment of the game, the player must save the ten crew members of a "flying saucer". In order to accomplish this, the player must guide a helicopter to correctly arrange the letters of the word whose picture is shown. For each word correctly spelled, a crew member is saved. At the game's end, the flying saucer takes off. If the player has successfully saved at least eight crew member (this is always the case when the game is played at Difficulty Level 1 or 2), the saucer will be able to escape to its planet. If not, it will return to its starting place. Results are then shown on the screen.

A note to parents

While Magical Words 2 is a game, it is based on teaching principles with the following objectives:

- allow children to discover the meaning of a word by associating that word with a picture, as is done in school
- allow children to familiarize themselves with the spelling of a word while playing a game involving the letters of that word
- allow children to progress at their own rate
- allow children to correct an error without being penalized
- allow children to learn words in a second language, even if they have no previous knowledge of that language.

Magical Words 2 has three levels of difficulty which allow the program to adapt to each child's personal rate of learning.

- Level 1 enables a child to master spelling of the word presented, while also developing the manual dexterity required to pilot the helicopter.
- Level 2 is for the child who has mastered the spelling of the word presented but who wishes to improve control of the helicopter.
- Level 3 is for the child who has mastered Levels 1 and 2 and wants to compete with himself at a higher skill level. Because of the speed with which the helicopter moves at this level, children must be able to spell the word correctly without error, and be able to pilot the helicopter with greater skill.

A note to teachers

When introducing students to the new skills of reading and writing, many teachers begin by presenting words based around a single theme. Using Magical Words 2, you can select from the four subject areas contained in this program (see world list page 16) according to the theme you plan to use in your classroom.

In preparing a lesson using this program, remember that the game always presents students with 10 different words in the same order as the lists on page 16 (except with the random option of the disk version). Each game will last an average of 20 to 25 minutes.

Successfully using Magical Words 2 as a teaching tool depends on the number of computers available to you and on your own personal style of teaching. Considering these two factors, it is possible to use this program as an exploration tool, or a reinforcement for regular classroom teaching. Naturally there must be a familiarization period in either case so that children can learn to play the game without your direct assistance.

An exploration tool

Before presenting your lesson, let the students play a ten-word segment so they can explore new words. Let's say you wish to teach a lesson about animal names. Without any presentation of the words in class, let the students try these words on the computer. They will proceed by trial and error and will soon learn that these groups of letters are actually words which name animals they know very well. They will experiment at their own pace and the game will reinforce the spelling of these words. When the exploration is complete, you can then use your own teaching materials, taking into account that the students have now had contact with these words.

A learning reinforcement tool

Present your students with the words in the category you choose, using your own teaching materials. You can then use Magical Words 2 to strengthen the skills you have introduced in the classroom. The program becomes a powerful motivational tool, particularly effective with children who have, in the past, experienced some learning difficulties.

Learning with Magical Words 2

A unique feature of this program is that children will be playing an enjoyable game while they learn. And they can double both the fun and the educational value of the program by learning words in a second language.

Here's how the game operates:

Magical Words 2 contains 40 words in English and 40 in French that have been grouped into four categories; animals, at home, at school, and miscellaneous. Each "game" is played in groups of 10 words at a time.

The program displays a colourful picture and below it the word associated with it. The numbers "1, 2, 3" appear at the bottom of the screen, asking the player to select the level of difficulty.

A magic wand makes the letters of the word disappear and reappear in random order at the bottom of the screen.

The wand then makes yellow bases for the letters to sit on, one space for each letter in the word.

The helicopter at the right side of the screen has a "magnetic hook". Players must guide the helicopter above the letters, "hook" them, and one by one, guide them to their correct place on the yellow bases.

In the upper right-hand portion of the screen is the helicopter's fuel reserve. The speed at which the fuel is used up depends on the Level of Difficulty selected.

The Level of Difficulty determines the helicopter's flight time and speed. Level 1 is slower, designed for children who do not know how to spell the word shown. Level 2 is a little faster, while Level 3 is very fast.

When the player has landed each of the letters on its correct base, the picture disappears to make way for the flying saucer. A crew member then appears at the bottom of the screen. The player must pilot the helicopter to pick up the crew member and deposit him in the saucer.

