

## Compiled Crowdsourcing from All Youth Services Fall Workshops

How can you interpret space?

- Science—astronomy, biology, chemistry, physics, environmental, exploration, cosmology, geology (Earth as part of space), theoretical physics, atmospheric chemistry
- Physical space
- Science fiction—the final frontier
- Mental space
- Emotional space
- Space travel
- Mythology
- Extremophiles
- Politics
- Astrology
- Constellations
- Entrepreneurs
- Health
- Colonization
- Math
- Engineering
- Technology
- Survival skills
- Nanotechnology
- Robots
- Fandoms
- Movies, books, popular culture (Buzz Lightyear, Hidden Figures, First Man, Interstellar, The Passenger, The Martian, Gravity, Hitchhiker's Guide, Across the Universe, Firefly, Dr. Who)
- History-- of space exploration, Cold War, understanding space
- Athleticism
- Paranormal
- Alien life
- Fandoms
- Indigenous perspectives
- Archaeoastronomy
- Aircraft/flight
- Universe

- Personal space
- Social science perspective—how would we adapt to living in space
- History and our relationship with other countries
- Space force
- Space food—what do astronauts eat
- Maps and spatial relations
- Communication

#### Space themed programs for young kids and elementary kids

- *Chicken in Space* by Adam Lehrhaupt
- *Hey Ho to Mars We'll Go* by Susan Lendroth
- *To the Moon and Back* (pop-up book) by Buzz Aldrin and Marianne Dyson
- *Interstellar Cinderella* by Deborah Underwood
- Book series-William Joyce, *The Guardians of Childhood*
- Board book series-Chris Ferrie
- Don't forget the nonfiction!
- Songs: *Rocketship Run* by Laura Berkner; *Zoom Zoom Zoom* song (<https://library.com/flannel-friday-zoom-zoom-zoom/>); *I'm a little spaceman*; *Twinkle Twinkle Little Star*; *Star Light, Star Bright*; *Here Comes Science* CD by They Might Be Giants
- Hire Denver Museum of Nature and Science to provide space-related programming (<http://www.dmns.org/teachers/offsite-at-your-place/>), or a virtual program (<http://www.dmns.org/teachers/teachers-programs-search?search=%20Space%20Science%20Distance%20Learning>)
- Stomp rockets
- Glow in the dark puff paint constellations
- Alien puppets
- Alien bubbles
- Galaxy jars
- Fiske Planetarium will present at libraries (<https://www.colorado.edu/fiske/educators>)
- DIY sun viewers
- Family astronomy viewing astronomy nights
- Constellation stories
- Build rocketship/space station out of cardboard in children's area
- Aurora pastels
- *Strange New Planet*—on NASA
- Arranging kids in order of planets, with props

- Sign language storytimes with signs for planets, sun, moon, etc
- Train like an astronaut (with gyroscope)
- Opening program—call it Launch or Blast Off
- Star Lab
- DIY gravity boots
- Make your own planet with paint on coffee filters
- Make your own planet with Legos, create the landscape
- Sensory—moon sand, sensory bins with stars
- Design your own alien with pantyhose stuffed with filling
- Alien masks
- Footprint on the moon with paint
- Drop objects into flour to show craters  
(<https://www.lpi.usra.edu/education/explore/LRO/activities/craterCreations/index.shtml>)
- Make candles
- CD hovercrafts (<http://old.raftbayarea.org/readpdf?isid=113>)
- Alien slime
- Gak
- Shrink dinks and perler beads for planets, Perler bead keychains in planet shapes, etc.
- Papier mâché planets
- Moon sand
- Sensory jars—space themed
- Display accomplishments on rocket
- Origami stars
- Star gazing with telescopes
- Glow in the dark stuff
- Space walk as in walking on sponges
- "Space Camp" that is on ongoing program and kids and learn and do different STEM activities and earn badges
- Bottle rockets
- Moon Landing Design program - Design their own moon landing craft and then test them from several heights with a plastic astronaut inside

#### Space themed programs for tweens and teens

- King Arthur in space books and movies
- Galaxy slime
- *Mission to Mars* by Buzz Aldrin and Leonard David

