PlayStation™

NTSC | U/C

Adventure 4
Lunar Base

lightspan™ adventures

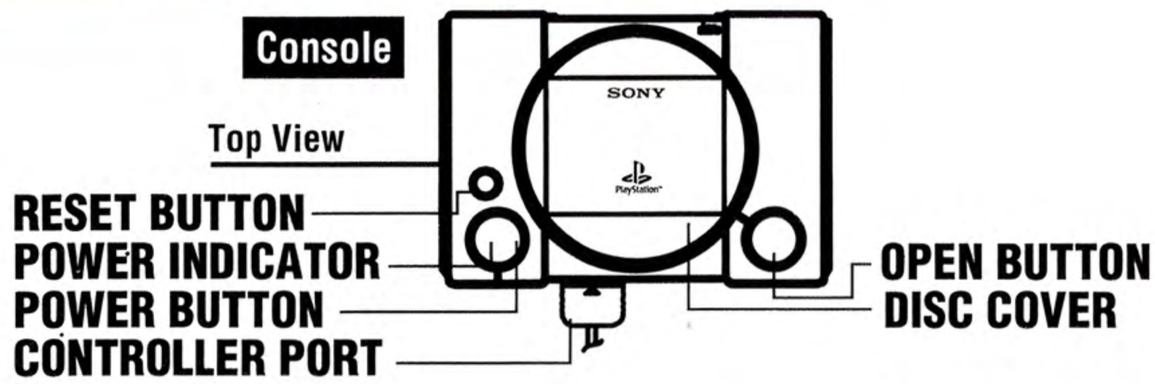
TIMELESS MATH™

Suddenly stranded on the Lunar Base, Anita and Jamal discover that an asteroid is soaring toward them on a collision course. With the help of their robot Ryan, they must devise a way to avoid disaster within one hour! By solving a series of mathematical problems, your child can help energize the base's power stations and generate enough laser power to blast the asteroid from the sky and save the Lunar Base.

LEARNING OBJECTIVES

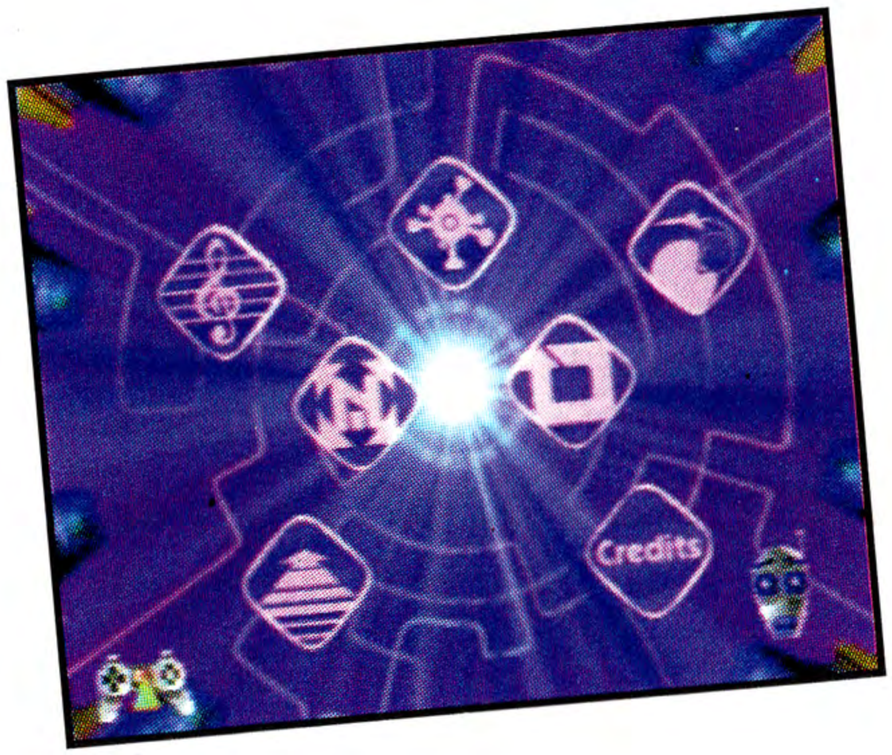
- Add, subtract, multiply, and divide whole numbers, fractions, and decimals
- Estimate sums, differences, products, and quotients for fractions and decimals
- Solve problems by using a variety of strategies
- Determine solutions using estimation

Getting Started



Set up the PlayStation™ game console according to the instructions in its Instruction Manual. Make sure the power is off before inserting or removing a compact disc. Insert the *Timeless Math—Lunar Base* disc and close the CD door. Insert the game controller and turn on the PlayStation game console. From the opening screen, follow the instructions to start an activity.

