

Name: _____

Lab #1 - Shop Orientation & Safety

(30 points)

Objectives:

- ☐ Become familiar with the layout of the shop and the safety equipment located in the shop.
- ☐ Learn to draw to scale.
- ☐ Practice measuring with different tools and with different levels of precision.

Shop Tour:

- ☐ Layout of Ag Mechanics 106, 105, 104 and 103
- ☐ Location of Exits
- ☐ Fire Extinguishers
- ☐ Electrical Panels and other control panels
- ☐ Location of First Aid Kits.
- ☐ Location of Phones. (In Case of Emergency Dial 9-1-1)
- ☐ Location of stationary tools, names, and their safety zones

General Shop Safety

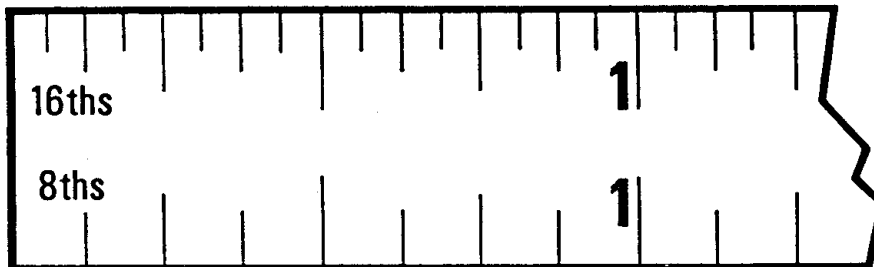
- ☐ Eye protection
- ☐ Safety is a "culture"
- ☐ Continued safety violations are grounds for removal from the course

Assignment: (30 points)

- 1) Break up into four equal teams. Measure the interior of the 105 and 106 shops. Omit the paint room and office at the east end of 106. Measure to the nearest 2'. Use attached drawing as guide. Record the shop dimensions, locations of door, and other major features such as tool storage and interior rooms.
- 2) Using the map locate (measure) and label the following:
 - ☐ All shop exits.
 - ☐ Fire Extinguishers.
 - ☐ All Electrical Panels (for lights and ventilation)
 - ☐ First Aid Kits
 - ☐ Locate on your plan the stationary equipment including table saws, jointers, planer, grinders, welders, drill presses, welding booths, and forges.
 - ☐ Telephones.
- 3) Review the lab grading criteria below. Create a scale map of the shop. Use a scale of 2 feet/ square (1"=20'). See sample. Each member of the team will need to turn in his or her own map. Use a ruler!
- 4) Using the provided tapes and squares measure the objects listed on the grade sheet:
- 5) Attach your map to the grade sheet. This lab is due in the next scheduled lab.

UNITS OF MEASUREMENT

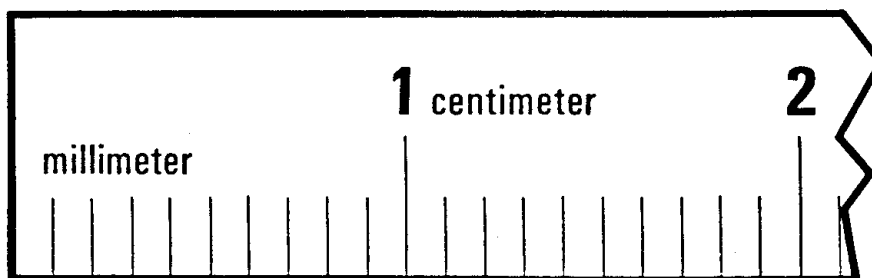
TM-1



Fractional Rule



Decimal Rule



Metric Rule

Lab #1 Grade Sheet

Name:

Description	Possible Points	Score
<p>Measurements:</p> <p>A) 2x4 length to nearest 1/8" _____</p> <p>B) Metal length to nearest 1/16" _____</p> <p>C) Machined part diameter to nearest 1/32" _____</p> <p>D) Plywood dimensions to nearest 1/16" _____X _____</p> <p>E) Sheet metal dimensions to nearest 1/16" _____X _____</p>	14	
Map drawn neatly to scale, major dimensions shown.	6	
Items neatly labeled.	4	
<p>Map includes the following in the correct location:</p> <p><input type="checkbox"/> All shop exits.</p> <p><input type="checkbox"/> Fire Extinguishers.</p> <p><input type="checkbox"/> All Electrical Panels (for lights and ventilation)</p> <p><input type="checkbox"/> First Aid Kits</p> <p><input type="checkbox"/> Stationary equipment</p> <p><input type="checkbox"/> Telephones.</p>	6	
TOTAL	30	

Agricultural Mechanics Shops