- Globe, NASA’s citizen science program (<https://www.nasa.gov/solve/feature/globe>)
- Dark sky meter for circulation
- Rename the constellations
- Rocketship building competition on Minecraft
- Book series on physics
- Interplanetary test of strength
- 3d printing—print the planets, etc.
- International Space Station app (<https://www.issdetector.com/>)
- Sky Guide app (<https://www.fifthstarlabs.com/#voyage>)
- NASA spoof videos
- Space-themed music
- Local author David Barron
- Local children’s author Claudia Mills
- Anything involving food—space themed Iron Chef, freeze dried everything, make your own space food with dry ice, astronaut food taste testing
- Make space maze out of cardboard boxes
- Stargazing apps
- Fandoms, fan fiction
- Flash fiction (story snacks)
- Council of Tweens (teens) –involve tweens and teens in planning for summer and selecting books
- HG Wells, War of the Worlds
- Alien robots
- Coding—adult dresses up as robot and tweens direct them to make a PBJ using coding language
- DIY bouncy balls that look like planets
- Chemical reactions—Coke and Mentos, etc, that demonstrate propulsion
- Rocket clubs
- Drone demo
- Fabric paintings
- Escape room
- Alien Flash mobs
- Space themed Jeopardy
- Sci fi movies and video games—new and retro (think classic movies!)
- Kahoot! app (<https://kahoot.com/mobile-app/>)
- Spaceship darts
- Paintball

- Pacman on floor with florescent duct tape—alien themed
- Space Invaders on floor
- Scavenger hunt
- Mini-videos
- Complete a scratch ticket to get a t-shirt
- Make a solar oven
- UV bead activity  
([https://www.nasa.gov/pdf/145908main\\_Sun.As.A.Star.Guide.pdf#page=12](https://www.nasa.gov/pdf/145908main_Sun.As.A.Star.Guide.pdf#page=12))
- Bleach art—galaxy t-shirts
- Galaxy themed painting class
- Screen printing
- Build a mini-Mars Rover
- Movie night with pizza
- Space food night
- Teen lock in
- Stargazing evening
- Alien makeup
- Build a space suit
- Space themed/sci fi fashion contest
- Marvel Universe/DC Comics programming
- Google Moon (<https://www.google.com/moon/>)
- Create your own wallet using space themed duct tape
- Personal space program with teens...consent being the core

Adult Ideas: books, programs, apps, crafts, games, STEM activities, etc.

- Star wheel with book recommendations
- Show History Channel series on science of Star Wars
- Show B movies
- Evening hike—full moon geology/nature walks
- Night sky party
- Partner with astronomy clubs/hobbyists/teachers
- Cooking class—recipes from sci fi movies
- Mystery Science Theater 3000 (with permission)
- Have an astronaut guest speaker
- Collaboration with Air Force
- Lego building event for adults
- Art day—spray paint, acrylic pouring, large scale display piece

- Human library—where were you during the moon landing?
- Night sky bulletin board with stars; patrons write on the stars what they dream of
- Host an art party to paint Van Gogh's Starry Night

#### Potential summer partners

- Space Science Institute
- Schools, preschools, higher education institutions
- Childcare centers
- Summer Food Service Program
- Town/city parks and rec centers
- Industry—Ball Aerospace, Lockheed Martin, SEAKR Engineering, United Launch Alliance (ULA)
- CU Science Discovery (<http://sciencediscovery.colorado.edu/>)
- CSU Little Shop of Physics (<http://www.lsop.colostate.edu/>)
- Great Outdoors Colorado/Generation Wild (<http://www.goco.org/>)
- Richard Blake—STEM Punked, Dr. Who writing workshops
- Rocky Mountain PBS
- Powerhouse (Durango STEM/science center - <https://powsci.org/>)
- State parks, national parks and forests
- Astronomy clubs/organizations/hobbyists
- Other local scientists
- Native American community members
- Museums, science centers
- Higher ed/community colleges
- Childcare providers
- Old Fort Lewis campus star viewing programs (<https://www.fortlewis.edu/observatory/>)
- Space Foundation in CO Springs
- Observatories
- Planetariums
- Sky Dome
- Zoos
- Malls—set up astronaut photo booth as promo
- Farmers markets
- Festivals
- Friends of the Library
- Senior centers
- 4H