Unit 9: "Hazards at the workplace"

Lesson A: "Potential hazards"

✓ At the end of the lesson you will be able to:

- ✓ Describe potential hazards
- ✓ State warnings in a construction site
- ✓ Giving instructions for safe construction practices

Warm up - Before you read

1- What safety rules are there at your school or workplace?

2- What kind of hazards can you encounter in a construction site?

While you read

1- As a construction manager, you must follow basic rules to keep the construction site safe. Read the following safety instructions and match the headings in the box to each instruction:

enclosing of construction site - hazardous materials - training courses - scaffold and roof safety - inspecting the site - power tools safety - emergencies -

How to Make a Construction Site Safe

By an eHow Contributor

Construction sites are hazardous by nature. To make your construction site safe, you can minimize the hazards, educate employees in safe work practices and increase awareness of construction site safety.

Protective equipment you'll Need:

- ✓ Hard hats
- ✓ Safety goggles
- ✓ Work boots
- ✓ Gloves, ear protection, face masks, storage containers for hazardous

materials, Safety checklist training in safe operating procedures.

1- Identify and evaluate any workplace hazards by inspecting the site and write down anything that may be unsafe. Determine ways to correct any problems to make the construction site safe.

2- Train all personnel in work site safety and safe operating procedures, on-site or at a training course. Training should include proper lifting techniques to help reduce common back injuries sustained on the job.

3- Identify and mark any hazardous materials. Determine any risk involved to personnel. Label and store any materials considered hazardous in proper containers and keep them in a safe location.

4- Inspect equipment to be sure it is working properly. Be on alert for unusual noises and movements. Report any problems immediately and do not operate the machinery until repairs are made.

5- Use harnesses and other safety equipment when performing roof work or working on scaffolds.

6- Provide personal protective equipment to all employees, including hard hats, safety goggles and boots, work gloves, ear plugs (or another form of protection) and face masks. Inspect all equipment and replace any items that are in poor or unsafe condition.

7- Prepare for an emergency. Operators and site workers should know what to do in case of electrical, mechanical or power failures.

8- Protect the public by barricading the construction site during work hours. After hours, lock down all points of entry.

Adapted from http://www.ehow.com/how_2059957_make-construction-site-safe.html#ixzz2D6wcvW9M

Read in detail

1- Read the text again and match the sentences:

1- Inspect the construction site to	a-	repair them and prevent accidents
2-Deliver safety courses to	b-	prevent scaffold and roof accidents
3-Identify and mark hazardous materials to	c-	train the personnel specially in lifting techniques
4-Inspect power tools safety to	d-	evaluate any potential hazards
5-Use harnesses to	e-	protect the public
6-Provide and inspect protective	f-	prepare workers in case of electrical,

equipment to		mechanical or power failures
7-Train for emergencies to	g-	keep them in a safe location
8-Enclose the construction to	h-	replace it when they are in poor condition

Let's work with vocabulary: Nouns, adjectives and verbs

1- Look for the correct form of adjectives, nouns or verbs of each word in the text and complete the chart:

Noun	Adjective	Verb
protection		
	safe / _____	----------
hazard		----------

2- Label the pictures with the correct names of protective equipment:

hard hat - safety gloves - ear plugs - face mask - safety harness - work boots








1-_____ 2-_____ 3-_____ 5-_____ 6-_____ 7-_____

Work out the rule: Describing potential hazards and giving instructions

1- Look at the following warnings and complete the rule:

Take care! You **might** get an electric shock!



Be careful! You **could** injure your back!



Modal verbs as **might** and **could** are used to explain _____.

Could and **might** are followed by the verb in the _____ form.

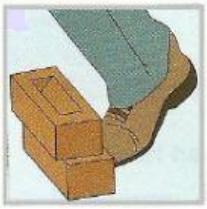
Applying the rule

1- Look at the following pictures of potential hazards, what might happen to these workers? Use ***could / might*** and the phrases from the box:

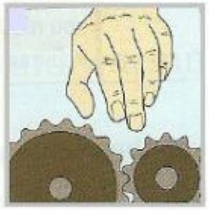
burn his hands - injure his head - fall from the scaffold - trip over the bricks - trap his hands in the gears - get an electric shock - fall into a gap - start a fire

a- 

b- 

c- 

d- 

e- 

f- 

g- 

i- 

a- Example: He might start a fire.

b- _____

c- _____

d- _____

e- _____

f- _____

g- _____

h- _____

2- **Have fun!** Spot the potential hazards (there are 16) in the following picture, and describe them:



Taken from http://www.napofilm.net/en/napo-for-teachers

3- Find out in the text *"How to make a construction site safe"* the following sentences and complete them:

_____ all personnel in work site safety.

_____ equipment to be sure it is working properly.

_____ personnel protective equipment to all

- These are all examples of the **imperative form**.
- We can use the **imperative form** to give an **order**, a **warning**, or an **instruction**.
- To form the **imperative**, use the *infinitive* form of the verb without "to."
- To make a negative imperative, put "do not" or "don't" in front of the verb, as in, "**Don't touch** that!"

