

# PEANUTS AND NASA: A 50th Anniversary Celebration

## Dear Educator,

This spring marks the 50th anniversary of Apollo 10, 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.

So start the countdown for a space-age celebration!

NASA has big plans for future space travel, and your students can be part of that future, with help from the Peanuts gang. This teaching kit is designed to excite K-2 students 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, the kit provides you with three easy-to-implement, standards-aligned classroom activities that introduce students to the history of space flight and the amazing technologies NASA will use to land astronauts on Mars within the next decade.

Please copy and share this program with other K-2 teachers at your school. And let us know your opinion of the program by visiting [ymiclassroom.com/feedback-peanuts](http://ymiclassroom.com/feedback-peanuts). We look forward to your comments and suggestions.

Sincerely,

  
Dr. Dominic Kinsley  
Editor in Chief  
Young Minds Inspired

## Program Objectives

- ★ To instill enthusiasm for space exploration and interest in the accomplishments of past space missions
- ★ To fuel STEM learning by tapping into students’ eagerness to imagine what space science can achieve
- ★ To engage students and their families as active participants in the next phase of our nation’s real-life space adventure

## Target Audience

Students in grades K-2

## How to Use This Program

Photocopy and distribute the three reproducible activity sheets and award template. Prepare the materials for each activity in advance. Visit [ymiclassroom.com/peanuts](http://ymiclassroom.com/peanuts) for standards alignment.

### Activity 1

#### Back to the Moon!

*In this activity, students are introduced to the Apollo 10 mission and learn how Snoopy and Charlie Brown “traveled” with the astronauts. Then students 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.*

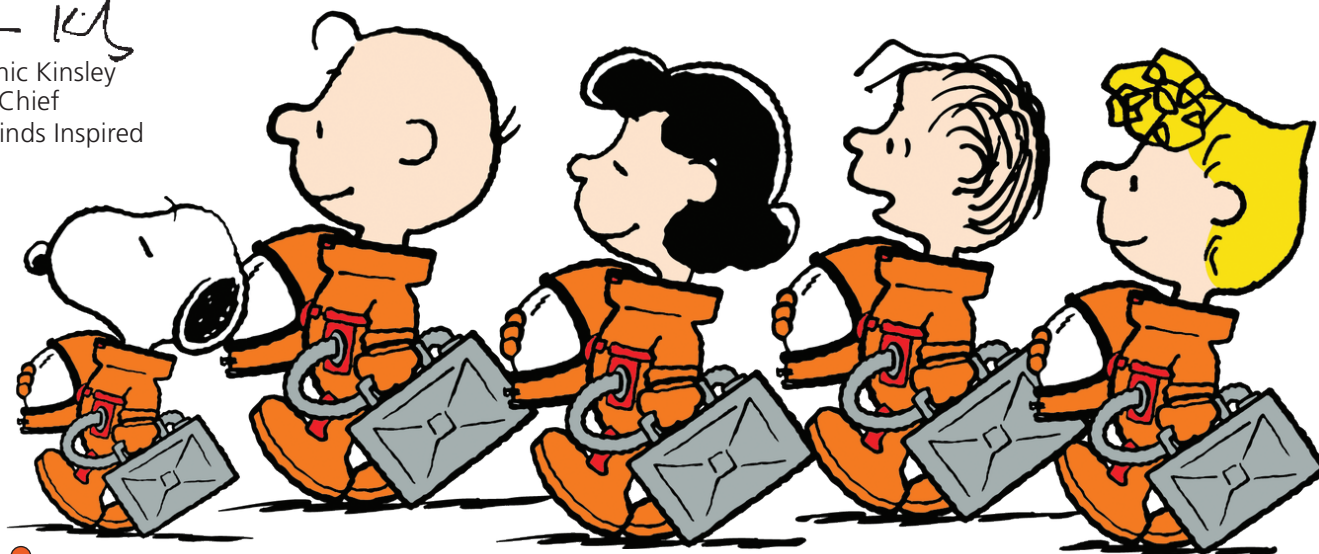
**Materials needed:** Per group—  
2 plastic straws, 1 small paper cup,  
4 circle-shaped candies with holes in the middle or pasta wheels, 1 index card,  
and 1 roll of masking tape. Consider

including additional materials that will challenge your students 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 students 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.

May 18, 2019 marks the 50th anniversary of the launch of Apollo 10. Tell students that, in honor of this milestone, 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.

Distribute the activity sheet, review the mission instructions aloud, hold up the materials, and ask students to brainstorm how they could use each item (e.g., the candies could be wheels). Divide students into small groups and let them explore the materials for a few minutes. Ask guiding questions: Do all of the “wheels” fit onto all of the materials? Which materials will allow the rover to move? Monitor the groups. Depending on the age and skill



level of your students, they may figure out how to engineer a rover without help.

If your students need 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 students cut out the image of Snoopy on the activity sheet and paste it onto their cups. Then let students test their lunar rovers by pushing them on a flat surface or down a small ramp.

**Extension:** Download the K-2 version of the Silver Snoopy Award template at [ymiclassroom.com/peanuts](http://ymiclassroom.com/peanuts) and distribute copies to students. Tell them 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. Then ask students to talk about 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 students 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, students learn that NASA is developing a new spacecraft, Orion, that lands with parachutes! Students 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:** Per group—1 coffee filter (have extras on hand), 4 pipe cleaners, 1 hard-boiled egg (or a small tomato or large strawberry, if you have a student with 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 students 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 in your classroom.

