

# PEANUTS AND NASA

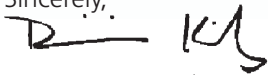
## Dear Parents & Caregivers,

Apollo 10 was the NASA mission that orbited the Moon in May 1969 as a “dress rehearsal” for the Apollo 11 Moon landing in July. But Peanuts fans remember Apollo 10 as the mission that made Charlie Brown and Snoopy part of the U.S. space program when their names were adopted as the official call signs of the Apollo 10 command module and lunar landing module.

NASA has big plans for future space travel, and your child can be part of that future, with help from the Peanuts gang. These activities are designed to excite kids in grades K-2 about the possibilities of space exploration and help them develop the STEM skills they will need to follow our astronauts as they venture to Mars. Developed by the curriculum specialists at YMI, in support of a unique partnership between NASA and Peanuts Worldwide, these standards-aligned activities introduce children to the history of space flight and the amazing technologies NASA will use to land astronauts on Mars within the next decade.

We hope you enjoy exploring space with your child.

Sincerely,



Dr. Dominic Kinsley  
Editor in Chief  
Young Minds Inspired

## What Your Child Will Learn

These activities will help reinforce:

- ★ Facts about space exploration
- ★ Problem-solving skills
- ★ Language arts skills
- ★ STEM skills

## Grade Level

Grades K-2

## How to Use the Activities

There are three standards-based activities in this program. Download and print the activity sheets that you plan to use and prepare the materials before getting started. Help your child by reading each activity sheet to them if they need support.

## Activity 1 Back to the Moon!

*In this activity, your child will be introduced to the Apollo 10 mission and learn how Snoopy and Charlie Brown “traveled” with the astronauts. Your child will learn the fundamentals of the engineering design process as they are challenged to make a lunar rover to demonstrate how Snoopy can explore the Moon.*

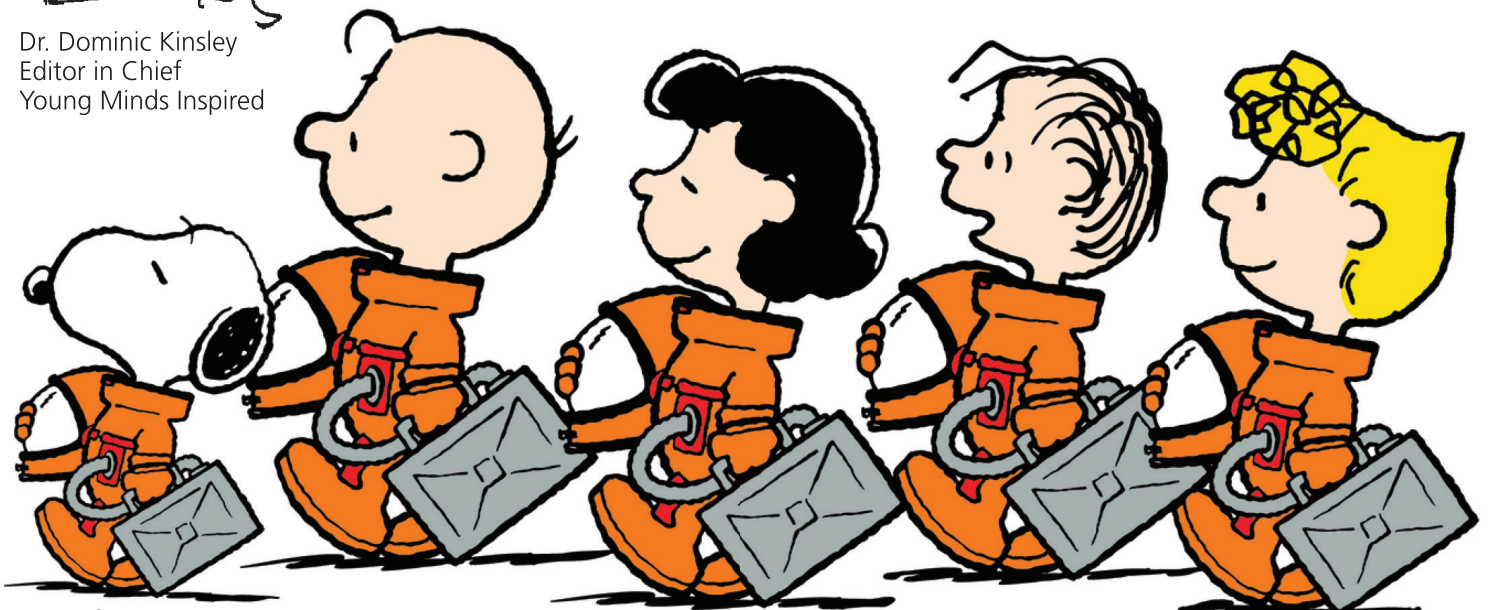
**Materials needed:** 2 plastic straws, 1 small paper cup, 4 circle-shaped candies with holes in the middle or pasta wheels, 1 index card, and 1 roll of masking tape. Consider including additional materials that will challenge your child to problem-