When ten words have been completed, the flying saucer pulls in its landing platform and flies away. The height it reaches depends on how many crew members have been saved. If the game is played entirely on levels 1 and 2, then ten crew members will have been saved, allowing the saucer to reach outer space and return to its planet. If the game has been played at Level 3, the necessary eight crew members might not have been saved. The saucer will return to earth and the results will be shown on screen. The player will be invited to try again.

Operating instructions for the cassette version

The program consists of three cassettes: the first contains the master program "Magical Words 2", the second contains the pictures of the "Animals" and "At Home" groups, and the third contains the pictures of the "At School" and "Miscellaneous" groups.

- 1) Connect your cassette recorder to the computer (see your owner's manual for proper connections).
- 2) Connect joystick to the RIGHT JOYSTK port on the back of the computer.
- 3) Turn on the computer and your television. You should see the "OK" prompt appear on the screen.
- 4) Insert the cassette containing the master program "Magical Words 2". The program is recorded on both sides of the tape.
- 5) Adjust the volume level of the cassette recorder (a setting of "4" is recommended, but may vary from recorder to recorder).
- 6) Rewind the tape completely. After the tape is totally rewound, press the "PLAY" button on the recorder (this button must remain down during the entire game).
- 7) Type "CLOADM" on the keyboard and press «ENTER». The computer will search for and load the program. When the program has been loaded it will automatically begin running. Adjust the volume on your TV as the program begins.
8. The following message will appear on the screen:

1 ENGLISH
2 FRANÇAIS

Press 1 for the English version or 2 to play the French version.

- 9) The computer will then complete the loading of the program, and present you with the "Printer Option". (Cassette instructions continue on page 7).

Operating instructions for the diskette version

IMPORTANT: Before using Magical Words 2, make a backup copy of the program diskette. Please refer to your Color Computer Disk Owner's Manual for detailed format and backup instructions. Always use the backup copy when playing Magical Words 2.

- 1) Connect your disk drive to the computer (follow the instructions in your disk operation manual).
- 2) Connect joystick to the RIGHT JOYSTK port on the back of the computer.
- 3) When the message "OK" appears on the screen, insert the diskette into the disk drive.
- 4) Type RUN "MAGI" and press «ENTER».
- 5) The following message will appear on screen:

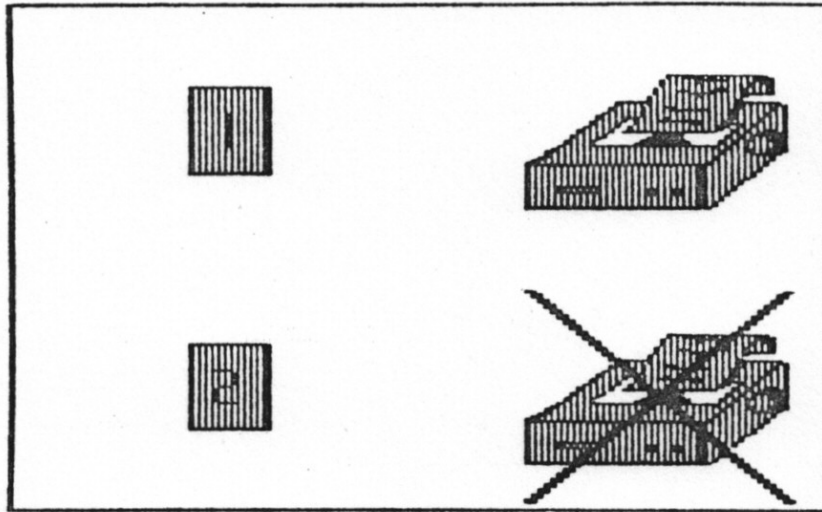
1 ENGLISH
2 FRANÇAIS

Press "1" for the English version or "2" for the French version.

- 6) The title page identifying Magical Words 2 appear on the screen. To begin the game immediately, press «X», or just wait for the title page to disappear on its own.
- 7) After the title page, (or after you press «X»), a square will appear in the top left corner of the screen. At this point you will be prompted for the word with which you would like the game to begin. The word list is located on page 16 of this manual. A two digit reply is expected, so if you wish to begin the game with the animals group, you would type 01. If you do not select a two digit number, or if you choose a number larger than 40, your choice will be "X"-ed out, and you will be prompted to make another choice.
- 8) If you wish, the computer will randomly select the 10 words for your game. To do this, type "00".

