

## XIV. Preparing for Next Year

When the school year comes to an end, you have the opportunity to assess and enhance your lessons. You should break down the progress and events of the year and determine what went right, what went wrong, and what you can improve on. In planning the next school year, adhere to the following path - analyze, prioritize, enhance, plan, purchase, and initiate. Here are some questions you should ask yourself to help in this process.

- Did all the demonstrations and experiments reflect the subject matter being taught?
- Were they as spectacular as they could be?
- Were you uncomfortable using any of the chemicals needed for a particular experiment or demonstration?
- Are there safer chemicals you can use in place of hazardous ones, to get the same results in a particular experiment?
- Are the demonstrations you have been using getting old?
- Did you have enough chemicals and materials to get you through the year?

Once you have answered these fundamental questions you are on your way. This section will help define the areas you need to focus on to effectively plan the upcoming school year.

### Define Your Budget

Break down what you spent over the year. Did you have enough money to get you through the year, or did you have to make do? Did you spend wisely, or were there better choices to be made? Was last year's planning successful, or were unplanned costs an issue? This information will help you refine your upcoming budget. Additionally, your Ward's Science representative can always help you determine the most cost effective means of buying chemicals and chemical supplies.

### Chemical Purchasing

As detailed in *Section II - Purchasing Your Chemicals*, smart chemical purchasing is an essential element in helping you provide a safe and successful chemistry experience. Buying too much of a chemical for the year creates a potentially dangerous storage condition, waste, and a significant disposal expense. Buying too little may limit students' hands-on experimentation—an important learning experience.

Take inventory of all the chemicals remaining in storage. Determine which can still be used. Properly dispose of those that cannot or will not be used. (See *Section XIV - Chemical Disposal* for further information). Select your intended experiments and demonstrations and estimate the amount of the chemicals you need to use in the laboratory. Try to select a demonstration or experiment that can use up left over chemicals. Also, try to use chemicals with low hazard characteristics. Once you have determined the experiments you will be presenting and you purchase the chemicals, stick with them. Deviations from the planned demonstrations or experiments will likely result in unused chemicals at the end of the year.

Ward's QuickPrep™ chemicals come in pre-measured packaging that saves prep time by eliminating the need to weigh chemicals when you dispense them. Additionally, QuickPrep chemicals do not require a UPS Hazardous Materials Surcharge (\$70.00/order at this writing. Ward's also provides selected chemicals in 25 g bottle 4-packs. These packages do not require the Hazard Surcharge either, and remain fresher since you only open what you need.

In *Section XVII - Ward's Demonstrations To Get the Students' Attention*, Ward's Science provides chemistry demonstrations for use in your classroom or laboratory, and the amount of chemical needed for each. This makes it easy to order efficiently.

### Personal Protection

Do you have enough safety equipment and supplies to adequately provide protection for the number of

students enrolled in your classes next year? Check your personal protection stock – safety glasses, safety goggles, aprons, lab coats, gloves, plastic demonstration shields, etc. If any are broken, incomplete, excessively dirty, excessively worn, or provide inadequate protection, they should be replaced. Remember, these students rely on you to provide a safe learning environment.

## **Spill Response Materials**

Do you have enough safety materials and equipment to respond to a spill? Spill response materials and equipment need to be present in sufficient amounts at all times. Verify that you have adequate amounts of containment materials including sand, blankets, and related materials.

If you use acids or bases, make sure you have absorption and neutralizing materials including kitty litter and vermiculite (or similar materials) to handle possible spills. You also need to keep a broom and dustpan, specifically designated for spill response. All response materials and equipment should be on hand before the school year begins. (See *Section XIII – Spill Prevention, Response and Control* for detailed information).

## **Safety Data Sheets (SDS's)**

Do you have the latest Safety Data Sheet (SDS) for all the chemicals that you have on hand? SDS's have replaced Material Safety Data Sheets (MSDS) and provide more and better organized chemical information. Be sure that you have an SDS for all of the chemicals in your inventory. Double check, since these sheets are can become mangled, unreadable, and even lost throughout the school year. Do this in the summer if you have limited time for SDS maintenance during the school year. All SDS's are available online.

## **Chemical Labeling**

During your chemical inventory, check the labels on the containers. Make sure that they are legible and have all the required information on them. (See *Section V – Labeling*). If necessary, replace the label with a proper GHS label.

## **Laboratory Equipment**

Is all the laboratory equipment functioning properly? Is the fume hood working and exhausting as designed? Do all the gas, air and water outlets work? Does the emergency shower and eyewash provide the proper volume of water at the correct temperature? Do you have enough beakers, test tubes, vials and glassware? Take an inventory of these items, to find out if something needs to be replaced or repaired. Don't wait until you need the equipment to find out its broken—there may be a lead time on orders for replacements and repairmen may not be immediately available.

## **Success**

If you effectively used this handbook throughout the year, the educational experience you provided to your students was successful and rewarding. The information presented in this section will help you provide the same rewarding educational experience to your incoming students.

