GENERAL POWER TOOL SAFETY

Authorization	You must have authorization from your teacher before using any power tools.
Condition of tools	Only use tools that are in good operating condition. If anything seems wrong with a machine-unusual vibrations or noises-check it out before using the machine.
Personal protective equipment	Wear ear and eye protection when operating all power tools. Long hair must be contained before operating any power equipment.
Know how your machine works	Know which direction your tool will go when you run material through it, and which way the material will go. In other words, make sure you know what is going to happen before you operate a machine so that you can be ready to control those forces.
Lockout	When doing any maintenance work on a power tool, isolate the source of power (unplug it, switch the breaker off and follow written lockout procedures) to ensure that the machine does not start running when you are working on it.
Operator	The power tool operator must be qualified to use the tool. Each power tool is designed for only one operator. This person must always concentrate on the task at hand, so never distract, bump or rush them when they are using a machine.

Path of the tool	Whatever tool you are using, make sure it will cut, drill or grind only what you want to cut, drill or grind-you do not want the saw blade sticking out the bottom of the stock, the cutter hitting the top of a vice, or the drill bit breaking through the stock. Be aware of the cutting path of the tool-keep your hands away from this area. Make sure the cutting part is not going to come in contact with the power cord.
Power cord damage	Check all power cords daily for tears or cuts in the insulation, loose connections (plug to wire, wire to tool) and good groundconnections.
Secure your work	When working with portable power tools, make sure the material stays in place-put stock in a vice, or clamp it to a workbench before approaching it with a power tool. While operating the tool, maintain a firm grip at all times.
Start-up	Check to ensure all guards and safety devices are in place and functioning properly. Make sure the power switch is in the off position before plugging in a portable power tool. Only the operator is to turn the tool on.
Stay beside running power tools	Do not walk away from a machine you have been using until it comes to a complete stop - it takes only a few seconds for a power tool to 'wind down' after it has been shut off.
Stop to make adjustments	Always unplug or lockout the tool before making any adjustments or changing settings where there is danger of being injured in the event of start up of the tool.

PORTABLE POWER TOOL SAFETY

Damaged power cord	Do not use tools if the power cord is damaged. The insulation should be intact and without tears, the ground connection should be working if the tool is designed with a ground, and the connections plug to wire and wire to tool should be solid. Fix or replace damaged cords
Direction of the tool and material	Understand which way the action of the tool will push the material and the tool itself. Usually they try to go in opposite directions. Power planers push the stock away and the tool towards the operator. Belt sanders do the opposite. Right angle grinders depend on which part of the wheel you grind with. The point is to make sure you know what is going to happen and are ready to control those forces. Hold that tool with a firm grip.
Ear and eye protection	Many portable power tools run at very high speeds and scream in operation. Wear hearing protection if the tool is noisy or you have to raise your voice to speak to others. Wear eye protection when using portable power tools.
Path of the tool	Make sure the path of the tool is clear. Saw blades stick out the bottom of the stock. Will they cut anything unintentionally? Is the cutter on your router or power planer going to hit the top of the vice? When the drill bit breaks through, where is it going? Whatever tool you are using, make sure it will cut, drill or grind only what you want to cut, drill or grind! Make sure the cutting part is not going to come in contact with the power cord.

Power switch	Check that the power switch is in the off position before plugging in any portable power tool.
Secure your work	Large machines stay in place while the material moves. With portable machines, the tool moves and the material is supposed to stay in place-make sure it does! Put the stock in a vice, clamp it to a work bench or wedge it in a corner, but don't try to hold a small piece of material in one hand while you approach it with a power tool held in the other.
Unplug the tool	Unplug the tool whenever you are changing bits, replacing blades or fixing something on the tool. You could easily bump the trigger unintentionally while handling the tool. Keep the plug within your sight and control so that it doesn't get inadvertently plugged in while you are working on thetool.