

Lesson At A Glance

Length	1 hour
Learning Objectives	<p>Students will:</p> <ul style="list-style-type: none"> • identify potential hazards that are created by poor safety procedures, unsafe practices and human error • evaluate hazardous situations and determine how to control or eliminate the hazards
Teaching Strategies	<ul style="list-style-type: none"> • transparencies • catch phrases • cooperative groups • questioning • group presentations
Equipment/Instructional Aids	<ul style="list-style-type: none"> • overhead projector (prepare overhead transparencies) • flipchart/whiteboard • visual laminate cards • Student Handouts (photocopy for class)
Assessment Strategy	<ul style="list-style-type: none"> • brainstorming activity (scenarios) • presentation • case studies

Lesson Breakdown

10 min.	Introductory Activity - Unsafe Work Procedures
25 min.	Group Learning Activity - Hazard Recognition Scenarios
25 min.	Learning Activity - Hazard Control Case Studies

Purpose

This module is designed to help students understand their responsibility for controlling a potentially hazardous workplace situation and to review the WorkSafe attitude, "See it. Think It. Do It."

Learning Objectives

Students will be able to:

- identify potential hazards that are created by poor safety procedures, unsafe practices and human error
- evaluate hazardous situations and determine how to control or eliminate the hazards

Duration

1 hour

Instructional Materials

Visuals & Transparencies

(optional: produce visuals into overheads)

1. Six Hazard Recognition Visual Cards

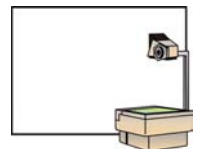
Student Handouts

(photocopy for students)

1. Hazard Recognition Activity Worksheet
2. Scenario Exercise (2 pages)
3. Scenario Worksheet

Equipment

1. Overhead Projector and screen
2. White board or flipchart and paper
3. Markers



Note to Teacher

This lesson reviews the principles of hazard recognition. This theme is deliberately repeated in each grade level to reinforce the principles of hazard recognition.

The visuals used in this lesson reflect some of the activities, tasks and jobs that grade 9 students are involved in. However, some of the jobs used in the visuals may not be available to students in your school.

Background Information

More and more students are working during their school years. Young workers bring many positive traits to the workplace: energy, enthusiasm and a desire for challenge and responsibility. However, they often try too hard which can lead to taking risks. They are often reluctant to ask workplace safety questions or make demands on their employers about safety. The safety training and instruction they need is not always provided. Their inexperience makes them less likely to recognize workplace hazards.

Providing thinking frames that include hazard recognition, problem solving skills to evaluate the hazard and decision-making skills to eliminate or control the hazard will help to make safety a transferable skill.

Introduction - 10 min.

Comment

Potential hazards exist in our life, including at work, home, school and at social events. We need to develop skills to be able to recognize, evaluate and control these hazards before injury occurs.

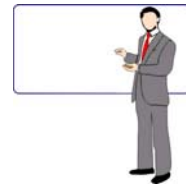
Introduction - continued

Ask

What potential hazards exist in our class setting or other classes in the school?

Random Responses

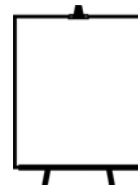
- tripping hazards
- broken pieces of equipment
- general clutter in work areas
- unknown chemical substances
- excessive noise
- spilled liquids
- use of flammables near heat
- improper use of tools
- heavy lifting
- contact with substances without proper protection



Comment

Hazards often result from:

- your own unsafe actions
- unsafe action of others
- unsafe movement
- unsafe amount of space
- unsafe objects or equipment
- incorrect use of objects or equipment
- unsafe procedures or processes



Introduction - continued



Ask

What hazards could be created by poor safety procedures, unsafe practices or human error?

Write responses on board or flipchart.

What potential hazards exist in our class setting or other classes in the school due to unsafe practices or poor safety procedures?

Random Responses

- tipping back on two legs of a chair
- removing labels from chemical substances
- not cleaning up spills
- unplugging electrical tools before changing bits
- inattention

Comment

There are three steps to controlling a hazard.

Write steps on the board)

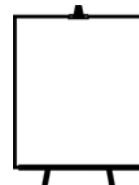
Recognition

Evaluation

Control

An easier way to remember this would be: See It, Think It, Do It.

