

## Safety Quiz—Air Chisel

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. You must wear a face shield to protect your face. T F
2. Gloves are necessary to protect your hands from injury on sharp metal edges. T F
3. Make sure by the end of the week that all metal trimmings are in the garbage. T F
4. By holding onto the chisel bit, you can direct the bit more accurately. T F
5. Goggles must be worn every time an air chisel is used. T F

## Safety Quiz—Air Sanding Tools

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. Ventilation is not a safety consideration when sanding with air tools. T F
2. Sanding dust from fillers and paints must be removed from the air by means of vacuum connection to the tool and/or use of a particle mask. T F
3. The use of higher than recommended air pressure will only make the tool work faster. T F
4. One mark of a good technician is that he/she keeps tools clean. T F

## **Grinder Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. With this machine you must wear proper eye protection, a \_\_\_\_\_, pass ALL tests with 100 percent, and have your teacher's permission to operate it.
2. Set tool rest and spark deflector so that they are ( **1/8 inch**   **1/4 inch**   **1/2 inch**) away from the wheel.
3. Hold work firmly and securely with ( **One**   **both**) hand(s).
4. Remember that small pieces ( **Will**   **Will not**) require special set-ups.
5. You should stand ( **Directly in front of**   **To the side**) when you start this machine.
6. Grind using the ( **Face**   **Sides**) of the wheel.
7. Press material against the wheel with ( **A lot of**   **Just enough**) pressure so that you cause a steady and even removal of metal.
8. Again, move stock slowly and evenly across the ( **Face**   **Sides**) of the wheel.
9. You can leave the machine when the grinding wheels have come to a ( **Half**   **Full**) stop.

List five SAFETY procedures you should do before you operate this or any machine:

10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_

## ***Grinder Written Test Key***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Face shield
2. 1/8 inch
3. Both
4. Will
5. To the side
6. Face
7. Just enough
8. Face
9. Full

List five safety procedures you should do before you operate this or any machine:

1. Tuck in your shirt.
2. Remove jewelry.
4. Wear Z87 safety glasses
5. Work with a partner.
6. Listen for and report any problems immediately.
7. Make sure that all guards are in place and working.
8. No horseplay.
9. Keep work area clean.
10. Protect hands.

## ***Impact Wrench Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Be sure all work ( **Is** **Is not**) secured with clamps or tightly in a vise.
2. ( **Firm** **Flexible**) footing is required of the operator at all times.
3. The ( **Chrome** **Black**) sockets are designed for impact wrenches.
4. The tool should be disconnected from the airline at the ( **Hose whip** **Tool**).
5. The impact wrench must be ( **Disconnected** **Connected**) when not in actual use.
6. ( **Long** **Short**) bursts of power should always be used to operate the tool.
7. If the machine is not working properly, you should: \_\_\_\_\_

List five SAFETY procedures you should do before you operate this or any machine:

8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

**Safety Quiz—Parts Washer**

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_

- 
- 
1. When brushing parts in solvent, a nylon or brass bristle brush should be used to avoid sparks. T F
  2. It is not necessary to wear goggles or a face shield when washing parts. T F
  3. A fusible link to hold the lid open is not necessary on parts wash tanks. T F
  4. Parts wash tanks should be placed in a well-ventilated area. T F
  5. It is not necessary to wash your hands after washing parts in solvents. T F

## ***Portable Drill Written Test***

Use the correct heading and write the answer on your own paper. Use the BEST answer to complete the following:

1. You ( **Should** **Should not**) secure a piece of scrap wood to your worktable.
  - 2/3. Make sure that the drill is switched ( **on** **off**) and that the work area is clean and ( **dry** **wet**).
  4. You ( **Should** **Should not**) drill with straight, steady, even pressure.
  5. To provide for a SAFE and even drilling process, you need to clear the area as you drill. To do this you need to \_\_\_\_\_.
  6. As with any machine, if it is NOT working properly you should:
- 

List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

## ***Portable Grinder Written Test***

Use the correct heading and write the answer on your own paper. Use the BEST answer to complete the following:

1. The sparks caused by grinding or sanding are ( **Warm but not Hot and are**) dangerous.
2. It ( **Never is Is**) safe to grind steady in one spot.
3. You ( **Are Are not**) required to wear protective clothing while using this tool.
4. Make all adjustments before turning ( **Off On**) the power.
5. Never sand free handed. Use ( **The table Your hands**) to support the material.
6. If the machine is not working properly you should:

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List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_



## **Sand Blaster Safety Written Test**

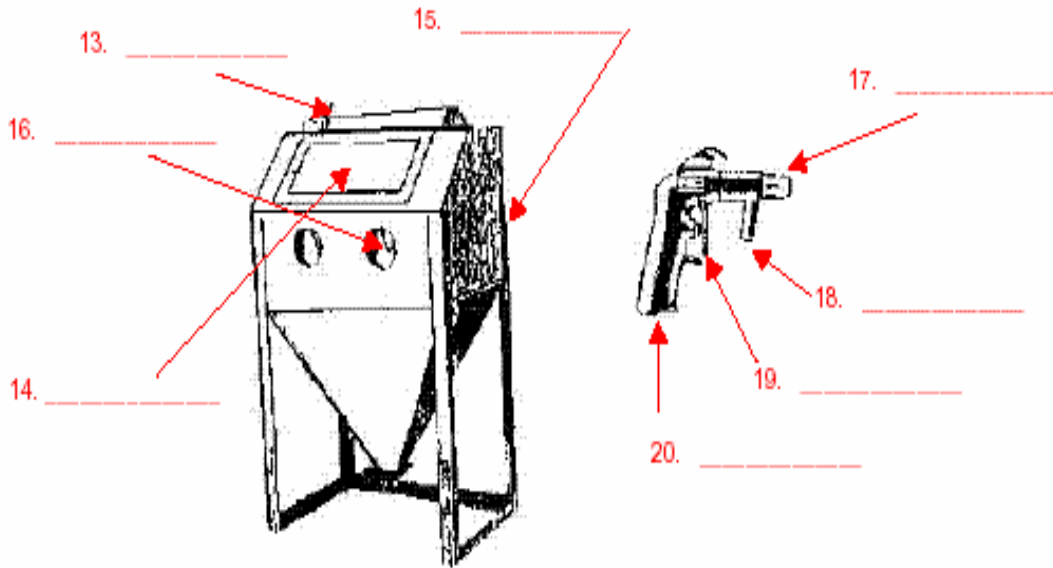
Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

### WORD BANK

Abrasive supply	Gloves	Sand blaster	Wet
Air supply	Lights	Safety glasses	Window
Door	Nozzle	Silica sand	1 Inch
Exhaust system	Paper	Switch	3 Inches
Glass etching	Pressure gauge	Trigger	5 Inches

1. What is the name of this machine? \_\_\_\_\_
2. We will use this machine for? \_\_\_\_\_
3. These are worn to protect your eyes: \_\_\_\_\_
4. This must be closed to use the machine: \_\_\_\_\_
5. This helps to remove dust from the air: \_\_\_\_\_
6. You should not blast objects that are \_\_\_\_\_
7. Before blasting, remove all loose \_\_\_\_\_
8. Do not point the nozzle toward the \_\_\_\_\_
9. These protect your hands when using this machine: \_\_\_\_\_
10. We use this material for our abrasive \_\_\_\_\_
11. Hold the nozzle this far away from your project: \_\_\_\_\_
12. Check this object if there is no air pressure: \_\_\_\_\_

### Parts Identification:



## Safety Quiz—Service Jack

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_

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1. It is unsafe to work under a car that is supported with a service jack only. T F
2. It is a good safety practice to raise a car with someone under it. T F
3. It is necessary to inspect the lift saddles for proper alignment when raising a car.  
T F
4. The service jacks should always be inspected for malfunctions before using. T F
5. Car stands on supports should be used before anyone goes under a raised car.  
T F

## ***Soldering Station/Pencil Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Eye protection ( **Should** **Should not**) be worn at all times in the laboratory.
2. ( **Only the tip** **All of**) of the soldering equipment is hot when it is on.
3. The soldering equipment should be ( **In its holder** **Laid on the bench**) after use.
4. ( **It feels cool to** **Do not**) let any of the melted solder touch your skin.

List five SAFETY procedures you should do before you operate this machine:

5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

## ***Soldering Station/Pencil Written Test Key***

1. Should
2. All of
3. In its holder
4. Do not

List five safety procedures you should do before you operate this or any machine:

1. Tuck in your shirt.
2. Secure your hair.
3. Remove jewelry.
4. Wear Z87 safety glasses.
5. Work with a partner.
6. Listen for and report any problems immediately.
7. Make sure that all guards are in place and working.
8. No horseplay.
9. Keep work area clean.
10. Protect hands.

## Safety Quiz—Storage Batteries

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_

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1. It is OK to light a welder near a car while its battery is being charged. T F
2. A closet or small storeroom is a perfect place to charge batteries. T F
3. Jewelry such as rings, necklaces, and watches/bracelets should be taken off before charging a battery. T F
4. List three potentially serious hazards from batteries.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
5. If battery acid gets in the eyes, deluge them with massive amounts of water immediately and get help (aid unit). T F

## **TIG and MIG Welder Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. It is okay to do TIG or MIG welding ( **Without** **With**) a welding helmet.
2. You ( **Can** **Cannot**) be shocked by touching the tungsten electrode while the TIG welder is turned on.
3. The high frequency switch must be turned ( **Off** **On**) while performing regular arc welding.
4. Both metal-arc welding and gas-shielded arc welding give off ultraviolet and infrared radiation, which ( **Can** **Cannot**) burn unprotected skin.
5. The helmet used for TIG and MIG welding should be equipped with a minimum number ( **12** **15**) density shade.

List five SAFETY procedures you should do before you operate this machine:

6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

## ***TIG and MIG Welder Test Key***

1. With
2. Can
3. Off
4. Can
5. 12

List five safety procedures you should do before you operate this or any machine:

1. Tuck in your shirt.
2. Secure your hair.
3. Remove jewelry.
4. Wear Z87 safety glasses.
5. Work with a partner.
6. Listen for and report any problems immediately.
7. Make sure that all guards are in place and working.
8. No horseplay.
9. Keep work area clean.
10. Protect hands.

## Safety Quiz—Tire Changer

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_

- 
1. There is absolutely no danger in using a tire-mounting machine. T F
  2. Most any type of tool can be used in changing tires. T F
  3. Truck tires using a split-rim assembly require the use of a safety cage. T F
  4. It is not necessary to wear eye protection when using a tire-mounting machine. T F
  5. It is important that the stem and core be installed properly. T F
  6. Fingers may be pinched between the tire bead and wheel rim. T F
  7. Always use correct lifting techniques when handling tires. T F



## **Arc Welder Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Flammable materials should be kept ( **Near** **Away from**) the working area.
2. Chipping can be done ( **With** **Without**) goggles.
3. Make sure all around you are ( **Unaware** **Aware**) that you are striking the arc.
4. ( **Always** **Never**) wear a welding helmet.
5. Gloves and protective clothing are ( **Not necessary** **Necessary**).
6. Ventilation is ( **Required** **Not necessary**) during welding.
7. A(an) ( **Open** **Closed**) container can be dangerous to weld.
8. The welding area floor should be ( **Dry** **Damp**) for a good ground.

