Career Development 2201

Read pages 134-136 and answer the following questions:

1. What is the Occupational Health and Safety Act?

2. Indicate the three (3) rights of every worker outlined by the Occupational Health and Safety Act:
   a. _____
   _____
   _____
   _____
   b. _____
   _____
   _____
   _____
   c. _____
   _____
   _____
   _____

3. Outline the four (4) responsibilities that you have as a worker in Canada.
   a. _____
   _____
   _____
   _____
   b. _____
   _____
   _____
   _____
   c. _____
   _____
   _____
   _____
   d. _____
   _____
   _____
   _____

4. Read over the symbols and their meanings.

WHMIS Symbols

The shapes of the symbols used on labels have been chosen to show the nature of the hazard they represent.

Class A	**COMPRESSED GAS** • It is a gas kept under pressure. • Heat may cause the container to explode. • A drop or impact may cause the container to explode. E.g. steel cylinders of acetylene, oxygen, hydrogen, helium, chlorine, nitrogen, neon, argon etc. and fire extinguishers. • Compressed gases can be hazardous simply because they are under high pressure, and the gas itself can also be hazardous (like chlorine gas). If the gas itself is hazardous, it will have other appropriate hazard symbols along with the compressed gas symbol. • Handle with care, do not drop. • Keep away from heat or potential sources of ignition. Store in a designated area. Large cylinders must be properly secured with a chain.	
Class B	**FLAMMABLE AND COMBUSTABLE MATERIALS** • The material is a potential fire hazard. It may burn at relatively low temperature. Sparks, flame or friction could ignite it. • May burst into flame spontaneously in air or release a flammable gas on contact with water. • Keep any of these materials away from heat sources and other combustible materials. Never smoke when working with or near the materials. Store in a cool, fire-proof area. **Division 1: Flammable Gases**: E.g. hydrogen, methane, propane. **Division 2: Flammable Liquids** Flashpoint less than 37°C. These liquids catch on fire easily and have highly flammable fumes. E.g. gasoline, ethanol, methanol, diethyl ether. **Division 3: Combustible Liquids:** Flashpoint > 37°C E.g. diesel fuel, kerosene. These are less easily ignited than flammable liquids. **Division 4: Flammable Solids**: E.g. magnesium, sodium, beryllium. **Division 5: Flammable Aerosols**: E.g. most aerosol cans contain flammable propellants, also butane, propane in aerosol containers. **Division 6: Flammable Reactive Materials:** Materials that could spontaneously ignite in air (celluloid, lithium aluminum hydride) or in water (sodium).	

Class C	**OXIDIZING MATERIALS** • The material is a fire or explosion risk near flammable or combustible material. May burn skin or eyes on contact. • An oxidizing material may or may not burn itself, but will release oxygen or another oxidizing substance, and thereby causes or helps a flammable or combustible material to burn. E.g. sulfuric acid, perchloric acid, hydrogen peroxide, sodium peroxide, benzyl peroxide, permanganates, dichromates, perchlorates, chlorine and bleach. • Keep the material away from combustible materials and store in designated areas. Keep the material away from sources of ignition. Never smoke when working near the material. • Wear proper protective equipment, including eye, face and hand protection and protective clothing.	
Class D	**POISONOUS AND INFECTIOUS MATERIAL** • The material is a potentially fatal poisonous substance. It may be fatal or cause permanent damage if it is inhaled, swallowed or absorbed through skin. May burn skin or eyes on contact. **Division 1: Materials Causing Immediate and Serious Toxic Effects.** • These materials are *immediately dangerous* to life and health. They can kill you fast! • Handle the material with extreme caution. Avoid contact with the skin or eyes, use proper protective clothing. • Avoid inhaling by working in well-ventilated areas. Wear respiratory equipment. • Wash and shower thoroughly after using. • Store in designated areas only. **Division 2: Materials Causing Other Toxic Effects** • The material is poisonous but not immediately dangerous to health. It may cause death or permanent damage as a result of repeated exposure over time. Usually the effects result from repeated exposure to the substance in the workplace over a long period of time. E.g. repeated exposure to benzene, asbestos. • Includes materials that can cause immediate irritation (to the eyes, skin, or lungs).	 

Class D Division 2 continued	• Includes materials that can cause ill health effects that are not immediate; such as allergies, asthma, cancer, organ damage, birth defects, sterility, or other serious illness or disease. • Avoid skin and eye contact by wearing all protective equipment necessary including eye, face and hand protection and protective clothing. • Avoid inhaling by working in well-ventilated areas. Use respiratory equipment. • Store in designated areas. **Division 3: Biohazardous Infectious material.** This includes organisms (like bacteria and viruses) and the toxins they may produce that are believed to cause disease. E.g. anthrax (in meat handling), salmonella, hepatitis B virus, AIDS virus, certain fungi and moulds, contaminated blood and pathogenic bacteria cultures, etc.	 
Class E	**CORROSIVE MATERIAL** • Caustic or acid materials that can eat through the skin or corrode metals like aluminum or steel. E.g. chromic acid, sulfuric acid, nitric acid, sodium hydroxide, hydrofluoric acid, some household cleaners, water treatment chemicals, photographic chemicals, lye. • This class also includes corrosive gases such as ammonia and the acids hydrogen fluoride, hydrogen chloride, hydrogen iodide and hydrogen bromide.	
Class F	**DANGEROUSLY REACTIVE MATERIAL** • Products which undergo dangerous reactions (such as polymerization, decomposition or condensation), when subjected to heat, pressure, shock or contact with water . Examples: • Plastic monomers such as butadiene undergo hazardous self-polymerization unless inhibitors are added, • Copper and mercury acydes, acetylides, ether, peroxides,benzyl peroxide, picric acid and isopropyl nitrates can be explosive under shock. • Calcium carbide reacts with water to release acetylene gas.	

5. Identify the following symbols, write down at least one hazard this symbol represents and give one example of a material or chemical that may have this symbol.

A B C D E F G H

	Identify Symbol	One Hazard	Example
A			
B			
C			
D			
E			
F			
G			
H			