Science Concepts and Effective Teaching Strategies Workshop
October 31, 2005

Twenty-two teachers from six Portsmouth Schools enjoyed a day of creative science at the NASA Science Strategies workshop held at the Education Center at NASA Langley Research Center in Hampton on Monday, October 31, 2005. Under the expert tutelage of Dr. Bill Williams and his team of education specialists, the elementary and middle school teachers explored general science strategies as well as specific content lesson plans for several different science SOL areas. Additionally, teachers learned how to access the nearly overwhelming number of NASA resources freely available to teachers and how to apply those space-related resources and strategies to lessons across the curriculum areas.

Appealing to the kinesthetic learner in everyone, teachers played with ping-pong balls to demonstrate air pressure and lift and made carbon dioxide in empty water bottles following a discussion of “The Air We Breathe”. Palm Pilots aided in drawing animated pictures of the lunar phases. The participants even made their own model of Saturn and engineered parachutes to “gently” drop the Cassini spacecraft onto the Saturn moon of Titan. Judging from the rough “landings”, it is probably a good thing that the workshop participants did not actually design the real Cassini parachute system!

NASA Education Specialist “Storm” Robinson led the morning workshop hands-on sessions. NASA Educator Rudo Kashiri led the afternoon sessions, which focused heavily on integrating reading and writing into science content areas. She shared several strategies for accessing prior knowledge with students (I imagine, I know, I wonder) and turning hands-on lessons into follow-up writing assignments. Rudo Kashiri is also the education contact person for our region and expressed her great desire to help teachers in any way, either by finding appropriate resources or coming to do actual lessons/demonstrations at schools.

Schools sending workshop participants included Brighton Elementary, Churchland Academy, Churchland Primary and Intermediate, James Hurst Elementary, Lakeview Elementary and Waters Middle School. Teachers will be asked to conduct a follow-up session with their grade level peers to disseminate the strategies and resource information gained from the workshop. Workshop participants will also participate in a follow-up workshop session in January with Rudo Kashiri to discuss their successes with using the workshop strategies and NASA resources.