

NAME: \_\_\_\_\_ Class Period: \_\_\_\_\_

# Shop & Machine Safety Guided Notes

## General Shop Safety

- Always wear \_\_\_\_\_ while in the workshop.
- Maintain a safe distance from the \_\_\_\_\_ (5-4-5)
- The following items can easily get caught in moving equipment:
  - \_\_\_\_\_ (Secure it or remove)
  - \_\_\_\_\_ (tie it back)
  - \_\_\_\_\_ (remove it)
- No horse play (Goofing around, running, etc)
- Maintain a \_\_\_\_\_ work environment  
\_\_\_\_\_ before you \_\_\_\_\_
- Report any \_\_\_\_\_ or damaged equipment to the instructor
- Oily rags are discarded into a \_\_\_\_\_ trash can with lid.
- Always check \_\_\_\_\_ of hand tools for any damage.

# General Machine Rules

(these apply to all machines)

- Only operate machines with \_\_\_\_\_ on.
- Make sure \_\_\_\_\_ are in position and \_\_\_\_\_.
- Stay out of \_\_\_\_\_ zones.
- Only \_\_\_\_\_ at a time.
- Only one person in the \_\_\_\_\_ at a time.
- Machine \_\_\_\_\_ turns \_\_\_ and \_\_\_ the machine, no one else.
- Machine needs to be a \_\_\_\_\_ before use.
- Never leave a machine while it is still **running** or \_\_\_\_\_.
- Adjustments are made with the machine **OFF** and \_\_\_\_\_.
- Never cut lumber with \_\_\_\_\_ in it. (Like staples or screws)
- Allow cutters to \_\_\_\_\_ before removing scraps from machine.
- Listen to the machine.

## UP-CUT SAW

### SAFETY RULES:

- NEVER place hands \_\_\_\_\_
- Allow the saw to reach full speed \_\_\_\_\_ (about 10 seconds)
- Wood should be placed tight against the \_\_\_\_\_ and tight against the \_\_\_\_\_



**PURPOSE:** To rough cut lumber to a length \_\_\_\_\_ than needed. This happens before planing the board to thickness. Used for \_\_\_\_\_

# Planer

## SAFETY RULES:

- Minimum board length:  
Longer than the distance  
between the in-feed & out-  
feed rollers (\_\_\_\_\_)
- Do NOT pass your hand past  
the \_\_\_\_\_ table.
- Do not remove more than  
\_\_\_\_\_ at a time.



## PURPOSE:

Used to make the surface of a board \_\_\_\_\_ and \_\_\_\_\_. Also cuts **wood** to the desired thickness, while creating parallel surfaces.

**NOTE:** This is the \_\_\_\_ & \_\_\_\_\_ steps in the squaring process.

# Jointer

## SAFETY RULES:

- Use push stick when \_\_\_\_\_  
than the fence.
- Keep board tight against \_\_\_\_\_  
& \_\_\_\_\_
- Never joint \_\_\_\_\_  
\_\_\_\_\_ board length 12"
- Maintain 5-4-5



**PURPOSE:** Used to create smooth, flat surface along the \_\_\_\_\_ of a piece of wood.

**NOTE:** This is the \_\_\_\_ step in the squaring process.

# Table Saw

## SAFETY RULES:

- Make adjustments with the \_\_\_\_\_ & blade \_\_\_\_\_.
- Be sure all guards are in place.
- Saw blade must be set \_\_\_\_\_ - \_\_\_\_\_ above the wood to be cut.
- Do not cut boards that are less than \_\_\_\_\_.
- \_\_\_\_\_ only, do not crosscut.
- Use a push stick to maintain 5-4-5.
- Allow motor to reach full speed.
- Lock \_\_\_\_\_ into position.
- Place \_\_\_\_\_ of board against fence.
- Maintain \_\_\_\_\_ with board until it passes the blade & \_\_\_\_\_.



# Table Saw

## SAFETY RULES:

- Never reach \_\_\_\_\_ the blade.
- When the fence and blade are closer than 6" a push stick \_\_\_\_\_ used.
- Any special set-ups or cuts must be approved by the instructor.
- Free hand sawing is \_\_\_\_\_ forbidden.
- When cutting is completed, turn off the power and do not leave until the saw has come to a complete stop.
- Do not attempt to stop a \_\_\_\_\_ blade.
- Do not remove \_\_\_\_\_ until the blade has stopped.



