Space Pioneer John Young

NASA Lesson 1

John Young is a pioneer of the NASA astronaut program. What does *pioneer* mean? In previous lessons, we learned about the pioneers – early settlers – who came from northern states and territories to start a new life on the Florida frontier. John Young is referred to as a *space pioneer* because he was among the early astronauts in the NASA space program who explored a new frontier.

Young was born in California and moved to Florida, where he spent most of his childhood. He graduated from Orlando High School in 1948. He joined NASA in 1962 as a part of "The New Nine" – the second group of astronauts selected by NASA to begin work toward landing on the moon. On his first trip to space in 1965 on Gemini 3, Young snuck a corned-beef sandwich on board. Even though this upset some people, he stayed with the space program and became the first person to fly to space six times! He had the longest career of any astronaut when he retired in 2004 after 42 years of flying in space, training future astronauts, and overseeing the safety of programs like the International Space Station and the Space Shuttle.

Orlando has shown its appreciation of Young's accomplishments in many ways. John Young Parkway and John Young Elementary School are named in his honor. The Historical Society of Central Florida – a part of the History Center – has an awards ceremony each year called the John Young History Maker Celebration where Central Floridians, including high school seniors, are honored for their commitment to our history.

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Activity 1: Historic Inquiry

Call or video chat with an older member in your community about the space program. What do they remember seeing on the news or hearing on the radio? Do they remember any important times during the space program?

Look up newspaper articles and the museum collections about John Young and NASA. What can you find?

https://www.ocps.net/departments/marketing_and_events/hall_of_fame/inductees/john_young

https://www.nasa.gov/vision/space/features/young_retires.html

http://cflhistory.org/cflhistory.org/wp-content/uploads/2017-John-Young-History-Maker-Sponsorship-Package.pdf

https://www.space.com/20690-john-young-astronaut-biography.html

https://www.orlandosentinel.com/space/os-john-young-obit-20180106-story.html

https://www.space.com/37110-becoming-a-nasa-astronaut-surprising-facts.html

Write down your notes and share with your teacher or people you live with.

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Activity 2: Astronaut Training

It takes a lot to become an astronaut. NASA requires candidates to have a college degree in science, engineering, or math and three years of professional experience or 1,000 hours of piloting a jet plane – and that's just to qualify to take the test! If NASA allows you to take their test, you'll have to pass physical training and even learn another language so you can work with astronauts from other countries!

Do you think you have what it takes to be an astronaut? Let's see if you've got the right stuff by creating an astronaut training course.

What You Need:
Here are some examples of things you'll need, but you can replace these with similar objects that you have on hand.

- Pair of oven mitts
- Ruler
- Yardstick or a long piece of string
- Maze puzzle from your favorite coloring book (or create your own!)
- Pencil
- Jar, cereal box, or Tupperware container
- Timer or stopwatch app on a phone or other mobile device
- Optional: colored pencils, markers, or crayons
- Optional: jumbo-sized puzzle

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Activity 2: Astronaut Training

What to do:

1. Gather and organize your supplies!
   a. Your oven mitts will be your astronaut gloves. You'll wear these while you complete your training. Big and bulky, right? Astronauts must wear thick gloves to protect their hands in space.
2. Set up your training course and test your abilities!
   a. Use a yard stick or long piece of string as a balance beam or to measure how far you can jump!
   b. Use a ruler to measure your reflexes. Hold your hand out, ready to catch the ruler. Have someone hold the ruler just above your hand. Catch the ruler! At what inch mark did you catch it? Try it again. Can you improve your speed?
      i. Have the other person give it a try. Are your results different?
   c. Grab your maze and pencil. Try to take some "notes." Pens may not always work in space, especially since there is a different level of gravity. Pencils work best because there is no ink! Can you complete your maze with your gloves on?
      i. Challenge others and use a timer. Instead of a pencil, use a different colored pencil, marker or crayon for each person on the same maze. Who completed the maze faster?
   d. Lastly, try to open something with your astronaut gloves! Open a jar, a cereal box, a Tupperware container, or even a door!
   e. All these activities can be timed to make them more competitive.
   f. Extra activity: If you have a jumbo-sized puzzle, try putting your puzzle together while wearing your gloves. This may be one of the trickiest tasks in your training course!

This lesson helps reinforce these Florida State Standards for K-5th grade:

- SS.K.A.2.4 Listen to and retell stories about people in the past who have shown character ideals and principles including honesty, courage, and responsibility.
- SS.1.A.2.1 Understand history tells the story of people and events of other times and places.
- SS.4.A.8.3 Describe the effect of the United States space program on Florida's economy and growth.
- SS.5.A.1.1 Use primary and secondary sources to understand history.
- PE.3.C.2.1 Identify the importance of purposeful movement and its impact on quality of performance.
- PE. K.M.1.10 Perform a creative-movement sequence with a clear beginning balance, at least one movement and a clear ending shape.
- PE.1.C.2.3 Identify technology that can be utilized to enhance physical activity.