List five (5) SAFETY procedures you should do before you operate this machine:

9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_

## **Buffer Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Wood and metal ( **Will Will not**) contaminate the buffing wheel.
2. The buffing wheel will ( **Burn Do nothing to**) you.
3. The buffing compound is basically a real ( **Fine Rough**) sanding compound.
- 4/5. You should buff the plastic by holding it ( **Horizontally Vertically**) and buffing in the ( **Lower Middle Upper**) part of the wheel.
6. You should hold the material you are buffing with ( **One Both**) hand(s).
7. The buffer ( **Can Cannot**) cause a serious injury.
- 8/9. Remember to wait ( **Patiently Impatiently**) behind the ( **Red Yellow**) line.
10. If you are not careful, the buffer ( **Will Will not**) catch your material and throw it causing potential injuries.
11. If the machine is not working properly, you should:

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List five SAFETY procedures you should do before you operate this machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## **Buffer Hands-On Test**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_
2. Why is it useful? \_\_\_\_\_
3. Can the student identify this machine (point to it)? ( Yes  No)
4. Identify the following parts:
  - On/Off                       Cleaning wheel
  - Buffing wheel                 Stand/base
5. Safety procedures followed before using the machine:
  - Shirt tucked in                 Z87 safety glasses
  - Hair secured                     Checks kick-back zone
  - Remove jewelry                 Gets help from/helps partner as needed
6. Procedures for operating machine (teacher designate):
  - Plastic—uses both hands to hold the plastic vertically and lower middle part of the wheel.
  - Hands—fingers stay at least 1-inch away from the buffing and cleaning wheels.
  - Feet—facing machine.
  - Eyes—watches to see where the fingers and plastic are going and makes sure that the fingers are nowhere near the wheels.
7. Makes two safe and successful operations:
  - a)  Yes                       No
  - b)  Yes                       No
8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes                       No

## **Crucible Furnace Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Safety glasses ( **Are**  **Are not**) the only protective clothing that you need to wear.
2. You ( **Should**  **Should not**) keep all flammable material away from the working area.
3. You ( **Do**  **Do not**) need to preheat cold metal before placing it in the crucible.
4. To be SAFE you ( **Should**  **Should not**) use the tongs to place metal inside the crucible.
5. Place mold in the designated area ( **After**  **Before**) you begin to pour the metal.
6. Move very cautiously and carry molten / melted metal up close to the mold to help ( **Increase**  **Reduce**) possible dangers.
7. It ( **Is**  **Is not**) okay or SAFE to step on any molten metal.
8. Any unused and unattended metal should be placed ( **Anywhere**  **In an area designated**).
9. To shut down, make sure that you turn the ( **Air**  **Gas**) off first.

List five SAFETY procedures you should do before you operate this machine:

10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_

## **Crucible Furnace Hands-On Test**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_

2. Why is it useful? \_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

- |                                     |  |   |
|-------------------------------------|--|---|
| <input type="checkbox"/> Lid        | <input type="checkbox"/> Fire bow w/crucible | <input type="checkbox"/> Pilot          |
| <input type="checkbox"/> Lid handle | <input type="checkbox"/> Air control         | <input type="checkbox"/> On/off switch  |
| <input type="checkbox"/> Fire brick | <input type="checkbox"/> Gas control         | <input type="checkbox"/> Igniter switch |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick-back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

7. Makes two safe and successful operations:

a)  Yes  No

b)  Yes  No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

## **Grinder Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. With this machine you must wear proper eye protection, a \_\_\_\_\_, pass ALL tests with 100 percent, and have your teacher's permission to operate it.
2. Set tool rest and spark deflector so that they are ( 1/8 inch  1/4 inch  1/2 inch) away from the wheel.
3. Hold work firmly and securely with ( One  both) hand(s).
4. Remember that small pieces ( Will  Will not) require special set-ups.
5. You should stand ( Directly in front of  To the side) when you start this machine.
6. Grind using the ( Face  Sides) of the wheel.
7. Press material against the wheel with ( A lot of  Just enough) pressure so that you cause a steady and even removal of metal.
8. Again, move stock slowly and evenly across the ( Face  Sides) of the wheel.
9. You can leave the machine when the grinding wheels have come to a ( Half  Full) stop.

List five SAFETY procedures you should do before you operate this or any machine:

10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_

## ***Drill Press Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. You ( **Should**    **Should not**) use a piece of scrap wood and a clamp or vise grip when using this machine.
- 2/3. Objects other than your wood and clamps ( **Should**    **Should not**) be removed from the table top because they can \_\_\_\_\_.
4. Use a ( **C-Block**    **V-Block**) to clamp down C02 cars and irregular stock.
5. The type of bit you select for drilling ( **Is**    **Is not**) important.
6. You ( **Should**    **Should not**) use a center punch when drilling into metal or hard woods.
7. You should use a ( **Faster**    **Slower**) drill speed when drilling into metals, hard wood, and with larger drill bits.
- 8/9. ( **Do**    **Do not**) **panic** if the bit gets stuck in the wood. You should:  
  
\_\_\_\_\_
10. You should remove chips from the table with your ( **Hand**    **Table broom**).
11. As with any machine, if it is NOT working properly you should:  
  
\_\_\_\_\_

List five safety procedures you should do before you operate this machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## ***Drill Press Hands-On Test***

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do?

\_\_\_\_\_

2. Why is it useful?

\_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> On/off switch    | <input type="checkbox"/> Head support safety collar | <input type="checkbox"/> Column               |
| <input type="checkbox"/> Tilting table    | <input type="checkbox"/> Motor                      | <input type="checkbox"/> Tilt angle lock knob |
| <input type="checkbox"/> Base             | <input type="checkbox"/> Belt guard                 |   |
| <input type="checkbox"/> Key chuck        | <input type="checkbox"/> Depth stop                 |   |
| <input type="checkbox"/> Pilot wheel feed | <input type="checkbox"/> Table-locking clamp        |   |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- Depth stop—makes sure that it is set to avoid drilling into the tabletop.
- Scrap wood—uses to avoid drilling into the tabletop.
- Left hand—holds the wood flat or it's clamped down.
- Right hand—guides the wheel feed (or vice versa).
- Feet—facing the machine.
- Key chuck—tightens down the chuck key in at least two places (*righty tighty/lefty loosy*).
- Eyes—watching to see where the bit is going and making sure that the body goes nowhere near it.

7. Makes two safe and successful operations:

- a)      Yes      No  
b)      Yes      No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes      No



## **Horizontal Milling Machine Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Turn the power ( **On**      **Off**) before you make any measurements or adjustments.
2. Be sure the holding device ( **Is**   **Is not**) mounted solidly to the table and the work is held firmly.
3. You ( **Can**      **Cannot**) SAFELY reach over or near the rotating center.
4. Cutters should be handled with ( **Bare**      **Gloved**) hands.
5. You ( **Should**      **Should not**) use a small brush like a table broom to remove chips.
6. It ( **Is**      **Is not**) SAFE to clear chips away while the machine is in operation.
7. It is ( **Safe**      **Unsafe**) to leave the machine while it is working.
8. Keep the floor around the machine ( **Clean**      **Messy**).
9. You ( **Do**      **Do not**) need to wipe up spilled cutting fluid immediately.
10. Make sure that you store all oily rags used to wipe down the machine in an approved ( **Rubber**      **Metal**) container that can be closed tightly.

List five SAFETY procedures you should do before you operate this machine:

11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_

## ***Horizontal Milling Machine Hands-On Test***

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_

2. Why is it useful? \_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

- |                                       |  |  |
|---------------------------------------|--|--|
| <input type="checkbox"/> Over arm     | <input type="checkbox"/> Cross-feed hand wheel | <input type="checkbox"/> Arbor support bracket       |
| <input type="checkbox"/> Table        | <input type="checkbox"/> Table-raising crank   | <input type="checkbox"/> Level for back gear         |
| <input type="checkbox"/> Cabinet base | <input type="checkbox"/> Power table feed      | <input type="checkbox"/> Longitudinal feed handwheel |
| <input type="checkbox"/> Arbor        | <input type="checkbox"/> Saddle                | <input type="checkbox"/> Knee                        |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick-back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

7. Makes two safe and successful operations:

- a)  Yes  No
- b)  Yes  No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

## ***Metal Lathe Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. When operating this machine you must wear proper eye protection, a \_\_\_\_\_, pass ALL tests with 100%, and have your teacher's permission to operate it.
2. You should ( Leave  Remove) the chuck key or wrench in the lathe chuck.
3. Be sure that all parts of the carriage will ( Clear  Touch) any rotating part during the full length of the cut.
4. Place hands on the controls or ( On the object  At your sides), except when filing or polishing.
5. Make sure work is ( Loose  Secure) and lathe is set at correct speed and feed rate before you start turning.
6. You ( Can  Cannot) SAFELY adjust tool bit when tool holder is hand-held.
7. Bring lathe to a ( Half  Full) stop before reversing.
8. Remove tool holder and post ( After  Before) you begin to file or polish.
9. Remove chips with ( A table broom  Your hands).
10. You ( Should  Should not) stop a lathe chuck with anything.
11. You ( Do  Do not) need to keep hands and any other body parts away from all moving parts.
12. It ( Is  Is not) SAFE to wear loose clothing.

List five SAFETY procedures you should do before you operate this machine:

13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_

## ***Oxyacetylene Welding Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. ( **Never**  **Always**) wear spark-resistant clothing.
2. Closed containers ( **Are**  **Are not**) hazardous to weld or repair.
3. Eye protection ( **Must be worn**  **Is not necessary**) for all welding, cutting, and chipping operations.
4. The equipment should not be wiped down with ( **Dry**  **Oily**) rags.
5. Acetylene pressure should be set at ( **20**  **15**) psi.