solve during the engineering design process, such as wheels of all shapes and sizes, wooden sticks, and pipe cleaners. Be creative and include whatever you have on hand!

Begin by reminding your child that humans have been traveling to space for many years now. Back in the spring of 1969, NASA sent Apollo 10 into space to orbit the Moon in preparation for the first Moon landing a few months later. The astronauts on Apollo 10 brought two members of the Peanuts gang along with them by naming their command module Charlie Brown and their lunar landing module Snoopy. They also used pictures of Charlie Brown and Snoopy to help them explain their mission when they sent videos back to Earth.

In honor of Apollo 10, tell your child that they are going to help Snoopy make a lunar rover he can use to explore the Moon if NASA calls on him to travel there again.

Read the mission instructions on the activity sheet and have your child explore the materials gathered from the list. Ask your child how they could use each item to create a lunar rover (e.g., the candies could be wheels). Ask guiding questions: Do all of the “wheels” fit onto all of the materials? Which materials will allow the rover to move? Depending on the age and ability of your child, they might figure out how to engineer a rover without help.



If your child needs guidance, however, lead them through the steps to make their rovers: (1) place two straws parallel to each other, (2) slide candies onto both ends of each straw to create wheels and axles, (3) wrap tape around the ends of the straws to secure the wheels, (4) place an index card atop the straws and tape it into place to create a platform, and (5) tape a small paper cup on top of the platform for Snoopy to sit in as he explores the Moon. Have your child cut out the image of Snoopy on the activity sheet and paste it onto the cup. Then test the lunar rover by pushing it on a flat surface or down a small ramp.

**For More Fun:** Download a copy of the Silver Snoopy Award template at [ymiclassroom.com/peanutsfamily](http://ymiclassroom.com/peanutsfamily). Tell your child that this award is given to outstanding NASA and contractor employees who work as a team to ensure safety and success during missions to space. Ask your child what it means to be a good teammate. Can they think of someone they feel is qualified to be given a Peanuts gang version of the award? Have your child write the name of that person and draw a picture of them, and write a few words that describe why they think that person deserves the award.

## Activity 2 On to Orion!

*In this activity, your child will learn that NASA is developing a new spacecraft, Orion, that lands with parachutes! Your child will try to create a parachute that will keep an egg or alternate object from breaking when it is dropped from a height of a few feet.*

**Materials needed:** 1 coffee filter (have extras on hand), 4 pipe cleaners, 1 hard-boiled egg (or a small tomato or large strawberry, if you or your child have an egg allergy), a handful of cotton balls, 1 small paper cup, and masking tape. As in Activity 1, consider including additional materials that will challenge your child to problem-solve during the engineering design process, such as aluminum foil, plastic wrap, tissue paper, wooden craft sticks, newspaper, string, and other similar items you may have on hand.

Tell your child that NASA's new and exciting spacecraft, Orion, will go faster than any spacecraft before, and will use parachutes to land safely and gently

back on Earth. Remind your child that Snoopy is a pro when it comes to parachutes. He knows how to land safely, even when he's being pursued by enemy planes! Your job is to help Snoopy design a parachute and an Orion-like capsule that will safely land an "astronaut" without breaking!