**PURPOSE:** Used mostly to \_\_\_ boards to the correct size. (RIP= cut with the grain)  
Can also make cross cuts with the \_\_\_\_\_.

**NOTE:** This is the \_\_\_ step in the squaring process.



# Miter Saw

## SAFETY RULES:

- Keep hands \_\_\_\_\_ (5-4-5) from the path of the blade.
- **Never** \_\_\_\_\_ your arms when cutting.
- Before cutting, clear all scraps from the \_\_\_\_\_ plate.
- Before cutting, check and \_\_\_\_\_ angle into place.
- **HOLD** board \_\_\_\_\_ to the **TABLE** and **FENCE**.
- Only cut when the blade has \_\_\_\_\_ full speed.
- Return the saw to the \_\_\_\_\_ after each cut.
- When using the **slide** for cutting, be sure to push the blade through the material. (\_\_\_\_\_ to \_\_\_\_\_)



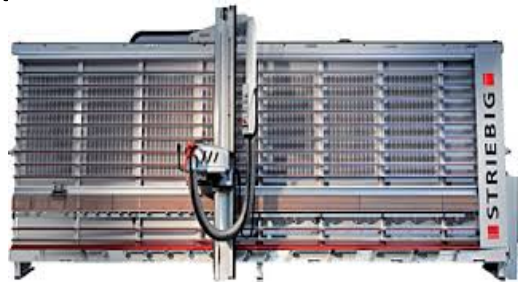
**PURPOSE:** Used for **cross cutting** and \_\_\_\_\_ (miter) cuts only. Used to square both ends of a board. Cut one end square (90 degree). Measure & cut to length (other end)

**NOTE:** This is the \_\_\_\_\_ (square one end) & \_\_\_\_\_ (Square other end to length) steps in the squaring process.

# Panel Saw

## SAFETY RULES:

- Make sure the board is \_\_\_\_\_ against the frame.
- Make sure the saw is \_\_\_\_\_ into position before using.
- Hold the handle with a firm grip and cut with a \_\_\_\_\_ feed.
- **Always** cut from \_\_\_\_\_ to \_\_\_\_\_.
- After each cut remove the blade from the material and return the saw to the \_\_\_\_\_ position.
- **Do not** leave the machine until it has come to a complete stop.



**PURPOSE:** Used for cutting large boards and panels, used for boards that are too \_\_\_\_\_ for the \_\_\_\_\_ Saw.

# Shapers

## SAFETY RULES:

- Before making adjustments, make sure the power is off & the knives are stopped.
- Before turning the shaper on, remove all tools, loose accessories and \_\_\_\_ boards.
- Make certain the fences and \_\_\_\_\_ are secured in their proper places working properly.
- Examine the stock carefully before shaping. Make sure it is free from defects. DO NOT shape knots, or \_\_\_\_\_ material.
- Maintain a \_\_\_\_ margin of safety. (5-4-5)
- Always run the material through the shaper from \_\_\_\_ to \_\_\_\_.
- While shaping, DO NOT \_\_\_\_ the board out of the knives.
- After shaping is complete, turn off the power and allow the shaper knives to come to a complete \_\_\_\_ before cleaning off chips and/or leaving the shaper.
- Always use a \_\_\_\_ or \_\_\_\_\_ when possible

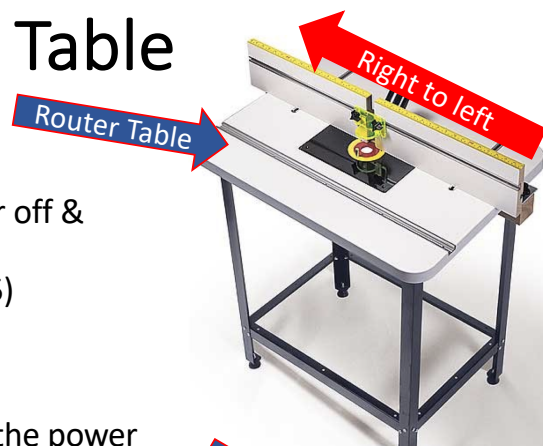


**PURPOSE:** Used to cut \_\_\_\_\_ into the edge or end of a board.

# Router Table

## SAFETY RULES:

- Make \_\_\_\_\_ with the power off & router stopped.
- Maintain a **6"** margin of safety. (5-4-5)
- Router from \_\_\_\_ to \_\_\_\_.
- Do not router too **fast** or too **slow**.
- When routing is completed, turn off the power and allow the router to stop before cleaning or \_\_\_\_\_ the machine.
- Use a push stick when need to maintain a safe distance
- Hold Board tight against \_\_\_\_\_ and \_\_\_\_\_ or \_\_\_\_\_ bearing.