Printer option

You will see a printer being drawn on the screen (you might have to use your imagination to clearly see the resemblance).



If you do NOT wish to use a printer, type 2.

If you would like a detailed account of the game results, select option 1 (be sure your printer is connected and turned on).

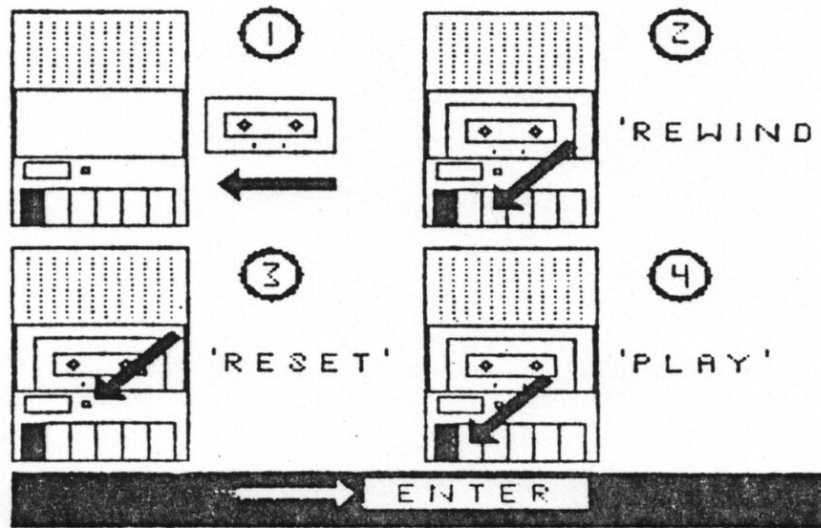
If you have selected the printer option, a square with a blue background will appear on the screen. You then should enter a two digit number from 01 to 99, allowing you to identify each player by number. You can thus get results on a large group of children. The game results will be displayed on the printer as:

```
**XX** WORD "YYYYYY" LEVEL: (1 to 3) # ATTEMPT(S): 0
```

where XX is the number assigned to each player and "YYYYYY" indicates the picture shown to the player for identification, followed by the Level of Difficulty chosen and the number of error(s) made in the spelling of the word.

Choosing the word cassette

With the cassette version, the following instructions will appear on screen:



These instructions represent the five steps to follow in order to begin playing the game. Remove the cassette "Magical Words 2" from the cassette recorder.

Step 1

Choose the cassette that contains the group of words you would like to try and insert that cassette into the tape recorder.

Step 2

Press "REWIND" on the cassette recorder to completely rewind the tape.

Step 3

Depress the "RESET" button on the tape counter so that it shows the number 000.

Step 4

Press "PLAY" on the cassette recorder.

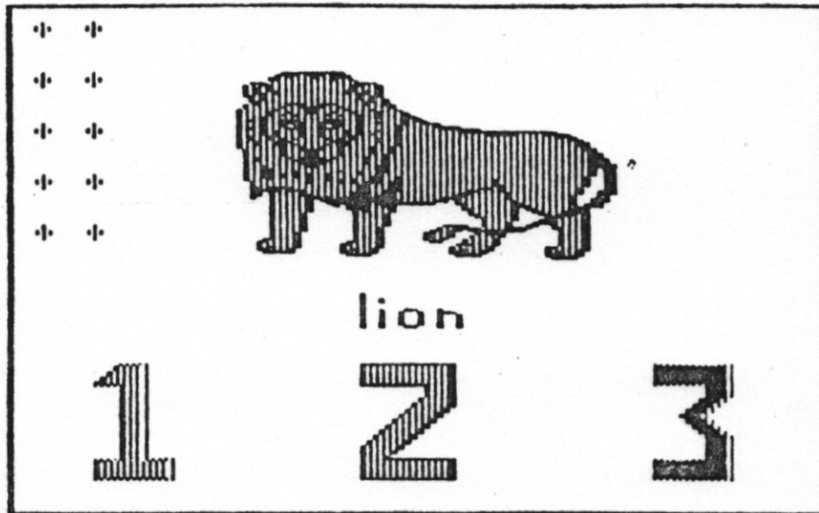
Step 5

Press «ENTER» on the computer keyboard

The computer screen then turns green, and after a few seconds the game begins.