Read the mission instructions on the activity sheet and have your child explore the materials gathered from the list. Then have your child brainstorm how they could use each item (e.g., the coffee filter could be the parachute cloth, the cotton balls could help cushion the egg in the cup, etc.).

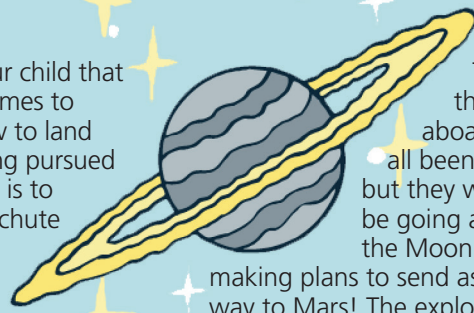
Ask guiding questions: How light or heavy are the materials? Which ones will be stiff enough to hold the "parachute" open? Depending on the age and ability of your child, they may figure out how to engineer the parachute without help.

If your child needs guidance, however, lead them through the steps to make a parachute and landing capsule for the egg, strawberry, or tomato. Show them how to attach pipe cleaners to the cup by poking one end through the side of the cup. Tell them to tape the other end of the pipe cleaners to the coffee filter, line the cup with cotton balls, and gently place the egg, strawberry, or tomato inside, covering the top with more cotton and taping it securely in place. Now let your child test the design by dropping the parachute a few feet, perhaps from the height of their head.

**For More Fun:** Ask your child what they think it would be like to travel to deep space, perhaps to other planets in our solar system. What would be exciting about it? What might be scary? Have your child write about it.

## Activity 3 Moving to Mars!

*In this activity, your child will learn about NASA's plans to send astronauts to Mars, and what life on Mars will be like for them when they first step foot on the red planet. Your child will use their imagination to help Snoopy reach one of his goals—writing the next Great American Novel about this experience!*



Tell your child that the astronauts aboard Apollo 10 had all been in space before, but they were excited to be going all the way to the Moon. Now, NASA is making plans to send astronauts all the way to Mars! The explorers who go to Mars will undoubtedly have dreamt about and prepared for such an adventure, and they will be excited by the challenges they will face on this alien landscape.

Share these facts about Mars with your child, or explore <https://spaceplace.nasa.gov/all-about-mars/en/together>:

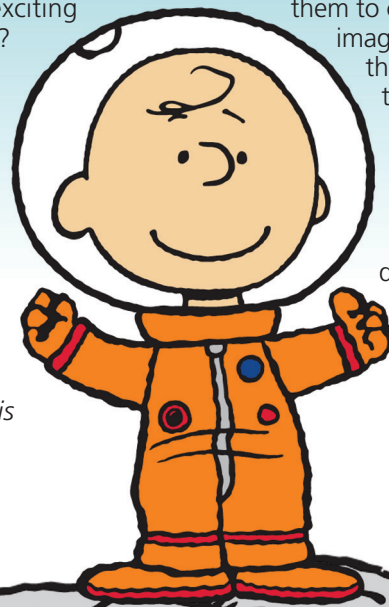
- Mars has a different air than Earth. It is also much colder than Earth! Astronauts will need spacesuits to protect them from the extreme cold, and to help them breathe.
- Mars is smaller than Earth, so gravity there is not as strong. Astronauts on Mars will weigh only about one-third of what they weigh here.
- Mars is farther from the sun than Earth, so a year there lasts much longer—687 days versus 365 days on Earth!

Ask your child to imagine what might happen if Snoopy joined the NASA mission to Mars. Remind them that Snoopy is not only an experienced space "traveler," but also an author who dreams of writing the next Great American Novel. Tell your child they will be helping Snoopy take notes about his imaginary expedition to Mars in preparation for turning his adventure into a novel.