“See it. Think it. Do it.” is the theme of this program and we are going to apply these elements in the next activity.



Hazard Recognition Learning Activity - 25 min.

Comment

In this group activity, students will practice the three steps to controlling a hazard.

Divide class into small groups of 4-6 students.

Distribute one Hazard Recognition Visual Card (#1-6) and Student Handout #1 to each group.

Ask students to brainstorm ideas and answers to the questions on Student Handout #1.

Hazard Recognition Group Activity		
Setting:	Keep in mind:	
Activity/Job:	<ul style="list-style-type: none"> Physical layout Equipment Tool condition Housekeeping Time of Day 	<ul style="list-style-type: none"> Lack of procedures Unnecessary risks Use of protective equipment Handling of hazardous materials or substances People movement (actions/alerts)
Specific Location:		
<input checked="" type="checkbox"/> See it (Recognition) What is unsafe?	<input type="checkbox"/> Think it (Evaluation) Why is it unsafe?	<input checked="" type="checkbox"/> Do it (Control) What must be done to make it safe?
Grade 9 Hazard Control Student Handout #1		

Student Handout #1



See it. Think it. Do it



Have each group present their findings to the class.
Optional: Use the hazard recognition overheads during each presentation.

Teacher's Answer Key - Hazard Recognition

Visual Set - Cook



See it

(how many unsafe acts or conditions can you find?)

- reaching for pot on stove top with bare hands
- aerosol can near hot stove area
- worker cleaning hood area above food
- worker wearing loose clothing
- worker working on top of counter



Think it

(ask yourself, "Why is this a hazardous situation?")

- can burn hands from touching hot pot
- worker can fall off counter
- explosion of aerosol can
- clothes can catch on fire resulting in burns to body
- cleaning solution can get into food (poison)



Do it

(In this scenario, suggest how an accident can be prevented from happening)

- use proper oven mitts
- move flammable aerosol can away from heat
- do not clean directly above food or while cooking
- wear tighter fitted clothing
- do not clean when stove is hot
- follow safe work procedures



Visual #1
O/H #1

Visual Set - Kitchen Worker



See it

(how many unsafe acts or conditions can you find?)

- worker is reading newspaper while cutting onion
- knives about to fall onto floor
- knife blades exposed
- worker's hair is in the way
- work area is messy
- spilled liquid on work area



Think it

(ask yourself, "Why is this a hazardous situation?")

- worker can get cut by knife
- another worker can get cut by exposed knife blades
- long hair can get caught while working
- hair could fall into food
- food could get mixed with other food debris or spilled liquid



Do it

(In this scenario, suggest how an accident can be prevented from happening)

- put knives away if not in use
- ensure spills are cleaned up
- pay attention to task
- tie back hair
- clean up work surface area
- ensure safe use of knives



Visual #2
O/H #2

Teacher's Answer Key - Hazard Recognition

Visual Set - Warehouse Worker on Forklift



- See it** (how many unsafe acts or conditions can you find?)
- worker operating forklift while another worker nearby
 - worker driving towards blind corner
 - forks are blocking worker's view at eye level
 - floor area not cleared of boxes
 - forklift may run into object



- Think it** (ask yourself, "Why is this a hazardous situation?")
- forklift may hit oncoming persons or objects
 - forks are too high for travelling (possible rollover)
 - sudden stopping of forklift in order to avoid hitting object could jar worker



- Do it** (In this scenario, suggest how an accident can be prevented from happening)
- pay attention while operating forklift
 - lower the forks from eye level
 - have another worker guide forklift around blind corner
 - move items away from forklift path
 - ensure safe work procedures are followed



Visual #3
O/H #3

Visual Set - Welder



- See it** (how many unsafe acts or conditions can you find?)
- worker not wearing safety eyewear or gloves
 - flammable tanks too close to torch
 - battery and aerosol can too close to heat
 - general clutter on work bench
 - paper towel on work bench



- Think it** (ask yourself, "Why is this a hazardous situation?")
- worker could get burns to eyes, hands
 - tank, battery or aerosol can could explode
 - paper towel on work bench could catch on fire
 - ladders leaning near work area could fall



- Do it** (In this scenario, suggest how an accident can be prevented from happening)
- wear safety goggles and gloves
 - move tanks away from torch area
 - move battery and flammable aerosol can away from work area
 - move ladders
 - clean up work bench area before starting to weld
 - ensure safe work procedures are followed



Visual #4
O/H #4

Teacher's Answer Key - Hazard Recognition

Visual Set - Woodworker On Saw



See it

(how many unsafe acts or conditions can you find?)

