

## ELI'S LADDER

Eli's Ladder is a counting, addition, and subtraction "drill and practice" set of games.

BY SIMAGE

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To play, insert the cartridge into the Atari 2600 and then turn on the power switch.

### A SWITCH BY ANY OTHER NAME IS STILL A SWITCH

Included with your cartridge are two Face Cards for use with your Atari 2600 which comes in two different models. One model has the Right and Left Difficulty switches on the same panel as the Power On switch, while the other has the difficulty switches on the top rear of the 2600. To make the instructions more meaningful, we have given each switch, except the Power On switch, a name which more closely describes the function performed for Eli's Ladder. These names are on the face cards:

ATARI	ELI
Power On/Off	Power On/Off
TV Type	Speed/Count
Left Difficulty	One/Two Player
Right Difficulty	Addition/Subtraction
Game Select	Title Page
Game Reset	Game Start

Place the correct Face Card on top of your Atari, for easy reference of switch settings and operation.

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### THE JOYSTICK CONTROLLERS

The left controller is for the parent's use. The fire button is used for:

- 1) starting each game
- 2) to advance to next problem
- 3) to count apples

The right controller is for the student's use. The joystick controls the pointer. The fire button is used for:

- 1) indicating the answer chosen
- 2) returning to the Title Page at the end of the game

### TITLE PAGE

The first screen will show the Title Page which displays:

- 1) the type of game, Add or Subtract,
- 2) the game number,
- 3) the speed setting used for pacer,
- 4) and the number of players for the game (1 or 2).

As the power is turned on, the initial settings will be:

++++

GAME

1

SPEED

16

2

At this time, make your selections for play.

- 1) to change the type of game, move the Add/Subtract switch. The top line of the Title Page will be + + + + or - - - - depending on the game selected.
- 2) Use the Title Page switch to set the proper game number wanted. The game numbers will go from 1 to 30 and back to 1 again.
- 3) To select a different speed, use the Speed/Count switch. Each time the switch is moved from Speed to Count and back to Speed again, the speed will change by two seconds.
- 4) Select One or Two players.
- 5) To begin the game, press the Game Start switch.

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### **PLAYING**

The problems will advance automatically while the One Player switch is on. You will see each problem on a chalkboard and a row of 4 answers below the board.

Under the answers is a pointer which can be moved by the right joystick to the selected answer. The number will light up brightly when the arrow is in the vicinity of the number. The arrow need not be directly under the number. When your choice is lighted, press the fire button on the right joystick. A correct answer will appear brightly lit under the problem on the chalkboard.

If your answer is correct, Eli, our alien friend from outer space, will appear going up one rung on his ladder. If your answer is incorrect, the correct answer will appear flashing with a dim light on the chalkboard.

After 20 problems have been played, Eli will jump off the ladder into his spaceship and the number of correct problems will appear. If the number correct is 18, 19 or 20, a colorful flashing "WOW" will appear and Eli will jump for joy over 100 times or until you hit the fire button on the student's joystick, at which time the Title Page will reappear. You may change to another game at this time or replay the same one.

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### **COUNTING APPLES**

To assist students in developing addition and subtraction skills, counting of red and green apples is included. You can use this Count switch at any time necessary during the play, both before and after the answer has been given. To use, move the Count switch to a down position. On the chalkboard, you will see the math problem written as a number sequence.

The parent's fire button controls the counting of the apples and may be held down for a rapid count, or pressed and released for the apples to appear slowly. Young children will enjoy counting them out loud, as they appear. For addition, the apples will appear one at a time. In subtraction, all the apples will appear and will be 'taken away,' one at a time, by the fire button, leaving the correct number for the answer. The counting of apples is used in both addition and subtraction up to the count of 18. The play will resume when the Count switch is placed in the up position.

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### **GAME LEVELS AND TYPES**

There are 10 levels of difficulty for addition and 10 levels for subtraction. Within each level there are three different types of play for a total of 30 addition and 30 subtraction games. The levels and games are sequential in difficulty. See Levels of Difficulty Chart for a description of each.

Since all numbers are chosen at random by a Random Number Generator, no two games will be the same. New levels will review previous levels and add materials for the new level of difficulty.

Type 1 is called PRACTICE Counting of apples and working at your own speed is recommended here.

Type 2 is called PACER: When used a "+" or "-" will travel from left to right at the bottom of the screen. If an answer is not selected before the sign reaches the barrier on the right, the problem is ended and marked wrong.

You may select speeds between 2 and 16 seconds. If the level being played allows counting, the Count switch will stop the pacer and after counting will reset it from the beginning.

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Type 3 is called PHANTOM: In addition to PACER, all the answers, except the one over the arrow, are blanked out. As the arrow is moved, only the selected answer will light up. This requires the student to decide the answer before looking for it on the darkened screen.

In the more advanced games, with seeds of only 3 seconds, you will find it helpful to place the pointer either to the extreme right or left, whichever is closer, before the next problem appears.

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### **AGES**

With the 8 speed settings, there are 480 games. You will find at least several levels to challenge each member of the family. With these games, you can have hours of fun, while you are increasing your ability to use numbers accurately and with more speed. You will see an improvement, if you are 4 or 40, after a few games!

Here are suggested attention span limits:

4 years old ----- 5 minutes  
5 years old ----- 10 minutes  
6 years old ----- 15 minutes  
7 years old ----- 20 minutes  
8 years old ----- 25 minutes  
9 years old ----- 30 minutes

More than 30 minutes of playtimes becomes highly individualized after age 9.

Parents will want to use the two player format while teaching young children. The automatic advance is useful for practice and playing when alone.

Remember, you can stop the game at any time to count apples or for other needs by using the Count switch, and resume play by listing it up.

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### **MOTIVATION**

A suggested story to stimulate the imagination of the 4 to 7 year olds:

#### **ELI'S STORY**

Eli is a space traveler from another planet, visiting Earth. He now wishes to travel to the Moon. Red and green apples have become a favorite of his. He is trying to load his spaceship with them for his voyage.

Help him climb his long ladder into the spaceship. When he reaches the top with your help, he will jump in and be ready for the trip. If you answered all the counting problems very well, he will jump for joy, as well as say a new word he learned on Earth. He was watching a child receive a birthday present and the word he shouted was "WOW!"

If you help load all ten of Eli's crewmembers on the Eli spaceship, they will be ready to "blast off!" Happy landing on the Moon, Eli.

#### **STICKERS AND AWARD CHART**

Eli stickers may be given for good work or great improvement. They will be placed on the windows of the spaceship on the Award Chart. Reluctant learners will be very responsive to these. After successfully filling up one spaceship, other planets, stars or constellations may be chosen as the next destination.

If you would like an additional supply of 2 Award charts and 20 Eli stickers, send \$2.50 (check or M.O.) to:  
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