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Tool Safety

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Tool Safety

1. T Never work alone when using power tools
   - Work with experienced adult supervision, use the “buddy” system
2. T Always use a tool only for its designed purpose
   - Using a tool incorrectly can damage the tool, can damage the model you are building and can injure yoe!
3. T Make sure the tools you use are in good condition
   - Worn or broken tools are dangerous and will give poor work results
4. T Always wear safety goggles or a face shield when cutting, drilling or sawing.
   - Protect your eyes! Patches may look cool on pirates, but not on scouts.

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5. **T** Keep safety goggles and face shields clean and scratch free.
   - It isn't safe if you can't see properly. Scratched goggles and shields can shatter if impacted.
6. **T** Only use the face of a hammer to strike an object.
   - The side is thin and may break.
7. **F** Always swing a hammer as hard as you can.
   - You will have better control if you do not swing wildly.
8. **F** When using a hand saw, hold the object you are cutting with your hand.
   - Use clamps or a vise, protect your hands!

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9. **T** When sawing, make sure there is clearance so the saw won't hit anything.
   - Hitting a clamp or vise will dull and damage your saw, you may damage your work table and you may damage the piece you are cutting
10. **T** When sawing, push and pull smoothly and evenly, don't force.
    - It is hard to control the saw if you use too much force and you may get a rough and crooked cut
11. **F** When a saw cut is almost through, twist the saw to break the pieces apart.
    - You may bend or break the saw and you may splinter the material you are cutting
12. **T** Keep the handle of a screwdriver directly over the screw head.
    - It will prevent slipping, which can damage the workpiece

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13. **T** Apply steady pressure toward the screw when using a screwdriver.
    - This will prevent slipping which could damage the workpiece or the screw slot
14. **F** A screwdriver makes a good substitute for a chisel.
    - Screwdrivers do not have sharp cutting blades. Use tools only for their designed purpose.
15. **F** Always tighten C-clamps as tight as you can.
    - If you tighten C-clamps as tight as you can you may crush your work or break the clamp. Clamp only enough to hold securely.
16. **T** When drilling or sawing, make sure clamps are clear of the drill or saw.
    - Striking metal clamps will dull and damage the saw

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17. **T** Attach a bench vise to a sturdy workbench or table.
    - A wobbly bench will result in poor work and may be dangerous to you.
18. **T** Never use a file without a handle.
    - Files have a spiked end that could stab your hand
19. **T** Avoid striking files with any hard object.
    - Files are made of hard, brittle metal and may break
20. **T** Store files in a dry place.
    - A rusty file will not cut properly

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21. **F** When using a chisel on soft wood, it is okay to hold the work piece with your hand.
    - You can't control the chisel with one hand. Keep both hands on the chisel and clamp the workpiece
22. **T** Wear safety goggles when using a chisel.
    - Chisels cause flying chips. Protect your eyes. (See question 4)
23. **F** Use a metal hammer to hit the chisel handle for extra cutting power.
    - Chisels have wood or plastic handles. A metal hammer will damage them. Use a rubber, plastic or wood mallet
24. **T** Cover chisel blades when not in use.
    - A chisel has a sharp blade. A cover will protect you from cuts and the chisel blade from nicked or dulled.

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25. **T** Always use the correct size wrench on nuts and bolts.
    - If a wrench is too large it may slip and damage the nut or bolt head
26. **F** If a bolt is really tight, use a piece of pipe for an extension bar to get more force.
    - Most wrenches aren't designed for the extra force. You may break or bend the wrench. Get a longer, stronger wrench.
27. **T** When cutting wire or metal rods with pliers, cover the cut end so it won't fly out.
    - Those ends really fly! Like little bullets.
28. **T** Securely tighten twist drills in the drill chuck.
    - If the drill bit slips it will damage the drill.

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29. **F** If you can't find the drill chuck key, use pliers.
    - You will damage the drill chuck.
30. **F** Always run the drill at the fastest speed setting.
    - Efficient drill cutting speed varies for different materials. Run the drill at the proper speed setting for the material you are drilling.
31. **T** Never use your fingers to clear chips from a drill.
    - You may get a splinter (from wood) or a nasty cut (from metal). Metal drill shavings are sharp like razor blades!
32. **T** Always use sharp drills.
    - Dull drills not only don't cut very well, they cut over size and out-of-round holes.

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33. **T** Always clamp work to a bench or in a vise when drilling.
    - If the drill bit seizes, it will spin the work piece fast and with great force. You won't be able to hold it.
34. **T** When cutting with a knife, always cut away from your body.
    - Totin' Chip Rule 1!
35. **T** Have experienced adult supervision when using power tools
    - Power tools are powerful and must be used properly!
36. **T** Keep power tool cords and extension cords away from the work being done
    - Not only will cutting the power cord damage the tool, it can be a shocking experience!

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37. T Always unplug power tools by grasping the plug head and pulling straight out.
    - Pulling on the cord may damage the wire connections in the plug. Some newer tools have stronger connections but grasping the plug is the safe practice. Also, if the plug is tight, support the wall socket also. The socket wire connections can be damaged too.
38. T Don't carry power tools by the cord.
    - Carrying by the cord may damage the wire connections in the tool. Some newer tools have stronger connections but the safest practice is carry using the tool handle.
39. T Work in a well ventilated area when using volatile adhesives, paints and thinners
    - Breathing the fumes can be irritating and potentially toxic.
40. T Wear non-latex protective gloves when handling solvents, epoxy and CA adhesives
    - Protect your hands and avoid gluing yourself to your work. Make sure the gloves are suitable for the material you are handling.

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41. **T** Carefully follow instructions and have qualified supervision when using a 3-D printer.
    - 3-D printers are expensive and delicate machines. They can also pose personal safety and environmental hazards. Read and follow instructions, use recommended eye and hand protection and seek instruction and guidance from an experienced operator.
42. **T** Follow Scouting America guidelines when using on-line sources for research
    - For personal safety and to avoid scammers be cautious when accessing information on-line and follow recommended guidelines.