

Name _____

Lab # 10 - Hot Metal

Description: In this lab you will learn to work metal while hot. These projects will be heated on a forge, but could be created using an oxy-acetylene torch with a rosebud tip. You will also learn how to temper steel (demonstration). This is a useful skill when reconditioning tools. CAUTION: Steel will be very hot. Be cautious not to burn yourself or others.

Materials:

20" - 1/4" mild steel round stock

Tools:

Hammer
Anvil
Tongs
Forge
Hacksaw

Chaining Pin Directions:

1. Always work the steel when red hot, DO NOT OVERHEAT.
2. Use a center punch to mark the bend of the eye (7"). Heat one end of the 1/4" round stock.
3. Form the eye by bending the stock at 90°
4. Then, reheat and bend the eye.
5. Trim to length (about 11 1/2") and point.
6. Cool the project.
7. Clean up with emery cloth and mark with masking tape.

Grading:

Name:

Criteria	Possible	Score
Eye correct size (+/- 1/8")	4	
Eye round	4	
Pin correct length (+/- 1/8")	4	
Point neat (square)	4	
Overall workmanship (metal not over worked)	4	
TOTAL	20	

