

EDUCATORS' GUIDE

MAGIC TREE HOUSE®

Midnight on the Moon and **Space: A Nonfiction Companion to Midnight on the Moon**



PB: 978-0-679-86374-8
EL: 978-0-375-89425-1
Grades: 1-4
F&P: M • Lexile: 320 L

ABOUT *Midnight on the Moon*

Jack and Annie are whisked forty years forward in time and land at an international space station on the moon. There they don space suits and go exploring the lunar surface in search of the fourth object needed to free the enchantress Morgan le Fay from a powerful spell.



PB: 978-0-375-81356-6
EL: 978-0-307-97518-8
Grades: 2-5
F&P: S • Lexile: 700L

ABOUT *Space:*

A Nonfiction Companion to Midnight on the Moon

How did the universe begin? How hot is the sun? How long does it take to get to the moon? Find out the answers to these questions and more in Jack and Annie's very own guide to the secrets of the universe. Including information on stars, planets, space travel, life on other planets, and much more!

CLASSROOM CONNECTIONS

ACTIVITIES FOR *Midnight on the Moon*

It's Only A Paper Moon

When Jack and Annie land on the moon, they discover a dusty gray surface covered with rocks and craters. Your students can create their own 3-D paper moons using a white poster-board circle, white glue in a squeeze bottle, and watercolors and water-based felt-tipped pens, pencils, and sponges.

Have students draw an outline in glue of several different-sized craters on their paper circles. After the glue sets, the students paint the color the inside of these craters in dark shades of blue, green, or purple. Then they color the surface of a sponge with felt-tipped pens while the watercolors dry. With sponges slightly dampened, they gently wash the sponge across the face of the moon to create a hazy appearance. Let dry and hang for display.

CURRICULUM: Art • Astronomy

ACTIVITIES FOR *Space*:***A Nonfiction Companion to Midnight on the Moon*****Biography and Autobiography**

Review the term nonfiction and discuss how a large portion of nonfiction deals with people. Introduce the word biography by writing the word on a card or on the board so that the class can see it. Discuss that the prefix bio means life.

A biography is the story of a person's life written by another person.

Add the prefix auto. Ask the students if they have ever seen auto before—e.g., automatic, automobile, etc. The prefix means of or for oneself. A person writes an autobiography about himself or herself. A collective biography is a collection of information on the lives of two or more people. Ask the students if they have ever read about another person or written a story about themselves. Have they heard of Galileo, Sir Isaac Newton, Neil Armstrong, or Sally Ride?

**A Time Line Study: Could Copernicus and Galileo Be Friends?**

Chapter 1 discusses the beginning of astronomy over 2000 years ago. As a class, design a time line that would cover from 2000 B.C. to today that will be used throughout the study of this book. Adding machine tape is inexpensive and easy to store. Once you have measured out the tape, you may want to expose only the time period being discussed in each point of your lesson. TimeLiner software is an alternative to the adding machine tape.

CURRICULUM: *Science Research*

Information Power-One Small Step

Work with the school librarian to plan a scavenger hunt in the library. This is a fun way to teach your students to locate the sections of the library and the types of materials that will be helpful in your studies of space. Since most libraries have Internet access, the librarian can print a list of available materials to use in your planning.

Create 5–10 stations in the library. Prepare a list of questions or tasks, one for each station. Assign partners and have each pair travel from station to station. Have bonus questions available for students in case all of the stations are busy.

EXAMPLE:

1. Find the online card catalog. How many books does your library have on the planet Saturn?
2. Find an unabridged dictionary. What is the definition of asteroid?
3. Find an encyclopedia. What volume has information on the planet Pluto?
4. Find books on space located in the 520s. Write down the title and the call number of a book on constellations.
5. Find a science dictionary. Find the definition of comet and write a sentence using the word.
6. Find a biography. (Hint: Biographies have the number 92 or the letter B on the spine, plus the first three letters of the person's last name.) Write down the title and the call number of a book on Sally Ride.

CURRICULUM: *Science Research*

Postcards from Space

Using research gathered from the book and other sources, have each student design a postcard. On the front, he/she should illustrate where they are in space. On the back, he/she should share the facts in first person narrative.

CURRICULUM: SCIENCE • Art

Stargazers

Reread the pages on constellations. Have students investigate the mythology and history of their favorite constellation by visiting different Web sites. With the information gathered, each student should prepare a composition about the history of a constellation or write an original story about it. Have students design their constellations on black construction paper; use a hole puncher to cut out the patterns, and then back the black paper with yellow construction paper to represent the light. Star stickers are an alternative to the hole puncher.

CURRICULUM: Language Arts • Math • Art

Mission Impossible

After reading Chapter 9, have students work in groups to research the Apollo mission of their choice. Once the research is done, have each group present their Apollo mission to the class as if it were a news conference.

CURRICULUM: Science Research

Got Space?

After reading about the future of space exploration in Chapter 9, divide the class into groups and have them design their own space city. The project developers will brainstorm the requirements for life in space. This would include housing, food, transportation, sanitation, and rules. The groups can decide on the duration of their stay; it can be for a vacation or for a longer period of time.

CURRICULUM: Research Science • Art

Teaching ideas provided by Jamay Johnson, second grade teacher; Melinda Murphy, media specialist, Reed Elementary School, Cypress Fairbanks Independent School District, Houston, Texas; and Rosemary B. Stimola, Ph.D., former professor of children's literature at City University of New York.