List five SAFETY procedures you should do before you operate this machine:

6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

## ***Portable Belt Sander Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Safety glasses ( **Are**  **Are not**) the only protective clothing that you need to wear.
2. Check belt ( **Tracking**  **Tension**) carefully before starting work.
3. The machine should be ( **Still moving**  **At a complete stop**) before placing it on the workbench.
4. The sander should be started ( **Before**  **After**) it is on the work.
5. See that the trigger switch is ( **Off**  **On**) before plugging in the machine.
6. Keep the sander ( **Moving back and forth in the direction of the grain**  **Pause in one spot**).
7. Keep the electrical cord ( **Wrapped around your neck**  **Away**) from working area.
8. If the machine is not working properly, you should:

---

List five SAFETY procedures you should do before you operate this machine:

9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_

## ***Portable Drill Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. You ( **Should**  **Should not**) secure a piece of scrap wood to your worktable.
- 2/3. Make sure that the drill is switched ( **on**  **off**) and that the work area is clean and ( **dry**  **wet**).
4. You ( **Should**  **Should not**) drill with straight, steady, even pressure.
5. To provide for a SAFE and even drilling process, you need to clear the area as you drill. To do this you need to \_\_\_\_\_.
6. As with any machine, if it is NOT working properly you should:  
\_\_\_\_\_

List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

## ***Portable Grinder Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. The sparks caused by grinding or sanding are ( Warm but not  Hot and are) dangerous.
2. It ( Never is  Is) safe to grind steady in one spot.
3. You ( Are  Are not) required to wear protective clothing while using this tool.
4. Make all adjustments before turning ( Off  On) the power.
5. Never sand freehanded. Use ( The table  Your hands) to support the material.
6. If the machine is not working properly, you should:

---

List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

## **Sheet Metal Machines Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Sheet metal machines ( **Cannot**    **Can**) be damaged by overloading.
2. Sharp burrs and edges ( **Do not need to**    **Should**) be removed before attempting to place stock in machine.
3. Fingers must be kept ( **Clear of**    **Close to**) moving parts.
4. Quarter-inch thick, mild steel stock ( **Can**    **Cannot**) be formed on the sheet metal machine.
5. If a handle jams, it ( **Can**    **Cannot**) be tapped lightly with a hammer.
6. If the machine is not working properly, you should:

---

List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_



## ***Soldering Station Pencil Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Eye protection ( **Should**     **Should not**) be worn at all times in the laboratory.
2. ( **Only the tip**     **All of**) of the soldering equipment is hot when it is on.
3. The soldering equipment should be ( **In its holder**     **Laid on the bench**) after use.
4. ( **It feels cool to**     **Do not**) let any of the melted solder touch your skin.

List five SAFETY procedures you should do before you operate this machine:

5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

## ***Spinning Lathe Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. You ( **Do**  **Do not**) need to watch out for sharp-pointed metal edges when cutting the metal disc to size and when getting it ready for spinning.
2. Make sure that the tool rest base, tool rest, and fulcrum pin are ( **Loosely**  **Securely**) tightened in place before attempting to spin.
3. It is SAFE to ( **Stand to the side**  **Stand in line with**) the disc during a centering operation.
4. Make certain the spinning tools are fitted solidly to the ( **Handle**  **Rest base**).
5. You ( **Can**  **Cannot**) SAFELY touch a spinning disc by hand.
6. Use the correct tool for the operation and ( **Slowly**  **Quickly**) force material to match the forming chuck.
7. You ( **Should**  **Should not**) remove tool rest and pin when using steel wool or polishing.
8. If you have any doubts, you should: \_\_\_\_\_

List five SAFETY procedures you should do before you operate this machine:

9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_

## **TIG and MIG Welder Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. It is okay to do TIG or MIG welding ( **Without**     **With**) a welding helmet.
2. You ( **Can**     **Cannot**) be shocked by touching the tungsten electrode while the TIG welder is turned on.
3. The high-frequency switch must be turned ( **Off**     **On**) while performing regular arc welding.
4. Both metal-arc welding and gas-shielded arc welding give off ultraviolet and infrared radiation which ( **Can**     **Cannot**) burn unprotected skin.
5. The helmet used for TIG and MIG welding should be equipped with a minimum number ( **12**     **15**) density shade.

List five SAFETY procedures you should do before you operate this machine:

6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

## Safety Quiz—Spot Welder

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_

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1. The spot welder should be used in a wet, damp work area. T F
2. The spot welder should always be left plugged in and the current left on. T F
3. After welding, the tips of the spot welder are very hot. T F
4. The metal being spot-welded must be clean and dry. T F

## Safety Quiz—Manual and Power Shears

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_

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Circle the correct answer:

1. What procedure or procedures would lower the chance of cut hands and fingers while shearing?
  - a. Stack metal before cutting.
  - b. Remove burrs on metal before shearing.
  - c. Wear gloves while handling metal.
  - d. Both b and c.
  
2. How should metal be placed in the shear?
  - a. From the back of the shear.
  - b. From the front of the shear.
  - c. From the back of the shear by a helper.
  - d. From the front of the shear under a lug or hold down bar.
  
3. Which would be the best procedure for two people shearing metal?
  - a. One operating, one helping.
  - b. One person feeding metal, the other catching metal.
  - c. Both people operating the shear.
  - d. Both b and c.
  
4. What parts of the shear should you always keep clear of?
  - a. The blade.
  - b. The hold-down bar or lugs.
  - c. Under the treadle.
  - d. All of the above.
  
5. Which procedure would be unsafe for operating a shear?
  - a. Wearing gloves.
  - b. Keeping fingers clear of the blade.
  - c. Allowing pieces to drop.
  - d. Removing the guard before operating the shear.

## ***Band Saw Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Adjust the blade guard to where it is 1/4 inch above the ( **Lowest**  **Highest**) part of the wood that you are cutting.
2. You ( **Should**  **Should not**) use a push stick when cutting out your C02 car design.
3. You should wait behind the ( **Air**  **Yellow**) line for your turn to use the machine.
4. ONLY ( **One**  **Three**) person(s) can use this machine at a time.
5. You can SAFELY cut ( **Slight**  **Sharp**) curves on the band saw.
6. Your fingers should stay ( **In front**  **To either side**) of the blade as you cut.
7. When cutting round or irregular-shaped stock you should use the ( **C-block**  **V-block**) to secure it.
8. You should use ( **Hand**  **Table broom**) to clean the top of the table off when you are finished.
9. You should use your ( **Hand**  **Scrap wood**) to push wood away from the blade.
10. It ( **Is**  **Is not**) SAFE to force wood into the blade.
11. Blades do occasionally break on this machine. If it does break you should:

---

List five SAFETY procedures you should do before you operate this machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## ***Band Saw Hands-On Test***

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_

2. Why is it useful? \_\_\_\_\_

3. Can the student identify this machine (point to it)? ( **Yes—*Band Saw Hands-On Test***  **No**)

4. Identify the following parts:

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> On/off switch  | <input type="checkbox"/> Lower wheel guard | <input type="checkbox"/> Miter gauge grove |
| <input type="checkbox"/> Table          | <input type="checkbox"/> Upper wheel guard | <input type="checkbox"/> Blade             |
| <input type="checkbox"/> Blade guard    | <input type="checkbox"/> Rear blade guard  | <input type="checkbox"/> Guidepost         |
| <input type="checkbox"/> Dust collector | <input type="checkbox"/> Kick-back zone    |  |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures to set up for a cut:

- Set guard 1/4 inch above thickest part of the wood.
- Hands—fingers stay to the side of the blade, not in front of it.
- Push stick—uses one when needed, ALWAYS with the CO2 car or to remove scrap.
- Lowers guard—lowers the blade guard by hand, does not let it just drop.
- Feet—facing machine.
- Vents—double-check to see that they are on and open.
- Eyes—watches to see where the blade is going and to make sure that the hand is nowhere near the blade.

7. Makes two safe and successful operations:

- a)  Yes  No
- b)  Yes  No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

## ***Belt Finishing Sander Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Safety glasses ( **Are**  **Are not**) the only protective clothing that you need to wear.
2. Use a ( **Push block**  **Your fingers**) to hold thin material against the belt.
3. The wood should be ( **Wet**  **Dry**), with no resin, paint, or finish on it and with no nails or other hardware in it.
4. The abrasive belt on the sander must be in good condition. Belts containing small rips or burns are ( **Permissible**  **Not OK**) to use.
5. The belt track must be adjusted with the power ( **Off**  **On**).
6. The table must be ( **1 inch**  **1/16 inch**) from the belt.
7. The work must be kept ( **Stationary**  **Moving**) while sanding.
8. If the machine is not working properly, you should:  
\_\_\_\_\_

List five SAFETY procedures you should do before you operate this machine:

9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_



## **Portable Circular Saw Written Test**

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. As with any machine, you must wear proper eye protection, pass ALL tests at ( 85 percent  95 percent  100 percent), and have your teacher's permission to operate it.
2. It ( Is  Is not) important to make sure that all stock is supported and securely clamped down.
3. Adjust the depth of cut to the thickness of the stock (material) plus ( 1/8 inch  1/2 inch  3/4 inch)
4. The power cord ( Should  Should not) be clear of the blade.
5. Your work area should be ( Clean  Dirty) before you start cutting.
6. Check the base and angle adjustments to be sure they are ( Loose  Tight).
7. Always place the base of the saw on the stock you will be cutting. Make sure that the blade ( Is  Is not) actually touching the stock before you turn it on!
- 8/9. Advance the saw blade ( Slowly  Quickly) and evenly making sure that it cuts ( Angled  Straight) through the work.
10. You should sit the saw down when the blade has come to a ( Half  Full) stop!
11. You should \_\_\_\_\_ the machine to change the blades or to make any kind of adjustments.

List five SAFETY procedures you should do before you operate this or any machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## ***Portable Circular Saw Written Test Key***

1. 100 percent
2. Is
3. 1/8 inch
4. Should
5. Clean
6. Tight
7. Is not
8. Slowly
9. Straight
10. Full
11. Unplug

List five safety procedures you should do before you operate this or any machine:

1. Tuck in your shirt.
2. Secure your hair.
3. Remove jewelry.
4. Wear Z87 safety glasses.
5. Work with a partner.
6. Listen for and report any problems immediately.
7. Make sure that all guards are in place and working.
8. No horseplay.
9. Keep work area clean.
10. Protect hands.

## ***Disc Sander Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. It ( **Is**  **Is not**) important to check the abrasive disk for tears, or loose areas.
2. The table should be ( **1/2 inch**  **1/4 inch**  **1/16 inch**) away from the disc.
3. You sand on the ( **Left**  **Right**) side of the disc.
- 4/5. The disc sander ( **is**  **is not**) a potentially dangerous machine, because it ( **Can**  **cannot**) cut or tear part of your finger off.
6. You can SAFELY sand ( **Small**  **Big**) objects.
7. It ( **Is**  **Is not**) necessary to hold your wood flat against the table.
8. You can use a piece of scrap wood to slow the disc sander down by ( **Jamming it into the disc**  **Sanding it carefully down**).
9. You ( **Should**  **Should not**) sand your wood with an even, steady pressure.
10. You should have patience and quietly wait for your turn behind the ( **Red**  **Yellow**) line.
11. If the machine is not working properly you should:  
\_\_\_\_\_

List five SAFETY procedures you should do before you operate this machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## ***Disc Sander Hands-On Test***

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do?

