

TUBE AND PIPE BENDER ACTIVITY
MR. WEBER
CAPITAL HIGH WELDING

PURPOSE and Goals-The purpose of this activity is to get you comfortable with using the Baliegh tubing and pipe bender before you have to use it on a “real project” in which mistakes in bending would be costly. You will be creating a bended object that will be bent according to the parameters given below and will match the CAD model you create.

DIRECTIONS-You will be designing a CAD model of a bended object made from 1” round tubing. You will be given 5’ of tubing and will bend it into a unique shape that you design.

Parameters- You will make a complete CAD model of the object using solid modeling or surface modeling techniques. (50 points)

1. Must have three 90 degree bends.
2. Must have two 30 degree bends.
3. Must have one 53 degree bend.
4. Must have one 18 degree bend.
5. The two ends have to meet to close up the bended object.
6. The two ends will be TIG welded together.
7. You can use the band saw, chop saw, and hole saw to cut angles and lengths as needed to make it work.

*There are not set number of cuts and bends. The main idea is for you to learn how to accurately use the bender. We do want your project to come out as close to the Cad model as possible but it is not the end of the world if it doesn’t.

Finished Project-(50 points)