

Name: _____

Construction

Safety

Book and Log Sheet

R.S. McLAUGHLIN COLLEGIATE VOCATIONAL INSTITUTE

Construction Technology

Safety instructional verification sheet

Student Name

Instructional area	Date of Instruction	Instructors initial	Student initial
Miter Saw			
Jointer			
Table Saw			
Thickness planer			
Mortise machine			
Band Saw			
Scroll Saw			
Router Table			

Compound Miter Saw

1. If cutting a piece shorter than 8" you must have the instructor present and use the hold down clamp.
2. **NEVER** under any circumstance are you to EVER rip your work piece on a Compound Miter saw. The Miter saw is for cross cutting only.
3. Pull the blade back slowly at a consistent speed and allow the blade to cut the wood. Do not cut the wood fast.
4. Roll up long sleeves, tie back long hair (ponytail behind back), and remove jewelry (bulky rings, necklaces, bracelets and watches, tuck in or remove loose clothing.
5. Hands should never come within 8" of the blade.
6. Before starting the saw check for and remove scraps beside and behind the blade with a piece of wood. Clean off scraps after you have finished and blade has stopped turning. Never clean scraps while blade is turning. Put scraps in cut-offs bin, NOT on the floor.
7. Before starting the saw ensure that left hand is holding the wood. When finished cutting wait for the blade to stop turning before removing the work piece.
8. Never start the saw with the blade touching the wood.
9. Wood must be held against fence while it is being cut.
10. When finished using machine wait beside it until the blade has stopped turning. Never leave a saw running or unattended.
11. Never throw things into the blade while machine is running.
12. Never have body or arms in front of the blade while using saw. Body should be off to the side of the blade path.
13. Do not look around or have a conversation when making a cut. Concentrate on what you are doing.
14. Operator should have a safe operating are of 4x4 feet.
15. Obtain the instructors permission before using this machine.

Compound Miter Saw

1. What type of cutting is the miter saw in our shop to be used for? /1
 - a. Cross-cut
 - b. Rip
 - c. Dado
 - d. All of these
2. When cutting your board what following statement best describes how you should cut your board? /1
 - a. Jerky and slow
 - b. Fast and consistent
 - c. Slow and consistent
 - d. Whatever speed you want
3. At what length should you have the instructor supervise you cutting your board? /1
 - a. 12"
 - b. 13"
 - c. 8"
 - d. 15"
4. Your hands should not come to within what distance of the blade? /1
 - a. 10"
 - b. 12"
 - c. 14"
 - d. 8"
5. Before starting the Miter saw what must you check for? /1
 - a. No cut offs in blade path
 - b. Right hand is out of blade area
 - c. Blade is not touching wood
 - d. All of these
6. If there are cut-offs or scraps in the blades path behind the fence when can you clean them off? /1
 - a. No cut-offs in blade path
 - b. When blade fully lifted
 - c. When blade is returned behind the fence
 - d. When blade has stopped turning
7. When finished with the saw what must you do before leaving the machine? /1
 - a. Make sure blade has stopped moving
 - b. Cut-offs are cleaned up and put in bin
 - c. Blade is pushed in as far a possible
 - d. All of these
8. How should your wood be held against the fence while it is being cut? /1
 - a. With your right hand
 - b. Just freely sitting on the blade
 - c. With your left hand
 - d. With whatever hand is comfortable
9. Which statement best describes how your cut-offs should be cleaned off the table? /1
 - a. Always with a piece of wood.
 - b. Only when blade has been returned behind fence
 - c. Only when blade has completely stopped
 - d. All of these

The Jointer - SAFE OPERATION

1. Remove jewelry, tuck in loose clothing, roll up long sleeves and confine long hair.
2. If stock that is to be edge jointed is lower than the fence the edge jointing push stick must be used.
The face jointing push stick is to be used at all other times (jointing face). Use designated push stick for specific operation.
3. Keep hands and fingers away from blade at all times. When edge jointing, left-hand is to be resting on magnetic hold down and pushing board against fence. When front end of board has cleared the orange area place left hand on board and hold against fence. Be aware that left hand never comes close to blade.
4. Maximum depth of cut is 1/16" for edge as well as face jointing.
5. Never joint end grain.
6. Stock is to be fed only from in feed table to out feed table. Never bring stock back over rotating blade.
7. Minimum length of stock to be jointed is 12".
8. Have a solid footing and body should be to side of blade pathway. Move body as board moves. Never lean awkwardly over knife.
9. When waiting to use the jointer never stand directly in the pathway of the blade.
10. Make sure blade guard is operating correctly before using machine.
11. Wait until blade guard springs back before reaching for work piece.
12. Make sure fence is locked in position you want it to be in before using. When checking fence angle, machine must be off and blade should not be rotating.
13. Always use fence on jointer to help guide your work.
14. Joint edge only after jointing fence.
15. The concave side of a cupped face should be placed down.

