

Lesson 1.6: Test Answer Key - Safety

PPE Questions:

1. When should safety glasses be worn in the shop?
 - a. Only when the teacher is looking
 - b. Only when I am working in the shop
 - c. If other people are working in the shop
 - d. If equipment is running
 - e. When grinding or welding
 - f. **Always**
2. What shade filter lens should be worn while GMAW welding?
 - a. 3
 - b. 5
 - c. 9
 - d. **10**
 - e. 15
 - f. 20
3. **T/F** If a face shield is being worn, safety glasses are optional
4. What is considered acceptable clothing material while welding?
 - a. **100% cotton or wool**
 - b. Nylon
 - c. Polyester
 - d. Cotton blends
 - e. Silk
 - f. Spandex
5. Which of the following is NOT considered proper welding attire
 - a. Denim jeans
 - b. Leather sleeves
 - c. Flame retardant shirt
 - d. **Athletic jersey**
 - e. Leather apron
 - f. Wool pants
6. **T/F** Cuffed pants commonly catch fire while welding
7. **T/F** Torn or frayed clothing commonly catch fire while welding
8. What is considered appropriate footwear while welding?
 - a. Sandals
 - b. **Steel toe boots**
 - c. Tennis shoes
 - d. Penny loafers
 - e. Slippers
 - f. Snow boots
9. **T/F** Exposure to arc rays will burn any exposed skin like a sun burn

Arc Safety Questions:

1. When would a welder ask an onlooker to “cover”?
 - a. While welding
 - b. While grinding
 - c. Before striking an arc
 - d. Before grinding
 - e. After striking an arc
 - f. After tacking the metal
2. What can be used to prevent other people in the shop from getting arc flash?
 - a. Get close enough to block the arc from others while welding
 - b. Tell bystanders to move out of the way of the arc
 - c. Only weld a little bit at a time
 - d. Barricade the arc with sheet metal
 - e. Put up a protective welding screen around the weld area
 - f. Only the welder is at risk of getting arc flash
3. T/F A welding arc is only dangerous to the person welding
4. T/F Exposure to welding arc can burn the eyes
5. T/F Arc rays contain some of the same harmful rays that the sun has.

Ventilation/Chemical and Fume Hazard Questions:

1. What document must be provided for each chemical in a shop?
 - a. Information Sheet
 - b. Material Safety Data Sheet
 - c. Material Safety Directions Sheet
 - d. Master Safety Data Section
 - e. Master Sectional Data Safety
 - f. Material Selection Data Safety
2. Which of the following are considered safe to weld on?
 - a. Painted metal
 - b. Gas tanks
 - c. Plated metal
 - d. Oily metal
 - e. None of the above
 - f. All of the above
3. What types of hazardous fumes are welders commonly exposed to?
 - a. Zinc
 - b. Hexavalent chromium
 - c. Fluorides
 - d. Cadmium
 - e. None of the above
 - f. All of the above
4. T/F An oscillating fan provides adequate ventilation for welders.

Fire Hazard/Fire Safety Questions:

- How far can welding sparks potentially fly?
 - 15 feet
 - 20 feet
 - 25 feet
 - 30 feet
 - 35 feet**
 - 40 feet
- What precautions can be taken to prevent fires?
 - Remove chemicals from the welding area
 - Empty a gas tank before welding on it
 - Weld in an area only when it's free from grease and oil
 - Keep welding area clean
 - a, b, and c
 - a, c, and d**
- T/F** Fire extinguishers and fire blankets are optional in a welding shop.
- If asked to weld on containers which have held flammable or unknown chemicals, what should a welder do?
 - Refuse to weld since the fumes of flammable chemicals may be present**
 - Rinse it out thoroughly before welding
 - Steam clean it before welding
 - Refuse to weld because containers can be difficult to work with
 - Just weld it and get it done with
 - Ask someone else to weld it
- T/F** The fumes of flammable chemicals are combustible.
- T/F** It is good practice to hold your hand over a piece of metal to feel for heat radiation before picking it up.

Electrical Hazards/Electrical Safety Questions:

- Under what conditions listed below would you refuse to arc weld?
 - Overhead welding
 - Welding in the open air
 - Welding while standing on a platform enclosed by safety chains
 - Welding while standing in water**
 - Vertical up welding
 - All of the above
- If exposed wires are found on welding equipment, what needs to be done?
 - Cover the wires with a rag
 - Cover the wires with electrical tape
 - Tell your teacher immediately**
 - Try to fix it yourself
 - Exposed wires are no big deal, weld anyway
 - Get a bucket of water in case it catches fire
- T/F** It is important to inspect welding equipment before turning the welder on
- T/F** It is okay to weld while wearing wet gloves or clothing
- What should be done if a welder (machine) gets wet?
 - Turn the welder on and let its fan dry it out
 - Let the welder air dry and do not turn it on until completely dry**
 - Welding will heat up the machine and evaporate the water
 - Use a torch at the vents to heat up the insides and dry it out
 - As long as the electrode holder is dry, it's okay to weld
 - Throw the welder away

Compressed Gasses:

1. Which of the following is considered unsafe practice when dealing with compressed gas cylinders?
 - a. Striking an arc on a cylinder
 - b. Using cylinders as rollers
 - c. Using grease or oil on the valve threads
 - d. Using a pry bar to open a stuck valve handle
 - e. Storing cylinders by the pile of oil rags
 - f. All of the above
2. After taking the cap off of a cylinder, what is the next step?
 - a. Put the regulator on
 - b. Open the valve slightly, then close to blow dirt from the valve
 - c. Open the valve all the way to blow dirt from the valve
 - d. Open the valve to identify the gas
 - e. Open the valve to make sure the cylinder is full
 - f. Open the valve to make sure it is working
3. T/F Smear the valve threads of a cylinder with grease before attaching the regulator.
4. How should a cylinder be transported through a shop?
 - a. Roll the cylinder on its side
 - b. Use the bottom edge of the cylinder to roll it
 - c. Pick up the cylinder and carry it by hand
 - d. Drag the cylinder
 - e. Use a hand cart with the cylinder chained in
 - f. Use a crane to move the cylinder
5. Which of the following is considered unsafe practice for storing cylinders?
 - a. Mark empty cylinders as empty (MT) and store away from the full cylinders
 - b. Store empty cylinders with valves open to further show they are empty
 - c. Store cylinders in well ventilated areas
 - d. Store cylinders away from flammable materials
 - e. Store cylinders upright
 - f. Secure stored cylinders with a chain
6. T/F Acetylene cylinders need to be stored separate from oxygen cylinders