

**SOILS – A GLOBE PROTOCOL WORKSHOP**  
**JUNE 18, 2008**                      **REGIONAL LEARNING ALLIANCE**  
**8:30am-3:30pm**                      **Six Act 48 Credits**                      **Fee\$35.00**

**This workshop is conducted by the Pittsburgh Regional Center for Science Teachers (PRCST) and presented by GLOBE Partner and Trainer, Charylene Philp, Director, North Central Math/Science Collaborative and the PA NASA ERC. GLOBE is a NASA related program. Resources from the A&WMA.**

Soils are one of Earth's essential natural resources, yet they are often taken for granted. Most people do not realize they are a living, breathing world supporting nearly all terrestrial life. Soils and their functions within an ecosystem vary greatly from one location to another as a result of many factors, including differences in climate, the parent material of the soil, and the location of the soil on the landscape. Scientists, engineers, farmers, developers, and other professionals consider a soil's physical and chemical characteristics, moisture content and temperature to make critical decisions.

**AGENDA**

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|---------------|---|
| <b>8:30am</b> | Registration/welcome  |
| 9:00am        | Introduction to GLOBE , Earth Systems Science and the Soils Protocol  |
| 10:00am       | Break   |
| 10:15am       | SOILS Protocols:<br>Why Soils? and Just Passing Through!<br>Soil site and collection and Soil Characteristics |
| Noon          | Lunch – on site   |
| 1:00pm        | Soils – Hands-on activity<br>Soil Horizons - Soil Maps  |
| 2:00pm        | NASA Programs<br>Growth Chambers for Space foods - Irradiated seeds   |
| 2:30pm        | Data entry  |
| 3:00pm        | Summary/prizes  |

Using the measurement data in the GLOBE Soil Investigation, students help scientists describe soils and understand how they function. These data are invaluable to scientists in many fields. Along with a full set of GLOBE data (atmosphere, hydrology, land cover), soils data at a specific site are used to run computer simulation models to understand how the whole ecosystem functions and to make predictions about what the ecosystem will be like in the future.

Free NASA related resources will be provided by the PA NASA Educator Resource Center (ERC) located at the University of Pittsburgh. To register, contact: Jane Konrad, PRCST, 5512 Posvar Hall, University of Pittsburgh, Pittsburgh, PA; 412/648-7315; or email [Konrad@pitt.edu](mailto:Konrad@pitt.edu). Include your name, school/district, phone, address, email.

Checks should be made payable to the University of Pittsburgh.