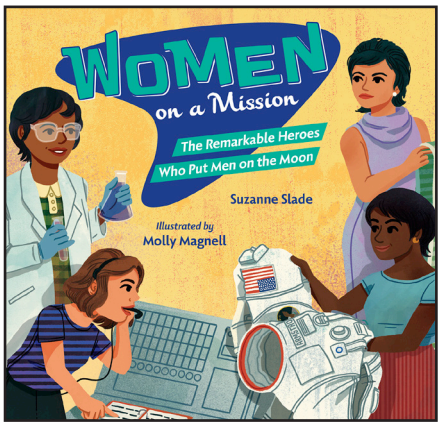
Women on a Mission: The Remarkable Heroes Who Put Men on the Moon

ACTIVITY KIT

Table of Contents



978-1-62354-395-2 HC
by Suzanne Slade
illustrated by Molly Magnell

About the Book

This is the story of our daring quest to visit the moon, featuring twelve of the talented women who helped get us there. From designing the descent engine to calculating the flight paths to mixing rocket fuel, these women used their grit, STEM know-how, and perseverance to achieve the Apollo 11 landing.

About the Author

Suzanne Slade is a mechanical engineer who worked on Delta and Titan rockets for NASA. She has written more than 180 children's books, including *Daring Dozen: The Twelve Who Walked on the Moon; Unlocking the Universe: The Cosmic Discoveries of the Webb Space Telescope; Shining Star: Vera Rubin Discovers Dark Matter*; and *A Computer Called Katherine: How Katherine Johnson Helped Put America on the Moon*. Suzanne and her family split their time between Illinois and New Hampshire.

About the Illustrator

Molly Magnell is a designer and illustrator who has worked with NPR, the *New York Times*, the *Washington Post*, *Scientific American*, Caltech, and others. When Molly isn't drawing, she can be found petting stray cats in Brooklyn, New York.

ACTIVITY KIT

Discussion Questions

Use these conversation starters to get kids thinking and learning.

Pre-reading

1. After looking at the cover of the book and reading the title, ask kids what they think *Women on a Mission* is about. Write their responses on chart paper.

2. What do kids know about NASA? If they wanted to work at NASA someday, what would they need to learn? What kinds of jobs do people have at NASA?

Post-reading

1. Revisit the predictions kids made before reading. What predictions (if any) were correct? Did *Women on a Mission* surprise them?

2. This book is set in the 1960s. What do kids know about this decade? What else was happening in the US and around the world? What do they notice about the time period in the illustrations and text of this book?

3. Twelve women are introduced in this book. Do kids have a favorite? Did any of the jobs these women did surprise kids? How do they think these jobs would be different if they talked to women in the same roles at NASA today?

4. What does the adjective "groundbreaking" usually mean when talking about science? What new discoveries and innovations did these women make in their work at NASA? What were some of the unique challenges they faced in working on the first moon landing?

5. Some of the women in this book faced opposition when they studied science or pursued STEM careers. How did they prove their detractors wrong? What legal and cultural changes have happened since the 1960s to protect the equal rights of women and people of color in the workplace? Why is it important to offer a fair chance to people of all backgrounds who are interested in STEM careers?

6. Why did author Suzanne Slade decide to highlight just twelve of the many women who worked on Apollo 11? What kinds of research did she do to prepare for writing this book? What kinds of research did the illustrator do to create accurate illustrations?

7. When was the first class of women astronauts welcomed at NASA? What are some of the firsts for women that these astronauts accomplished?

ACTIVITY KIT

Science Connection: Design a Space Ship

Name: _____

Date: _____

Use the space below to design your own space ship, just like Phyllis Gaylard and Margaret Brennecke designed parts of the *Saturn V* rocket and the *Eagle* lunar module. Don't forget to label the parts!

WOMEN on a Mission
The Remarkable Heroes Who Put Men on the Moon

ACTIVITY KIT

Math Connection: Budget Like an Astronaut

Name: _____

Date: _____

Josephine Jue kept the Apollo missions on track by developing a budget. You might not take a trip to the moon just yet, but you can budget for a different kind of trip! Use this worksheet to figure out how much a vacation would cost.

