

## **Examples of Assistance for Middle School Volunteers**

Complement the teachers' presentations. When the content focus for the curriculum is familiar, the volunteer can make valuable additions to the teacher's presentations. This contribution should be viewed as complementary and not as a substitute.

Interact with students on investigations and inquiry problem sheets. This can be one of the most effective contributions because it is difficult for a teacher to interact effectively with a class of 30 students as they conduct their individual assignments. In most instances, intimate knowledge of the science is not required to provide valuable assistance to the teacher.

Offer advice on science inquiry projects. Most middle-school students in the Montgomery County (MD) Public Schools are required to conduct a science inquiry project. This is regarded as an important mechanism for helping the students to understand the scientific method. Volunteers can make a major contribution through advising students as they conceive and implement these projects. These interactions can take place during class, at lunch or after school, providing that a teacher or school employee is present.

Identify and test new investigations. The best investigations must be: (1) meaningful as they relate to the curriculum, (2) doable in the time available, and (3) interesting to the students.

Answer teachers' questions on course content. The level of middle-school science is not very high, but its coverage is broad, including physics, chemistry, earth science, and biology. There are instances when the teachers are uncertain about the science content underlying the activities; volunteers can provide clarification. This can generally be achieved, even if the problem is not in the technical area of the volunteer's expertise, by gathering information from the Internet or conferring with colleagues. Any clarifications or corrections should be done with tact; teachers should not be corrected in front of their students.

Help develop parent support. It is perceived that parents, with the exception of those with a science or engineering background, are minimally involved at best with the science education of their children. How to generate parent interest in science, and cause them to encourage their children to study science should be regarded as a challenge for volunteers. One strategy is to work with the PTA to organize a Science Night.