\_\_\_\_\_

2. Why is it useful?

\_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

- |  |                                     |                                     |
|--|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> On/off switch | <input type="checkbox"/> Dust spout | <input type="checkbox"/> Power cord |
| <input type="checkbox"/> Tilting table | <input type="checkbox"/> Lock knob  | <input type="checkbox"/> Motor      |
| <input type="checkbox"/> Abrasive disc | <input type="checkbox"/> Rim guard  |                                     |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick-back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- Wood—uses both hands to hold the wood flat against the table.
- Hands—fingers stay at least 1-inch away from the abrasive disc.
- Scrap wood—uses it to slowly sand the disc to a stop.
- Feet—facing the machine.
- Eyes—watches to see where the material is going and makes sure that the hands are nowhere near the disc.

7. Makes two safe and successful operations:

- |    |                              |                             |
|----|------------------------------|-----------------------------|
| a) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

## ***Jig/Bayonet Saw Written Test***

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. As with any machine, you must wear proper eye protection, pass ALL tests with 100 percent, and you ( **Do**  **Do not**) need your teacher's permission to operate it.
2. Selecting the correct blade for the stock (material) ( **Is**  **Is not**) important.
3. You should clamp the blade down ( **Lightly**  **Tightly**) in the chuck.
4. Always leave the saw ( **Disconnected**  **Connected**) when you change blades or make adjustments of any kind.
5. Use vise or clamps, like a ( **C-clamp**  **V-clamp**) to securely hold the stock (material) that you will be cutting.
6. Keep a constant and ( **Even**  **Uneven**) cutting pressure.
7. You ( **Should**  **Should not**) force the blade into the work.
8. You can safely cut ( **Tight**  **Slight**) curves.
9. You can safely sit this saw down on the workbench when ( **You are through with it**  **It has completely stopped**).
10. If you are not going to use it again immediately, you should

---

List five SAFETY procedures you should do before you operate this or any machine:

11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_

## ***Jointer Written Test***

Use the correct heading and write the answers on your own paper! Use the BEST answer to complete the following:

1. ALWAYS keep the knives of the jointer ( Dull  Sharp).
2. It is ( Safe  Dangerous) adjust the fence while the jointer is running.
3. Adjust the depth of cut ( After  Before) you turn the jointer ON.
4. ( 1/2 inch  1/8 inch  1/16 inch) is the maximum SAFE plane thickness.
5. You should allow the machine to come to ( Half  Full) speed before using it.
6. You ( Can  Cannot) SAFELY use the jointer on PLYWOOD or PARTICLEBOARD.
7. Cut ( Against  With) the GRAIN.
8. You ( Should  Should not) use your hands to clean wood shavings from ANY table.
9. If you are facing and using the jointer, the kick-back danger area is to your ( Left  Right).
10. You ( Should  Should not) turn the dust collector on before you start your work.

List five SAFETY procedures you should do before you operate this or any machine:

11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_

## ***Jointer Hands-On Test***

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do?

\_\_\_\_\_

2. Why is it useful?

\_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

- |   |  |                                      |
|---|--|--------------------------------------|
| <input type="checkbox"/> On/off switch  | <input type="checkbox"/> Kick back zone                | <input type="checkbox"/> Guard       |
| <input type="checkbox"/> Infeed table   | <input type="checkbox"/> Infeed table adjustment lever | <input type="checkbox"/> Cutter head |
| <input type="checkbox"/> Outfeed table  | <input type="checkbox"/> Infeed depth of cut gauge     | <input type="checkbox"/> Fence       |
| <input type="checkbox"/> Dust collector |  |                                      |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick-back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- Fence adjustment—makes sure that it is big enough and uses a push stick if needed.
- Infeed table adjustment—1/16 inch maximum cut.
- Left hand—keeping board flush with the fence, but stays far away from the cutter head.
- Right hand—guides the board, but stays away from the cutter head.
- Feet—facing the machines and does the “side step.”
- Vents—double-check to make sure that they are open.

7. Makes two safe and successful operations:

- a)  Yes       No  
b)  Yes       No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

### **Motorized Miter Box Written Test**

Use the correct heading and write the answer on your own paper. Use the BEST answer to complete the following:

1. Always hold the work firmly ( **Away from** **Against**) the fence and table.
2. The machine ( **Should** **Should not**) be stopped by pushing a piece of scrap against the side of the blade.
3. The guard sections can easily be checked for proper operation ( **Before** **After**) using the machine.
4. The trigger switch and the brake button ( **Can** **Cannot**) be used together to gain better control.
5. Fingers should be kept ( **Inside** **Outside**) of the blade guards.
6. If the machine is not working properly you should:

---

List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_



## Safety Quiz—Motorized Miter Box

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_

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1. The table on this machine can be cut so often that it no longer gives safe support to the work. T F
2. The machine should be stopped by pushing a piece of scrap against the side of the blade. T F
3. The guard sections can easily be checked for proper operation before starting to use the machine. T F
4. The trigger switch and the brake button can be used together to gain better control. T F
5. A warped or twisted work piece is not really dangerous. T F

## **Planer/Surfacers Written Test**

Use the correct heading and write the answer on your own paper! Use the BEST answer to complete the following:

1. NEVER stand directly behind the board or in front of the machine when planing, in case of a \_\_\_\_\_
2. It ( **Is** **Is not**) SAFE to look into the throat of the planer from either side when the machine is in operation.
3. Plane your board down to ( **One** **Two** **Three**) desired thickness at a time.
4. Support long pieces of wood, because these could \_\_\_\_\_
5. Make sure the board is ( **Longer** **Shorter**) than the distance between the centers of the in feed and out feed rolls.
- 6/7. Before you make any adjustments turn the power ( **On** **Off**), and then check to make sure that the cutter head is ( **Moving** **Standing still**).
8. DO NOT take cuts deeper than ( **1/4 inch** **1/8 inch** **1/16 inch**).
9. ALWAYS surface wood ( **Against** **With**) the grain. NEVER run a piece cross grain.
10. You ( **Can** **Cannot**) SAFELY use the planer on plywood or particleboard.
11. You ( **Should** **Should not**) check your wood for imperfections like metal, and scrape off excess glue before you plane it.
12. You ( **Should** **Should not**) panic if your wood gets stuck.

List five SAFETY procedures you should do before you operate this or any machine:

13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_

## Planer/Surfacers Hands-On Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_
2. Why is it useful? \_\_\_\_\_
3. Can the student identify this machine (point to it)?  Yes  No
4. Identify the following parts:  
 On/Off switch     Chip breaker     Outfeed rollers     Infeed rollers  
 Infeed table     Cutter head     Outfeed table  
 Pressure bar     Clutch     Elevating wheel
5. Safety procedures followed before using the machine:  
 Shirt tucked in     Z87 safety glasses     Hair secured  
 Checks kick back zone     Remove jewelry     Gets help from/helps partner as needed
6. Procedures for operating machine (teacher designate):  
 Fingers—kept away from the underside and inside of the machine.  
 Does not look into the throat of the machine.  
 Keeps the wood straight and flat against the table.  
 Vents—double-check to make sure that they are open.  
 Does not force the wood, take time to readjust as needed.  
 Does not panic if wood gets stuck, just readjusts.  
 Feet – stands to the side.
7. Makes two (2) safe and successful operations:  
1)  Yes     No  
2)  Yes     No
8. Makes sure the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

## Safety Quiz—Planer—Surfacer

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. Instructor's permission is required to operate the machine. T F
2. Eye protection is required to operate machine. T F
3. Chips may be removed while machine is running. T F
4. It is safe to plane wood with loose knots. T F
5. If material becomes stuck, it is safe to stop machine. T F
6. Line of sight should be through the throat of the machine. T F
7. Assistance should be obtained when planing long pieces of wood. T F

## ***Portable Belt Sander Written Test***

Use the correct heading and write the answer on your own paper. Using the BEST answer to complete the following:

1. Safety glasses ( **Are**  **Are not**) the only protective clothing that you need to wear.
2. Check belt ( **Tracking**  **Tension**) carefully before starting work.
3. The machine should be ( **Still moving**  **At a complete stop**) before placing it on the workbench.
4. The sander should be started ( **Before**  **After**) it is on the work.
5. See that the trigger switch is ( **Off**  **On**) before plugging in the machine.
6. Keep the sander ( **Moving back and forth in the direction of the grain**  **Pause in one spot**).
7. Keep the electrical cord ( **Wrapped around your neck**  **Away**) from working area.
8. If the machine is not working properly you should:
9. \_\_\_\_\_
10. List five SAFETY procedures you should do before you operate this machine:
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_

## ***Portable Drill Written Test***

Use the correct heading and write the answers on your own paper. Using the BEST answer to complete the following:

1. You ( **Should**  **Should not**) secure a piece of scrap wood to your worktable.
  - 2/3. Make sure that the drill is switched ( **on**  **off**) and that the work area is clean and ( **dry**  **wet**).
  4. You ( **Should**  **Should not**) drill with straight, steady, even pressure.
  5. To provide for a SAFE and even drilling process, you need to clear the area as you drill. To do this you need to \_\_\_\_\_.
  6. As with any machine, if it is NOT working properly you should:
- 

\_\_\_\_\_

List five SAFETY procedures you should do before you operate this machine:

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

## ***Portable Finishing Sander Written Test***

Use the correct heading and write the answers on your own paper. Using the BEST answer to complete the following:

1. Be sure the trigger switch is in the ( **Off**  **On**) position when plugging it in.
2. Check the abrasive sheet to see if it is ( **Loose**  **Secure**).
3. Hold the sander by the ( **Cord**  **Handle**).
4. Pull the ( **Plug**  **Power cord**) to remove the plug from the socket.
5. Turn ( **Off**  **On**) the sander before placing it on the work.
6. Turn the sander off while it is ( **On**  **Off**) the work piece.
7. If the machine is not working properly, you should:

---

List five SAFETY procedures you should do before you operate this machine:

8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

## ***Portable Router Written Test***

1. You ( **Should**  **Should not**) carry any portable tool by its power cord.
2. You should router to the ( **Left**  **Right**) and remember to use the \_\_\_\_\_ as a guide.
3. You ( **Do need**  **Do not need**) to use a face shield when cutting on the router.
4. It ( **Is**  **Is not**) safe to touch the router bit after you have used it because it will be ( **Cold**  **Hot**)
5. As with any machine, if it is not working properly, you should:

---

List five safety procedures you should do before you operate this or any machine:

6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_



## Portable Router Hands-On Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_
2. Why is it useful? \_\_\_\_\_
3. Can the student identify this machine (point to it)? ( Yes  No)
4. Identify the following parts:

