

## Space Exploration Resource List for Grades K through 4

The Resources in this document can be used with the Space Exploration Curriculum Packet for grades K through 4.

### Books

#### Picture Book Biography

- Counting on Katherine: How Katherine Johnson Saved Apollo 13, 2018 by Helaine Becker (Author), Dow Phumiruk (Illustrator).  
From Katherine's early beginnings as a gifted student to her heroic accomplishments as a prominent mathematician at NASA, this is the story of an amazing American woman who not only calculated the course of moon landings but, in turn, saved lives and made enormous contributions to history.
- Mae Among the Stars, 2018 by Roda Ahmed (Author), Stasia Burrington (Illustrator).  
Young Mae's curiosity, intelligence, and determination, matched with her parents' encouraging words, paved the way for her incredible success at NASA as the first African American woman to travel in space.
- My Journey to the Stars, 2017 by Scott Kelly (Author), André Ceolin (Illustrator).  
Scott wasn't sure what he wanted to be when he grew up. Then, one day, he discovered a book about test pilots and astronauts that fascinated him. That led him becoming a pilot and then an astronaut, along with his brother Mark (the first twin astronauts in history). But his greatest accomplishment of all was commanding the International Space Station and spending nearly a year in space, which set the record for the longest spaceflight by an American.
- Star Stuff: Carl Sagan and the Mysteries of the Cosmos, 2014 by Stephanie Roth Sisson (Author, Illustrator).  
This book introduces the beloved man who brought the mystery of the cosmos into homes across America to a new generation of dreamers and star gazers.
- Yvonne Brill and Satellite Propulsion (21st Century Junior Library: Women Innovators), 2017 by Ellen Labrecque (Author).  
This book examines the life of Yvonne Brill and her contributions to rocket science. Sidebars, full color photos, a glossary, and a listing of additional resources all enhance the learning experience.

## Nonfiction

- 12 Things to Know About Space Exploration (Today's News), 2015 by Rebecca Felix (Author). Explores 12 things to know about space exploration. Includes amazing facts along with information about key players and technologies.
- The Amazing Story of Space Travel: Max Axiom STEM Adventures, 2013 by Agnieszka Biskup (Author), Pop Art Properties (Illustrator). Dozens of astronauts travel to space every year, but what makes these amazing trips possible? Max Axiom has the answers. Join Max as he explores the science and engineering behind space travel.
- Astronaut Handbook, 2017 by Meghan McCarthy (Author). This bright and fun book transports aspiring space travelers to astronaut school. Learn how it feels to be weightless, try a bite of astronaut food, and have your measurements taken for your very own space suit.
- Destined for Space: Our Story of Exploration (Smithsonian), 2012 by Don Nardo (Author). From stargazing, to moon walking to someday, intergalactic travel, the story of human space exploration is full of adventure, incredible machinery, and curiosity about our place in the universe.
- Living in Space (TIME FOR KIDS Nonfiction Readers) 2nd Edition by Teacher Created Materials (Author). What's it like to be an astronaut in space? Read about the men and women who have actually traveled to space. Find out what it was like to work, cook, and sleep in zero gravity.
- Lunar Probes (Space Tech), 2017 by Blake Hoena (Author). Did you know that more than 70 probes have been sent to the moon in the past 50 years? Their missions have included orbiting the moon to take pictures and gathering samples of moon material. This book maps the progress on making the moon a base for space exploration.
- Moonshot: The Flight of Apollo 11, 2009 by Brian Floca (Author, Illustrator). Here for a new generation of readers and explorers are the famous astronauts, clicking themselves into gloves and helmets and strapping themselves into sideways seats. Here are their great machines in all their detail.
- Nefertiti, the Spidernaut: The Jumping Spider Who Learned to Hunt in Space, 2016 by Darcy Pattison (Author), Valeria Tisnes (Illustrator). Most spiders spin a web and passively wait for prey to come to them. Jumping spiders, by contrast, actively hunt by jumping to catch their food. This book chronicles the amazing voyage of Nefertiti, the Spidernaut, to the International Space Station and back.
- Space (Adventures in STEAM), 2018 by Richard Spilsbury (Author). Take a trip into space and discover the spacecraft, satellites, and telescopes that travel among the galaxies and stars. Learn about the astronauts who have lived in orbit and set foot on the moon and find out about the future of space tourism and exploration.

Spaceships and Rockets, 2016 by DK (Author).

Find out how a rocket blasts off and identify the different parts of a rocket. Read about the probes floating in space and the rover on Mars as they work to gather information to send back to earth.

