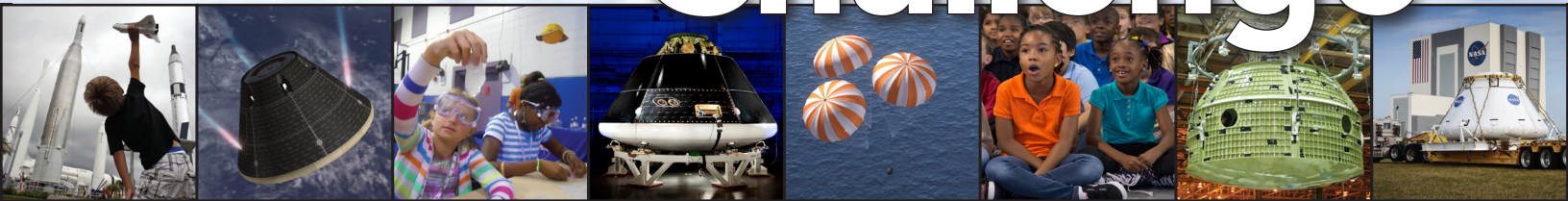


# Exploration Design Challenge



**NASA's Exploration Design Challenge** is an example of an educational experience aligned with the Next Generation Science Standards. The challenge provides today's students and tomorrow's workforce an opportunity to play a unique role in the future of human spaceflight. NASA and Lockheed Martin are developing the Orion spacecraft to carry astronauts beyond low Earth orbit and on to an asteroid or Mars. Protecting astronauts from space radiation on these distant travels is an important – and very real – problem that needs solving. NASA is looking for students to help!

Using free, standards-based activities and multimedia resources developed by leading education experts, students will learn about space radiation and human spaceflight. Students will then think and act like scientists to analyze different materials that simulate radiation shielding and make recommendations as to what best blocks harmful radiation.

Students in grades 9-12 can take the challenge a step further and think and act like engineers to design shielding. Students will follow the engineering design process and work in teams to design radiation shielding to protect a sensor on the Orion crew module from

space radiation. Once designs are complete, teams may compete for the chance to build their designs and have it flown on the Orion Exploration Flight Test-1 Mission.

All students and educators participating in the challenge will have their name flown on the Exploration Flight Test-1 Mission as members of the virtual crew. This unmanned mission is set to launch from Florida's Cape Canaveral Air Force Station in late 2014. The deadline to register for the virtual crew is March 14, 2014.

The challenge officially launched on March 11, 2013, and thousands of students across the globe have registered to take part. Help NASA protect our astronauts as they venture to places never before attempted by human beings.

Chart your journey to  
deep space by joining  
NASA's Exploration  
Design Challenge at  
[http://www.nasa.gov/  
education/edc](http://www.nasa.gov/education/edc).

**For more information, visit [www.nasa.gov/education/edc](http://www.nasa.gov/education/edc)**