

New Permanent Exhibit Opens in January

Space Center Houston's newest permanent exhibit, Mission Mars, takes visitors on a deep space exploration to the red planet. Full of interactive activities, the exhibit will take visitors through a Mars portal featuring five different areas. It highlights how Mars and Martians have been illustrated in pop culture; the wealth of rich scientific discovery there is to uncover; the innovation needed to build the most advanced spacecraft; and what returning to earth involves.

Visitors get a rare glimpse at the advancements needed to prepare astronauts to go into deep space. The exhibit focuses on solving problems, teamwork and the innovation needed for the most ambitious space mission ever.

Why Mars?

The first step of the journey is to understand the evolution and formation of Mars. The exhibit compares how Mars differs from Earth physically in size, weight and temperature. Learn how NASA is studying its climate and geology to prepare humans to survive the extreme environment.

- Mars is the only known planet inhabited solely by robots with the Opportunity and Curiosity rovers continuously collect a wealth of information.
- The red planet is a rich destination for scientific discovery, and human and robotic exploration.

The Challenges

The exhibit will teach visitors about the advanced technologies critical to the exploration of Mars and other solar-system destinations. Inside the laboratory area, the exhibit explains what we'll need to build to get there and learn how each step builds upon the next to ensure success.

- A 45-foot model of the Space Launch System rocket towers over the exhibit. The SLS will be the most powerful rocket ever built. It is accompanied by one of four RS-25 Engine Boosters, which gives the rocket the power to launch beyond Earth's gravity.
- A real Orion capsule gives guests a glimpse inside its tight living quarters and technology.
- The Orion flight simulator replicates the experience of re-entry to Earth and learn about the effects of spaceflight with an exciting video of actual NASA footage.

The Journey

Years of science and research are underway as NASA prepares for the four-person crew on their six month, 50 million mile journey to Mars. The development of advanced tools, infrastructure and sustainability are needed in order to survive. The return is just as important to ensure the historic crews safe return back to Earth.

- A huge (**dimensions**) virtual Martian landscape displays the terrain from the view of an orbiting satellite and search for evidence of life on Mars.
- Experience the feeling of being the first human on the surface of Mars even transmit your first words to Earth as the first astronaut to step onto Mars.

Space Center Houston is a science and space learning center, focused on educating and inspiring the next generation of explorers.