TEST
NAME

JOINTER


DATE

CIRCLE THE MOST CORRECT ANSWER

JOINTER

1. When must a push stick be used to edge joint a board?
a. board is higher than fence b. always /1
c. never d. board is lower than fence
2. When jointing a face when must a push stick be used?
a. doesn't matter b. when board is less than 1/2" thick /1
c. always d. when board has a lot of knots
3. What is the maximum depth of cut on the jointer?
a. 1/8" b. 1/16" c. 3/16" d. 1/4" /1
4. When can you joint the end grain on your board?
a. if board is 6" or wider. b. if board is 7" or wider /1
c. when you feel it is necessary d. never
5. Why must you never feed your board from the out feed table to the in feed table?
a. the knives will take chunks out of your board b. you can't control the depth of cut /1
c. it is extremely dangerous to do so d. the knives will dull faster
6. What is the distance that your left hand should never come within the blade when edge jointing?
a. 8" b. 7" c. 6" d. 5" /1
7. What is the minimum length of stock to be jointed?
a. 12" b. 10" c. 16" d. 14" /1
8. Before using the jointer what must you check for on the machine?
a. that the guard is springing back over the blade to the fence /1
b. there isn't anything sitting in the knives
c. that the fence is locked d. all of these
9. When using the jointer where must your body be?
a. behind machine b. wherever is comfortable for you /1
c. side of blade pathway d. as far past the out feed table as possible
10. Immediately after you have jointed your board when can you reach for and lift your board off the out feed table?
a. when you want b. when your board has cleared the guard /1
c. when the guard springs back over the cutter d. when the cutter has stopped turning

The Thickness Planer – SAFE OPERATION

1. Remove jewelry, tuck in loose clothing, roll up long sleeves and confine long hair.
2. The minimum length of board to be machined is 
3. Do not force the material through the planer. If board is stuck, gently push on its end with another board. If it is still stuck do the following:
 1. turn machine off.
 2. Wait until blade stops turning(1 minute).
 3. lower table with hand wheel.
 4. Remove stock or wood chips with scrap Piece of wood.
4. Do not stand directly in front of the planer or in the line of a kickback. Stand to the side of machine when using.
5. Do not look into the throat of the machine when it is running.
6. If wood chips are spitting out of machine, open vent. If that doesn't help follow rule #3 steps 1-4.
7. Wood is to be pushed into machine with palm of hands, fingers are never to be under piece of wood.
8. Max. depth of cut is 1/16".
9. Measure material thickness before adjusting table height.
10. The cutter head is on the top of the machine.
11. Hands should never extend past the orange edge of infeed table.
12. Wait until cutter head has stopped turning before leaving machine.
13. Never initiate a conversation with anyone using machine. Never have a conversation with anyone while you are using machine.
14. Operator should have a safe operating area of 4' x 4'.
15. Obtain the instructors permission before operating this equipment.

TEST THICKNESS PLANER NAME

1. What is the maximum depth of cut on the thickness planer? /1
a. 1/8" b. 1/16" c. 3/16" d. 1/4"
2. What is the minimum length of stock to be planed? /1
a. 12" b. 10" c. 16" d. 14"
3. Where should your body be when feeding your board into the machine? /1
a. directly in line with the blade b. wherever you want
c. either side of the board d. directly behind the board
4. When can you look into the throat of the machine? /1
a. when the machine is running b. when the blade is moving
c. if your board gets stuck in the machine d. when the blade is not moving
5. When can you remove chip accumulation? /1
a. after machine has stopped running b. whenever blade has stopped moving
c. whenever they are spitting out of the machine d. whenever you want
6. Why should you never push your board into the planer with your fingers? /1
a. your fingers aren't strong enough to feed the wood b. you could get splinters in them
c. your fingers might go under the board and get pinched between the table and board
d. your fingers might get pinched on the top of the machine
7. Which measurement must be taken on your board before planning it for the first time? /1
a. height b. width c. thickness d. perimeter
8. Which part of your board gets planed? /1
a. top b. bottom c. side d. end
9. Which part of the infeed table should your hands never extend past? /1
a. the top of it b. the orange painted edge
c. under it d. the side of it
10. When is it ok to put your hands inside the machine? /1
a. never b. after stop button is pushed
c. whenever board gets stuck d. 60 seconds after stop button is pushed
11. How long does it take for the cutter head to stop turning after the machine has been turned off? /1
a. 15 seconds b. 60 seconds c. 45 seconds d. 90 seconds
12. If your board gets stuck in the planer when can remove it with another board? /1
a. after blade has stopped turning b. after machine is turned off
c. after table is lowered d. after all of these are done

