Space Exploration



Space is an endlessly fascinating subject for many people. What exists beyond our planet? What's it like to be launched into space and walk on the moon? This text set dives into the history and lasting impact of space exploration.

Essential Questions

- **1.** What are the reasons for exploring space?
- 2. Who has made contributions to space exploration? How have they done so? Why have done so?
- **3.** How has technology changed over time to aid space exploration?
- 4. How has space exploration contributed to our knowledge on the topic? Why is that?

Introduction to the Theme

Watch the video *From Apollo 11 to Now*. After watching it, ask students to write down the steps NASA and the United States had to accomplish before they safely put humans on the moon. Have students share their answers with the class. Then engage the class in a discussion of what inspired U.S. space exploration. How has what inspires space exploration changed?

Informational Text

These *TIME for Kids* articles can be used to discuss the theme of refugees.

- <u>"Shooting for the Moon"</u> (September 13, 2019) In 1969, the United States put the first man on the moon. Fifty years later, another race to the moon is taking place.
- 2. <u>"Moon Mission"</u> (September 14, 2018) A new NASA space station may soon allow astronauts to explore the moon in new ways.
- **3.** <u>"Mission Ready"</u> (December 17, 2017) Astronaut Ricky Arnold gets ready to live and work on the International Space Station.
- **4.** <u>"Eyes in the Sky"</u> (December 17, 2017) The James Webb Space Telescope is set to look farther into space than we've ever done before.
- 5. <u>"Cosmic Critters"</u> (December 17, 2017) Before astronauts, heroic animals, such as dogs and a chimpanzee, were launched into space.
- <u>"Suiting Up"</u> (March 3, 2017) NASA engineers design spacesuits for exploring Mars and beyond.

Literary Text

These fictional texts can be used to discuss the theme of space.

- **1.** *Midnight on the Moon,* by Mary Pope Osborne. Jack and Annie are on a mission to the moon to find the last *M* thing that will break a spell.
- We're Not from Here, by Geoff Rodkey. Earth is no longer habitable. One family is charged with making friends with the inhabitants of Planet Choom. The only problem is, the Zhuri are not fans of humans. (See our Educator's Guide for this book under Teaching Resources at *timeforkids.com.*)
- **3.** *Lucy and the Rocket Dog,* by Will Buckingham and Monica Arnaldo. Space-loving Lucy has built a rocket in her backyard. But when her dog, Laika, launches the rocket into space, Lucy must go out and find her.
- 4. See You in the Cosmos, by Jack Cheng. Alex Petroski has one mission: to launch his golden iPod into space the way the Golden Record was launched on the Voyager spacecraft in 1977.

Optional Extensions

Assign the class to build a timeline of space missions. Each student should research one of the U.S. space missions. While researching, they should answer the following: Why was the mission necessary? Did space technology need to improve for the mission? If so, why and how? What have been the effects (or what were the hoped-for effects) of the mission? Students should also gather photos related to the mission.

After completing their research, have students create a classroom space-mission timeline on the wall. They should line up their research and photos in chronological order of the space-mission dates. When they're finished, lead students in a discussion of how different space missions are connected and how our understanding of space has changed over time.

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