

**GRCI SCIENCE****WHMIS**

**WHMIS** or **Workplace Hazardous Materials Information System** is a comprehensive national legislated program that insures your "right to know" about the chemicals you are working with at school or on the job.

The **WHMIS** program is the result of joint development by the federal and provincial governments, industry and labour. In Ontario, WHMIS is incorporated into the **Occupational Health and Safety Act**, which states that if you work with materials that may be hazardous to health, information must be provided about these materials to enable you to work safely with them.

**WHMIS** provides the information we need to know about the hazardous materials (any chemical is potentially harmful) we use in the laboratory through a system of:

1. Distinctive labels
2. Material Safety Data Sheets (MSDS) – by law, manufacturers of all chemical products must provide complete information about their materials using a standardized MSDS format.
3. Instructional programs

The **WHMIS** program uses eight (8) distinctive symbols to identify the six (6) classes of hazardous materials.

**ACTIVITY 1: Can you figure it out?**

- a) Look carefully at the 8 WHMIS symbols below.
- b) Have you ever seen these symbols before? If so, see if you can guess what they mean.
- c) Write your best guess beside each symbol.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

**Now, let's see how you did!**





# WHMIS Activity

Class and Name	Symbol	Risks	Precautions
<b>Class A:</b> Compressed Gas			
<b>Class B:</b> Flammable & Combustible Materials			
<b>Class C:</b> Oxidizing Material			
<b>Class D:</b> <b>Poisonous &amp; Infectious Material</b>			
<b>Class D1:</b> Materials Causing Immediate & Serious Toxic Effects			
<b>Class D2:</b> Materials Causing Other Toxic Effects			
<b>Class D3:</b> Biohazardous Infectious Material			
<b>Class E:</b> Corrosive Material			
<b>Class F:</b> Dangerously Reactive Materials			

### Hazardous Household Product Symbols

The warning symbols on Household products were developed to show you **HOW** dangerous a product is, and exactly **WHY** it is dangerous.

1. Refer to the table below to become familiar with the hazard symbols.

Symbol	The Danger	Product Examples
Explosive 	This <b>container</b> can explode if it's heated or punctured. Flying pieces of metal or plastic can cause serious injuries, especially to the eyes.	<ul style="list-style-type: none"> <li>• water repellent for shoes or boots in an aerosol container</li> <li>• spray paint in an aerosol container</li> </ul>
Corrosive 	This <b>product</b> will burn skin or eyes on contact, or throat and stomach if swallowed.	<ul style="list-style-type: none"> <li>• toilet bowl cleaner</li> <li>• oven cleaner</li> </ul>
Flammable 	This <b>product</b> , or its fumes, will catch fire easily if it's near heat, flames or sparks.	<ul style="list-style-type: none"> <li>• contact adhesives</li> <li>• gasoline</li> </ul>
Poison 	Licking, eating, drinking, or sometimes smelling, this <b>product</b> will cause illness or death.	<ul style="list-style-type: none"> <li>• windshield washer fluid</li> <li>• furniture polish</li> </ul>

2. Do a search of your home and find **at least 10 items** with hazard symbols (products in a supermarket do not have WHMIS symbols).
3. Use the table on the back of this page to record the following information:
  - a) The item name
  - b) The **hazard** information –indicate all hazards (there may be more than one)
  - c) Determine what **WHMIS** class this item would belong to and write down the class.

## Household Hazards Product Symbols

Name of Product	Hazards	WHMIS Class
1. Jig-a-Loo (like WD40)	<ul style="list-style-type: none"> <li>- Danger - Poisonous</li> <li>- Danger - Flammable</li> <li>- Danger - Explosive</li> </ul>	D1 B A
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

**GRCI SCIENCE****WHMIS**

**WHMIS** or **Workplace Hazardous Materials Information System** is a comprehensive national legislated program that insures your "right to know" about the chemicals you are working with at school or on the job.

The **WHMIS** program is the result of joint development by the federal and provincial governments, industry and labour. In Ontario, WHMIS is incorporated into the **Occupational Health and Safety Act**, which states that if you work with materials that may be hazardous to health, information must be provided about these materials to enable you to work safely with them.

**WHMIS** provides the information we need to know about the hazardous materials (any chemical is potentially harmful) we use in the laboratory through a system of:

1. Distinctive labels
2. Material Safety Data Sheets (MSDS) – by law, manufacturers of all chemical products must provide complete information about their materials using a standardized MSDS format.
3. Instructional programs

The **WHMIS** program uses eight (8) distinctive symbols to identify the six (6) classes of hazardous materials.

**ACTIVITY 1: Can you figure it out?**

- a) Look carefully at the 8 WHMIS symbols below.
- b) Have you ever seen these symbols before? If so, see if you can guess what they mean.
- c) Write your best guess beside each symbol.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

**Now, let's see how you did!**





# WHMIS Activity

Class and Name	Symbol	Risks	Precautions
<b>Class A:</b> Compressed Gas			
<b>Class B:</b> Flammable & Combustible Materials			
<b>Class C:</b> Oxidizing Material			
<b>Class D:</b> <b>Poisonous &amp; Infectious Material</b>			
<b>Class D1:</b> Materials Causing Immediate & Serious Toxic Effects			
<b>Class D2:</b> Materials Causing Other Toxic Effects			
<b>Class D3:</b> Biohazardous Infectious Material			
<b>Class E:</b> Corrosive Material			
<b>Class F:</b> Dangerously Reactive Materials			

### Hazardous Household Product Symbols

The warning symbols on Household products were developed to show you **HOW** dangerous a product is, and exactly **WHY** it is dangerous.

1. Refer to the table below to become familiar with the hazard symbols.

Symbol	The Danger	Product Examples
Explosive 	This <b>container</b> can explode if it's heated or punctured. Flying pieces of metal or plastic can cause serious injuries, especially to the eyes.	<ul style="list-style-type: none"> <li>• water repellent for shoes or boots in an aerosol container</li> <li>• spray paint in an aerosol container</li> </ul>
Corrosive 	This <b>product</b> will burn skin or eyes on contact, or throat and stomach if swallowed.	<ul style="list-style-type: none"> <li>• toilet bowl cleaner</li> <li>• oven cleaner</li> </ul>
Flammable 	This <b>product</b> , or its fumes, will catch fire easily if it's near heat, flames or sparks.	<ul style="list-style-type: none"> <li>• contact adhesives</li> <li>• gasoline</li> </ul>
Poison 	Licking, eating, drinking, or sometimes smelling, this <b>product</b> will cause illness or death.	<ul style="list-style-type: none"> <li>• windshield washer fluid</li> <li>• furniture polish</li> </ul>

2. Do a search of your home and find **at least 10 items** with hazard symbols (products in a supermarket do not have WHMIS symbols).
3. Use the table on the back of this page to record the following information:
  - a) The item name
  - b) The **hazard** information –indicate all hazards (there may be more than one)
  - c) Determine what **WHMIS** class this item would belong to and write down the class.

## Household Hazards Product Symbols

Name of Product	Hazards	WHMIS Class
1. Jig-a-Loo (like WD40)	<ul style="list-style-type: none"> <li>- Danger - Poisonous</li> <li>- Danger - Flammable</li> <li>- Danger - Explosive</li> </ul>	D1 B A
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		