ON THE MOON

NASA AND DESIGN SQUAD TEAM UP TO INSPIRE A NEW GENERATION OF ENGINEERS

in collaboration with the
National Aeronautics and Space Administration

ENGINEERING CHALLENGES FOR SCHOOL AND AFTERSCHOOL PROGRAMS
GRADES 3–12
Dear Educators,

In 2004, President Bush announced a new vision for the United States’ space program. Today, that vision is becoming reality. The men and women of NASA are working on the next generation of spacecraft that will return Americans to the moon by 2020. A new generation of students across the country and around the world will be inspired by what President Kennedy called the “greatest adventure on which humankind has ever embarked.”

As NASA prepares for the future of exploration, we recognize that the young people of today are the engineers, scientists, and astronauts of tomorrow. Creativity, curiosity, and analytical thinking are the trusted tools of NASA’s engineering arsenal, and we continually direct our educational efforts to create experiences that allow young people to develop these skills as they investigate and solve challenging problems.

NASA is proud to partner with Design Squad®, PBS’s reality competition series focused on the fun and excitement of engineering. Central to this partnership is our belief that science, technology, engineering, and mathematics education will play a vital role in solving the problems of the 21st century. On the Moon is part of our long, proud tradition of showcasing how engineering fuels space exploration. By structuring the activities around real-world engineering applications, it is our hope that you will find the On the Moon activities to be effective, innovative ways to engage your students in the engineering design process, encourage their interest in space exploration, and inspire them to pursue a career in engineering.

NASA supports people like you who play a key role in preparing the minds that will strengthen the Nation’s future. Use this guide to bring the possibilities of engineering to life for young people and to inspire them to solve challenging problems. Engage their creativity, foster their curiosity, and teach them to autograph their work with excellence.

Sincerely,

Joyce Winterton
Assistant Administrator for Education
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