4- What steps should you follow in your workplace in the event of fire, earthquake, accident or chemical spill? Put the following steps in order:

Fire:

____ move quickly away from fire to the agreed place
__1__ sound the alarm
____ dial the emergency number

Earthquake:

____ count personnel to ensure that everyone is in there
____ look for shelter until earthquake ends
____ reunite at the designated assembly point

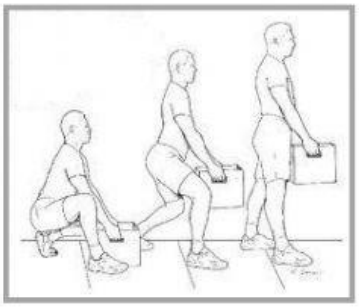
Accident:

_____ if injury is serious, call the ambulance
_____ seek immediate first aid treatment

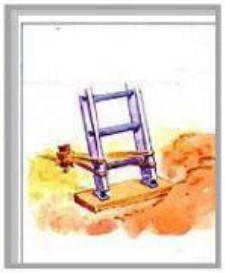
Chemical spill:

_____ evacuate the area
_____ inform the supervisor
_____ clean the area if it is safe
_____ call qualified personnel to clean the area

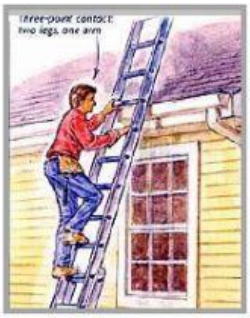
5- Use the pictures to order the instructions for safe lifting techniques and ladder safety:



_____ keep your back straight
__1__ test the weight
_____ hold the object close to your body
_____ stand up using your leg muscles
_____ bend your knees







_____ face the ladder and use both hands

_____ put the ladder in the right angle

_____ put the ladder in a firm position

Your turn!

- You are a safety officer and have to evaluate your school potential hazards (use the report worksheet provided below)
- Describe the potential hazards
- Identify possible solutions
- Prepare a handout with the instructions to follow in case of earthquake or fire.

SAFETY INSPECTION REPORT

Visit to: _____

Date of report: _____

	Potential hazards	*Possible control*
Classrooms		
Kitchen		
Administration offices		
Patio		
Workshops		
Toilets		
Library		
Laboratory		
Computer lab		

Lesson B: "Signage"

- ✓ At the end of the lesson you will be able to:
  - Identify and describe different types of signs
  - State safety rules for a construction site

Warm up - Before you read

1- What are signs for? What do they tell you?

2- Look at the following signs. Why do they have different colors and shapes? What do they represent?

a- 

b- 

c- 

d- 

e- 

f- 

While you read

1- Read the text about types of safety signs and match the examples to the signs:

Information on Safety Signs

By Je' Czaja, eHow Contributor

Definition

ANSI (American Standards Association) defines a safety sign as a visual device that alerts an observer to potential hazards. The sign must be clear and eye-catching to accomplish this. Standard features include a signal word such as "Danger" and a picture or message displayed on certain specific colors.

Signal Words

A signal word indicates the relative degree of danger. "Caution" indicates a potentially hazardous situation that could result in minor or moderate injury. Potentially hazardous situations that could result in severe injury are indicated by the word "Warning." "Danger" indicates an imminent situation that will result in serious injury or death if not avoided.

Types of safety signs

Warning signs

These signs warn you about a danger. They say things like this: " *Warning". "Danger". "Be careful". "There is danger or hazard here". "You might injure yourself".*

The signs are yellow and black in color and triangular in shape. Here are some examples:

- Warning. Poison. See picture _____
- Danger. Fire hazard here. See picture _____

Prohibition signs

These signs prohibit an action. They say: *"Do not do this". "You must not do this". "Never do this".*

The signs are red, white and black in color and round in shape. Here are some examples:

- You must not climb. See picture _____
- You must not use scaffolding incomplete. See picture _____

Mandatory action signs

These signs order you to do something. They say: "Do this". "You must do this". "Always do this".

These signs are blue and white in color, and round in shape. Here are some examples:

- Always use high visibility clothing or vest. See picture _____
- You must use the guard on this circular saw. See picture _____

Adapted from "Technical English 1 B" – Unit 10 – p.74 – David Bonamy and Christopher Jaques - Pearson Longman and http://www.ehow.com/facts_7241416_information-safety-signs.html#ixzz2DI9neZQH

Read in detail

1- Read again and complete the chart with information about safety signs:

	Warning signs	Prohibition signs	Mandatory signs
Color			
Shape			
Signal words			