

LESSON 1

Tool basics

MEASURING AND MARKING

- Try Square (yes that's how it is spelled)
 - Used to mark lines perpendicular to an edge
 - Also used to make sure two components are perpendicular
- Pencils/pens
 - Thin lines = more precision when cutting
- Punch
 - Used to mark where holes should be drilled



MEASURE TWICE, CUT ONCE

ALLEN KEYS (AKA HEX KEYS OR ALLEN WRENCHES)

- Righty tighty, lefty loosy
- Used for bolts and screws with a hexagonal head
- Torque can be increased by pushing with the long side



Not to be
confused with
Alan Keyes the
politician



HACKSAWS

- Hold the saw at a 45 degree angle
- Pull back gently to make indent in wood/metal at first
- Hold the saw with your dominant hand on the handle, and your other hand on the top



Pro wrestler Jim
"Hacksaw" Duggan

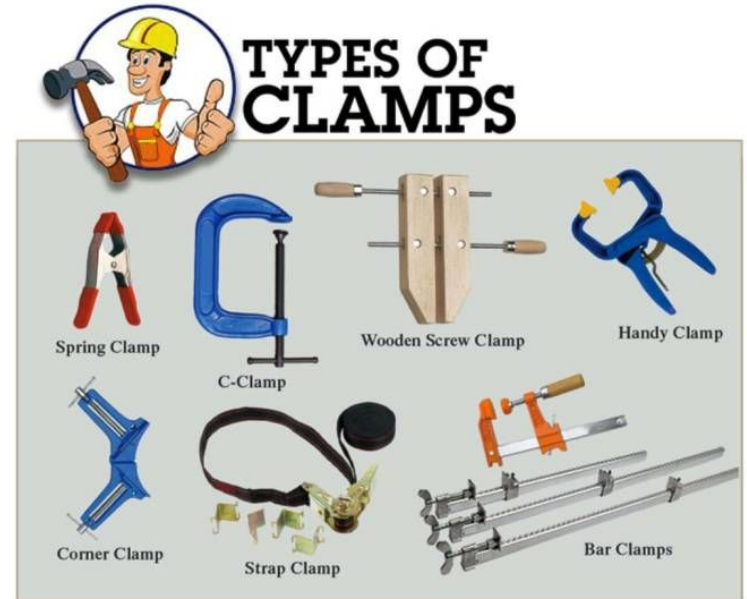


CLAMP

- Used to hold things in place.
- Types:
 - C-Clamp
 - Wooden Screw Clamp
 - Handy Clamp
 - Bar clamp
- Also of note: Vise Grip



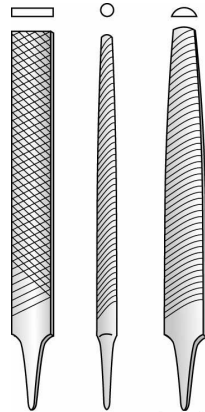
CLAMP is a Japanese manga company



FILE

- Only file in one direction, usually downwards
- Clamp work to a table to make life easier
- Use smaller grain for metal, larger grain for wood

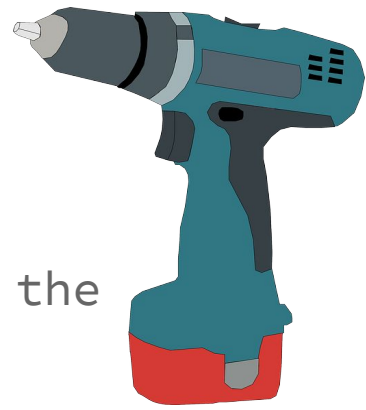
You'll get the hang of it



WRENCHES/SCREWDRIVER

- Again, righty tighty, lefty loosy
 - This is our mantra
- Wrenches → Bolts
- Screwdrivers → Screws

DRILLS



- The arrows on the button point in the direction the drill will travel (outwards or inwards)
- Push the button to the middle to lock the drill whenever you aren't using it (safety!)
- Hold it with your dominant hand on the handle, and your other palm on the top
- Hold the drill at 90 degrees to the work, and press your weight down on it. Have a spotter check you at first.

