

## STEMpunk# 4531 CAD Drawing Practices

- Don't forget centerlines for hole centers, in side views and between holes that are in-line
- Create at least (2) views of each part/assembly
- Show hidden features in all views. If it gets cluttered and hard to distinguish, get rid of unimportant ones. Show each feature in at least (2) views
- Do not dimension to a hidden feature. You may need to add a section view
- Add finish marks where you plan to remove material. Make sure to label the appropriate finish value. Only leave off the finish value if you have a note stating "ALL FINISHES ARE 125 UNLESS OTHERWISE SPECIFIED"
- All text must be in CAPS and be read horizontally. The only exception is using ordinate dimensioning.
- Specify the stock material size as a note above the title block. MAT'L: 1.5" x 1.5" x .125" WALL 6061
- Label dimensions that will remain in their stock form as "STK"
- Use standard clearance hole, c'bore and c'sink dimensions from the machinery's handbook
- Do not use slotted screws – instead use Socket Head Caps Screws (SHCS)
- Call out a thread designation in fractional or number form with the threads per inch as well as the UNF or UNC. See Machinery's Handbook for complete list.
  - 5/16 – 18 UNC
  - #10-32 UNF
- When modifying a purchased part, use the note "MAKE FROM: VENDOR NAME & PART NUMBER" placed above the title block. Then, label the dimensions or features you are changing or adding. Use a few reference dimensions to give overall size.
- Check all decimal places on each feature to make sure they are appropriate for the level of control you are trying to achieve.
- Hold at least 3 decimals on hole patterns that need to fit with another piece

SEE CAD NAMING STANDARDS FOR NAMING CONVENTIONS