

Skills and Strategies

- Planning and Conducting
- Processing and Analyzing
- Evaluating
- Communicating

Safety

- Do not carry out your plan until your teacher approves it.
- Do not conduct your survey without an adult present.

What You Need

- paper and pencil
- rubber gloves

A Survey of Hazardous Materials in Your Home

In this investigation, you will identify and list the hazardous materials at your home.

Question

What hazardous materials are in your home, and where are they located?

Procedure

1. Make a plan for how you will conduct the survey of your home. Use the following questions to guide you.
 - How will I determine if an item is hazardous and what type of hazardous material it is?
 - What safety precautions will I take?
 - What information will I collect and how will I record my findings?
2. Have your teacher approve your plan.
3. Arrange a time when a parent or guardian can accompany you during your survey.
4. Do not handle containers that are damaged, and make sure to wash your hands when you are finished.

Analyze and Interpret

1. Did any findings from your survey surprise you? If so, explain why.
2. Did one area of the home contain more hazardous substances than others? If so, which area was it?

Conclude and Communicate

3. Compare your survey with those of your classmates.
4. Propose two ways to reduce the amount of hazardous materials in your home.
5. Do research to find less-hazardous alternatives that could replace two hazardous products in your home.

INVESTIGATION 2-B

STRUCTURED AND GUIDED INQUIRY

Skills and Strategies

- Processing and Analyzing
- Evaluating
- Communicating

What You Need

- Safety in Your Science Classroom on pages xiv–xvii
- Internet access
- print sources of information on WHMIS 2015
- several sample SDS
- sample chemical bottles from the lab

Practise Safety in the Laboratory

Learning how to work safely in the laboratory is an essential part of studying chemistry. Mastering these skills will allow you to enjoy investigating science for years to come. In this investigation, you will practise working with WHMIS symbols and laboratory safety procedures.

Question

What safety-related information is important when working in a laboratory?

PROCEDURE

Part A (Structured): WHMIS 2015

Answer the following questions about WHMIS 2015. Use online or print information sources as needed.

1. Describe the basic structure of the WHMIS 2015 program.
2. Why is the program now called WHMIS 2015, instead of just WHMIS?
3. What is an SDS and what information does it provide?
4. Nine WHMIS symbols are shown below.
 - a) Describe what each means.
 - b) For each symbol, give one example of a substance or material that would have it on the label.