Magical Words 2: the game begins.

A magic wand makes a word appear on the screen. Then using its magical ray, it makes a picture of that word appear above it. On the left of the screen, ten yellow stars indicate the number of crew members that must be saved. Since the game is just beginning, there are ten crew members.



The numbers 1, 2 and 3 appear at the bottom of the screen. The player selects the Level of Difficulty by pushing one of these numbers on the keyboard.

The three levels of difficulty

Magical Words 2 has three Levels of Difficulty in order to adapt to a child's personal rate of learning.

Level 1

Level 1 is for the child who cannot yet spell the word presented. The magic wand writes the word above the picture, so the player can refer to it during the game. Level 1 also lets players become more familiar with the piloting of the helicopter, since it moves at a relatively slow speed.

Flight time is approximately ten minutes. Time elapsed is indicated by the fuel consumption gauge shown in the upper right-hand part of the screen. When the fuel runs out, the game begins again with the same word until the player has succeeded.

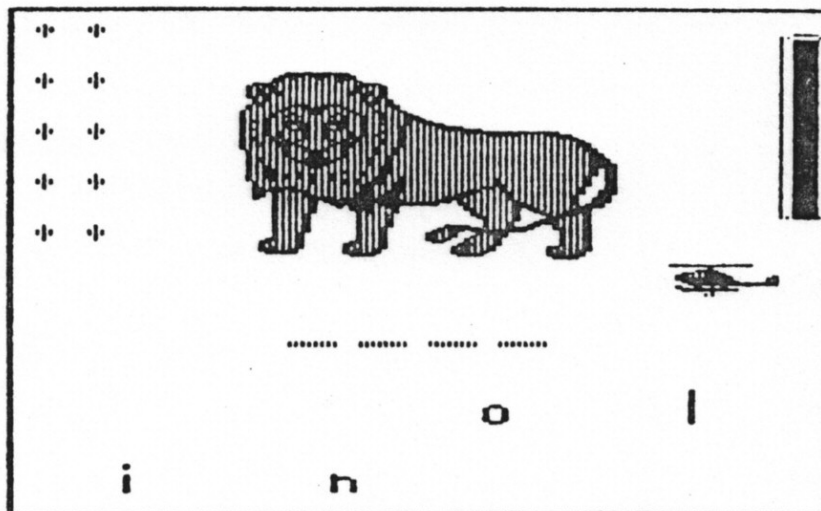
Level 2

Level 2 is an intermediate level for children who find no difficulty in spelling the word presented. The word is not left on the screen for reference, as in Level 1. Here the helicopter moves at a faster pace, and its flight time is reduced to approximately 5 minutes. Again the game will start over with the same word if the player uses up all his fuel reserve before completing the word.

Level 3

This is a competition level, reserved for those children who have mastered not only the spelling of the words presented, but the movement of the helicopter. The helicopter pace is very fast and flight time is limited to approximately 11 seconds per letter found in the word. This level aims at great skill not only in spelling but in the manual dexterity and hand-eye coordination required to handle the helicopter (hooking letter "i" and "l" require great concentration and good control of the joystick).

When the Level of Difficulty has been chosen, the magic wand makes the letters of the word disappear, and then one by one reappear in random order at the bottom of the screen. Then small yellow rectangles appear under the picture. These are the bases on which the letters of the word must rest. There are as many bases as there are letters.



The player must now pilot the helicopter in order to "hook" each letter and land it on its appropriate base.

Piloting the helicopter

The joystick is used to guide the flight of the helicopter. Hold the joystick in your hand with the red fire button facing the screen. Be sure the joystick is plugged into the right joystick jack.

Note: If you are using the TRS-80 Deluxe Joystick, adjust the toggle switches to select "spring-centering" operation (the joystick returns to the centre of the case when you release it).

