


Check Your Understanding of Topic 2.1

QP Questioning and Predicting **PC** Planning and Conducting **PA** Processing and Analyzing **EE** Evaluating
AI Applying and Innovating **CC** Communicating

Understanding Key Ideas

- Steps from two different laboratory procedures are given below. Which safety icons and WHMIS symbols should be included with the procedures? More than one may apply in each case. Explain why you chose each symbol. **PA EE CC**
 - Pour a solution of salt water from a graduated cylinder to a beaker.
 - Light a Bunsen burner. Then gently heat the test tube containing the solution. Do not breathe in the irritating ammonia gas that forms.
- You are about to use a household product that has this symbol on its label. 
 - What does this symbol mean?
 - Describe the precautions you should take when using the product. **AI PA**
- Make a sketch of your science lab or classroom showing the location of emergency exits, eye wash stations, fire extinguishers, and any other emergency equipment. Include the name of your school's emergency first aid contact. **CC**

Connecting Ideas

- Suppose you are a writer for the local community newsletter. You have been asked to interview someone at the fire department about how they deal with hazardous chemicals. Come up with a list of questions you have for the person you are interviewing. **CC QP**
- Name three jobs that require a person to know about chemicals, their possible dangers, and how to work with them safely. Describe the type of chemical knowledge each job needs. **QP CC PA**
- Many homes have hazardous materials. Often, people dispose of them by throwing them out in the regular garbage or flushing them down drains or toilets. **QP CC AI**
 - What hazards are associated with these practices?
 - Write a public service announcement to advise people of the dangers of hazardous household products and why they should not be disposed of in this way.
 - Come up with an idea for how your local city or town council could deal with hazardous waste.

Making New Connections

- The term "green chemistry" refers to an area of chemistry that involves designing consumer products and the methods used to make them so that less hazardous material is involved. **AI CC QP**
 - In what other way have you seen or heard the term "green" being used? What does the word mean when it is used that way?
 - It takes time and money for a company to change how it produces a product to make it greener. Assume you are an environmental consultant who must convince a chemical company to switch to green chemistry. Make a list of important points you will make to do this.