PEER Life Science Properties of Hazards: Invisible Intruders Notes Outline STUDENT

**Introduction**

* The most common solvent is \_\_\_\_\_\_\_\_\_\_, which is an inorganic solvent.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is dependent upon the potency of the toxicant and the amount of exposure to the toxic substance.
* Health hazards associated with organic solvent exposure include toxicity to the nervous system, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hamage, liver and kidney damage, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ impairment, \_\_\_\_\_\_\_\_\_\_\_\_\_, and dermatitis.

**Lesson**

* A \_\_\_\_\_\_\_\_\_\_\_\_\_ is a substance that is capable of dissolving another substance (called a \_\_\_\_\_\_\_\_\_\_) into a uniform mixture known as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Molecules are held together by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interactions called van der Waals forces.
* Some organic solvents are highly \_\_\_\_\_\_\_\_\_\_\_\_\_ and harmful to human health.
* Solvents have many properties including: dissolving power, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, evaporation rates, color, odor, \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and environmental impact.
* The three components of van der Waals forces are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces, \_\_\_\_\_\_\_\_\_\_ forces, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bonding forces.
* Dispersion forces are \_\_\_\_\_\_\_\_\_\_\_\_\_ dependent; the \_\_\_\_\_\_\_\_\_\_\_\_\_ the molecule the stronger the bond between molecules.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces are dependent upon molecular characteristics such as atomic compulsion, geometric shape, and geometric size.
* When the single electron orbiting a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ atom is pulled away by another atom in a molecule, a strong \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attraction is created by the exposed hydrogen proton.
* The properties of solvents vary because the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the nature of the component forces binding them together vary.