- worker not wearing safety glasses or gloves
- worker not wearing appropriate footwear
- electrical cords lying behind worker
- electrical cords on table saw area
- worker wearing loose jewellery
- using saw file to pick at saw while saw still plugged in



Think it

(ask yourself, "Why is this a hazardous situation?")

- worker's hands could get cut on saw blade
- debris could get into eyes
- foot could get crushed by falling objects
- worker could trip on electrical cords
- jewellery or clothing could get caught on saw



Do it

(In this scenario, suggest how an accident can be prevented from happening)

- wear safety glasses and gloves
- wear steel toed work boots
- lock out saw (disconnect)
- wear tighter fitting clothes and no jewellery
- clean up work area (remove cords and clutter)
- ensure safe work procedures are followed



Visual #5
O/H #5

Visual Set - Warehouse Worker



See it

(how many unsafe acts or conditions can you find?)

- stairs could move
- worker could drop box
- box could be too heavy
- worker about to put one foot on shelving



Think it

(ask yourself, "Why is this a hazardous situation?")

- strain on neck, shoulder and back
- could fall off stairs
- stairs could roll - worker could fall
- unstable position for worker to have one foot on shelving



Do it

(In this scenario, suggest how an accident can be prevented from happening)

- use proper stable ladder
- ensure ladder does not roll
- use proper lifting and carrying techniques
- ask for assistance, if required



Visual #6
O/H #6

Learning Activity - 25 min.

Comment

Accidents can happen at work any time and they can affect the rest of your life. You may not always get the safety training and instruction that you need on your job and your inexperience will make it less likely for you to recognize workplace hazards. We are going to read about an injured worker whose life has changed forever as a result of a workplace accident.



Distribute Student Handout #2. Ask students to read the injured worker profile.

Distribute Student Handout #3A and 3B. Have students complete the handouts.

Learning Activity - continued

Comment

More than 50 percent of work-related accidents happen during a young worker's first six months on the job and males under 25 are much more likely to get injured on the job than any other worker.

You have read how the injured worker's (John Higgins) life has changed forever as a result of a workplace accident.

Review Student Handout #3A and 3B with class. Ask students to share their responses to the questions on the handouts.

Teacher's Answer key on following page.

Conclusion

Conclude

Students will use the following 3 steps to determine how to control the hazard.



See it. - Identify the hazards. Identify class safety rule that was broken.



Think It. - Evaluate the hazard. What could happen?



Do It. - Provide solutions to control or eliminate the hazard.

Injured Worker Profile Worksheet - Answer Key

1. Describe five factors you think could have contributed to the injured worker's accident.
 - 1) **reluctant to ask questions**
 - 2) **was rushing to get behind the lift**
 - 3) **was unaware of safe work procedures**
 - 4) **inexperience with operating forklift**
 - 5) **did not notice pool of hydraulic fluid**

2. In a few sentences, explain how you could have made the injured worker's worksite a safer workplace.
 - * **regular maintenance of equipment**
 - * **ensure workers are properly trained**
 - * **ensure workers are supervised**
 - * **wear personal protective equipment as required**
 - * **provide assistance to workers if required**

3. List five questions you think John could have asked prior to his accident.
 - 1) **Have I received sufficient training to operate the forklift?**
 - 2) **What are some of the hazards I should be aware of in this job?**
 - 3) **Is there assistance (supervisor), if I need it?**
 - 4) **Is the forklift in working condition?**
 - 5) **Is the job I'm asked to do safe?**

4. Describe some of the employer's responsibilities at the worksite.
 - * **maintain and service equipment**
 - * **ensure workers are adequately trained and supervised**
 - * **ensure worksite hazards are either eliminated or controlled**
 - * **ensure safe work procedures are followed**

5. Write a couple of paragraphs on how the accident has changed John Higgin's life and your thoughts on the importance of workplace safety.

Random responses