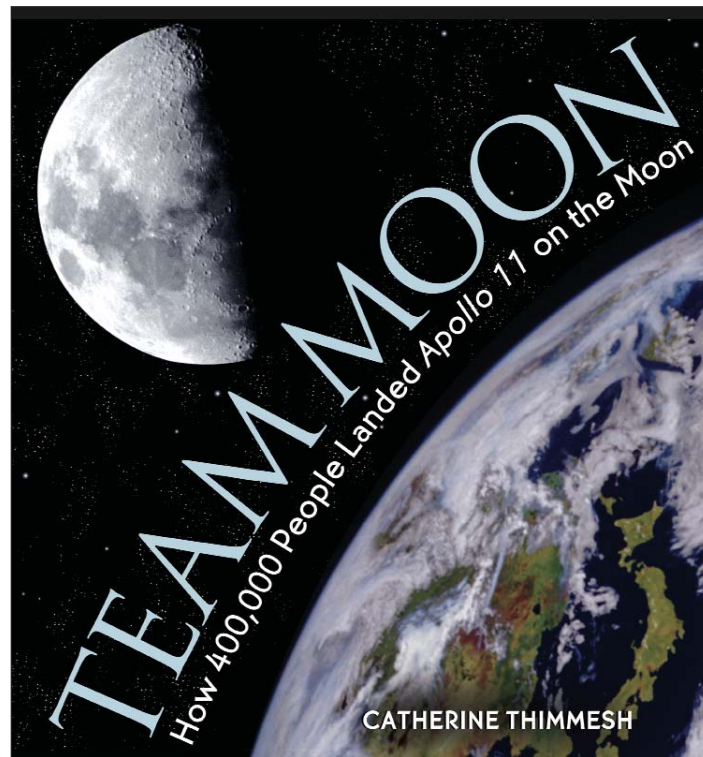




Team Moon

How 400,000 People Landed
Apollo 11 on the Moon

by Catherine Thimmesh

About the Book

Catherine Thimmesh takes readers behind the scenes of one of the twentieth century's boldest moments and reveals the complexity, magnitude, and drama of "one small step for man, one giant leap for mankind." Her book—*Team Moon*—combines history, science, sociology, literature, and art to tell the story of the mission that sent the first man to walk on the moon. Using *Team Moon* in your classroom will allow you to cross the curriculum with activities, projects, and discussions that connect oral history, literature, critical thinking, research, and cooperative learning

In the Classroom

Oral History

"And now, at this defining moment, the world had come together—like nothing ever before—not only to wish the astro-

nauts Godspeed, but to bear personal witness to this incredible event." (p. 5) An unprecedented number of people viewed the astronauts land on the moon on television that July day in 1969 and remember the occasion vividly. Have your students gather recollections of this important event from people who have witnessed it.

Begin by asking the class to make a list of people who may have watched the Apollo 11 landing on television. These can include parents, grandparents, other family members, neighbors, local community leaders, teachers, and librarians. Then have the class create an outline of questions for interviewing these subjects. Questions may include:

- Where were you when you watched Neil Armstrong take mankind's first step on the moon?
- What time of day was it?
- What did you think? How did you feel?
- What were your hopes about this event?
- Have those hopes come to fruition?

Each student should present the responses he or she has collected to the class. Then all the interviews should be gathered into a book, and the book might be given to the school or public library.

Decision-Making

One of the primary themes in *Team Moon* is the pervasiveness of decision-making during the flight of *Apollo 11*. At every step, members of the various teams had to assess the situation, evaluate the options, and take quick actions—actions that involved the safety of the astronauts and the ultimate success or failure of the mission. Whether considering what to do about a frozen slug or whether or not the TV satellite signals should be transmitted from Australia as planned or from a backup site, the teams had to rely on their experience, knowledge, and instincts to make the necessary choices.

The *Apollo 11* mission was nearly ten years in the making, and the team leaders and members had all that time to hone their decision-making skills. Your students can practice their own skills with this exercise.

Present the class with the following: The school has just been given \$1,000 by a local business. The only requirement is that the money be used to benefit as many students as possible.

Divide the class into four or five teams and ask each one to come up with an idea for the best use of the money. Their response should go beyond what to use the money for and include ways to implement their choice.

For example, if a group suggests that the money be used to purchase additional books for the school library, then the students should be able to answer these questions:

- How many books will the money buy?
- What is the best source for the books?
- How will the books be selected?
- What kind of help do the students need?
- Who can provide that assistance?
- Why is this the most worthy use of the funds?

Each group should present their solution to the whole class. They should be persuasive in both their oral presentations and in their visual aids—charts, photos, etc. Then the class should vote on which idea is the strongest and the most doable.

If your students really get involved in this project, you might want to take it even further and suggest that they write up a proposal for the chosen project and try to get a grant or a gift or raise the money to make their decision a reality.