Read the activity sheet and the mission instructions together. Help your child complete Snoopy's travel journal by asking

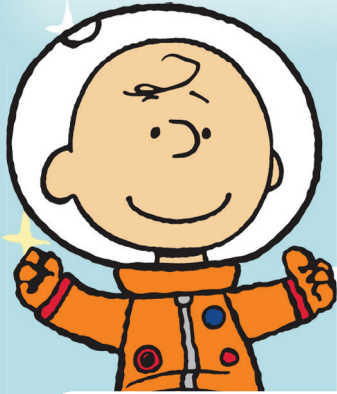
them to close their eyes and imagine landing on Mars, then sharing how they think Snoopy would feel and what he might see.

**For More Fun:** Have your child design a cover for Snoopy's Great American Novel about traveling to Mars!



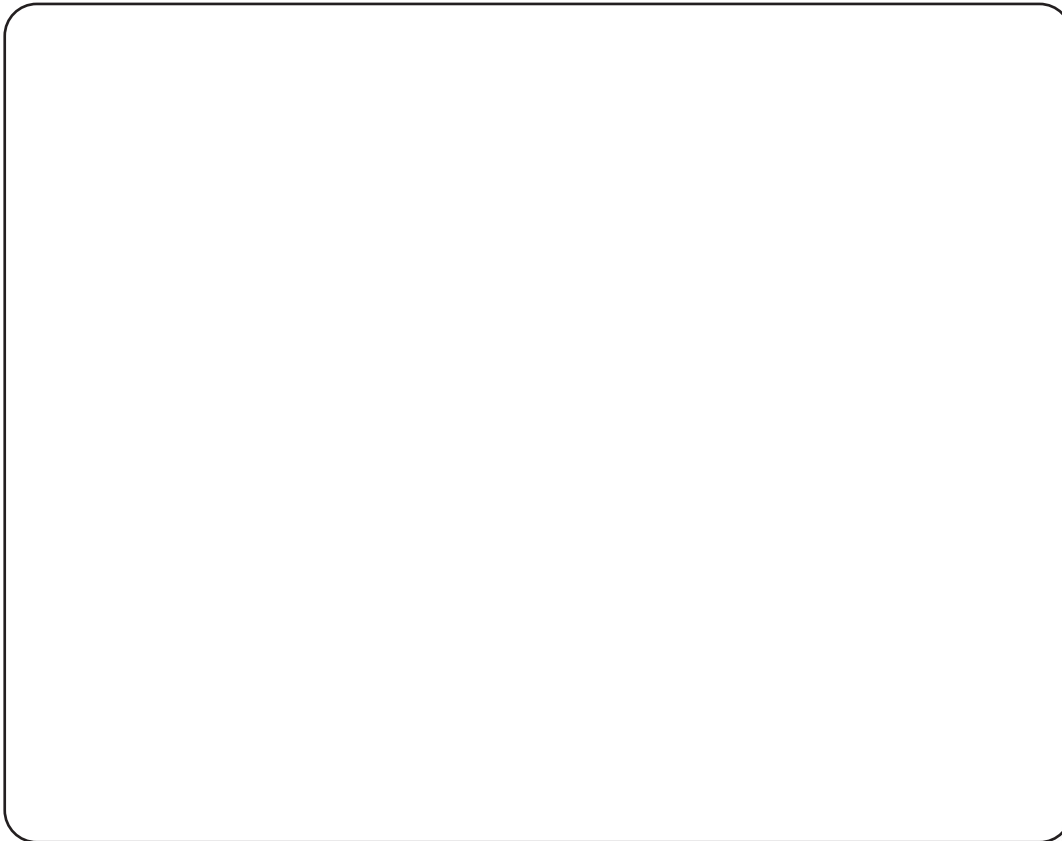
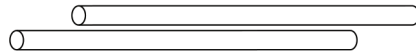
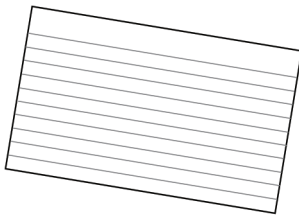
## Activity 1

# BACK TO THE MOON!



In 1969, the Apollo 10 space mission took two members of the Peanuts gang to the Moon! The Apollo 10 command module was named Charlie Brown. The landing module was named Snoopy. All through the mission, the astronauts talked about Snoopy and Charlie Brown as they tested equipment for the first Moon landing a few months later.

