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STUDY GUIDE BASIC SHOP SAFETY

NAME: _____
CLASS OR PERIOD: _____
DATE OF INSTRUCTION: _____

1. Get your instructors' permission before you use any of the equipment in the shop. You must have permission to use the tools and equipment.
2. Don't use any of the equipment until you've been shown how to use it correctly and safely. Be sure you understand the instructions before you use any of the equipment.
3. Use the equipment *only* when the instructor is in the shop.
4. Don't wear clothing with open pockets. Don't wear pants with cuffs or rolled pant legs. Avoid wearing anything that may have "traps" for live embers and sparks.
5. Avoid wearing loose clothes. Keep shirts tucked in and sleeves rolled down and buttoned. Loose clothing is dangerous; it can become caught or tangled in a moving machine or tool, or it could catch on sharp corners or a piece of equipment. Wear clothes that fit properly.
6. Wear protective shoes. Wear hard, high top shoes or boots. Wear shoes or boots with non-slip, insulating soles and heels.
7. Wear a cap. If your hair is long, tuck it neatly under the cap to keep it out of the way of flames, sparks or embers.
8. Always use the recommended eye protection. Use the safety goggles, face shield welding goggles and welding hoods whenever they are required, even if you are only watching.
9. Wear approved protective clothing whenever it is required. Wear treated leather gloves with gauntlets, an approved, treated apron or protective jacket, and a cap whenever your personal safety requires it.
10. Don't wear jewelry in the shop. Remove rings, watches, bracelets or necklaces.
11. Whenever you work with electricity, be sure your hands are dry and be sure you're standing on a dry floor.
12. Keep tools, equipment, your clothing and your hands free of oil or grease. Oil, grease and welding *don't mix*. The combination of oil or grease with the welding gases or with sparks from arc welding can cause an explosion or a fire, or both.
13. Don't use tools or equipment that are in any way damaged, defective or broken. Tell the instructor about any tools or equipment that are not in safe, working condition.
14. Use the right tool for the work. Use the tools *only* for what they were designed to do, and use the right *size* tool.
15. Carry pointed or sharp tools with the point or edge held down toward the floor. This will help avoid injuries if you bump into something or if someone bumps into you.
16. Always use tongs or vise grips to handle small work you're welding. *Severe* burns could result from holding it with your hands, even if you're wearing gloves. (Acetylene combined with oxygen produces one of the *hottest known flames!*)
17. When they're not being used, return tools to their proper storage area. Don't leave tools lying around the shop.
18. Don't let anyone distract you while you work. You have to think about what you're doing. And, don't distract others while they're operating the equipment or welding.
19. Some of the equipment may have a marked safety zone. Whether there is a specific safety zone or not, stay clear when someone is using power tools or welding equipment. Also, make sure others stay clear when you're using any of the equipment.

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20. Work only in well ventilated areas. Oxygen and acetylene are flammable and, under some conditions, explosive. Also, both oxyacetylene welding and arc welding produce toxic fumes when coatings, fluxes and base metals are heated. Work areas must be well ventilated.
21. Gas flames and electric arcs produce harmful ultraviolet and infrared radiation. You must wear welding goggles or a welding hood with the *correct filter lenses* for the work you're doing.
22. Arc welding must be done in a shielded area to protect others in the shop from the intense light and radiation. (If the work can't be shielded properly, make sure others stay out of the area.)
23. Keep flammable or combustible materials out of the shop. Avoid any possible risk of fire or explosion.
24. Clean up any spills, dirt or scraps. Don't leave anything around that someone could slip on or trip over.
25. Keep used rags in an approved, covered metal container. Damp, dirty or oily rags can begin to burn by spontaneous combustion. The heat produced by oxidation is enough to start a fire.
26. Know where the fire extinguishers are located and read the instructions on the extinguishers. Know what types of fires the extinguishers are for and know how to use them in an emergency.
27. Keep aisles and work surfaces clean and clear of any tools or materials that aren't in use. Keep drawers and cabinet doors closed.
28. Avoid the risk of a serious back injury, muscle or tendon injuries. Lift properly. Lift with your *legs*, not with your back. If you have to lift something large or heavy, get help. Don't try to do it alone; ask someone to help you.
29. Handle oxygen and acetylene cylinders *very* carefully. Never bang them around or drop them; keep cylinders upright and secured with a strap or a chain, and be sure there's a valve-protection cap on cylinders that aren't in use.
30. Don't fool around in the shop. There are no exceptions to this; don't *ever* play around in the shop area!
31. Report all accidents, near accidents or injuries to the instructor immediately.
32. These are *not* all the safety regulations and procedures that apply to working in the shop. Each operation has its' own, specific safety precautions. Be sure you understand *all* the necessary safety procedures for the work you are doing. Be safe, not sorry.