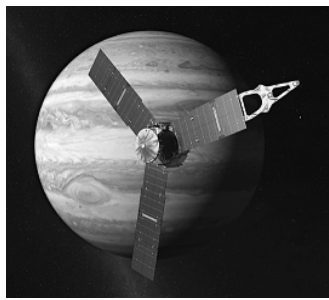


Have you ever dreamed of being an astronaut, or of designing a robot that could explore a distant planet? The United States and other countries have been traveling beyond our world for decades. This week, we learn about current and future projects from the experts at NASA.

Almost to Jupiter

The Juno mission to orbit Jupiter is scheduled to arrive there on July 4, our Independence Day. It will have taken Juno almost five years to travel to Jupiter.

In orbiting Jupiter 33 times, Juno will be collecting information that scientists hope will help us understand the planet better. For instance, Juno will be examining temperatures, atmosphere, what the planet is made of and whether it has a solid core. In addition, like Earth, Jupiter has auroras near its magnetic poles. Juno will observe the light shows and the magnetism and gravity on the planet.



photos courtesy NASA

Juno has three solar panels that extend out from a hexagonal (six-sided) body. The spacecraft spins continuously, which makes it easy to control and stabilize. This picture is an artist's idea of Juno traveling around Jupiter.

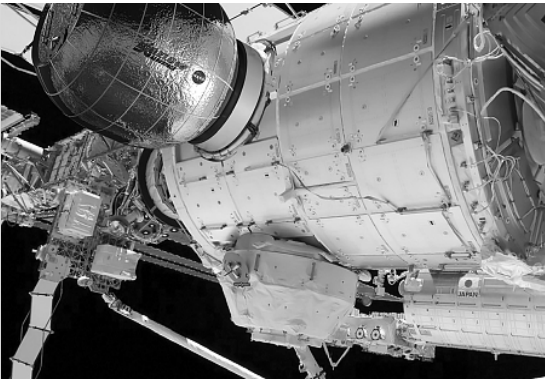


photo courtesy Bigelow Aeronautics

Looking ahead

As part of long-range planning for a human mission to Mars, NASA is testing a new habitat called BEAM (Bigelow Expandable Activity Module). BEAM will be tested while attached to the International Space Station (ISS) (as shown above).

BEAM will be expanded while attached to the ISS. For the next two years, astronauts will take measurements to see how well BEAM resists radiation and whether it is damaged by solid objects floating in space, along with other tests.

If BEAM performs well, it could lead to future expandable habitats where astronauts could live in deep space and while on Mars.

Students build satellites

In December, students from St. Thomas More Cathedral School in Arlington, Virginia, sent a cube satellite, or CubeSat, to the ISS. From there, the satellite was deployed into space and is sending images and other information back to the school.

Students worked with NASA's Project ELaNa (Educational Launch of Nanosatellites). Just 10 centimeters square, these satellites can be grouped together to collect more complex information.

Mini Fact:

Astronauts aboard the ISS are helping NASA test many of the technologies needed to travel to Mars and beyond.

Chasing an asteroid

In September, a spacecraft called OSIRIS-REx will be launched to chase down Benu, an asteroid that orbits the sun. Almost two years later, OSIRIS-REx will catch up and fly alongside Benu, collecting data about the asteroid.

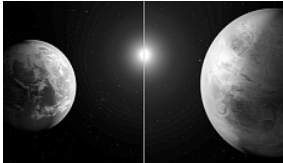


A scientist tests the robotic arm that will collect data from the asteroid Benu.

Finally, OSIRIS-REx will move very close to Benu and send out a robotic arm to gather samples of the surface. The whole mission will take seven years!

Earth's cousin?

The Kepler mission is looking for planets outside our solar system that might be able to support life. Last summer, NASA confirmed the first near-Earth-size planet, Kepler-452b, in the "habitable zone" around a sun-like star.



This is an artist's view of how Earth would compare in size to Kepler-452b.

Resources



On the Web:

- [go.nasa.gov/1TBwLzv](http://go.nasa.gov/1TBwLzv)
- [go.nasa.gov/1PRIWsc](http://go.nasa.gov/1PRIWsc)
- [go.nasa.gov/1OgK3LI](http://go.nasa.gov/1OgK3LI)
- [spotthestation.nasa.gov](http://spotthestation.nasa.gov)

At the library:

- "The Stellar Story of Space Travel" by Patricia Lakin

Try 'n' Find

Words that remind us of space travel are hidden in this puzzle. Some words are hidden backward or diagonally, and some letters are used twice. See if you can find:



ASTEROID, ASTRONAUT, BEAM, BENNU, CUBESAT, DISTANT, EARTH, HABITABLE, HABITAT, JUNO, JUPITER, KEPLER, MARS, MISSION, ORBIT, PROJECT, ROBOT, SAMPLE, SATELLITE, TEST.

A S T E R O I D F D B M T T X  
T O J S S T E S T A S E B U C  
R Z U T M D I S T A N T N H S  
E T P O R B I T H J U N O N F  
L C I B Q U E A S R A M C Q U  
P E T O H A B I T A B L E I A  
E J E R R I E T I L L E T A S  
K O R T T P J U M I S S I O N  
B R H A E L P M A S A M A E B  
Y P T A S T R O N A U T K R H

Cook's Corner

Sweet Baked Tortilla Chips

You'll need:

- Cooking spray (butter-flavored works best)
- 8 (6-inch) corn tortillas, cut into 8 wedges each

- 1 1/2 to 2 tablespoons sugar
- 1/2 teaspoon ground cinnamon



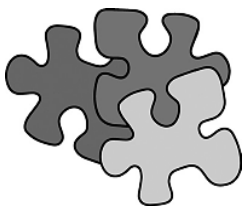
What to do:

1. Preheat oven to 400 degrees. Coat large baking sheet with cooking spray.
2. Arrange tortillas on baking sheet and spray them with cooking spray. Sprinkle sugar and cinnamon over the tortillas.
3. Bake for 8 to 10 minutes, until tortilla chips are golden brown and crispy. Serves 4.

\* You'll need an adult's help with this recipe.

Puzzling

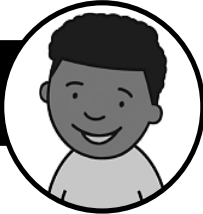
Unscramble the words below that remind us of exploring space.



ivatygr \_\_\_\_\_  
atsr \_\_\_\_\_  
nhulac \_\_\_\_\_  
nlepat \_\_\_\_\_

Answers: gravity, star, launch, planet.

Mini Jokes



Stan: How do astronaut lambs travel?  
Stuart: In spacesheeps!

Sid: How do you organize a flight to the space station?  
Scott: You need to plan-et carefully!

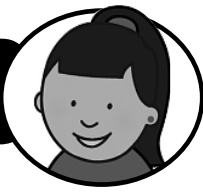
Eco Note



Russian scientists say they have found a new species of glowing "fluorescent lanterns" living in coral reefs near Saudi Arabia. The green polyps are a form of hydrozoa and are only 0.05 inch in size.

adapted with permission from Earthweek.com

Thank You



The Mini Page thanks Stephanie Schierholz and Laurie Cantillo in NASA's office of communications for help with this issue.

Teachers:

For standards-based activities to accompany this feature, visit: [bbs.amuniversal.com/teaching\\_guides.html](http://bbs.amuniversal.com/teaching_guides.html)

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