<input type="checkbox"/> On/Off switch	<input type="checkbox"/> Cord strain reliever	<input type="checkbox"/> Sub-base
<input type="checkbox"/> Locking handle	<input type="checkbox"/> Housing	<input type="checkbox"/> Collet type chuck
<input type="checkbox"/> Guide knob	<input type="checkbox"/> Depth adjustment	<input type="checkbox"/> Motor safety disconnect
5. Safety procedures followed before using the machine:

<input type="checkbox"/> Shirt tucked in	<input type="checkbox"/> Z87 safety glasses
<input type="checkbox"/> Hair secured	<input type="checkbox"/> Checks kick-back zone
<input type="checkbox"/> Remove jewelry	<input type="checkbox"/> Gets help from/helps partner as needed
6. Procedures for operating machine (teacher designate):

<input type="checkbox"/> Router Adjustment—makes sure that it's tightened down and makes a test cut on scrap wood.
<input type="checkbox"/> Fence Adjustment—checks the height and secures it.
<input type="checkbox"/> Left Hand—holds the wood flat and guides it through, but stays away from the bit.
<input type="checkbox"/> Right Hand—same.
<input type="checkbox"/> Feet—facing the machines and side steps.
<input type="checkbox"/> Eyes—watches to see where the bit is going and makes sure that the hand is nowhere near the bit.
<input type="checkbox"/> Routers to the left when at all possible.
7. Makes two safe and successful operations:
  - 1)  Yes  No
  - 2)  Yes  No
8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes  No

## **Radial Arm Saw Written Test**

Use the correct heading and write the answers on your own paper. Using the BEST answer to complete the following:

- 1/2. Make adjustments with the power ( On  Off) and the cutter head ( Behind  In front of) the fence.
3. BEFORE making any cut, wait until the cutter head is turning at ( One-half  Full) speed.
4. The maximum SAFE width/size of a board that you can cut is ( 1' – 0"  12 – 0"  1 – 6").
- 5/6. ALWAYS make sure that the machine is turned ( On  Off), and that the blade has stopped  after  before) you leave the machine.
7. As with any machine, if you think that it is not working correctly you should

\_\_\_\_\_

List five basic steps you should follow before and during the use of the arm saw:

8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

List five safety procedures you should do before you operate this machine:

13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_

# Radial Arm Saw Hands-On Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_

2. Why is it useful? \_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

On/Off switch     Dept of cut gauge     Cutter head     Kick-back zone

Table     Miter cut scale     Fence

Guard     Miter lock knob     Dust collector

5. Safety procedures followed before using the machine:

Shirt tucked in     Z87 safety glasses     Gets help from/helps partner as needed

Hair secured     Checks kick-back zone     Remove jewelry

6. Procedures for operating machine (teacher designate):

Right hand—guides the blade, but stays far away from it.

Feet—facing machine.

Vents—double-check to see that they are on and open.

Left hand—keeping board flush with fence, but staying far away from the blade.

Blade adjustment—make sure that it is set to the angle that is required (90, 45, etc.) to set up for a cut.

Board cut adjustment—1' 0" is maximum cut.

Eyes—watches to see where the blade is going and makes sure that the hand is nowhere near the blade.

7. Makes two safe and successful operations:

1)  Yes     No

2)  Yes     No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.  Yes     No

## Scroll Saw Written Test

Use the correct heading and write the answer on your own paper. Using the BEST answer to complete the following:

1. The scroll saw can be SAFELY used to cut ( Slight  Tight) curves.
2. Make any adjustments with the power ( On  Off).
3. Use ( both  One) hand(s) to guide the wood through the blade.
4. "Hard" woods and tight curves should be cut with a ( Faster  Slower) speed.
5. You should wait ( Patiently  Impatiently) for your turn to use the machine.
6. Picking the correct speed for cutting a design ( Is  Is not) necessary.
7. You ( Should  Should not) force wood into the blade.
8. If you are unsure of how to cut a design you ( Try it anyway  Get assistance).
- 9/10. The machine should be turned ( On  Off) and ( Still going  Standing still) before you leave it.
11. Blades do occasionally break on this machine, if it does break you should:

---

List five SAFETY procedures you should do before you operate this machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## Scroll Saw Hands-On Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Subject: \_\_\_\_\_ Per: \_\_\_\_\_

1. What does it do? \_\_\_\_\_

2. Why is it useful? \_\_\_\_\_

3. Can the student identify this machine (point to it)? ( Yes  No)

4. Identify the following parts:

- |                                   |  |                                       |
|-----------------------------------|--|---------------------------------------|
| <input type="checkbox"/> On/Off   | <input type="checkbox"/> Hold down             | <input type="checkbox"/> Table insert |
| <input type="checkbox"/> Table    | <input type="checkbox"/> Guide post            | <input type="checkbox"/> Upper chuck  |
| <input type="checkbox"/> Blade    | <input type="checkbox"/> Guide assembly        | <input type="checkbox"/> Base         |
| <input type="checkbox"/> Over arm | <input type="checkbox"/> Belt and guard pulley |                                       |

5. Safety procedures followed before using the machine:

- |  |   |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses                     |
| <input type="checkbox"/> Hair secured    | <input type="checkbox"/> Checks kick back zone                  |
| <input type="checkbox"/> Remove jewelry  | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- Wood against—uses both hands to hold the wood flat on the table to keep it from bouncing around.
- Hands—fingers stay to the side of the blade, not in front of it.
- Scrap wood—use to remove scrap wood.
- Lowers guard—lowers the guide assembly by hand; does not let it just drop.
- Feet—facing machine.
- Eyes—watches to see where the blade is going and makes sure that the hand is nowhere near the blade.

7. Makes two safe and successful operations:

- a)  Yes  No
- b)  Yes  No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away.

- Yes  No

## ***Table Saw Written Test***

Use the correct heading and write the answer on your own paper. Using the BEST answer to complete the following:

1. Adjust the blade, just high enough to cut through the stock, ( **Before**  **After**) the power is turned on.
2. Keep fingers ( **Away from**  **Close to**) moving parts and never reach over the saw blade.
3. ( **Always**  **Never**) make a cut without using the proper fences or gauges
4. Be sure that the blade will clear both sides of the ( **Fence**  **Throat plate**) before turning on the power.
5. Make ( **No**  **Any**) adjustments while the machine is running.
6. Never attempt to clear away scraps while the blade is ( **Running**  **Still**).
7. Before beginning any "special" cuts, always have ( **The instructor**  **Another student**) check the set up.
8. Do not allow fingers to ( **Come into direct line with**  **Be on the side of**) the blade.
9. ( **Get help**  **Just be careful**) when sawing large stock.
10. ( **Do not**  **Do**) cut cylindrical stock on this machine.
11. When starting work or on special set ups, ( **Cycle the switch quickly to see that everything is working properly**  **Have your instructor check your set-up**).
12. Clean the machine and the area around it with ( **Your hands**  **A brush**) when finished using.

List five SAFETY procedures you should do before you operate this machine:

13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_

## **Wood Lathe Written Test**

Use the correct heading and write the answer on your own paper. Using the BEST answer to complete the following:

1. When operating this machine you must wear proper eye protection, a \_\_\_\_\_, pass ALL tests with 100 percent, and have your teacher's permission to operate it.
2. You ( **Should**  **Should not**) examine all wood for checks, knots, or other defects before you put it on the lathe.
3. Work must be balanced and securely held between ( **Ends**  **Centers**) or mounted on a faceplate.
4. Rotate spindle by ( **Hand**  **Turning it on**) to check to make sure that you have enough clearance before start the turning.
5. Tool rest must be set ( **1/8"**  **1/4"**  **1/2"**) away from the work piece and adjusted to the proper height for the tool being used.
6. Be sure the lathe is running at the ( **Half**  **Full**) speed for the operation.
7. You should use caution and \_\_\_\_\_ to prevent turning tools from catching in the stock.
8. You ( **Do**  **Do not**) need to select and use the correct tool for the cut you plan to make.
9. Since you will be wearing a face shield, you  (**should**  **should not**) also make sure that the safety shield is properly in place.
10. Remove the tool rest and base ( **After**  **Before**) sanding or polishing.
11. Use ( **A table broom**  **Your hands**) to clean off lathe when finished.

List five SAFETY procedures you should do before you operate this machine:

12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

## Safety Quiz—Wood Lathe

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

- 
- 
1. The speed of the machine is not important for safe operation. T F
  2. A space of 1- inch is safe between the tool rest and the work. T F
  3. Eye protection is not necessary during operation. T F
  4. Dull tools may be used. T F
  5. It is safe to feel for smoothness while turning. T F
  6. The tool rest should be removed while sanding. T F
  7. It is safe to turn work that is not balanced. T F
  8. Long sleeves may be worn while operating. T F



## Safety Quiz—Uniplane

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. The guard should be clamped in position to clear the work piece. T F
2. Loose cutters will give a rough cut but are not detrimental to safety. T F
3. The work piece should be moved through the machine to the rear fence before removing. T F
4. The machine must come to a full stop before it is safe to leave the work area. T F
5. All adjustments should be made with the power off. T F
6. A lamp attachment contributes to safety. T F

## Safety Quiz—Portable Electric Plane

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

- 
- 
1. Since the cutter will not touch, it is all right to set the plane on the bench while still running. T F
  2. The plane will cut deeper the more pressure is applied. T F
  3. The plane should be disconnected before adjusting the depth of cut or the fence. T F
  4. Eye protection is required when using a power plane. T F
  5. The plane should be kept firmly against the work piece until the cut is completed. T F
  6. The chip deflector is of no real safety value and can be removed. T F

