



STEM CENTERS OF INNOVATION



BOYS & GIRLS CLUBS
OF AMERICA

Raytheon

Moonshot Celebration:

An “Out of This World” party in honor of the 50th anniversary of the first moon landing!

Purpose: Inspire youth to face the challenges of today based on our nation’s history of innovation and willingness to boldly work towards solutions to the issues and concerns their generation will face

Leadership and Planning: Work with Keystone Club or Junior Staff to plan what works best for your Club or Youth Center. You may also be able to find local scientists or engineers who would like to work with you to make this a special day at for your youth. Science teachers might also enjoy the opportunity to volunteer for this occasion.

Time Requirement: 2-2.5 hours

Party Agenda

Set the Context: 30 minutes

- What is “Moonshot Thinking?”
 - Defined: A type of thinking that aims to achieve something that is generally believed to be impossible. Moonshot thinking motivates teams to think big by framing problems as solvable and encouraging “anything is possible” dialogues around how to solve the challenge. Originally refers to President Kennedy’s challenge to land on the moon before the end of the 1960’s decade.
 - Watch President John F. Kennedy inspire the nation with the challenge before us in 1962.
 - <https://www.youtube.com/watch?v=G6z-h6faR6o>
 - <https://www.americanrhetoric.com/speeches/jfkriceuniversity.htm>
- Share NASA’s video of the original moon landing:
 - Television: <https://www.youtube.com/watch?v=S9HdPi9Ikhk>
 - NASA’s Footage: <https://www.youtube.com/watch?v=HIECwTxbiRg>
- Create a KWL Chart (Know, Want to know, Learned). Use space themed books obtained from the library to find answers to questions. (15 minutes)
 - Hints on using KWL Charts with youth can be found here: <https://www.youtube.com/watch?v=PvF0ON4oIOc>

Participate in the STEM Challenge (50-60 minutes per group)

- The mission: Make a stable moon buggy (Activity #4)
- NASA's BEST activity guides have detailed instructions for leading the session at each age level—early elementary, upper elementary, and middle school.
- Link to site is here: <https://www.nasa.gov/audience/foreducators/best/activities.html>

Space Games and Activities: (20-30 minutes)

- Space snacks
 - Astronaut ice cream
 - Tang
- Create Astronaut Photos to share with parents.
 - NASA selfies—app for iOS and Android
 - Use moon background
- Other options can be found here:
 - NASA Kids' Club: <https://www.nasa.gov/kidsclub/index.html>
 - https://www.challenger.org/challenger_lessons/the-next-giant-leap/

Supply List: Bolded items will be provided in Moonshot Celebration kit.

Register here to be part of the initial 20 sites who will receive a kit: <http://bit.ly/2RceA7U>

Photo booth:

- Create a photo background of the moon
 - **FUERMOR Background 5x7ft White Clouds Under Full Moon Photography Backdrop Space Theme Photo Props RQ003**
- Dress ups for astronauts
 - **Beistle 60041 Plush Astronaut Helmet, White/Red/Blue**

Space Food:

- Astronaut ice cream (**Kit: 5 packets**)
- Tang Breakfast drink
- Consider freeze dried camping-type food

Books:

- **American Moonshot, by Douglas Brinkley (Middle School level)**
- **Team Moon, by Catherine Thimmesh**
- A Kite for Moon , by Yolen, Stemple, and Phelan
- Selections from your library

Space Food:

- **Astronaut Ice Cream: 5 packs**
- Tang Breakfast drink

Books:

- **American Moonshot, by Douglas Brinkley--\$11.72**
- **Team Moon, by Catherine Thimmesh--\$8.99**

Supplies for Moon Buggies (Lunar Rover)

- General building supplies: Cut cardboard, cardstock, binder sticks, bamboo skewers, file canisters, index cards, toilet paper tubes, pipe cleaners, Popsicle sticks, rubber bands, straws (items normally found around the education and/or art room.)
- Meter or yard stick
- **Small plastic people (i.e. Lego)**
- **Dowel rods**
- Plastic eggs
- Pennies or washers (“cargo”)
- **Wheels:** i.e. model car wheels (plastic or wood), empty thread spools, or rotelle pasta

Astronauts to drive “moon buggies”