Research

Your students can do research on the Internet to discover what is going on at NASA today. There are links to learn about the astronaut training program, biographies of astronauts, current manned and unmanned space projects, the International Space Station, scientific experiments being conducted in space, satellite telescopes, and future NASA projects. There are even pictures of Earth taken from space.

Go to NASA's Website: www.nasa.gov. As the students navi-

gate through the screens they should think about what they would like to learn more about. Some suggestions: reports on how to become an astronaut; the International Space Station; the newest spaceship NASA is working on.

If they have a problem or want a question answered, they can e-mail NASA at education@nasa.gov.

Discussion Questions

Dick Underwood, NASA's supervisory aerospace technician and chief of photography, told the *Apollo 11* astronauts that "when they returned from the moon they'd be heroes, have dinner at the White House, have parades, along with other hoopla." (p. 53) The astronauts Armstrong, Aldrin, and Collins, are indeed American heroes.

- What do you think are the qualities of a hero?
- Who are heroes to you? Why?
- How has your understanding of what a hero is changed after reading *Team Moon*?
- How has learning how many people were waiting in the background changed your thinking?
- Look at the photos of the members of Team Moon on pages 66 to 69. Are any of these people heroes by your definition? Explain.

In 1961, President Kennedy made the bold statement: "I believe this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to Earth." (p. 10) This was a dream almost beyond imagination. In 1969, that dream was realized with *Apollo 11*.

- What might be an equivalent goal today, now that technology has taken us so far? You might consider goals in medicine, social causes, and international relations, as well as scientific exploration.
- Make a list of the people who would have to be involved and the skills they would need to make up the team to achieve the goal.
- Look at the photographs throughout the book and you will notice that there were very few women on Team Moon. How would that be different in the pursuit of the goal that you set? What other differences would there be in the make-up of your team?
- Discuss with your classmates whether such a goal would have the kind of popular support of the American people that the Apollo program had.
- Using the list of the other Apollo missions on pages 77 and 78 as an example, chart the stages for getting to and beyond your goal.

The *Apollo 11* mission was dangerous. There was no guarantee for the astronauts' safe return. In fact, President Nixon had a speech prepared in case there was a tragedy: "Fate has ordained that the men who went to the moon to explore in peace will stay on the moon to rest in peace . . . These brave men, Neil Armstrong and Buzz Aldrin, know that there is no hope for their recovery. But they also know there is hope for mankind in their sacrifice." (p.5) Once your students know the risks, have them discuss:

- If you were the President, would you have agreed to send this mission to the moon?
- If you were a family member or friend of the astronauts, would you have encouraged them to be a part of *Apollo 11*?
- If you were a part of the scientific community of the time, would you have been in favor of taking these risks for the sake of technological and scientific progress?
- As a citizen of the United States, how would you have felt about the space program and this project in particular?
- Would you have been an *Apollo 11* astronaut?

"Whistling and howling, a fierce wind whipped through the Australian grassy paddock—probably scaring the beejeebers out of the grazing sheep." (p. 39) Catherine Thimmesh uses a mix of descriptive, sometimes lyrical language and everyday speech throughout *Team Moon*. She has a real voice and her own style in presenting the information, and this makes her book an outstanding example of literary nonfiction. Give your students the opportunity to think and talk about *Team Moon* as a work of literature. Some questions they can discuss:

- What techniques does the author use to make readers feel as if they are insiders—part of *Team Moon*?
- Although she is writing about a historical event, and we all know the outcome, Thimmesh maintains suspense throughout *Team Moon*. How does she accomplish this?
- Much of the information in the book is in the captions rather than the main body of the text. Why?
- How does the design of the book contribute to the drama of the story? Which are your favorite photographs?

About the Author

The Apollo years generated enough paperwork, it is estimated, that if piled into a vertical stack, it would stretch as high as the entire Apollo 11 launch vehicle. Author Catherine Thimmesh tried to go through as much of this material as possible while doing her research; there were mounds of paper covering every inch of her home during the writing process. While conducting interviews, she became so enthralled with the stories she heard, she started to develop a grudge against her parents for bringing her into this world too late (she missed the whole thing!). Catherine Thimmesh is an avid space enthusiast and has so far saved about \$1,050 toward the advertised price tag of \$98,000 that it will take to shuttle a tourist to space in the not-so-distant future. She can't wait to go. She is also the award-winning author of *Madam President: The Extraordinary, True (And Evolving) Story of Women in Politics*, *The Sky's the Limit: Stories of Discovery by Women and Girls*, and *Girls Think of Everything: Stories of Ingenious Inventions by Women*. She lives with her family in Plymouth, Minnesota.

This guide was prepared by Clifford Wohl, an educational consultant.