

## 20 HAND AND PORTABLE POWER TOOLS

---

### QUIZ 1 (20 POINTS TOTAL)

#### *True/False (6 points)*

1. A claw hammer should be used to strike a steel chisel.
  - a. true
  - b. false
2. If an employee brings his own tools to work they do not need to be inspected by the company.
  - a. true
  - b. false
3. When metal tools break during normal use the causes are usually related to the tool's quality.
  - a. true
  - b. false
4. It is possible to redress tools with chips or mushroomed striking surfaces.
  - a. true
  - b. false
5. When using a hacksaw, apply pressure on the forward stroke only.
  - a. true
  - b. false
6. A wood chisel can double as a pry or wedge.
  - a. true
  - b. false

#### *Multiple Choice (6 points)*

7. Companies should consider use of less noisy models of tools or other noise controls when noise levels exceed \_\_\_\_\_.
  - a. 50 dBA
  - b. 60 dBA
  - c. 75 dBA
  - d. 90 dBA
8. If it is not practical for a company to have a central tool control area, who should be responsible for inspecting tools?
  - a. employees
  - b. supervisor
  - c. management
  - d. safety and health professional

9. Which of the following woods is preferred for handles of hand tools used for striking?
- a. hickory
  - b. ash
  - c. maple
  - d. all of the above
  - e. a and b only
10. The \_\_\_\_\_ is probably the most commonly used and abused tool.
- a. screwdriver
  - b. hammer
  - c. chisel
  - d. hatchet
11. \_\_\_\_\_ of the proper size are designed for striking chisels and punches.
- a. Sledge hammers
  - b. Ball peen hammers
  - c. Riveting and setting hammers
  - d. Common hammers
12. Most disabling hand tool injuries are caused by \_\_\_\_\_.
- a. chisels
  - b. hatchets
  - c. knives
  - d. saws

**Short Answer (7 points)**

13. To determine if tools should be changed, what factors should you consider?
14. Demonstrate an understanding of the personal risks involving hand and portable power tools by listing some of the many accidents and disabilities that can occur when using damaged tools.
15. Name at least four questions that should be on a hand tool analysis checklist.



## QUIZ 2 (20 POINTS TOTAL)

### *True/False (6 points)*

1. The proper axe grip for a right-handed person is to have the left hand about 3 inches from the end of the handle and the right hand about three-fourths of the way up.
  - a. true
  - b. false
2. When an axe blade cannot be guarded, workers should carry the axe over their shoulder.
  - a. true
  - b. false
3. To reduce the chance of injury while using a shovel, use the arch of the foot to press the shovel into clay or other stiff material.
  - a. true
  - b. false
4. When workers use a wrench, it should be pushed away from the body for better control and less likelihood of slippage.
  - a. true
  - b. false
5. The torque exerted on a nut or bolt is directly proportional to the length of the wrench handle and the pulling force exerted on it.
  - a. true
  - b. false
6. Pullers or knockers are the only quick and safe way to pull a gear, wheel, pulley, or bearing from a shaft.
  - a. true
  - b. false

### *Multiple Choice (6 points)*

7. Power tools should be cleaned with a recommended nonflammable and nontoxic solvent; to dry, use \_\_\_\_\_.
  - a. compressed air
  - b. air drying
  - c. a soft cloth
  - d. both a and b
8. Reduce the risk of electric shock from power tools by \_\_\_\_\_.
  - a. using battery powered tools
  - b. using tools with low voltages in wet locations
  - c. using double insulated tools
  - d. all of the above

9. \_\_\_\_ is a sudden reaction to a pinched blade that causes an uncontrolled portable tool to lift up and out of the workpiece toward the operator.
- a. Backfire
  - b. Kickback
  - c. Reciprocating
  - d. Miter
10. \_\_\_\_ saws are specially designed for crosscutting and beveling wood, nonferrous metals, and plastic.
- a. Miter
  - b. Reciprocating
  - c. Jig
  - d. Saber
11. \_\_\_\_ tools are widely used in logging, construction, and other heavy industries.
- a. Gasoline-powered
  - b. Hydraulic-powered
  - c. Powder-actuated
  - d. None of the above
12. \_\_\_\_ tools are used to make forced-entry fastenings in various construction materials.
- a. Gasoline-powered
  - b. Hydraulic-powered
  - c. Powder-actuated
  - d. None of the above

**Short Answer (7 points)**

13. What factors determine the selection of a chisel? When should you discard a chisel?
14. What precautions should be observed when using an axe? What may happen if you try cutting wood with a dull axe?
15. Why should pliers not be used in place of a wrench?

16. What are the dangers involved with the use of soldering irons?

17. What precautions should be made when using portable power tools?

18. What are the benefits of a GFCI?

19. What hazards are specific to chainsaws?

**Short Essay (1 point)**

20. Electric drills can cause injuries in several ways, and your boss is concerned that the employees of your facility may have picked up some bad work habits. What precautions should be followed when using portable electric drills? Demonstrate to your boss that you can use an electric drill safely.