To move the helicopter upwards on the screen, push the joystick forward. To move it down, pull the joystick back towards you. To move right, push the joystick right, and to move left push the joystick left. To stop the helicopter, move the joystick to the centre.

Control of magnetic hook

The magnetic hook can only be activated with the joystick in the centre of the case (when the helicopter has stopped moving). By pressing continually on the red fire button, the hook descends, and when you release the fire button, the hook is drawn back to the helicopter.

To hook a letter, you must guide the helicopter until the hook is above one of the letters. Stop the helicopter by bringing the joystick to the centre, and press the fire button. Keep this button down until the letter is hooked; you will hear a "beep" and the cable stops its descent when the letter has been successfully hooked. To raise the letter, release the fire button. The hook lowers only until it reaches a letter or its maximum length has been reached.

Note: To lower the hook, the joystick must be in the centre position. When the hook is activated and moving up or down, the helicopter cannot be moved.

Letter unhooking

After securing a letter, you must guide the helicopter to a place above the yellow base that corresponds to the letter you have hooked. In our example, the word is "lion" and you have hooked the letter "o". You must guide the helicopter until it is above the third yellow base, since the letter "o" is the third letter of the word "lion".

To unhook the letter, press the red fire button. If you have positioned the helicopter correctly, the letter will land on its base and you can go on to another letter of the word. However, if the letter was not exactly over its own base, or if it was above the wrong base, it will keep falling and return to its place at the bottom of the screen. If the letter was above the wrong base, the screen will change colour during the letter's descent. The colour change, telling the player of the incorrect letter placement, will aid in correctly spelling the word. It is not necessary to hook the letters in their correct spelling order. Any letter can be picked up at any time, and placed on any space.

Helicopter flight time

Helicopter flight time is determined by the level of difficulty and indicated by fuel consumption shown in the upper right-hand portion of the screen. Level 1 gives about 10 minutes of flying time, Level 2 about 5 minutes, and Level 3 approximately 11 seconds per letter.

Saving a crew member

When the word is completed, the picture disappears, making way for the flying saucer. A crew member appears at the bottom of the screen. You must now guide the helicopter until the hook is above the crew member. Stop the helicopter by bringing the joystick to the centre, and release the hook by pressing and holding the fire button. When the crew member has been successfully hooked, release the fire button to bring him back into the helicopter. Now guide the helicopter until it is just above the centre of the blue bubble on the saucer.

Press again on the fire button to allow the crew member to lower himself into the flying saucer. After a few seconds, the crew member disappears inside the saucer and a yellow star in the upper left-hand portion of the screen will be replaced by a crew member, indicating that he has been saved. The game then continues with the next word.

If you have selected to play at Level 3, and the helicopter fuel has all been used up before you could complete the word, then you won't be able to save a crew member. The completed word will appear in the centre of the screen, and the crew member disappears from the bottom of the screen. A red star replaces the yellow star in the upper left of the screen, indicating a crew member has been lost.

Flight of the flying saucer

The flying saucer takes off when the player has completed all ten words. If the game was played using only Difficulty Levels 1 or 2, ten crew members will automatically have been saved. The flying saucer will pull in its landing platform and rocket off into outer space to return to its planet. The game is over!

If during the game, the player has chosen Level 3, some crew members may have been lost. The height to which the saucer rises depends on the number of crew members saved. If the number is below 8, the saucer will return to earth, the number of crew members saved will appear on the screen, and the player will be invited to play a new game. If 8 or more crew members have been saved, the saucer takes off into outer space, and returns safely to its home planet.

To play a new game

When the game is over, press any key on the computer keyboard.

Cassette version: You will see the instructions for the section "Choosing the Word Cassette" (page 8). These instructions will allow you to select a new group of ten words.

Diskette version: You will see the following messsge appear on screen:

1 ENGLISH
2 FRANÇAIS

Choose the language in which you wish to play the game, and press the appropriate number. A square will appear in the upper left part of the screen, and you must type a two digit number (between 01 and 40) to select the word you wish to start a new game (see word list page 16). For a random choice of words, type 00.

Stopping the game

You can stop the game at any time during the ten words, when the helicopter is flying. Press «CLEAR» on the computer keyboard. To continue the game, press any other key.

