SAFETY SYMBOLS: HHPS

HHPS

- stands for <u>Hazardous Household Products Symbols</u>
- This is a set of <u>symbols</u> that warn <u>consumers</u> what <u>dangers</u> the product may contain.
- These symbols are <u>mandatory</u> for all chemical <u>products</u> They MUST be drawn on the <u>labels</u> of all chemical products.

HHPS symbols are classified as follows:

- a) Poisonous
- A poisonous substance is one that can cause immediate damage to an <u>organism</u> (anything <u>living</u>).



- The symbol for a poisonous substance is the <u>skull</u> and crossbones.
- b) Flammable
- A flammable substance is one that can catch <u>fire</u> very easily. The symbol for a flammable substance is a burning <u>fire</u>.



- c) Explosive
- An explosive substance can <u>explode</u> very easily if <u>heated</u> or <u>dropped</u>.



- The symbol for an explosive substance is a diagram that looks like an exploding <u>firecracker</u>.
- d) <u>Corrosive</u>
- A corrosive substance is one that can easily "eat" through other pieces of matter.



- The symbol for a corrosive substance is a <u>hand</u> turning into a <u>skeleton</u> when dipped into a liquid.
- The <u>HHPS</u> system not only uses these <u>four</u> symbols, but it also describes to us how <u>severe</u> the danger is.
- When the <u>symbol</u> is placed inside of a <u>yellow upside-down triangle</u> it tells us that "<u>caution"</u> should be taken when using the product.
- When the symbol is placed inside of an <u>orange diamond</u>, it is "<u>warning"</u> us that the danger is more severe.
- When the symbol is placed inside of a <u>red octagon</u> (like a stop sign), it means that the chemical has extreme "<u>danger</u>" and must be used very <u>carefully</u>.

Let's identify the following risks:



<u>This</u>	<u>substance</u>	is m	<u>ildly</u>	corrosive.	It may	burn	<u>through</u>	paper
or ir	ritate skin.							



This substance	is extremely	poisonous.	This may	kill an
organism		•		

This substance may ignite	e (set on fire)	

APPLICATION OF HHPS:

Examine 3 household products. For each product, perform the following steps and record your observations.

- a) Name the product.
- b) Name the manufacturer (the company that makes it).
- c) Describe what kinds of warning symbols (HHPS) are on the product.
- d) Use the label to record what safety precautions you should use when using the product.
- e) Use the label to record what the manufacturer suggests you do if the product harms you.

SAFETY SYMBOLS: WHMIS

WHMIS

- stands for the "Workplace Hazardous Materials Information System."
- Similar to <u>HHPS</u>, WHMIS also uses safety <u>symbols</u> to let users know what <u>dangers</u> the chemical may possess.

There are 8 WHMIS symbols:

a) <u>Compressed Gas</u> - this means that <u>gas</u> is under very high <u>pressure</u> inside of its container and therefore may explode easily.



b) <u>Flammable</u> and <u>Combustible</u> – same meaning as in the <u>HHPS</u> category.



c) Oxidizing Material - this product will contain highly reactive oxygen (more dangerous than the oxygen we breathe).



d) <u>Corrosive Material</u> - same meaning as in the <u>combine</u> category.



e) Dangerously <u>Reactive</u> Material - this substance will <u>combine</u> with almost any <u>chemical</u> around it and therefore cause a potentially dangerous <u>reaction</u>.



f) <u>Biohazardous Infectious</u> Material - this substance came from an <u>organism</u> and may contain <u>bacteria</u> or <u>viruses</u>.



g) <u>Poisonous</u> and <u>Infectious</u> Material – this substance is very toxic and may be fatal (cause death).



h) <u>Poisonous</u> and <u>Infectious</u> Material - this is a less <u>severe</u> (mildly) than the category above.

The substance still may cause <u>severe</u> effects such as blindness or brain damage.

