

Space Exploration Resource List for Grades 9 through 12

The Resources in this document can be used with the Space Exploration Curriculum Packet for grades 9 through 12.

Books

Nonfiction and Biography

- [Apollo to the Moon: A History in 50 Objects](#), 2018 by Teasel E. Muir-Harmony (Author).
Photographs, graphics, and engaging stories commemorate the 20th century's most important space endeavor: NASA's Apollo program to reach the moon. From the lunar rover and a survival kit to space food and moon rocks, it's a carefully curated array of objects--complete with intriguing back stories and profiles of key participants.
- [Ask the Astronaut: A Galaxy of Astonishing Answers to Your Questions on Spaceflight](#), 2016 by Tom Jones (Author).
Ever wondered what space is really like? Thanks to his 25 years of training for, flying in, consulting on, and writing and speaking about space, astronaut and spacewalker Tom Jones can answer that question and many others.
- [Chasing New Horizons: Inside the Epic First Mission to Pluto](#), 2018 by Alan Stern (Author), David Grinspoon (Author).
On July 14, 2015, something amazing happened. More than 3 billion miles from Earth, a small NASA spacecraft called New Horizons screamed past Pluto at more than 32,000 miles per hour, focusing its instruments on the mysterious icy worlds of the Pluto system, and then continued on its journey out into the beyond.
- [The Illustrated Encyclopedia of Space & Space Exploration: Discovering the Secrets of the Universe](#), 2016 by Giles Sparrow (Editor), Judith John (Editor), Chris McNab (Editor).
This title investigates the Cosmos and humankind's efforts to understand it. Each page is filled with artworks and photographs, data tables and explanations of the workings of the stars and planets, moons, astronauts, rockets and satellites.
- [Galaxy Girls: 50 Amazing Stories of Women in Space](#), 2018 by Libby Jackson (Author).
This book honors the amazing true stories of fifty inspirational women who helped fuel some of the greatest achievements in space exploration from the nineteenth century to today.
- [Pioneers in Astronomy and Space Exploration \(Inventors and Innovators\)](#), 2012 by Michael Anderson (Editor).
Contains brief biographies of influential people in astronomy and space exploration, including Galileo, Buzz Aldrin, and Sally Ride.

- NASA (Opposing Viewpoints), 2012 by Margaret Haerens (Author).
This edition of the Opposing Viewpoints series discusses the National Aeronautics and Space Administration (NASA). Article topics include the future of the NASA space program, issues surrounding the space shuttle program, NASA funding, and NASA's role.
- Space Exploration (Cutting-edge Science and Technology), 2015 by Liz Kruesi (Author).
Thrilling new discoveries in science and technology are announced almost daily. Space Exploration covers the incredible work being done in our solar system, ranging from the New Horizons Pluto mission to cutting-edge studies on comets, engine technology, and humanity's future journeys to Mars.
- StarTalk Young Readers Edition (Science & Nature), 2018 by Neil deGrasse Tyson (Author), Charles Liu (Author), Shelby Alinsky (Editor).
Featuring vivid photography, thought-provoking sidebars, enlightening facts, and fun quotes from science and entertainment luminaries like Bill Nye and Josh Groban, this book reimagines science's most challenging topics, from how the brain works to the physics of comic book superheroes, in a relatable, humorous way that will attract curious young readers.
- A Visual Guide to Space Exploration (Visual Exploration of Science), 2017 by Alberto Hernandez Pamplona (Author).
This illustration-packed title covers the most outstanding events since humans landed on the moon. Missions to the different planets are explained, and include images and details of space stations, satellites, and Mars rovers.

Fiction

- Ancillary Justice (Imperial Radch Trilogy), 2013 by Ann Leckie (Author).
On a remote, icy planet, the soldier known as Brej is drawing closer to completing her quest. Once, she was the Justice of Toren, a colossal starship with an artificial intelligence linking thousands of soldiers in the service of the Radch, the empire that conquered the galaxy. Now she's just looking for justice.
- Arabella of Mars (The Adventures of Arabella Ashby), 2017 by David D. Levine (Author).
A plantation in a flourishing British colony on Mars is home to Arabella Ashby, a young woman who is perfectly content growing up in the untamed frontier. But her mother is planning a move to an exotic world Arabella has never seen: London, England.
- Illuminae (The Illuminae Files), 2015 by Amie Kaufman (Author), Jay Kristoff (Author).
This morning, Kady thought breaking up with Ezra was the hardest thing she'd have to do. This afternoon, her planet was invaded. Told through a fascinating dossier of hacked documents. These include emails, maps, files, IMs, medical reports, interviews, and more, this is the first book in a trilogy about lives interrupted, the price of truth, and the courage of everyday heroes.

- The Martian: A Novel, 2014 by Andy Weir (Author).
He was just a regular guy, part of a team sent to the red planet, and through a series of tragic events, he's left behind, stranded and facing certain death. The story is told mostly through the log entries of astronaut Mark Watney, chronicling his efforts to survive: making the prefab habitat livable and finding a way to grow food, make water, and get himself off the planet.
- Moon Hoax (Hoax Trilogy Series), 2012 by Paul Gillebaard (Author).
China claims the US moon landings never happened and that they have proof. Losing worldwide prestige is not an option for the United States. America must prove they won the space race of the 60's. CIA agent and former NASA candidate Peter Novak, son of a U.S. moonwalker, is selected to fly a mission back to the moon against UN sanctions to set the record straight.
- The Right Stuff, 2008 by Tom Wolfe (Author).
What went on in the minds of the astronauts, in space, on the moon, and even during certain odysseys on earth. The inner life of the astronauts is the subject of this classic novel by Tom Wolfe.

Magazines, Journals, Miscellaneous

- NASA App: Visually stunning NASA-backed treasure trove. (Download from App Store)
- National Geographic Astronauts: Past, Present, & Future, September 2017 by The Editors of National Geographic (Author), Patricia Daniels (Contributor).
- National Geographic Space Issue. - August, 2017 by Susan Goldberg (Editor-in-Chief) (Author).
- Solar System Explorer: Visit and explore this beautiful, vast handheld planetarium. (Download from App Store)
- Space Science Investigations: Plant Growth: Developed by NASA, Plant Growth is a simulation game that takes kids on a virtual exploration of the International Space Station. (Download from App Store)

Online Links

- Kids Zone: Explore the International Space Station with this interactive website
<https://solc.gsfc.nasa.gov/modules/newkz3/index.html>
- Space Station Explorers: Connect with the International Space Station
<https://www.spacestationexplorers.org/educational-programs/>
- Spot the International Space Station: website shows when the station will be flying overhead.
<https://spotthestation.nasa.gov/>

Background information for the Educator

- Discovery Education: Understanding Space Travel
<http://www.discoveryeducation.com/teachers/free-lesson-plans/understanding-space-travel.cfm>
- Nasa Space Place Activities for Parents and Educators
<https://spaceplace.nasa.gov/menu/parents-and-educators/>
- STEM Leadership Center: Resources for Teaching About Space Exploration
http://www.stemedcenter.org/blog_files/space-exploration-resources.html