Reset Button

The rest button (located on the back of the computer) allows you to start a new game at any time. By pressing this button, all results of the game currently underway are automatically erased, and this produces a slightly different situation, depending whether you are using the cassette or diskette version of the game.

Cassette Version: The game stops and the screen presents the instructions for the section "Choosing a Word Cassette" (page 8). Follow the given instruction to start a new game.

IMPORTANT

With the cassette version, DO NOT push the Reset Button before you have selected "Printer Option". This could cause the program to "freeze", requiring you to turn the computer off, and begin again with the "Operating Instructions for the Cassette Version" on page 5.

Diskette Version: By pressing the reset button you will automatically get the following message:

1 ENGLISH
2 FRANÇAIS

Choose the version you wish, and follow the instructions outlined in the section "Operating Instructions for the Diskette Version" on page 6.

Control of "I/O" errors

INPUT ERROR

This feature of Magical Words 2 is used to control cassette or diskette read errors which may occur during the loading of word pictures. It cannot control a read error which occurs during loading of the master program.

Cassette Version: Most I/O errors will occur from improper adjustment of the cassette playback volume. If the computer is attempting to read one of the pictures on a tape and an error occurs, the following message will be displayed:

TYPE THE NUMBER INDICATED BY THE CASSETTE RECORDER COUNTER
«ENTER» WHEN FINISHED

Type the number shown on your cassette recorder counter and press «ENTER» when you have finished. You will then see the following message:

1. REWIND TAPE TO NUMBER ***XX***
2. ADJUST THE CASSETTE RECORDER VOLUME
3. PRESS 'PLAY'
4. PRESS «ENTER»

IF AFTER SEVERAL TRIALS, YOU STILL RECEIVE THIS MESSAGE, THEN PRESS «BREAK»

Depending on the adjustment of the volume on your recorder, you may have to repeat this operation. If the Input Error persists after you have tried a number of volume settings, it may indicate that the tape is damaged, which makes reading that portion of the cassette impossible. You may continue the game without that particular picture by pressing the «BREAK» key. The game continues, but that picture will not appear on screen.

NOTE: Because tape counters may vary from recorder to recorder, you may have to try a slightly different number than the one indicated by the computer for the control of I/O errors.

Diskette Version: If a read error occurs, just press «ENTER». If the error occurs again and again, make another backup copy of the master disk. To make this copy, please consult your Disk Owner's manual.

Magical Words 2

GROUPE #	1)	Animaux
	1)	lion
	2)	écureuil
	3)	grenouille
	4)	serpent
	5)	baleine
	6)	cygne
	7)	tortue
	8)	mouton
	9)	chameau
	10)	papillon

GROUP #	1)	Animals
	1)	lion
	2)	squirrel
	3)	frog
	4)	snake
	5)	whale
	6)	swan
	7)	turtle
	8)	sheep
	9)	camel
	10)	butterfly

GROUPE #	2)	À la maison
	11)	baignoire
	12)	balai
	13)	fourchette
	14)	chaise
	15)	porte
	16)	couteau
	17)	canapé
	18)	assiette
	19)	fenêtre
	20)	lampe

GROUP #	2)	At home
	11)	bath
	12)	broom
	13)	fork
	14)	chair
	15)	door
	16)	knife
	17)	sofa
	18)	plate
	19)	window
	20)	lamp

GROUPE #	3)	À l'école
	21)	tableau
	22)	crayon
	23)	pupitre
	24)	règle
	25)	livre
	26)	ciseaux
	27)	ordinateur
	28)	horloge
	29)	drapeau
	30)	autobus

GROUP #	3)	At school
	21)	blackboard
	22)	pencil
	23)	desk
	24)	ruler
	25)	book
	26)	scissors
	27)	computer
	28)	clock
	29)	flag
	30)	bus

GROUPE #	4)	Divers
	31)	avion
	32)	château
	33)	arbre
	34)	patin
	35)	tracteur
	36)	fleur
	37)	poupée
	38)	indien
	39)	camion
	40)	voilier

GROUP #	4)	Miscellaneous
	31)	plane
	31)	castle
	33)	tree
	33)	skate
	35)	tractor
	36)	flower
	37)	doll
	38)	indian
	39)	truck
	40)	sailboat