National Engineers Week

NASA Comes to Your School
Pre/Post Visit Handbook for the School

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National Engineers Week and NASA

Engineers turn ideas into reality! They are movers and shakers in our world. Engineers design structures to stand up to earthquakes and they are significant members of our NASA team, creating the capability to travel to space, explore the universe, and learn more about Earth from the vantage point of space.

From computer chips to potato chips, the work of engineers is integral in our daily life. Engineers are known as great inventors and problem solvers. **National Engineers Week** is the annual celebration of engineers and their work. A nationwide effort, the activities during this week link over three million engineers, teachers and students in recognizing accomplishments and careers of engineers.

This is the sixteenth year that Goddard Space Flight Center has scheduled visits to classrooms to increase awareness of and encourage interest in engineering. Through these personal career talks, students learn how math, science and engineering create the world around us. They understand that concepts they are learning today in school are applied by NASA engineers and technicians in their careers.

Every day some two million engineers contribute to our way of life. Engineers have defined our most spectacular achievements, from moon landings to magnificent bridges. They have improved the quality of life in many ways from cars and computers, medicines and clean water, tools for safer and more efficient surgeries, to roller coasters and better energy delivery. As engineers help shape this new century, none will be more important than helping to protect and conserve our natural resources.

- We invite your school to register ***today*** for a NASA engineer or technician to visit your school and speak to your students.
- Early registration receives priority. ***Registration closes April 30 , 2008.***
- Register at http://education.gsfc.nasa.gov/eweek

Special Note:
Visits will be available until the end of the Spring term.
Please indicate a preferred date.

Pre/Post Visit Suggestions

Registration closes on Wednesday, April 30, 2008
Priority will be given to early registrants.
You will receive notification of a speaker commitment on or before Friday, March 16. While every effort will be made to secure a speaker, priority will be given to early registrants.

The purpose of the NASA coming to your school during National Engineers Week is for our speakers to tell their career story and how they are helping to realize the Vision for Space Exploration – return to the moon and journey on to Mars and beyond – at Goddard Space Flight Center (GSFC).

Through this personal narrative and dialogue, we hope to convey to students the connections between their math, science, technology, and communications classes and the work we do at GSFC. We strive to create an atmosphere that encourages curiosity, asking questions, and begins the search for answers.

Suggestions for pre-visit classroom opportunities include:

- exploration of digital and print information about space exploration, NASA Goddard, and engineering.
- preliminary classroom discussions or role playing based upon their research.
- development and selection of the "Top Ten" questions for the speaker.
- student development of the visitation agenda and logistics i.e. assign a student to create the speaker's name tag, another to greet and escort the speaker to the room(s) where he/she will be speaking, another to prepare the room, etc.

Suggestions for post-visit classroom activities include:

- discussion of how their courses relate to engineering and/or NASA careers.
- generation of additional questions to be explored.
- written essay on what they learned from the talk.
- conducting an engineering career search concluding in a career party with students dressing and acting the parts of different types of engineers.
- Compose and send thank you notes to the speaker.

Suggested Web Sources for Students and Educators

These suggested web sources are only a sample of the many offerings from NASA and its many partners. Browse, discover, learn!

- **http://www.nasa.gov/centers/goddard/home/**

Note: This site introduces you to the unique research and capabilities of NASA Goddard Space Flight Center. Learn about the current and planned missions related to exploration of the Universe, the Sun and Earth Connections, and our Solar System.

- **http://www.eweek.org**
  - **New Faces in Engineering**
  - **The Creative Engineer**
  - **Engineers**
  - **Discover Engineering Online**
  - **Engineering Students K-12**

Note: These pages have many links to other, specific information including suggested hands-on activities, interesting & relevant—kids types of 'engineering' facts, and example of different types of engineering careers and contributions.

- **http://education.nasa.gov/home/index.html**
  - **http://www.nasa.gov/audience/forstudents/k-4/home/index.html**
  - **http://www.nasa.gov/audience/forstudents/5-8/features/index.html**
  - **http://www.nasa.gov/audience/forstudents/9-12/features/index.html**

Note: These pages feature NASA general and GSFC-specific related mission and education activities. Some pages are downloadable, visuals and video clips may be useful.

- **http://science.nasa.gov**

Note: This site brings you stories about current NASA research. Written in a fast-paced, active style, the stories feature interviews with researchers, connections between the research and daily life, crisp visuals, video clips, and direction to supplemental resources.

- **http://dlcenter.larc.nasa.gov/**

Note: This site makes available to you broadcast quality feature shows for each grade level: K-4; 3-5; 5-8; 9-12. Produced and aired on PBS, cable, and other TV stations, these segments star student talent and NASA researchers. Each grade level focuses on a specific discipline. For example all shows for 5-8, NASA Connect use NASA research to reinforce math skills.

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