- Use the **arrow buttons** on the PlayStation controller to move the pointer.
- Use the **X button** on the PlayStation controller for clicking.
- Click the **planet** to learn about the characters and the mission history.
- Click **Ryan** in the lower-right corner of the screen for game help.
- Click the **base diagram** in the top center of the screen to access five practice tools that will help your child acquire problem-solving skills.



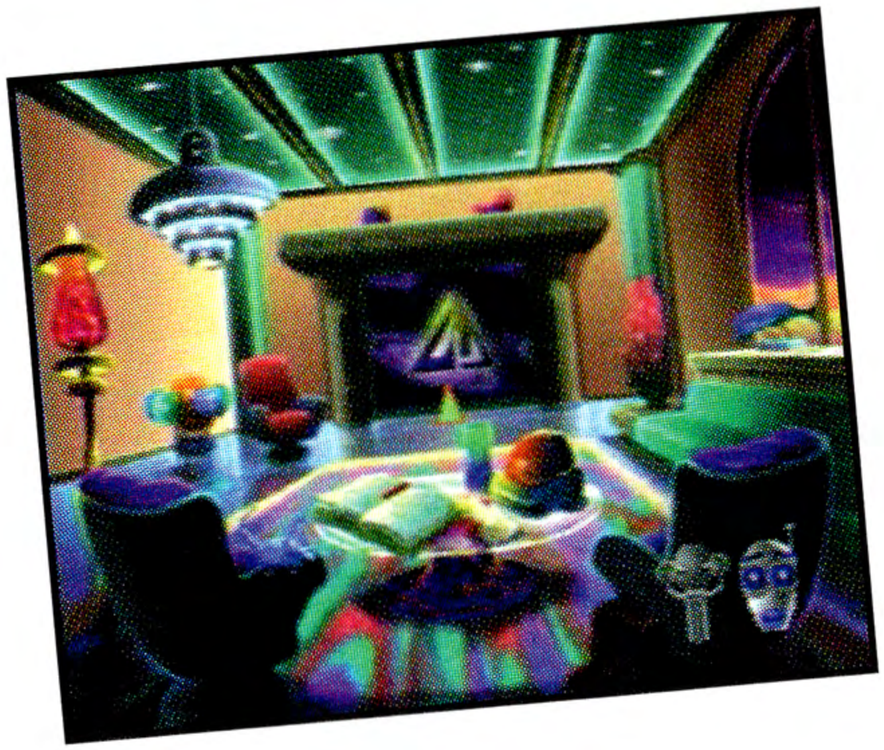
- Click the **square** near the right center of the screen to enter a password if you are resuming a previous mission, or click the **N** on the left center of the screen to begin a new mission.
- Click the **arrow** in the lower-left part of the screen to exit the game.

To complete the Lunar Base mission, your child must complete the following tasks before time runs out:

- Energize the power stations located in the **"Robot Repair Center,"** the **"Security Deck,"** and the **"Energy Room"** by completing the two activities in each station at all five levels.
- Gain security clearance to the Base Protection System in the **"Control Center"** by correctly answering three equations.
- Your child can save his or her work and continue the game later by clicking **Mission Access Code** and obtaining a password before leaving *Lunar Base*.

In addition to the rooms with power stations, your child also can enter the following rooms for exploration and more learning:

- "Crew Quarters"—Access a laptop computer to hear and read information about asteroids. Operate a sliding scale to observe weights on various planets.



- "Base Living Area"—Manipulate a sliding scale to show various temperatures between freezing and boiling and see a scene relating to that environment.
- "Control Center"—Use a telescope to scroll through pictures of five objects in space and hear information about them. Enter the data bank to explore space-related topics. Use the robot catalog to combine robot parts.