The Table Saw - SAFE OPERATION

1. Remove jewelry, tuck in loose clothing, roll up long sleeves and confine long hair.
2. Stand in a comfortable position and to the side of the blade path.
3. When finished with the saw turn the power switch off. Stay with machine until blade has stopped turning.
4. Disconnect power when making repairs and changing blades.
5. Always use the blade guard.
6. Make sure blade teeth are pointing towards operator.
7. Tighten the fence clamp or the mitre gauge-adjusting knob.
8. Make sure the table insert is flush with the table.
9. Blade should be $\frac{1}{4}$ " to $\frac{1}{2}$ " above work piece.
10. Always think through an operation before performing it.
11. Hold the stock firmly against the fence or mitre gauge.
12. Use a push stick for ripping material narrower than 6".
13. Never operate the saw without rip fence, mitre gauge, or other guide. No free hand cutting.
14. Never reach across, over or behind the blade.
15. Do not use the rip fence and the mitre gauge at the same time if cutting stock to length.
16. Do not attempt to remove work that is caught in the machine while blade is rotating. Hold onto work piece until blade has stopped rotating. Then remove it.
17. Provide support for a long or a wide work piece before and after the cut.
18. Do not look around or have a conversation when making a cut. Concentrate on what you are doing.

TABLE SAW

63. Where should your body be positioned when you are ripping on the table saw?
a. directly behind the blade
b. directly in line with the blade
c. to the right of your wood
d. to the left of your wood /1
64. Whenever you are done using the table saw what must you ensure the blade is doing before you leave the machine?
a. not turning
b. slowing down
c. almost stopped
d. spinning /1
65. If you have to make repairs or change the blade what must you ensure is done to the machine?
a. cleaned off
b. blade removed
c. power disconnected
d. fence removed /1
66. When should you use the blade guard?
a. always
b. whenever it is convenient
c. ripping
d. cross cutting /1
67. Which direction should the teeth be pointing on the table saw?
a. towards out feed side
b. up
c. doesn't matter
d. towards operator /1
68. How high above your wood should the blade be?
a. even with top face
b. even with bottom face
c. 1"
d. 1/4" - 1/2" /1
69. What word best describes the pressure you use to hold your wood against the miter gauge or rip fence?
a. moderately
b. firmly
c. gently
d. loosely /1
70. If you are ripping your wood, at what width of rip do you have to use a push stick?
a. always
b. 4"
c. 5"
d. 6" /1
71. When can you freehand cut on the table saw?
a. ripping
b. crosscutting
c. whenever you want
d. never /1
72. If you are cutting your stock to length what do you use to do this?
a. rip fence
b. rip fence and miter gauge
c. miter gauge
d. free hand /1
73. If your wood gets caught in the machine when can you let go of wood?
a. immediately
b. after the stop button is pushed
c. whenever you want
d. after blade has stopped turning /1
74. When can you put your hands under the guard?
a. after stop button has been pushed
b. when blade has almost stopped turning
c. whenever a piece is caught under the guard
d. never /1
75. During a ripping operation what is the person pulling the wood off the table responsible for?
a. pull wood off the table
b. pull wood clear of the blade
c. make sure fence is set
d. make sure blade is high enough /1

The Band Saw - SAFE OPERATION

- 1. Remove jewelry, tuck in loose clothing, roll up long sleeves and confine long hair.**
- 2. Make sure all guards are in place and operating correctly.**
- 3. Make sure all adjustments are tight and secure and blade guides are adjusted properly before starting machine.**
- 4. Upper blade guards should be 1/8" – 1/4" (pencil width) above work piece.**
- 5. Guide the work slowly, letting the blade do the work. Do not force the work into the blade.**
- 6. Do not attempt to cut a smaller radius than the blade will allow.**
- 7. Avoid backing out of a cut.**
- 8. Hands and fingers are never to be inside the orange painted area on the table while the blade is moving.**
- 9. Never leave the machine until it has come to a full stop.**
- 10. Adjust guards only when blade is not moving.**
- 11. Step on brake only after you have turned the machine off.**
- 12. Do not twist blade with wood.**
- 13. If blade breaks step to side of machine and turn it off. Never open doors.**
- 14. Operator should have a safe operating area of 4' x 4'.**
- 15. Clean scrap pieces away from blade with a long piece of wood. Never clear scrap pieces away with your hands.**
- 16. Never initiate a conversation with anyone using machine. Never have a conversation with anyone while you are using machine.**
- 17. Obtain the instructors permission before operating this equipment.**

