



Republic of the Philippines  
**Department of Education**  
National Capital Region  
Schools Division Office – Muntinlupa City

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**SPECIAL PROGRAM FOR TECHNICAL VOCATIONAL EDUCATION (SPTVE)**  
**SHIELDED METAL ARC WELDING 10**  
**QUARTER 3- WEEK 5**

- I. Topic: Use Personal Protective Equipment
- II. Objectives:
  - 1. identify Personal Protective Equipment (PPE) as per job requirements;
  - 2. explain the function/uses of Personal Protective Equipment; and
  - 3. observe proper wearing of PPE in accordance with workplace safety policies.
- III. Brief Introduction of the Lesson

**Protective cover all** - are made from light asbestos coated with aluminum to protect the whole body during welding.

**Leggings** - are made from leather to protect the legs and feet.

**Safety Shoes**- have heat resistant soles and impact resistant toes. Some safety shoes have metal in soles, while others protect workers from different types of electrical hazards.

**Welding spats** - are made of chrome leather and protects our feet from spatter.

**Safety goggles** - are used when grinding and chipping off slag.

**Welding shield/helmet** - is used to protect our face and eyes from the arc rays and heat, and the spatter from molten metal. The arc is viewed through a filter which reduces the intensity of radiation but allows a safe amount of light to pass for viewing the weld pool and end of the electrode.

**Earplugs**- is a pair of device that is meant to be inserted in the ear canal to protect the wearer's ears from loud noise or intrusion.

**Respirators**- is an apparatus worn over the mouth and nose or the entire face to prevent the inhalation of dust, smoke, or other noxious substances.

**Leather jacket** is made of chrome leather and prevents the entry of sparks between our clothes and body.

**Welding gloves/gauntlet** - is made of chrome leather and protects our hands from heat, spatter, and radiations.







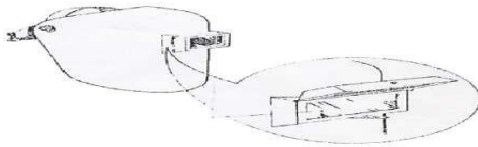


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IV. Activities:

Activity 1.

**Direction:** Match the name of the tools and equipment with the correct pictures.  
Write the letter of your answer on the blank space provide before the number.

A		B
	_____ 1. Full Face Respirator	 E
	_____ 2. Welding helmet	 C
	_____ 3. Safety shoes	 B.
	_____ 4. Welding gloves	 D
	_____ 5. Protective cover all	 A

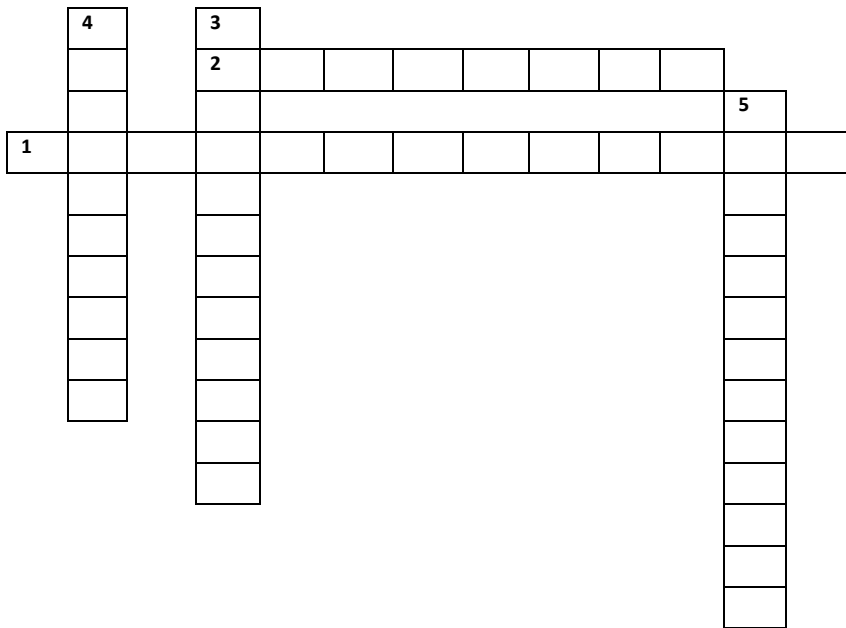




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Activity 2 “CROSSWORD PUZZLE”

**Direction:** Complete the crossword by filling in a word that fits each clue.



**Across:**

1. Made of chrome leather and protects our hands from heat, spatter, and radiations.
2. It is a pair of devices that is meant to be inserted in the ear canal to protect the wearer's ears from loud noise or intrusion.

**Down:**

3. It is made of chrome leather and protects our feet from spatter.
4. Best for general protection because it can be worn under an arc welding helmet.
5. Is used to protect our face and eyes from the arc rays and heat, and the spatter from molten metal. The arc is viewed through a filter which reduces the intensity of radiation but allows a safe amount of light to pass for viewing the weld pool and end of the electrode.

Activity 3

**Direction:** Write **TRUE** if the statement is correct and **FALSE** if the statement is incorrect.

- \_\_\_\_\_ 1. Safety shoes protect us from different types of electrical hazards.
- \_\_\_\_\_ 2. Welding will be easy if you use tools and equipment.
- \_\_\_\_\_ 3. To protect us from arc rays and heat use welding gloves.
- \_\_\_\_\_ 4. Welding gloves is made of metal.





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\_\_\_\_\_ 5. Use ear plug to prevent the inhalation of dust, smoke or other substances.

V. Assessment:

**Direction:** Encircle the letter of the correct answer.

1. It is an apparatus worn over the mouth and nose or the entire face to prevent the inhalation of dust, smoke, or other noxious substances.
  - A. Ear plugs
  - B. Face shield
  - C. Safety Goggles
  - D. Respirator
2. Which Personal protective equipment are used to protect our eyes and face from the arc rays and heat, spatter from the molten metal?
  - A. Face shield
  - B. Safety Goggles
  - C. Welding gloves
  - D. Welding helmet
3. A pair of devices that is meant to be inserted in the ear canal to protect the wearer's ears from loud noise or intrusion.
  - A. Ear plugs
  - B. Chipping hammer
  - C. Respirator
  - D. Safety shoes
4. It is made of chrome leather and protects our hands from heat, spatter, and radiations.
  - A. Leggings
  - B. Protective cover all
  - C. Welding gloves
  - D. Welding spats
5. Which driving tool is used for straightening, bending and deforming metals?
  - A. Face shield
  - B. Leggings
  - C. Protective cover all
  - D. Welding shoes

V. Reflection:

**Direction:** Answer the following questions.

1. Why is it important to wear PPE?
2. What hazards do PPE protect from?

References:

- Public Technical Vocational High Schools, Competency-Based Learning material, Second year, SMAW NCI, (Department of Education 2008)
- [http://img.divtrade.com/cding/340379/1362621/0/1133753301/Welding\\_gloves.jpg](http://img.divtrade.com/cding/340379/1362621/0/1133753301/Welding_gloves.jpg)
- [http://1.bp.blogspot.com/\\_1p20WdeXKKs/TVFOqgHuFAI/AAAAAAAAAKj8/DrB1yHyAqVI/s1600/Respirator1.jpg](http://1.bp.blogspot.com/_1p20WdeXKKs/TVFOqgHuFAI/AAAAAAAAAKj8/DrB1yHyAqVI/s1600/Respirator1.jpg)

Writer: Albert B. Sierra

Validator: Gerry V. Domalanta