Timeless Math—Lunar Base

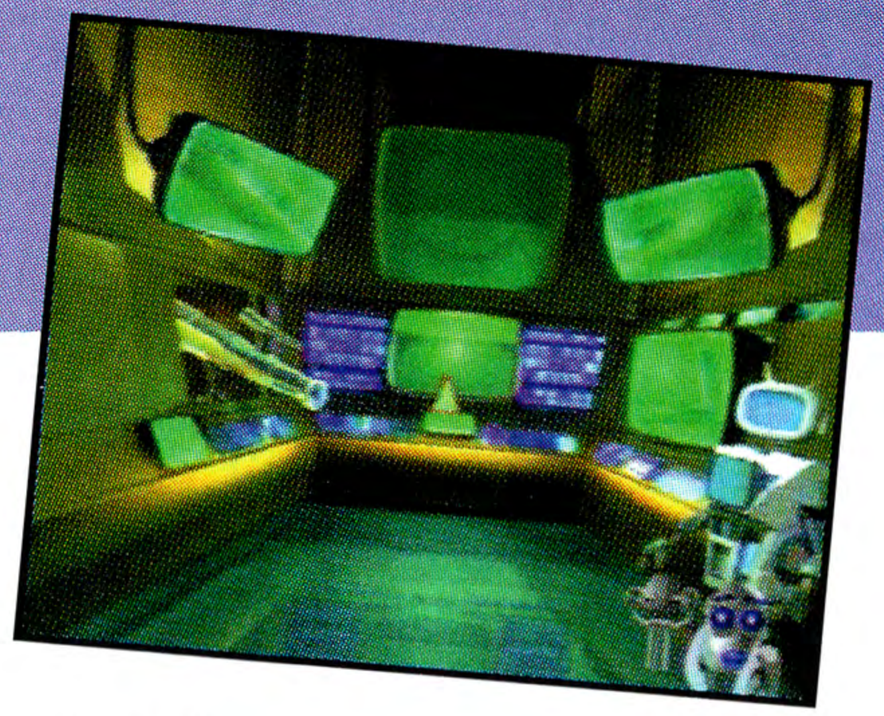
Anita, Jamal, and their robot Ryan are fighting the clock to power up the base's laser so it will have enough energy to destroy the asteroid that is falling toward them. Your child can help them by completing a series of math games. He or she can begin in either the **"Robot Repair Center,"** the **"Security Deck,"** or the **"Energy Room."**

"Robot Repair Center"

In this activity, your child must activate the two power stations by playing the Score More game at all five levels. Using computation strategies, mental math, and estimation, he or she must obtain the highest score possible by building four equations with integers, fractions, and decimals. Have your child:

- click one of the eight **numbers** at the top of the screen, or one of the four **math operations** on the right side of the screen
- click the **field** in the center of the screen where you want to put that number or operation
- click the **?** for help and game strategy
- click **Ryan** for additional instructions

"Security Deck"



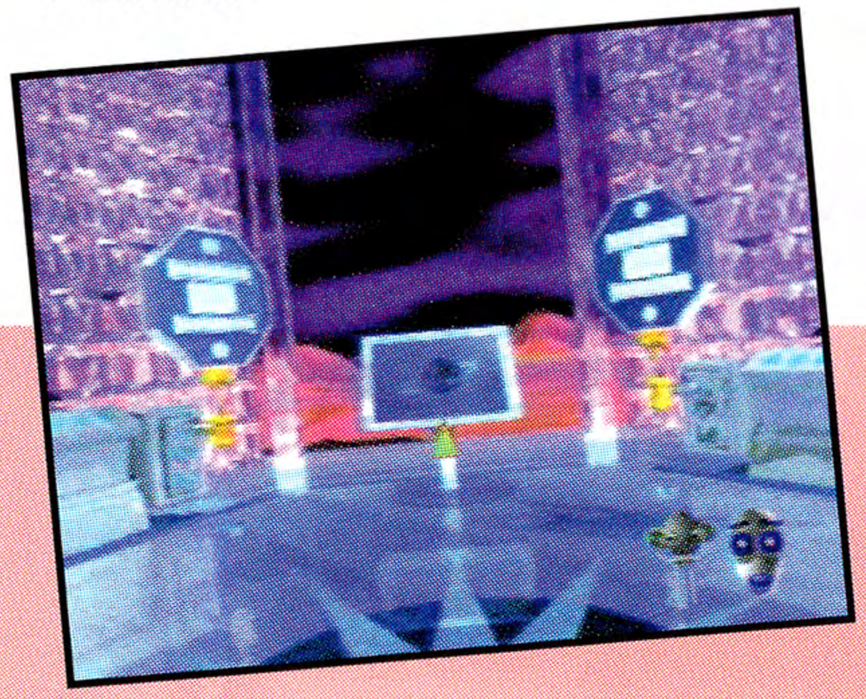
In this activity, your child must energize the two power stations by playing the Close to 100 game at all five levels. He or she will choose mathematical operations and integers to make a series of equations that result in a number as close to 100 as possible. Have your child:

- read the number that appears in the window in the center of the screen
- click the **new number** in the upper-right corner of the screen, or click either **square root** or **square** at the right side of the screen to create the equation
- click one of the 12 **operations** at the top of the screen to complete the equation in the center of the screen
- click **Ryan** for additional instructions, or click the **computer monitor** in the **"Security Deck"** for detailed game information

"Energy Room"

To energize this room's power stations, your child must complete the Target game at all five levels. Using four basic operations, he or she must choose a pair of numbered tiles to form an equation that equals the target number. This process is repeated until at least 16 tiles are removed. Have your child:

- read the target number at the upper-right corner of the screen
- click the **tile** in the lower-left corner of the screen where he or she wants to put that number



- click one of the 20 **tiles** in the middle of the screen, then click one of the four **math operations** on the right side of the screen, and finally click a second **tile** to create an equation
- click **OK** to compute the equation
- click **?** for help and game strategy
- click **Ryan** for additional instructions, or click the **computer monitor** in the **"Energy Room"** for detailed game information

Base Protection System

After your child completes each level, he or she can gain access to the **Base Protection System** by correctly solving three problems that involve finding the sum, difference, product, or quotient of two whole numbers. Have your child:

- read the equation in the center of the screen
- click the correct **solution** to the equation (There will be three possible solutions to choose from.)

- click **Enter** to confirm his or her choice
- click **Ryan** for additional instructions, or click the **computer monitor** for detailed game information

If your child would like to try a different problem, he or she can click **Next** to see the database of equations.

Extending the Learning Experience
Family Activities

Weigh In

In the Lunar Base "Crew Quarters," a scale may be used to determine weight in pounds and kilograms throughout the galaxy. Help your child use a scale to find the weight in pounds of members of your family, and then convert them to kilograms (1 kg = 2.2 lb.). Use the scale in the "Crew Quarters" to find your family members' weight on various planets. How much will everyone weigh on Mars?

A Warming Trend

In the "Base Living Area," the Environmental Enhancer may be used to experiment with temperature. Encourage your child to look in the newspaper for various temperatures of cities throughout the U.S. and together discuss how temperatures vary across the country. Encourage your child to take a poll to determine the type of climate each family member prefers.

Watch the Speed Limit

It takes a rocket about three days to travel to the Moon, which is about 240,000 miles from Earth. With your child, figure out how long it would take you to go there in a car driving 55 miles per hour, if that were possible! Have another family member join in the fun by figuring out how long it would take if he or she used a different mode of transportation (e.g., by bicycle, train, or plane).

Checking Makes Cents

Discuss with your child how checks are filled out. Explain that the dollar amount written in the box is usually written in decimal form (e.g., $23.56). Show your child that the amount is also written in words. Explain how to write cents as a fraction $\frac{56}{100}$, decimal 0.56, or fifty-six hundredths. Ask your child why he or she thinks the same amount is written in two different ways on such a small document?

WARNING: READ BEFORE USING THE PlayStation™ GAME CONSOLE.
A very small percentage of individuals may experience epileptic seizures when exposed to certain light patterns or flashing lights. Exposure to certain patterns or backgrounds on a television screen or while playing video games, including games played on the PlayStation™ game console, may induce an epileptic seizure in these individuals. Certain conditions may induce previously undetected epileptic symptoms even in persons who have no history of prior seizures or epilepsy. If you, or anyone in your family, has an epileptic condition, consult your physician prior to playing. If you experience any of the following symptoms while playing a video game—dizziness, altered vision, eye or muscle twitches, loss of awareness, disorientation, any involuntary movement, or convulsions—IMMEDIATELY discontinue use and consult your physician before resuming play.

WARNING TO OWNERS OF PROJECTION TELEVISIONS:
Do not connect the PlayStation™ game console to a projection TV without first consulting the user manual for your projection TV, unless it is of the LCD type. Otherwise, it may permanently damage your TV screen.

HANDLING THE PlayStation™ DISC:

- This compact disc is intended for use only with the PlayStation™ game console.
- Do not bend it, crush it, or submerge it in liquids.
- Do not leave it in direct sunlight or near a radiator or other source of heat.
- Be sure to take an occasional rest break during extended play.
- Keep this compact disc clean. Always hold the disc by the edges and keep it in its protective case when not in use. Clean the disc with a lint-free, soft, dry cloth, wiping in straight lines from center to outer edge. Never use solvents or abrasive cleaners.

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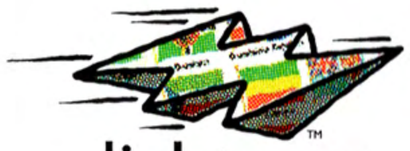

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