

The Pennsylvania State University
Workforce Education and Development

Lesson Plan Template

Name of Instructor: Larry Brown
Program Title: Welding Technology/ Welder
Course Title: Welding
Unit Title: Welding Assignment #1
Lesson Title: Oxy- Fuel Torch and Cutting Procedures.
Lesson Performance Objective: Given the information students will be able to research and answer the following questions about Oxy-Fuel cutting procedures.
Time (length of lesson): 20-30 mins.
Equipment and Materials needed: Computer or textbook for information.
Technical Standard(s): CIP Manual Oxy-Fuel Cutting 901, 902, 903.
Academic Standard(s):
Introduction By now students will have experienced basic Oxy-Fuel cutting torch operations. They will be able to research and answer the questions on the worksheet.

Body: Students will gain information of proper step by step operation of Oxy-Fuel Cutting Procedures.

Summary: Given the information students will be able to return to the shop and perform cutting tasks with a higher proficiency level.

Student Assessment:

Formative Assessment(s)

Summative Assessment:

Universal Design for Learning (UDL)

Multiple Means of Engagement:

Multiple Means of Representation:

Multiple Means of Expression:

Welding Assignment #1

Oxy-Fuel Torch and Cutting Procedures

1. A cut made by a torch is called a _____.
2. What is the correct name for the holes in a cutting torch tip _____.
3. An oxygen cylinder has what type of valve. _____.
4. Oxy-acetylene cutting tip is made of _____.
5. Name the most often used flame when cutting with an oxy-acetylene torch _____.
6. A full cylinder of oxygen will contain A. 2000 psi. B. 2500 psi C.2200 psi., D. 3000 psi of pressure.
7. What is the maximum working pressure for acetylene gas. _____.
8. What is the liquid used in an acetylene cylinder to stabilize the acetylene gas _____.
9. Torches and regulators are made of what type of metal _____.
10. What is the pressure of an acetylene cylinder when full _____.
11. What is the oxygen/acetylene ratio for cutting with a torch _____.
12. Which cutting tip is larger. A. 000, B 0, C. 1, D. 00.
13. What is R.B.O. _____.
14. What is the melting point of mild steel _____.
15. There are two types of regulators used in oxy-acetylene torch procedures single stage and double stage regulators. Explain how each one works and the advantages and disadvantages of each _____

_____.

Name _____

Date _____

$$\begin{array}{r} \textcircled{1} \quad 3 \frac{7}{8} \\ + 5 \frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad 7 \frac{3}{8} \\ - 5 \frac{15}{16} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad 12 \frac{13}{14} \\ + 2 \frac{7}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad 12 \frac{5}{8} \\ - 7 \frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{5} \quad 1 \frac{1}{8} \\ + \frac{1}{4} \\ + \frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{6} \quad 1.0351 \\ + .1579 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{7} \quad 7,135 \\ - 986 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{8} \quad 437.97 \\ + 27.88 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{9} \quad 5,280 \\ - 1,768 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{10} \quad 4,203 \\ - 659 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{11} \quad 12 \frac{5}{8} \\ - 9 \frac{15}{16} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{12} \quad 3 \frac{1}{2} \\ + 6 \frac{3}{8} \\ + \frac{15}{16} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{13} \quad 6 \frac{3}{8} \\ - 2 \frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{14} \quad 8 \frac{3}{8} \\ - 4 \frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{15} \quad 2 \frac{3}{16} \\ + \frac{7}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{16} \quad .875 \\ .626 \\ + 1.125 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{17} \quad 2 \frac{13}{16} \\ - 1 \frac{15}{16} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{18} \quad 7 \frac{1}{16} \\ 8 \frac{3}{8} \\ + 1 \frac{1}{16} \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{19} \quad 3 \frac{7}{16} \\ - 1 \frac{1}{2} \\ \hline \end{array}$$

Write the ruler measurement on top of the line.