- To the Stars, 2009 by Buzz Aldrin (Author), Wendell Minor (Illustrator).  
Buzz Aldrin, astronaut, serves as an amazing guide as he introduces us to the pioneers of space. From Copernicus to the Wright brothers, from the Apollo program to dreams of future travel, he reminds us that mankind has always looked to the stars.

## Fiction

- The Big Golden Book of Starships, Speeders, and Space Stations (Star Wars), 2017 by Golden Books (Author), Alan Batson (Illustrator).  
From A-wings to X-wings, from land speeders to snow speeders, from Death Stars to Star Destroyers, this Big Golden Book is packed with stories about all the awesome vehicles from the *Star Wars* saga.
- Black Hole Battle! Space Penguins (Series), 2014 by Lucy Courtenay (Author).  
With their pioneering flying skills and resistance to the deep freeze, these intergalactic avians are going where no fin has gone before. Captain T Krill, Rocky Waddle, Fuzz Allgrin and Splash Gordon are on a mission to explore new planets, rescue alien life, and battle their former comrade-in-wings: Dark Wader.
- Captain Raptor and the Space Pirates (Series), 2007 by Kevin O'Malley (Author), Patrick O'Brien (Author, Illustrator).  
This is a job for Captain Raptor, hero of a thousand space missions; champion of truth, justice, and dinosaurs in space throughout the galaxy. If anyone can track down marauding space pirates, it's Captain Raptor!
- Deep Space Hijack (Superman), 2010 by Scott Sonneborn (Author), Dan Schoening (Illustrator).  
When astronauts crash on Pluto, only one man can save them . . . SUPERMAN! Faster than a speeding bullet, the man of steel soars toward the dwarf planet, towing a high-tech rescue vehicle.
- I am Going to Outer Space, 2017 by Timothy Young (Author).  
It's almost time for bed, but Luis is staring out the window at the starry sky. Any minute now, he's expecting a space ship to pick him up and whisk him to outer space.
- Glow in the Dark: Voyage through Space, 2018 by Katy Flint (Author), Cornelia Li (Illustrator).  
Join one little astronaut and her space dog as they voyage through our solar system and see space as you've never seen it before! Journey from the sun, to the planets, asteroids and Kuiper belt, before folding out your glow-in-the-dark poster.

- Mousetronaut: A Partially True Story, 2012 by Mark Kelly (Author), C. F. Payne (Illustrator). Astronaut Mark Kelly flew with real “mice-tronauts” on his first spaceflight aboard space shuttle Endeavour in 2001. This the story of a small mouse that wants nothing more than to travel to outer space. The little mouse works as hard as the bigger mice to show readiness for the mission and is chosen for the flight! While in space, the astronauts are busy with their mission when disaster strikes and only the smallest member of the crew can save the day.
- Once Upon a Star: A Poetic Journey Through Space, 2018 by James Carter (Author), Mar Hernandez (Illustrator). The Big Bang, the formation of the planets, and the origins of life on Earth are made accessible and fascinating in a poetic, jazzy, free-flowing exploration of space, the solar system, and how we all got here.
- Ricky Ricotta's Mighty Robot (Series), 2014 by Dav Pilkey (Author), Dan Santat (Illustrator). A mad scientist named Dr. Stinky McNasty has created a Mighty Robot who is as gentle as he is powerful. Dr. Stinky plans to make the Robot destroy Squeakyville, but there's one little thing in his way: Ricky Ricotta!
- Zelda's Big Adventure, 2017 by Marie Alafaci (Author), Shane McG (Illustrator). Zelda has big plans, she wants to be the first chicken in space. She leaves nothing to chance as she builds her spaceship, plans her experiments, and packs for the journey. All she needs now is a little help from her friends.

### **Magazines, Journals, Miscellaneous**

- NASA App: Visually stunning NASA-backed treasure trove. (Download from App Store)
- Ready, Jet, Go Space Explorer: Swipe or move the device to scan through a generic sky, or turn on location services to have the app match the sky exactly as kids see it from where they are. Tap on constellations and planets to learn a few fun facts about them, (Download from App Store)
- Solar System Explorer: Visit and explore this beautiful, vast handheld planetarium. (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>
- Nasa's Space Place: NASA's Space Place is a site with interactive games, projects, and facts about space and Earth science. <https://spaceplace.nasa.gov/>
- 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](http://www.stemedcenter.org/blog_files/space-exploration-resources.html)