Destination	Duration

Expenses

Travel (car fuel, plane tickets, etc.)	
Activities	
Food	
Housing	
Souvenirs	
Miscellaneous	
TOTAL	

ACTIVITY KIT

History Connection: Profile of a Scientist

Name: _____

Date: _____

Pick a woman from the Apollo 11 team and learn more about her life. Use the boxes below to organize your research!

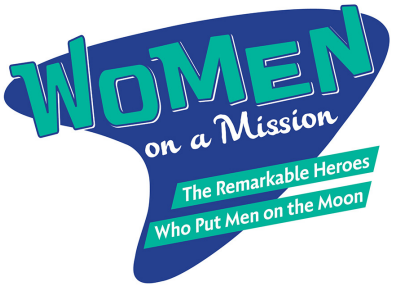
Name

Job Title

Responsibilities

Education

What did she do after working at NASA?



ACTIVITY KIT

Reading Connection: Matching Up

Name: _____

Date: _____

Match the women of the Apollo mission to their jobs!

Rita Rapp	Aerospace Engineer
Mary Golda Ross	Metallurgist
Dee O'Hara	Budget Mathematician
Josephine Jue	Aerospace Nurse
Reatha Clark King	Food Scientist
Phyllis Gaylard	Lunar Module Engineer
Yvonne Young Clark	Space Suit Technologist
Katherine Johnson	Flight Path Mathematician
Margaret Brennecke	Chemist
Hazel Fellows	Sample Case Engineer

ACTIVITY KIT

Further Reading

Make connections and enrich the learning experience with these additional resources!

About Apollo 11

Floca, Brian. *Moonshot: The Flight of Apollo 11.* Atheneum, 2019.

McReynolds, Linda, and Ryan O'Rourke. *Eight Days Gone.* Charlesbridge, 2012.

Robbins, Dean, and Sean Rubin. *The Astronaut Who Painted the Moon: The True Story of Alan Bean.* Orchard Books, 2019.

Siy, Alexandra. *Footprints on the Moon: Apollo's Giant Leap of Exploration & Discovery.* Charlesbridge, 2001.

Slade, Suzanne, and Alan Marks. *Daring Dozen: The Twelve Who Walked on the Moon.* Charlesbridge, 2019.

Slade, Suzanne, and Thomas Gonzalez. *Countdown: 2979 Days to the Moon.* Peachtree, 2018.

About Women in STEM

Ahmed, Roda, and Stasia Burrington. *Mae Among the Stars.* HarperCollins, 2020.

Gehl, Laura, Louise Pigott, and Alex Oxton. *Always Looking Up: Nancy Grace Roman, Astronomer.* Albert Whitman & Company, 2019.

Hansen, Amy S, Wanda Díaz Merced, and Rocío Arreola Mendoza. *Wanda Hears the Stars: A Blind Astronomer Listens to the Universe.* Charlesbridge, 2025.

Robbins, Dean, and Lucy Knisley. *Margaret and the Moon: How Margaret Hamilton Saved the First Lunar Landing.* Knopf, 2017.

Robeson, Teresa, and Rebecca Huang. *Queen of Physics: How Wu Chien Shiung Helped Unlock the Secrets of the Atom.* Sterling Children's Books, 2020.

Stone, Tanya Lee, and Margaret A. Weitekamp. *Almost Astronauts: 13 Women Who Dared to Dream.* Candlewick, 2009.

Van Vleet, Carmella, Dr. Kathy Sullivan, and Nicole Wong. *To the Stars! The First American Woman to Walk in Space.* Charlesbrige, 2016.

About Space and Astronauts

Fabiny, Sarah, Who HQ, and Ted Hammond. *What Is NASA?* Penguin Workshop, 2019.

Kelly, Scott, and André Ceolin. *My Journey to the Stars.* Crown, 2017.

Kregenow, Julia PhD, and Carmen Saldaña. *Twinkle Twinkle Little Star, I Know Exactly What You Are.* Sourcebooks, 2018.

McAnulty, Stacy, and Stevie Lewis. *Moon! Earth's Best Friend.* Henry Holt, 2019.

McCarthy, Meghan. *Astronaut Handbook.* Dragonfly Books, 2017.

Siy, Alexandra. *Voyager's Greatest Hits: The Epic Trek to Interstellar Space.* Charlesbridge, 2017.

Slade, Suzanne. *Unlocking the Universe: The Cosmic Discoveries of the Webb Space Telescope.* Charlesbridge, 2024.