BAND SAW - SAFE OPERATION TEST

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1. What must you make sure about the guards before starting the machine? /3

2. How high above the work piece must the guards be? /1

3. When cutting where should your hands never be? /1

4. List in order the procedure for shutting down the machine when you are done using it. /4

5. What two things must you do if the blade breaks? /2

6. What must you never do to the doors under any circumstances? /1

7. What is the safe acceptable method for cleaning your scraps away from the blade? /1

TI 17

8. Why must you never adjust the guards when the blade is moving? /1

9. Describe the speed at which you should feed your wood into the blade? /1

10. Why should you never attempt to cut a radius smaller than the blade can handle? /2
Explain why you will know this is happening.

11. Explain why you should avoid backing out of a cut? /1

12. Explain why you must use the brake to stop the blade. /1

13. Explain why you must first turn off the power to the machine before using the brake. /1

The Drill Press – SAFE OPERATION

1. Remove jewelry, tuck in loose clothing, roll up long sleeves and confine long hair.
2. Be sure the key is removed from chuck before starting machine.
3. Work piece is to be held against fence or clamped to table.
4. Never try to stop moving chuck with hand.
5. If a work piece gets caught in the drill, turn off the machine and step back. Do not try to stop the moving piece with your hand. Once it stops turning remove the piece.
6. Hands are never to be near or under the moving cutter.
7. One operator (person using the machine controls the buttons).
8. Adjust the depth stop only when machine is stopped.
9. When adjusting table height machine must be off.
10. Feet are never under table when adjusting table height.
11. Never let go of table when adjusting its height.
12. Make sure table locking lever is locked when done adjusting table.
13. When actually moving table both hands must be on table.
14. Never initiate a conversation with anyone using machine. Never have a conversation with anyone while you are using machine.
15. Operator should have a safe operating area of 4' x 4'.
16. Always use the shield/guard.
17. Obtain instructors permission before operating this equipment.

The Drill Press - Safe Operation - Test

1. Why should you make sure the chuck key is removed from the chuck before you turn on the machine (be specific what will the chuck do)? /1
2. What are the two options for securing your wood while it is being drilled? /2
3. Why must you never try to stop the moving chuck with your hand? /1
4. What should you do if your wood starts spinning around the drill bit? /2
5. If your wood starts to spin around on the drill bit why should you never try to stop it with your hand? /1
6. Why should your hands never get near or under the moving cutter? /1
7. Who controls the buttons on the machine? /1
8. When is the only time you can adjust the depth stop? /1
9. What must the cutter be doing when you are adjusting the table height? /1
10. Why should your feet never be under the table when the table height is being adjusted? /1
11. Why should you never let go of table when adjusting its height? /1
12. What must you make sure is done to the table locking lever when you are done adjusting table? /1
13. When you are actually adjusting the height of the table how many hands must be holding the table? /1
14. When you are done using the machine what must you do before leaving it? /2

The Disc/Belt Sander - SAFE OPERATION

1. Remove jewelry, tuck in loose clothing, roll up long sleeves and confine long hair.
2. Inspect the disc and the belt to be sure they are properly installed and in good condition before starting the machine.
3. Use moderate pressure and move the material being sanded back and forth to avoid heating and burning the belt or disc.
4. Keep hands and fingers at least 2" away from the moving belt and disc.
5. Sand only on the down stroke side of the disc sander.
6. Operator should have a safe operating area of 4' x 4'.
7. Always have work piece sitting on the table while sanding it.
8. Wait until belt and disc stops moving before leaving the machine.
9. Never initiate a conversation with anyone using machine. Never have a conversation while you are using machine.
10. Obtain the instructors permission before operating this equipment.

The Disc/Belt Sander - Safe Operation - Test

1. Before starting the sander what should you look for on the disc and belt? /1
 2. How much pressure should you put against the disc or belt with your wood while sanding it? /1
 3. What can you do to avoid heating the belt or disc while sanding your wood? /1
 4. How far from the disc or belt should you keep your hands? /1
 5. Which side of the disc sander should you only sand on? /1
 6. What will happen to your wood if you sand on the upstroke side of the disc sander? /1
- Which part of the machine should your wood be sitting on while it is being sanded? /1
8. When finished using the sander what thing must you confirm before leaving the machine? /1
 9. While using the sander what must you concentrate on? /1