Unit 7

Procedures and precautions

Lesson 1 (p.54)

**First, it is very important to know the difference between:**

**Procedures: steps/ methods we follow to do a certain activity**

e.g. If I want to travel, I need to get a passport, apply for the visa online, go for an interview, then if accepted, book a ticket and a hotel room.

**Precautions: these are things you do to avoid/ prevent danger, injury, or any problem.**

e.g. babies are given vaccines to prevent them from getting sick.

e.g. you wear a helmet when riding a motor bike, to avoid injuring your head if you have an accident.

**Second: Following are very important words to know for this unit.**

|  |  |  |
| --- | --- | --- |
| Verb | Noun | Adjective |
| Endanger | **Danger(s)** | **Dangerous** |
|  |  |  |
| Hazard | **Hazard(s)** | **Hazardous** |
|  |  |  |
| Risk | **Risk(s)** | **Risky** |
|  |  |  |
| ------- | **Toxin** | **Toxic** |
|  |  |  |
| Poison | **Poison(s)** | **Poisonous** |
|  |  |  |
| Save | **Safety** | **Safe** |
|  |  |  |
| ------- | **Health** | **Healthy** |

**Ex. 1: This exercise discusses certain situations and what types of danger might be present in these situations. When given a certain situation, you need to be able to mention a danger and then a precaution for that situation.**

* **Manufacturing process using dangerous chemicals.**

There is the danger of hazardous materials (chemicals), so you need to wear gloves and a mask to stay safe.

* **Casting and welding involving high temperatures.**

There is the danger of fire, so you need to wear protective clothing such as gloves and  **gloves.**

**Ex. 2. A: This is a very important exercise. You have 7 points in the box. Some are dangers and some are precautions.**

**1. Hazardous substances:** (danger) dangerous materials which can burn the skin or cause diseases. For example, acids and asbestos.

**Personal protective equipment (PPE):** (precaution) different types of clothing you wear to stay safe and avoid injury. (You have pictures on page 55) For example, helmets, gloves, ear protections, eye protections (goggles), lab coats……

**2. Harmful gases or fumes:** (danger) materials which cause the skin or body to react, but do not burn. These can cause: itching, rashes, red skin….. For example, chlorine.

**Fumes:** (danger) liquids which evaporate at room temperature without heating.

**Asphyxiation:** (danger) suffocation/ inability to breathe as levels of CO2 increase and levels of O2 decrease. This is a situation known as being in a **CONFINED SPACE.**

**3. Fire/ Explosion hazard:** (danger) materials that could burn or explode when in contact with sparks or flames. For example, petroleum products.

**4. Guards:** (precautions) shields fitted around machines with dangerous parts as blades, saws, and cutting parts.

**5. Guardrails:** (precautions) rails that prevent people from falling. You have then on stairs, roof tops, platforms….

**Emergency exits:** (precautions) exits which are used in dangerous situations as firs, to escape.

**6. Electrical installations:** (danger) being in contact with exposed electricity as high voltage cables.

**7. Noise hazard:** (danger) loud noise which can harm your ears, like working near very loud machines.

**Ex. 2. B: Go to text 7.1, read the four extracts and match them to the 7 points on page 54.**

**Hints in each extract (p.91)**

**a.**

silos/ confined spaces/ do an air test/ dust/ CO2 detector harmful gases and fumes plus asphyxiation (2)

**b.**

you need to shout/ ear protections noise hazard (7)

**c.**

irritant/ not corrosive/ wash it off your eyes hazardous material (1) or harmful (2)

**d.**

welding/ flammable liquids/ sparks fire/ explosion hazard (3)

**Ex. C: Match word and their meanings**

1. confined space areas without ventilation/ air circulation (High CO2 levels)

2. CO2 detector a device which measures carbon dioxide levels

3. exposure contact with danger

4. irritant causes skin to react (such as rash, red spots, itching)

5. toxic poisonous

6. corrosive burns the skin

7. flammable catches fire easily (burns easily)

8. naked flames or sparks sources of ignition

**Ex. C. D: (We mentioned the PPE in the above lines)**

**Ex. C. E.: You need to mention the danger and a suitable precaution.**

1. Working inside a **container** with limited air circulation

A container is a confined are, so there is the danger of asphyxiation (suffocation). As a precaution, test the air before entering and use a CO2 detector.

2. Cleaning metal using **acid** that can burn the skin and gives off **fumes**.

Acid is a hazardous substance, so you need to wear gloves, and the fumes are harmful so you need to wear a mask.

3. Using a **grinder** to **cut through** steel.

There is the danger of sparks due to cutting steel, so you need a mask and eye protections.

4. Applying paint that can cause **rashes**.

This is a harmful substance, so wear gloves.

**Other vocabulary items:**

Hazardous: dangerous

Asphyxiation: suffocation

Grinder: a machine used to change something into powder or very small pieces. For example, coffee grinder.





Silo: a place for storing grains as rice, wheat, corn…

Regs: (regulations) rules

Brief: short

Forklift truck:

