

**Task: Safety in Manufacturing  
Technological Systems, 8<sup>th</sup> Grade**

- A. The students will participate in a hands-on Safety Presentation on Personal Protection Equipment (PPE)
- B. Take a Safety Examination and pass with 100% accuracy.
- C. Then the students will summarize OSHA's Bloodborne Pathogens Fact Sheet and state at least 5 facts from the reading.

**Common Core State Standards**

*CTE Standard 2.0*

Safely use tools, materials, equipment and other technology resources.

*Learning Expectations*

2.1 Pass with 100% accuracy a written examination relating specifically to safety issues.

2.3 Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.

*Literacy in Science and Technical Subjects 6-12*

*1. Cite Specific textual evidence to support analysis of science and technical texts.*

**Essential Understandings**

*The students will understand:*

- a. What PPE means and the different equipment used for protection*
- b. Safety Glasses*
  - *Meet the ANSI Z87.1 protection requirement*
    - *Polycarbonate lenses*
    - *Clear lenses*
- c. Dust Mask*
  - *Protection from dust and aerosol solids*
  - *Nose bridge*
  - *Dual strap*
- d. Ear Plugs*
  - *Most industrial worksites contain constant loud noises*
  - *Form fitting and corded plugs are preferred*
- e. Steel-toe shoes/boots*

- *Required at most industrial work sites.*
- *Protection for the toes and the top front of the foot*

*The students will read OSHA's Bloodborne Pathogens Fact sheet and then write a summary of the potential risks of coming in contact with blood and the methods of the prevention of the possible spreading of blood borne diseases. They will include 5 facts from the reading.*

### **Possible Solutions/Solution Paths**

*Active participation and attentiveness are key in achieving the 100% on the Safety Test.*

### **Additional Teacher Information**

*I will have examples of proper safety glasses, proper dust mask, proper ear-plugs, and proper shoes/boots. Students will be able to inspect these items as visual references.*

*Link to OSHA's Bloodborne Pathogens Fact Sheet:*

[https://www.osha.gov/OshDoc/data\\_BloodborneFacts/bbfact01.pdf](https://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact01.pdf)

*Sample T/F Exam Questions:*

- *PPE stands for "Personal Protection Equipment". - T*
- *If you work station requires safety glasses, they should have a rating of ANSI Z87.1 - T*
- *Safety Glasses DO NOT have to be equipped with clear lenses. – F*