

## Purpose

In this lesson, students learn about various types of safety equipment used to minimize exposure to hazards.

## British Columbia Planning 10 Curriculum Connections

Prescribed Learning Outcomes	Suggested Achievement Indicators
<i>It is expected that students will:</i>	<i>Students who have fully met the prescribed learning outcome are able to:</i>
<ul style="list-style-type: none"><li>Analyse practices associated with work-related risk reduction and injury prevention (e.g., safety training, hazard recognition, risk management, communication)</li></ul>	<ul style="list-style-type: none"><li>Describe and discuss standard guidelines and procedures for reducing risk and injury in the workplace (e.g., following established safety guidelines such as those set out by the Workers' Compensation Board, knowing own abilities and limits, using safety and personal protective equipment, knowing where to go to address a problem)</li><li>List and discuss primary causes of injury to young workers (e.g., inability to recognize and respond appropriately to hazards, lack of training)</li><li>Create a list of factors that contribute to making workers and workplaces physically and emotionally safe (e.g., safety training programs, team building, harassment policies)</li><li>Propose strategies to minimize workplace hazards</li></ul>

## Teaching Strategies

- Direct instruction
- Small-group discussion
- Independent research

## Suggested Time

- 1 hour

## Materials and Resources

- Student Handout 14: Personal Protective Equipment*
- Teacher Resource 5: Personal Protection Equipment Answer Key*
- Six Hazard Recognition Visuals* (from Lesson 4)

## **Assessment Strategies**

- *Assessment Tool 5: Personal Protective Equipment Assessment*

## **Preparation**

- Print copies of the student handouts and teacher resources and review them before teaching the lesson.

## LESSON 5: Personal Protective Equipment

## Instructional Plan

1. **Introduce** the subject by writing the letters “PPE” on the board and having students guess what they stand for. Help them by giving hints. Inform them that “personal protective equipment” is clothing and equipment used by workers to eliminate or minimize their exposure or contact with injurious physical, chemical, or biological agents.
2. **Review** the six hazard scenarios discussed in Lesson 4 (*Student Handout 10: Hazard Recognition Scenarios*). Have students list any personal protective equipment that could have been used by the workers shown in the scenarios to reduce the risk of injury. Suggested responses could include:
  - Non-skid, low-heeled footwear
  - Eye and ear protection
  - Covering of exposed skin, protective clothing
  - Secure ladder
  - Respirator
  - Gloves
  - Mask
  - Wrist rest
  - Anti-glare screen
  - Safety device (guard), guide on saw
3. **Point** out to students that employers are responsible for supplying the required safety gear and clothing. Young workers are responsible for supplying their own clothing to protect themselves from the natural elements, general purpose work gloves, safety foot wear, and safety head gear. Young workers are responsible for wearing and using PPEs properly. Additional information can be obtained from the WorkSafeBC web site (<http://www2.worksafebc.com/Publications/OHSRegulation/GuidelinePart8.asp>)
4. **Organize** the class into groups of four. Assign one pair of jobs to each student in each group. Ask students to brainstorm with their other group members all the items of personal protective equipment that might be used on each job:
  - A. Dishwasher, forestry worker
  - B. Construction worker
  - C. Nurse, warehouse worker
  - D. Gardener, lab technician
5. **Engage** students in discussion by having them share their answers with the class.
6. **Distribute** *Student Handout 14: Personal Protective Equipment*. Ask students to identify the personal protective equipment indicated in the picture and explain why it is being used. Refer to *Teacher Resource 5: Personal Protective Equipment Answer Key* to help you provide them with more information. Emphasize to students: **Accidents don’t have to happen. You have a choice.**



7. **Remind** students that personal protective equipment serves only to reduce the risk of injury—it does not eliminate the hazard. As they learned in Lesson 4 on hazard recognition, students can use the three steps of hazard control to reduce the chance of injury:

**See it.**



**Think it.**

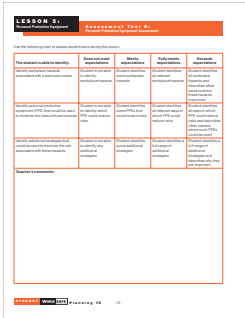


**Do it.**



8. **Ask** students to choose a career (preferably one in which they are interested) to use as the basis for further research. Have them conduct online or print research to list 5–10 possible workplace hazards associated with that career and the types of personal protective equipment that can be used to minimize the risks associated with those hazards. Also ask them what other strategies might be useful in minimizing the risk (e.g., communication strategies; cleaning and organization strategies). Ask them to summarize their findings in a one-page report.





### Assessment

- Have students submit the results of the research completed in step 7 for assessment. Use *Assessment Tool 5: Personal Protective Equipment* to record your assessment of each student's work in this lesson.

### Adaptation

- If pressed for time, leave out procedure 7 in the instructional plan. Assess student work on the basis of their group work and participation in discussions.

### Extension

- Have students present the results of their research in procedure step 7 to the rest of the class. You may also consider having them present their work to students in younger grades.



