

Assessment

Circle the letter that corresponds to the correct answer.

1. Which tool is designed to scribe arcs and circles on metal?
 - a. Center punch
 - b. Dividers
 - c. Scratch awl
 - d. Soapstone
2. Which tool is designed to mark the center of a hole for starting a twist drill?
 - a. Soapstone
 - b. Scratch awl
 - c. Dividers
 - d. Center punch
3. When cutting with a hacksaw, how many teeth should be on the metal at all times?
 - a. Two
 - b. Three
 - c. Four
 - d. Five
4. Which type of cold chisel is best for shearing metal?
 - a. Cape
 - b. Diamond
 - c. Flat
 - d. Round nose
5. For best results when cutting with snips, the operator should:
 - a. close the blades completely on a cut.
 - b. open the blades wide to improve leverage.
 - c. keep the metal at the front part of the blades.
 - d. prevent the metal from lifting up during the cut.

6. Which tool would probably be best for cutting structural steel?
 - a. Cold chisel
 - b. File
 - c. Power shears
 - d. Snips
7. Which cutting design of a file has individual teeth that are raised and sharp?
 - a. Curve
 - b. Double
 - c. Rasp
 - d. Single
8. Which tools or materials are used to round cold metal?
 - a. Ball-peen hammer and pipe
 - b. Ball-peen hammer and angle iron
 - c. Vise and adjustable wrench
 - d. Vise and angle iron
9. When fastening metal with a 3/16-in. diameter rivet, how far should the rivet extend above the metal?
 - a. 1/16 in.
 - b. 1/8 in.
 - c. 3/16 in.
 - d. 1/4 in.
10. A cutting tool designed to cut external threads on round metal is called a:
 - a. tap drill.
 - b. tap.
 - c. die stock.
 - d. die.
11. Which type of thread system is typically used for fastening metal that will be under high-stress situations?
 - a. NC
 - b. NF
 - c. ISO coarse
 - d. NPT

Complete the following short-answer questions.

12. Define the following terms as related to a saw blade.

a. Pitch -

b. Set -

13. How should a hacksaw blade be installed?

14. What is the correct way to hold a file?

15. What part of a file does the handle go on? Why is it important to use a handle when filing?

16. Why is it important to not overtighten a screw?

17. What is the function of a rivet set?

18. What is a taper tap used for?

19. What is the correct tap drill size for a 3/4 - 16NF tap? Show your work.

20. List two reasons that burrs should be removed from metalworking projects.

a.

b.