## **RESET Program Components**

#### **Introductions to Real Scientists—‘Hello, I’m a Computer Programmer . . .’**

RESET makes a point of introducing children to STEM professions and jobs. One of our principal aims is to get children interested in these fields so they will consider taking science and math classes in high school and even go on to pursue a STEM career. Most students will have little knowledge of the kinds of jobs and work scientists do. We encourage you to take some time during your RESET sessions to share some of your STEM experiences with the children. After introducing yourself and what type of scientist or engineer you are, you might ask the children what they want to be when they grow up. Share with them how you got interested in your field. Explain your educational background. What are some of the more fascinating things you or your colleagues do in your profession? This is a good opportunity to let the children know that the math and science they are learning now is important in every profession in today’s world.

#### **The Experiments—Hands-On, Inquiry-Based Learning**

Hands-on experiments and exercises are the cornerstone of the RESET program. We believe that students learn best by “doing.” In RESET’s classroom programs, one of the first things you will do is present your teacher with a list of the experiments you would like to conduct during your six classroom sessions. You and your teacher will create an outline of the experiments and determine what activities will be hands-on. You will probably want to divide the class into smaller groups so every student has numerous opportunities for hands-on experiences. You will also want to set aside time at the beginning of each session to demonstrate and explain the objective of the experiment.

In out-of-school day programs, discuss the plans for your STEM activities with the program director or community organization leader. Obtain information about the venue, the set-up for the session(s), and the number and age range of the participating children.

RESET encourages children to see STEM as useful, relevant, and EXCITING—subjects that have a strong connection to their lives and to their futures. Volunteers are challenged to find ways to motivate children to appreciate their world and how the sciences have improved their lives. Advise students of the value of learning by trial and error as key to discovery and innovation.

#### **The Field Trip—Learning by Doing**

The RESET classroom program concludes with a field trip to a science museum, laboratory or other STEM-related site. Volunteers often select venues that will reinforce the learning the children have experienced during their RESET sessions together. Some volunteers have taken their students to a college campus to observe students in a laboratory. You will want to discuss different possibilities with your teacher. You are responsible for making arrangements with the staff at the site the class will visit. You should do this early in your program, as you may need to make reservations for the venue and transportation well in advance.

The teacher is responsible for making arrangements for permission slips and chaperones. Please call or email RESET staff regarding the dates of the trip, what time you will need the bus at the school, the destination drop-off point, and when you will leave the site to return to the school. RESET staff will send you confirmation of the bus reservation. Provide your phone number, the phone number of the school, and the name of your teacher in case the driver needs to inform you of a delay in bus arrival.

**Below is a list of some of RESET’s most popular field trip venues:**

* Cosmic Adventures Traveling Planetarium (at the school)
* Historical Electronics Museum
* Living Classrooms Science Cruise
* Marian Koshland Science Museum of the National Academy of Sciences
* NASA’s Goddard Space Flight Center
* National Aquarium at Baltimore
* National Electronics Museum
* National Zoo
* Rock Creek Park Nature Center and Planetarium
* Smithsonian Institution’s National Air and Space Museum
* Smithsonian Institution’s National Museum of Natural History
* Stephen F. Udvar-Hazy National Air and Space Museum
* Under the Sea (at the school)