Tell students 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 students 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! Today, students will help Snoopy design a parachute and an Orion-like capsule that will safely land an "astronaut" without breaking!

Distribute the activity sheet, review the mission instructions aloud, hold up the materials, and ask students to 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.).

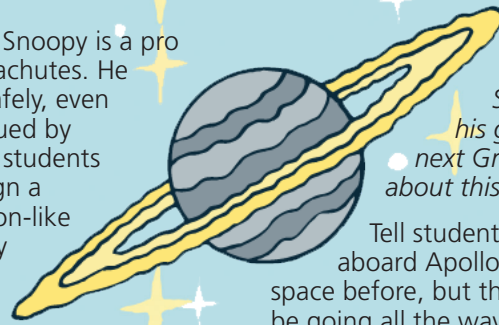
Divide students into small groups and let them explore the materials for a few minutes. Ask guiding questions: How light or heavy are the materials? Which ones will be stiff enough to hold the "parachute" open? Monitor the groups. Depending on the age and skill level of your students, they may figure out how to engineer the parachute without help.

If your students need 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 students test their designs by dropping the parachute a few feet, perhaps from the height of their heads.

**Extension:** Engage students in thinking about what 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 them share their ideas aloud while you write them on the board. Second-grade students can use the back of the activity sheet to write their thoughts.

## Activity 3 Moving to Mars!

*In this activity, students 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. Students*



*will then use their imaginations to help Snoopy reach one of his goals—writing the next Great American Novel about this experience!*

Tell students 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.

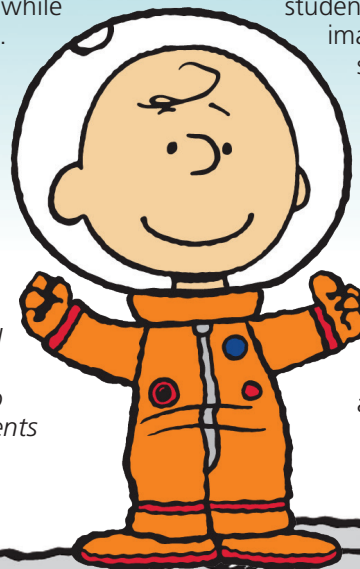
Share these facts about Mars with your students, or explore <https://spaceplace.nasa.gov/all-about-mars/en> together:

- 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 students 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 students they will be helping Snoopy take notes about his imaginary expedition to Mars in preparation for turning his adventure into a novel.

Distribute the activity sheet and review the mission instructions. Read the paragraph together as a class, and help students complete Snoopy's travel journal by asking students to close their eyes and imagine landing on Mars, then sharing how they think Snoopy would feel and what he might see.

**Extension:** Divide students into small groups and have them work together to design a cover for Snoopy's Great American Novel about traveling to Mars! Provide crayons and paper for student use.

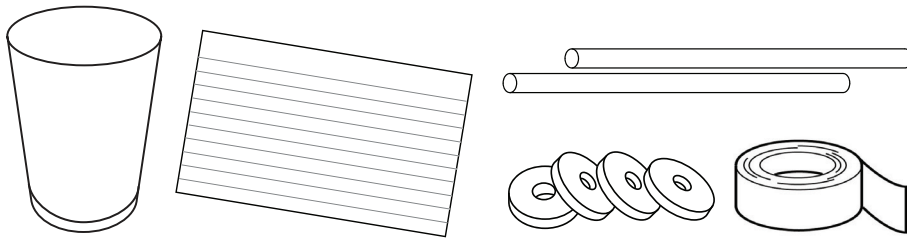


# BACK TO THE MOON!



May 18, 2019 is the 50th anniversary of the Apollo 10 space mission. That's the mission that 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.



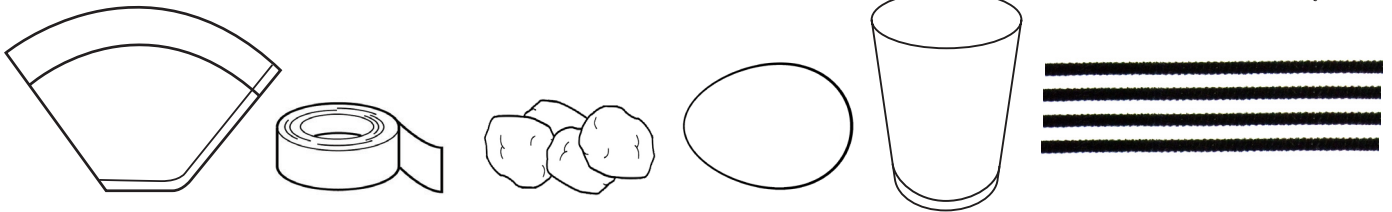
It's been 50 years since Apollo 10 took the final step toward landing astronauts on the moon. Today, NASA is preparing to travel even farther — to Mars! Start your own adventure to Mars by visiting <https://mars.nasa.gov/participate/funzone> to learn more about NASA's plans!

# 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 teacher 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.



It's been 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 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!

