Name_____ School_____ Contestant Number _____

2013 Cowboy Classic
Agricultural Technology and Mechanical Systems
Structural Systems-Welding Skill

You are currently interning at a local welding company after school a few nights a week. This internship will help improve your welding skills as well as allow you to work on projects within the community. You have recently been assigned to do some repairs on a greenhouse south of town. Your first repair is to fix the separated corner frame on the North East corner. In order to correctly repair this frame you will complete a 90 degree weld using the pieces provided and an E6011 rod. The weld components to be repaired have been removed from the structure and can be manipulated by you for the best weld possible. **Do not change the polarity or amperage settings on the welder.**

The welding rod chosen for this application is the Hobart **E6011 3/32" X 14"** rod. List the ideal amperage range for this rod in each of these applications.

AC _____ Amps DCEN / DCEP _____ Amps

1. ____ For the purpose of repairing the greenhouse what benefits does the E6011 rod provide?

a. A fast fill rod for all positions
b. Light, easy to remove slag
c. Useful for both AC and DC positions
d. All of the above

2. Is this electrode acceptable for use in tack welding and on steel with moderate surface contaminates?

Yes No

3. When welding in the DC polarity, arc blow can be a problem. List three characteristics of arc blow that are often seen in the weld when this condition occurs in the spaces provided.

1. _____
2. _____
3. _____

Criterion	Points Possible	Points Earned
Quality of weld	12	
Questions	14 (2 points ea.)	
Safety	4	