## Safety Quiz—Wood Shaper

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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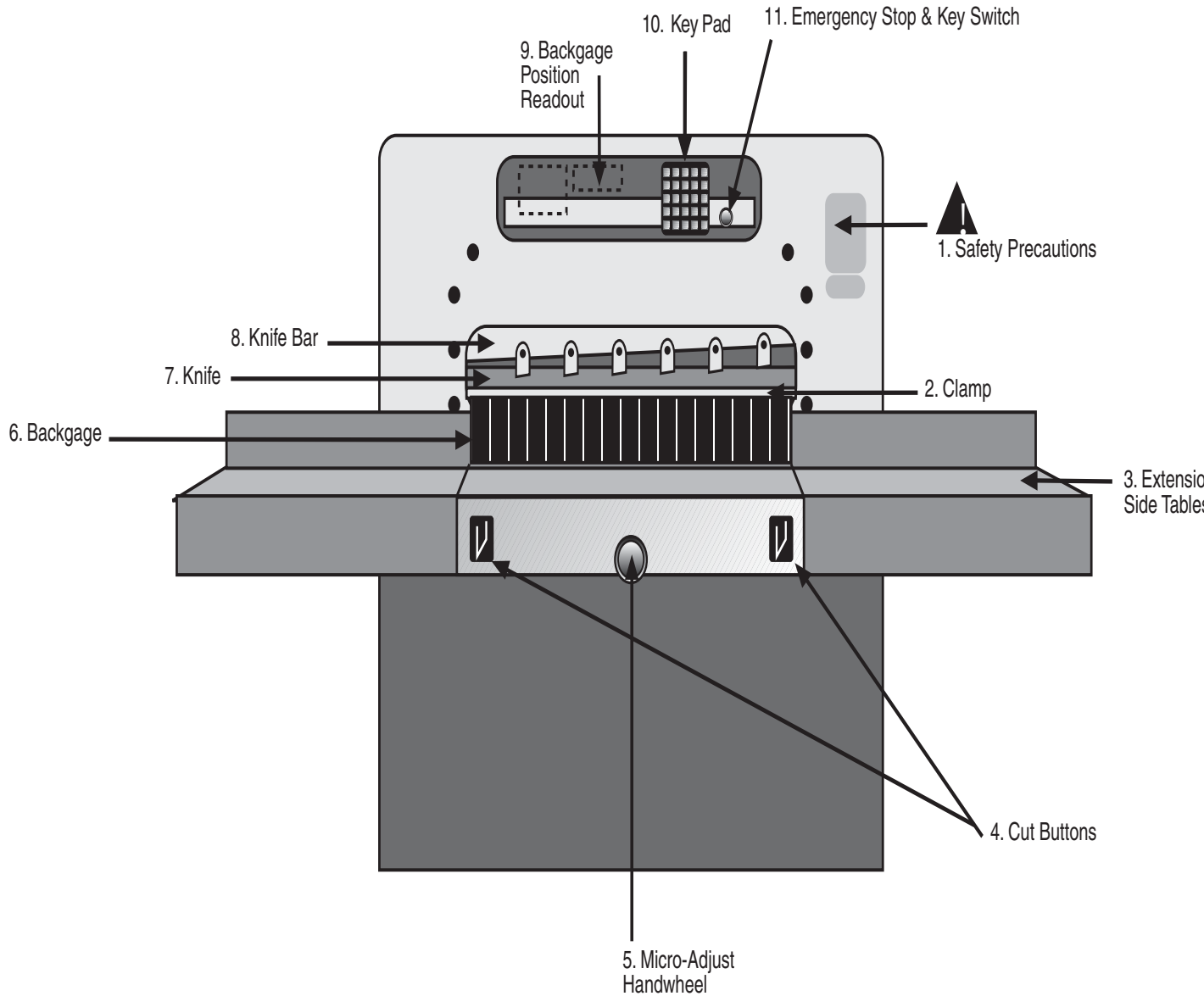
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1. In most cases, guards and hold-downs only get in the way. T F
2. Often the special or custom fixtures must be made to do a job safely. T F
3. A starting pin is not necessary. T F
4. The largest table insert should always be used. T F
5. A brush should be used to brush away chips when the machine is running. T F
6. Three-wing cutters are safer than a cutter head. T F

# CUTTER

True or False:

- |   |   |   |
|---|---|---|
| 1. It is safe to reach carefully into the cutter and touch the blade.                     | T | F |
| 2. Students are not to change the blade without the teacher's permission.                 | T | F |
| 3. Students can throw trimmings on the floor to save time.                                | T | F |
| 4. It is safe to use the cutter when your teammates are in the operator's zone.           | T | F |
| 5. It is safe to go over and operate the cutter at any time without teacher's permission. | T | F |



## PLATEMAKER

True or False:

- |  |   |   |
|--|---|---|
| 1. The platemaker should have the chemistry changed by the teacher only.                       | T | F |
| 2. Never look into the light used for exposing the plate because it may be harmful to eyes.    | T | F |
| 3. All covers must be left in place during operation.  | T | F |
| 4. The glass copy board should always be lowered quickly to get good contact with the artwork. | T | F |

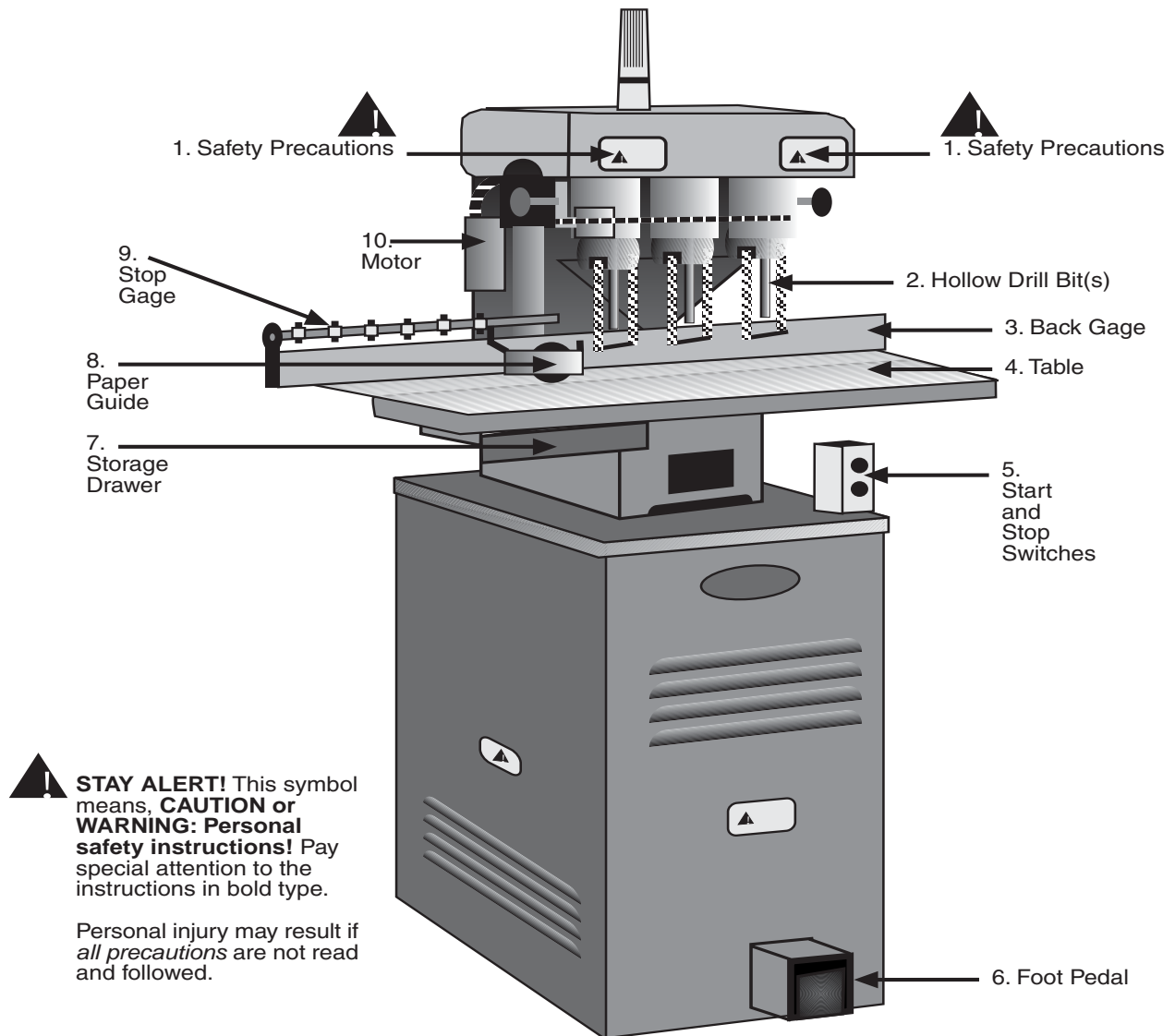
Write the correct name of the machine and its parts in the space provided below.

- A. \_\_\_\_\_
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

## DRILL

True or False:

- |  |    |
|--|----|
| 1. Be sure the paper guide is unfastened before turning on the machine | TF |
| 2. Hold the paper loosely against the paper guide.                     | TF |
| 3. Allow the foot pedal to return slowly.                              | TF |
| 4. Use of the drill bit may cause it to become hot.                    | TF |



# PRESS

True or False:

1. It is safe to reach carefully across the press when it is operating. T F
2. Students are not to use any tools on the press without the teacher's permission. T F
3. Final adjustments may be made while the press is running slowly. T F
4. Loose or dangling clothing should not be worn when one is working around the press. T F
5. It is best to avoid unnecessary conversation while running the press. T F
6. Gears need not be covered while the press is in operation if the operator is careful. T F
7. It is all right to leave the press running if one returns to it immediately. T F

Multiple Choice:

- \_\_\_\_\_ 8. Before operating the offset press, one should:
- (a) Get the teacher's permission.
  - (b) Place all guards in position.
  - (c) Have received instruction on how to operate it.
  - (d) Have done all of these.
- \_\_\_\_\_ 9. Oily rags should always be placed:
- (a) In the wastebasket.
  - (b) In the scrap box.
  - (c) In a metal self-closing can.
  - (d) Where the next person can find them.
- \_\_\_\_\_ 10. Scrap paper and other litter:
- (a) May be left on the floor to be swept up later.
  - (b) Should be disposed of in the recycling box or in the waste can.
  - (c) Can be ignored because they do not cause a safety hazard.
  - (d) None of these.
- \_\_\_\_\_ 11. Before operating the offset press, one should:
- (a) Tuck in loose clothing and roll up long sleeves.
  - (b) Remove rings, watches and other jewelry.
  - (c) Tie back long hair.
  - (d) Do all of these.

Write the correct name of the machine and it's parts in the space provided.