**PURPOSE:** Used to cut \_\_\_\_\_ into the edge or end of a board.

# Wide Belt Sander

## SAFETY RULES:

- Dust \_\_\_\_\_ must be on during use.
- Minimum board length: \_\_\_\_\_
- Keep hands away from pinch points (Conveyor belt and rollers) .
- Do NOT overlap boards.
- Only remove \_\_\_\_\_ each pass.
- Use \_\_\_\_\_ adjustment knob for small adjustments.



**PURPOSE:** Used to sand stock flat and to a specific \_\_\_\_\_. Can sand both with and across the grain. (i.e. Face frame)

# Horizontal Belt Sander

## SAFETY RULES:

- Before using: check for & report any \_\_\_\_\_ or loose sandpaper.
- Allow sander to obtain full speed before using it.
- Turn on \_\_\_\_\_ switches
  - Belt \_\_\_\_\_ and \_\_\_\_\_ (up and down).
- Maintain fingers a safe distance from sanding belt.
- Sand with \_\_\_\_\_ pressure.
- Never sand material that may jam between the belt and table.
- Hold the material \_\_\_\_\_ **on the table** when sanding.
- Always sand by moving the stock into ( \_\_\_\_\_ ) the rotation of the sanding belt.



**PURPOSE:** Used for trimming to a scribed line, sanding rough surfaces, and freehand \_\_\_\_\_ and shaping.

# Spindle Sander

## SAFETY RULES:

- Sand \_\_\_\_\_ the rotation
- Maintain a safe distance from Sandpaper.
- Remove on \_\_\_\_\_"-\_\_\_\_\_"
- Do not use \_\_\_\_\_ pressure
- Hold material \_\_\_\_\_ against the table



**PURPOSE:** Used to sand \_\_\_\_\_ **CORNERS** of an object.

# Disc Sander

## SAFETY RULES:

- Hold material \_\_\_\_\_ against the table
- Maintain a safe distance from Sandpaper.
- Sand on \_\_\_\_\_ side of disc.
- Remove on 1/8"- \_\_\_\_\_"
- Do not use \_\_\_\_\_ pressure
- Use a clamp for sanding \_\_\_\_\_ boards.



**PURPOSE:** Used to smooth material, especially on \_\_\_\_\_ curves. Can be used to remove **small** amounts of material.

# Drill Press

## SAFETY RULES:

- Drill bits are SHARP & (can be) \_\_\_\_\_
- Hold or \_\_\_\_\_ board securely
- Always use a \_\_\_\_\_ board
- Always **Remove** \_\_\_\_\_
- If you loose control of your board or board begins to rise up:
  1. Keep \_\_\_\_\_ down
  2. Turn machine off



**PURPOSE:** Used for drilling holes (one hole at a time)

# Horizontal Boring Machine

## SAFETY RULES:

- Maintain a safe distance from \_\_\_\_\_ mechanism and bits (5-4-5)
- Allow motor to be at full speed before use
- Step on \_\_\_\_\_ to clamp & drill. \_\_\_\_\_ when holes have been drilled.



**PURPOSE:** Drills \_\_\_\_ holes used for a \_\_\_\_\_ joint.

# Band Saw

## SAFETY RULES:

- Guard: Set \_\_\_\_"-\_\_\_\_" above material
- Avoid the \_\_\_\_ of the blade.
- Stop blade before backing out of a \_\_\_\_ cut.
- Use \_\_\_\_ cuts on curves.
- Remove scraps when blade is \_\_\_\_\_ stopped.



**PURPOSE:** Primary purpose is to make \_\_\_\_ or \_\_\_\_ cuts. Not intended to cut to an exact size.

# Pneumatic Nail Gun

## SAFETY RULES:

- Always keep Nail gun pointed in a \_\_\_\_ direction.
- Keep fingers at least 5-4-5 away from the area where the \_\_\_\_ comes out.
- Do not shoot nails into work \_\_\_\_\_.



**PURPOSE:** \_\_\_\_ two objects together using nails.