Chem I Name _____

Date _____ Per _____

Worksheet # C27: Naming Covalent Compounds (pages 211-213)

1. What are the prefixes for the numbers of the atoms in a covalently bonded molecule?

1= _____ 2= _____ 3= _____ 4= _____ 5= _____

6= _____ 7= _____ 8= _____ 9= _____ 10= _____

2. The prefix "mono" is very rarely used. There are two molecules whose names, however, always contain it. Give both their formulas and their names.

a. _____ = _____

b. _____ = _____

3. How do you know which of the two nonmetals should go first in the formula? _____

_____

3. Complete the following table:

Atoms in Molecule	Name of Molecule	Formula of Molecule
1 iodine and 1 sodium	sodium iodide	NaI
10 fluorines and 2 sulfurs	disulfur decafluoride	S_2F_{10}
	tetraiodine nonoxide	
		Np_3O_8
5 chlorines and 1 antimony		
	iodine heptafluoride	
		CeB_6
1 sulfur and 3 oxygens		
	pentaboron nonahydride	
		SCl_4
7 nitrogens and 3 oxygens		
	tin tetraiodide	
		As_2O_5

3. What do you think of these? _____

Excerpts taken from the website of the Dihydrogen Monoxide Research Division

Frequently Asked Questions About Dihydrogen Monoxide (DHMO)

What is Dihydrogen Monoxide?

Dihydrogen Monoxide (DHMO) is a colorless and odorless chemical compound, also referred to by some as Dihydrogen Oxide, Hydrogen Hydroxide, Hydronium Hydroxide, or simply Hydric acid. Its basis is the highly reactive hydroxyl radical, a species shown to mutate DNA, denature proteins, disrupt cell membranes, and chemically alter critical neurotransmitters. The atomic components of DHMO are found in a number of caustic, explosive and poisonous compounds such as Sulfuric Acid, Nitroglycerine and Ethyl Alcohol.

Should I be concerned about Dihydrogen Monoxide?

Yes, you should be concerned about DHMO! Although the U.S. Government and the Centers for Disease Control (CDC) do not classify Dihydrogen Monoxide as a toxic or carcinogenic substance (as it does with better known chemicals such as hydrochloric acid and benzene), DHMO is a constituent of many known toxic substances, diseases and disease-causing agents, environmental hazards and can even be lethal to humans in quantities as small as a thimbleful.

Why haven't I heard about Dihydrogen Monoxide before?

Good question. Historically, the dangers of DHMO, for the most part, have been considered minor and manageable. While the more significant dangers of Dihydrogen Monoxide are currently addressed by a number of agencies including FDA, FEMA and CDC, public awareness of the real and daily dangers of Dihydrogen Monoxide is lower than some think it should be.

What are some of the dangers associated with DHMO?

Each year, Dihydrogen Monoxide is a known causative component in many thousands of deaths and is a major contributor to millions upon millions of dollars in damage to property and the environment. Some of the known perils of Dihydrogen Monoxide are:

- Death due to accidental inhalation of DHMO, even in small quantities.
- Prolonged exposure to solid DHMO causes severe tissue damage.
- Excessive ingestion produces a number of unpleasant though not typically life-threatening side-effects.
- DHMO is a major component of acid rain.
- Gaseous DHMO can cause severe burns.
- Contributes to soil erosion.
- Leads to corrosion and oxidation of many metals.
- Contamination of electrical systems often causes short-circuits.
- Exposure decreases effectiveness of automobile brakes.
- Found in biopsies of pre-cancerous tumors and lesions.
- Given to vicious dogs involved in recent deadly attacks.
- Often associated with killer cyclones in the U.S. Midwest and elsewhere, and in hurricanes including deadly storms in Florida, New Orleans and other areas of the southeastern U.S.
- Thermal variations in DHMO are a suspected contributor to the El Nino weather effect.

For more information, including the uses of Dihydrogen Monoxide and its links to school violence, athletic performance, and other alarming facts, go to www.dhmo.org.