- A. \_\_\_\_\_
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_
  6. \_\_\_\_\_
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  21. \_\_\_\_\_
  22. \_\_\_\_\_
  23. \_\_\_\_\_
  24. \_\_\_\_\_
  25. \_\_\_\_\_



# Screen Printing

True or False:

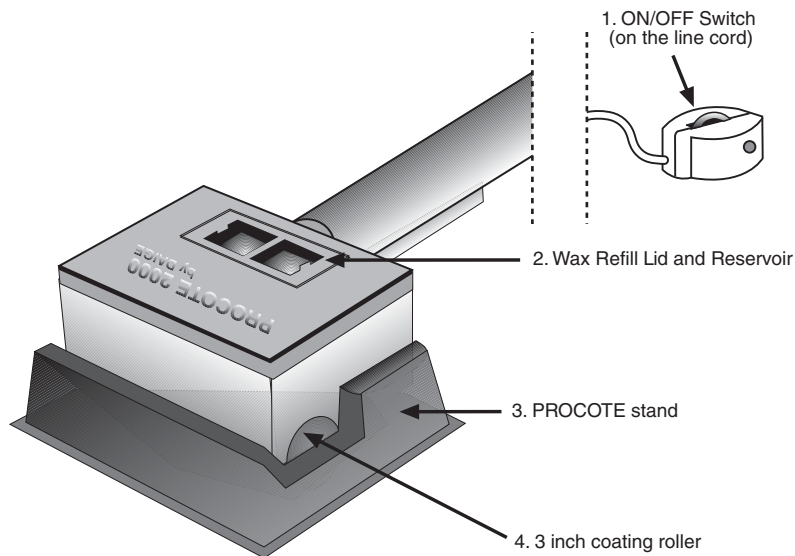
1. Many screen inks and cleaners give off toxic fumes T F
2. Photo stencil exposure lights are not very bright; therefore, no special precautions need to be taken when working around such lights. T F
3. Darkroom safety procedures need to be followed when preparing materials for photo stencils. T F
4. Flammable liquids should be stored in metal fireproof containers. T F

Multiple Choice:

5. If a student does not understand the screen-printing operation, he/she should:
  - (a) Ask for the teacher's help.
  - (b) Ask another student who doesn't know.
  - (c) Go ahead as planned and hope it works.
  - (d) Do none of these.
6. When working with screen inks and cleaners:
  - (a) Get the teacher's permission.
  - (b) Wear appropriate eye protection.
  - (c) Work only in well-ventilated area.
  - (d) Do all of these.
7. After use, cleaning rags should be:
  - (a) Placed in metal fireproof container.
  - (b) Thrown in the waste can.
  - (c) Left for the next student.
  - (d) Rolled up in a neat bundle.
8. If oils or inks spill on the floor:
  - (a) Be careful not to slip on it until clean-up time.
  - (b) Clean it up at once.
  - (c) Inform the teacher.

# TOOLS

1. True or False:
2. It is safe to lean or sit on light tables and glass stripping area because they have unbreakable glass tops. T F
3. It is safer to use a dull cutting tool than a sharp one. T F
4. X-acto knives, razor blades, and/or scissors should never be carried in the pocket. T F
5. To avoid burns when using the waxer, never turn it upside down and always be careful. T F
6. It is a good safety practice to give tools back to the teacher or put them in their storage place after use. T F



## Safety Quiz—Cameras, Flash Units, Projectors

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

- 
- 
1. Get permission of models and owners of private property before taking photographs. T F
  2. Before mounting a camera on a tripod, be sure the tripod legs are secure. T F
  3. Carefully remove used flashbulbs from the camera by hand. T F
  4. Leaving cameras and film in closed and locked cars in the summer is a safe thing to do. T F
  5. Do not exercise any special care in the handling of flashbulbs. They are sturdy. T F
  6. Before beginning a slide show or movie, be sure the projector is on solid surface where it will not fall. T F
  7. Carry both used and unused flashbulbs in a pocket. T F
  8. Use a flashguard over the flash unit at all times in case a flashbulb shatters. T F
  9. Take no special care of the projector's moving parts. T F

### **MULTIPLE CHOICE**

- \_\_\_\_\_ 10. When taking a photograph, never endanger: (a) oneself, (b) the model, (c) the camera, (d) both a and b.
- \_\_\_\_\_ 11. Before leaving the classroom to take photographs: (a) tell another student of one's destination, (b) get the teacher's permission, (c) put on a jacket, (d) invite a good friend to go along.
- \_\_\_\_\_ 12. When taking a photograph from a car: (a) pull to the edge of the road and stop the car, (b) roll down the window, (c) drive slowly while taking the picture, (d) keep one hand on the steering wheel.
- \_\_\_\_\_ 13. Never ask a model to look directly into: (a) the camera, (b) the sun, (c) empty space, (d) none of these.
- \_\_\_\_\_ 14. When connecting the flash unit to the camera, always have it aimed: (a) toward one's face, (b) toward the model, (c) toward bystanders, (d) always from oneself and others.
- \_\_\_\_\_ 15. When changing a burned-out projector bulb: (a) let the bulb cool first, (b) disconnect the power cord, (c) be careful not to crack the bulb, (d) do all of these.
- \_\_\_\_\_ 16. To protect the members of the audience during a movie or slide show: (a) do not let the projector light shine directly into their eyes, (b) do not have the room so dark a person could not see to leave if necessary, (c) be sure no one trips over extension cords running to the projector, (d) do all of these.

## Safety Quiz—Studio Light

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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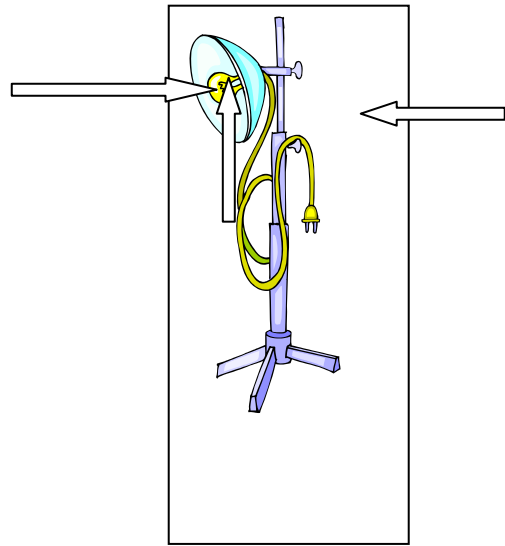
1. Frayed electrical cords may be used when setting up studio lighting,
  - a. if they are the only ones available. T F
2. Spotlights become only slightly warm during use. T F
3. It is all right to handle power cords or switches with damp hands
  - a. if the electrical equipment is properly grounded. T F
4. Hot lighting equipment should never be placed close to flammable
  - a. materials because it could cause a fire. T F
5. Any temporary power cords running across the floor should be taped
  - a. to the floor to prevent tripping. T F

### MULTIPLE CHOICE

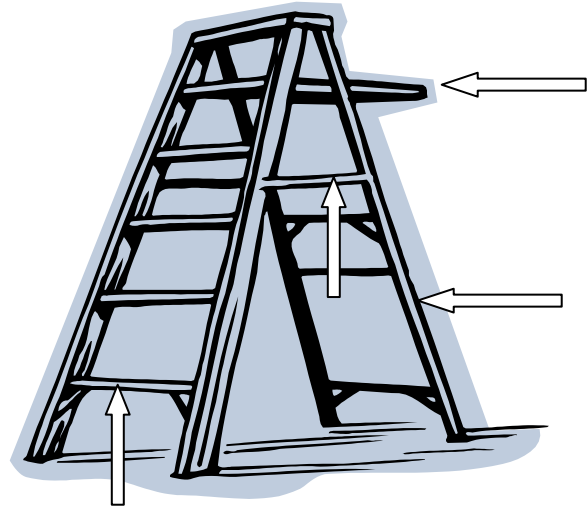
- \_\_\_ 6. The total of all photo lamps connected to a single household circuit should not be more than: (a) 50 watts, (b) 500 watts, (c) 1000 watts, and (d) 1500 watts.
- \_\_\_ 7. Do not splash any liquid on a hot lamp or spotlight because: (a) the bulb may shatter, (b) the bulb will get wet, (c) it will make a mess, (d) the liquid is being wasted.
- \_\_\_ 8. After use, all light cords should be: (a) coiled and secured to the light stand, (b) coiled and placed on the floor, (c) left plugged into studio outlets, (d) left taped to the floor.
- \_\_\_ 9. Be sure all props are firmly secured so they don't fall on the:  
(a) photographer, (b) camera, (c) model, (d) floor.
- \_\_\_ 10. When adjusting studio boom lights: (a) only one student is needed, (b) two students are needed—one to hold the light and one to tighten the wing nuts, (c) three students are needed—two as in (b) above and one to give directions, (d) let everyone help.
- \_\_\_ 11. When shooting high camera angles, stand on a: (a) chair, (b) stool, (c) ladder, (d) box.
- \_\_\_ 12. In the studio, always keep one leg of the light and camera tripods pointing:  
(a) towards the model, (b) towards the camera, (c) away from the model, (d) away from the camera.

- \_\_\_13. After use, extension cords and electrical equipment should be: (a) returned to storage, (b) pushed into a corner, (c) left in place for the next assignment, (d) none of these.
- \_\_\_14. To protect the model: (a) always adjust the boom light with the model in place, (b) never adjust the boom light over the model's head, (c) have the model looking directly into bright lights, (d) do none of these.
- \_\_\_15. When climbing a stepladder, use: (a) the brace side, (b) the tread side, (c) the spread brace side, (d) any method at all.
- \_\_\_16. When using a stepladder, be sure: (a) one spread brace is in position, (b) both spread braces are in position, (c) neither spread brace is in position, (d) none of these.
- \_\_\_17. Before climbing a stepladder, make certain: (a) the feet are firmly placed, (b) the ladder is fully open, (c) the ladder is on a solid floor, (d) all of these.

- A. \_\_\_\_\_
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_



- B. \_\_\_\_\_
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_



## Safety Quiz—Photo Finishing Equipment

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. The guard should be removed before using the paper cutter. T F
  2. The paper cutter may also be used to cut cloth, plastic, and thin pieces of wood. T F
  3. The tacking iron must be returned to its proper holder after use to avoid fire danger or damage to the counter. T F
  4. The heat setting for the dry mount press is to be decided by the teacher. T F
  5. Spray adhesives and film cleaners are flammable and special precautions should be taken when using them. T F
  6. The print dryer becomes only slightly warm during use. T F
  7. The paper cutter can cause serious cuts and pinches. T F
  8. A Person using the paper cutter should cut several pieces at one time to save energy and time. T F
  9. The print dryer should not be used with wet hands or while standing on a wet floor. T F

### **MULTIPLE CHOICE**

- \_\_\_\_\_ 10. For cutting panchromatic film in total darkness, the cutting edge of the paper cutter should be coated with: (a) luminescent paint, (b) fluorescent paint, (c) latex paint, (d) a or b above.
- \_\_\_\_\_ 11. When using spray adhesives or film cleaners, be sure to: (a) avoid breathing the fumes, (b) store them in a metal cabinet, (c) avoid using them around sparks or flames, (d) do all of these.
- \_\_\_\_\_ 12. When using the tacking iron or dry mount press, extreme care should be taken due to: (a) the plug-in of the equipment, (b) the style of the equipment, (c) the high temperature of the equipment, (d) none of these.
- \_\_\_\_\_ 13. Before using the paper cutter, the student should: (a) put on safety glasses, (b) have the teacher's permission, (c) tie back long hair, (d) tuck in loose clothing.
- \_\_\_\_\_ 14. When the paper cutter is not in use, the blade must be: (a) closed and locked, (b) open and locked, (c) closed and unlocked, (d) open and unlocked.

\_\_\_\_\_ 15. When using the dry mount press, keep the hands away from: (a) the base, (b) the matte, (c) the platen, (d) the mount.