**LESSON 5:**  
Personal Protective Equipment

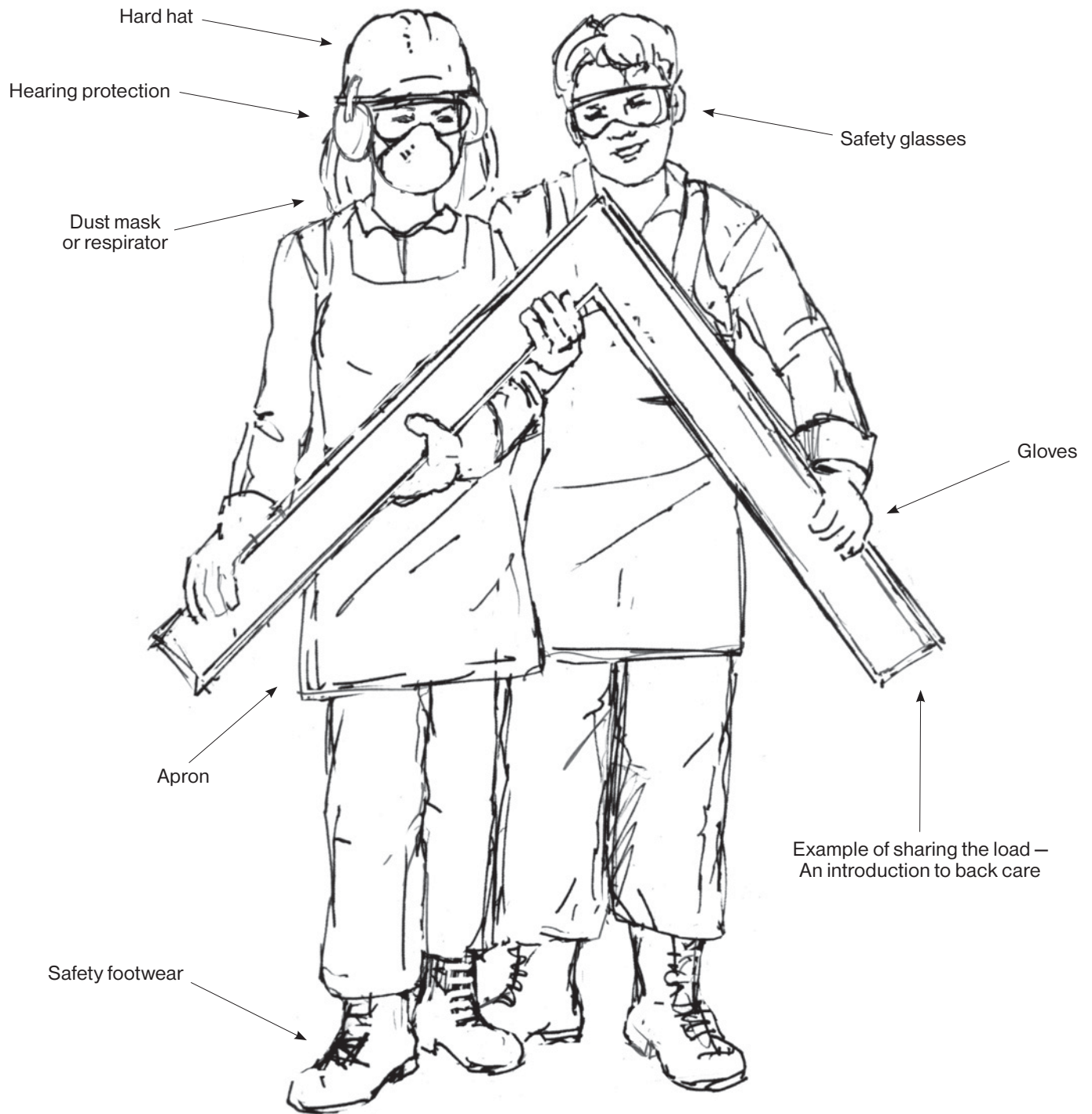
**Student Handout 14:**  
Personal Protective Equipment

Identify the personal protective equipment indicated in the picture and describe why it is used.



**LESSON 5:**  
Personal Protective Equipment

**Teacher Resource 5:**  
Personal Protective Equipment Answer Key



**LESSON 5:**  
Personal Protective Equipment

**Assessment Tool 5:**  
Personal Protective Equipment Assessment

Use the following chart to assess student work during this lesson.

<b>The student is able to identify:</b>	<b>Does not meet expectations</b>	<b>Meets expectations</b>	<b>Fully meets expectations</b>	<b>Exceeds expectations</b>
Identify workplace hazards associated with a particular career	Student is not able to identify workplace hazards	Student identifies some workplace hazards	Student identifies all relevant workplace hazards	Student identifies all workplace hazards and describes other careers where these hazards may occur
Identify personal protective equipment (PPE) that could be used to minimize the risks of those hazards	Student is not able to identify which PPE could reduce risks	Student identifies some PPEs that could reduce risks	Student identifies all relevant ways in which PPE could reduce risks	Student identifies all ways in which PPE could reduce risks and describes other careers where such PPEs could be used
Identify additional strategies that could be used to minimize the risk associated with those hazards	Student is not able to identify any additional strategies	Student identifies some additional strategies	Student identifies a full range of additional strategies	Student identifies a full range of additional strategies and describes why they are important
<b>Teacher's comments:</b>				