Snoopy is hoping that NASA will ask him to travel to the Moon again. This time he'll need a lunar rover to explore the Moon! Can you help Snoopy make a rover? Use this box to show your lunar rover.



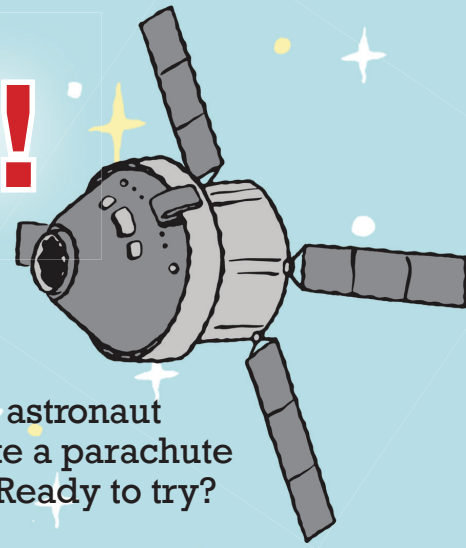
It's been more than 50 years since Apollo 10 took the final step toward landing astronauts on the Moon. Today, NASA is preparing to travel even farther — to Mars! Start your own adventure to Mars by visiting <https://mars.nasa.gov/participate/funzone> to learn more about NASA's plans!



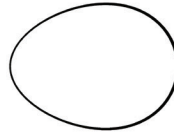
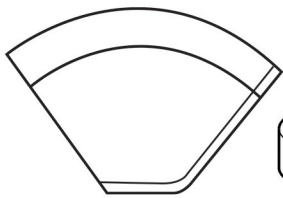
## Activity 2

# ON TO ORION!

NASA is building a new spacecraft called Orion. It will have a capsule where the astronauts sit during their journey. When they get back, parachutes will help their capsule land safely on Earth.



Imagine that the egg (or object) your grown-up gives you is an astronaut testing the Orion capsule. It's your mission to help Snoopy make a parachute that will bring the astronaut back to Earth — without cracking! Ready to try? Draw your plans in this box.

A large, empty rectangular box with a black border, intended for the child to draw their parachute design.

It's been more than 50 years since Apollo 10 took the final step toward landing astronauts on the Moon. Today, NASA is preparing to travel even farther — to Mars! Start your own adventure to Mars by visiting <https://mars.nasa.gov/participate/funzone> to learn more about NASA's plans!

# MOVING TO MARS!



NASA is planning a mission to Mars. Imagine what might happen if Snoopy went along. Remember, Snoopy was part of the Apollo 10 mission to the Moon.

Snoopy is a famous author who wants to write the next Great American Novel. Help Snoopy take notes about his Martian journey so he can write his novel when he gets back.

## SNOOPY'S MARTIAN JOURNAL

What happened on my space flight to Mars:

Mars was \_\_\_\_\_ than I expected it to be.

The most exciting thing I saw on Mars: \_\_\_\_\_

My favorite part of the trip was: \_\_\_\_\_

What I want to learn more about: \_\_\_\_\_

My Great American Novel will be about: \_\_\_\_\_

Now, imagine you are one of the astronauts who travels with Snoopy to Mars! On the back of this sheet, draw a picture of you and Snoopy standing on the Martian surface!



It's been more than 50 years since Apollo 10 took the final step toward landing astronauts on the Moon. Today, NASA is preparing to travel even farther — to Mars! Start your own adventure to Mars by visiting <https://mars.nasa.gov/participate/funzone> to learn more about NASA's plans!

# SILVER SNOOPY AWARD



Silver Snoopy Award

I think \_\_\_\_\_

should get the Silver Snoopy Award  
because he/she is

\_\_\_\_\_

Draw a picture of the person in the space below.