\_\_\_\_\_ 16. To avoid burns, always draw the tacking iron away from: (a) the print edge, (b) the mount board, (c) the hand, (d) the print center.

\_\_\_\_\_ 17. To hold paper flat when using the paper cutter, use: (a) the left hand, (b) a ruler, (c) the right hand, (d) a piece of cardboard.

\_\_\_\_\_ 18. When using the paper cutter, cut the following number of sheets of paper at one time: (a) one, (b) two, (c) three, (d) five.

\_\_\_\_\_ 19. When closing the platen of the dry mount press, the only two things under the platen should be: (a) the print and tape, (b) the print and mount, (c) the mount and protective shield, (d) the mount and tape.

\_\_\_\_\_ 20. When finished with the dry mount press or tacking iron, always: (a) turn it off and unplug, (b) leave it plugged in for the next student, (c) unplug only, (d) turn off only.

\_\_\_\_\_ 21. Write the correct name of each item and its parts in the space provided.

A. \_\_\_\_\_

1. \_\_\_\_\_

3. \_\_\_\_\_

2. \_\_\_\_\_

4. \_\_\_\_\_

B. \_\_\_\_\_

1. \_\_\_\_\_

3. \_\_\_\_\_

2. \_\_\_\_\_

4. \_\_\_\_\_

C. \_\_\_\_\_

1. \_\_\_\_\_

5. \_\_\_\_\_

2. \_\_\_\_\_

6. \_\_\_\_\_

3. \_\_\_\_\_

7. \_\_\_\_\_

4. \_\_\_\_\_

8. \_\_\_\_\_

## Safety Quiz—Blender

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. Why is it important to make sure all the legs on the blender are in place?
  
2. Do not fill blender container more than how full?
  - a.  $\frac{1}{2}$
  - b.  $\frac{1}{3}$
  - c.  $\frac{2}{3}$
  - d.  $\frac{3}{4}$
  
3. What hazard would occur by not putting the container top on securely?
  
4. Why is it important not to put hand tools in container while operating?



## Safety Quiz—Broiler

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. Kitchen hoods above broilers need not be cleaned any more often than the rest of the hoods. T F
2. The tray at the bottom of the broiler needs to be changed once a month. T F
3. Broiler grids need to be wire brushed frequently to avoid buildup of grease. T F
4. Always check to insure that pilot lights are working before turning broiler on. T F
5. Tongs are widely used as a broiler tool. T F

## Safety Quiz—Buffalo Chopper

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. What is the best way to learn how to operate a food chopper?
  - a. Ask a friend.
  - b. Obtain a booklet on the machine and read it.
  - c. Figure it out yourself without help.
2. To prevent breakdown, how often should bowl gear be lubricated?
3. Must the machine be stopped to change speeds?
4. List three important precautions to observe when working with a food cutter.
5. When assembling the knives on a food cutter, which knife should be placed on the shaft first?
  - a. The one that is beveled on one side.
  - b. The one that is beveled on both sides.
6. Which part of the machine tightens down the knives?
7. What part of the chopper should be removed for using attachments?
8. Can the food chopper be overloaded, thus causing injury?

## Safety Quiz—Convection Oven

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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- 
1. Dry towels are best for removing food items from an oven. T F
  2. An oven timer controls the operation of an oven. T F
  3. Cooking times are identical for convection ovens or conventional baking ovens. T F
  4. Convection ovens must preheat at least one hour before use. T F
  5. The circulation fan in a convection oven need not run unless there is food product in the oven. T F
  6. Oven lights should only be used when checking food product. T F

## Safety Quiz—Conventional Oven

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. When using a gas oven, what is important before setting a gas thermostat?
2. What part of the oven should not be used as a shelf?
3. Before opening oven door to examine contents, what should you have in your hands?

## Safety Quiz—Deep Fryer

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. How should the fryer well be cleaned?
2. Fryers can be placed anywhere in the kitchen area. T    F
3. How much fat should there be in a fryer when ready to use?
4. It is okay to have impurities such as salt in the fryer when hot. T    F
5. What temperature should the thermostat be set for when ready to use?
6. What will prevent spattering?
7. What position should the grease outlet be in?
8. What will cause fat to bubble up and cause damage or fire?
9. When fryer is not in use, should the temperature be lowered and to what degree, if any?

## Safety Quiz—Food Processor

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. Food may be fed into processor by any means available. T F
2. Can a processor be used with a damaged cord?
3. How much food can be put into a processor bowl at one time?
4. Why is the locking system built into the processor?
5. The processor may be used next to a stove or frying unit. T F
6. Can food be removed from the processor while it is in motion?
7. How should blades and disc be handled?
8. Can attachments be interchanged from one machine to another if they are different models?
9. When should the processor be unplugged?
10. Can the processor base unit be washed with the attachment?  
If the answer is no, why not?

## Safety Quiz—Gas Cheese Melter

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. What hazard could occur from the pilot not being lit when turning on cheese melter?
2. Grease fires can be a hazard when operating the cheese melter. T F
3. What precaution should be taken when removing food from the cheese melter?
4. Broiling steaks in the cheese melter is permissible if in a hurry. T F
5. The top of the cheese melter is a good place to keep food hot. T F

## Safety Quiz—Gas Range

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. Why should you wear your clothing snug and your sleeves rolled or snug?
2. What is the first thing you do after cleaning the range?
3. Why shouldn't you use water on a grease fire?
4. What should you watch for when deglazing pans?
5. What is the purpose of lighting back burners first?



## Safety Quiz—Griddle

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. Why should you check the grease trap daily?
2. What two ingredients found in the kitchen should you always have near the griddle?
3. What precautions should you take when cleaning the griddle?
4. Why is loose clothing a hazard when working around the griddle?
5. Why should pan handles always be kept inward?

## Safety Quiz—Large Food Mixer

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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- 
1. Hard food products should be started at a high mixer speed. T F
  2. Under no condition should your hand be placed inside the bowl while the mixer is moving. T F
  3. It is possible to change mixer speed when the mixer is operating. T F
  4. Start the mixer with the bowl lowered, and then slowly raise the bowl to the raised position.
    - i. T F
  5. Ask for help when lifting a heavy mixer bowl. T F
  6. It is easiest to remove the mixer attachment while the mixer bowl is raised. T F

## Safety Quiz—Meat Grinder

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. The cutting blade edges should face away from you when assembling the grinder. T F
2. It is not always necessary to use the stomper when pushing food down the feed tube. T F
3. Place the pan receiving the ground product on the floor in front of the grinder. T F
4. Keep all the grinder parts together to keep parts from being misplaced. T F
5. Never place fingers inside grinder feed tube. T F
6. Large pieces of meat can easily be pushed down the grinder feed tubes. T F

## Safety Quiz—Power Meat Saw

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. What is the easiest way to check if the meat saw is properly set-up?
  
2. What should be used to push the meat through the saw blade?
  
3. Why is it important to shut off the saw before cleaning?
  
4. What hazard could occur if your mind is not on your task while operating the meat saw
5. \_\_\_\_\_
  
6. If the blade binds during operation, force meat against the saw blade or wiggle it free. T F
7. \_\_\_\_\_
8. Turning away from saw to talk while operating it is recommended. T F
9. How many guards are on your meat saw?
  
10. It is not important for the saw to be level, since the blade will work anyway. T F
11. It is good practice to get the motor washed down with lots of water. T F

## Safety Quiz—Slicer

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. What is the proper procedure used when slicing foods on the slicer?
2. What is the proper procedure used for cleaning the slicer?
3. Why is forcing food through the slicer a dangerous practice?
4. What should the indicator knob be adjusted to when slicing is finished?
5. Why is it so important not to distract the operator when slicing?
6. What is the procedure for sharpening the slicer?

## Safety Quiz—Steam Kettle

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. What are the proper precautions for bleeding the petcock?
2. What is the first thing you assume about any steam kettle?
3. Why should you always have dry towels and/or oven mitts on your station?
4. What problems can condensation on the lid produce?
5. What is the purpose for lifting the lid away from you?

## Safety Quiz—Steam Table

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. When should the water be placed in the steam table?
2. Why is it safer not to leave utensils in the pans?
3. What is the proper procedure for removing the cover from the steam table?
4. Why is filling the steam table with the right level of water so important?
5. What is the proper procedure for emptying the steam table?

## Safety Quiz—Tilting Brazier

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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- 
1. You cannot overheat a tilting brazier. T F
  2. Use wooden utensils whenever possible to avoid “dinging” the brazier bottom. T F
  3. Always start cooking in a “cold” brazier. T F
  4. Clean your brazier while the unit is still hot. T F
  5. The unit will heat faster if the thermostat is turned to maximum T F
  6. Never preheat the pan for over five minutes at a temperature higher than 300° F. T F
  7. An empty brazier that is too hot is in danger of warping. T F



## Safety Quiz—Toaster

Class \_\_\_\_\_

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_

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1. What part of the toaster should be checked regularly for safety reasons?
2. What should be done to the machine before removing stuck toast?
3. Why is it important to be careful when trying to remove stuck toast?

## Safety Quiz—Vertical Power Shredder

Student Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

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1. What is the easiest way to check if the power shredder is properly set-up?
  
2. The proper tool for pushing the food into the shredder plate is?
  - a. Rubber spatula
  - b. Spoon
  - c. Plunger
  - d. Tongs
  
3. Why is it important that apron strings are tied and hair is restrained while operating machine?
  
4. For one-person operation, it is recommended that you hold the catch pan while feeding food. T F
  
5. If food fails to fall out of shredder outlet, it's best to turn off power before examining. T F
  
6. Pushing the food as hard as possible into the blades will get your job done faster. T F
  
7. What is the last thing you should do before being "done" with machine?

## ***Robotics Written Test***

Use the correct heading and write the answer on your own paper. Using the BEST answer to complete the following:

1. Move the robot arm ( **Slowly**  **Quickly**) from point to point when in the teach mode.
2. The operator ( **Does not**  **Does**) need to understand the program of robot actions and motions prior to use of the robot.
3. Eye protection ( **Is not**  **Is**) required when operating robots in the technology lab.
4. The operator must stay ( **Clear of**  **Within**) the work envelope when the robot is executing the program.

List five SAFETY procedures you should do before you operate this machine:

5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

## ***Soldering Station/Pencil Written Test***

Use the correct heading and write the answer on your own paper. Using the BEST answer to complete the following:

1. Eye protection ( **Should**  **Should not**) be worn at all times in the laboratory.
2. ( **Only the tip**  **All of**) of the soldering equipment is hot when it is on.
3. The soldering equipment should be ( **In its holder**  **Laid on the bench**) after use.
4. ( **It feels cool to**  **Do not**) let any of the melted solder touch your skin.

List five SAFETY procedures you should do before you operate this machine:

5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_