

CRAFTSMAN(1) -- TECHNOLOGY GROUP

Building Tools

An Opening or Closing Ceremony

1. We are the future builders of America. This is how we will shape tomorrow.
2. We will hammer out justice. (Hammer)
3. We will help cut out crime. (Saw)
4. We will pinch out poverty. (Pliers)
5. We will wrench out discrimination. (Wrench)
6. We will live by the Golden Rule. (Ruler)
7. We will plunge out hatred. (Plunger)
8. We will drill love deep into our hearts. (Drill)

Den Activities

- Visit a furniture factory, lumber yard, saw mill or cabinetmaker.
- Visit a tannery or leather goods manufacturer.
- Invite an expert to give a demonstration on the proper care and use of tools.
- Have someone give a demonstration of leather craft and explain how to use leather tools.
- Discuss finishing methods for wood projects: The importance of sanding, filling holes and scratches, the various types of finishes, such as shellac, stain, lacquer, varnish and enamel.
- Have a nail-driving contest. Give each boy a scrap of wood, nails and a hammer. Let them practice driving nails straight.
- Make a tool chest or a bench horse for sawing.
- Have a birdhouse building contest.
- Build midway games for your Pack.

Working With Leather

Leather crafting is a hobby that many boys may carry into adulthood. It is best to start with simple projects like key chains and coasters and let the boys work their way up to more difficult items such as wallets or belts.

Look in the yellow pages for leather crafting supply stores near you. Here are some tips to help you get started:

Dampen leather with a sponge for ease of tooling, but don't have it dripping wet.

Have the boys draw a design on paper before starting. Then trace the design onto their leather piece with an awl.

Let the boys practice with their tools on scrap leather first.

Leather stains or acrylic paints will give projects added dimension. Put a wood board under each boy's leather piece while he is working.

Bow Drill

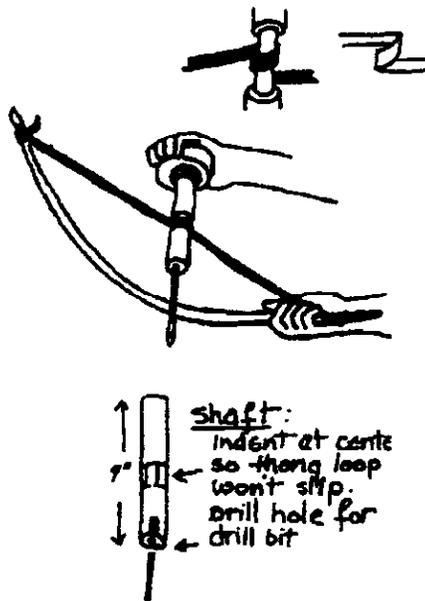
This drill may be used to start a fire or to drill holes.

Materials:

- A green twig for the bow
- Stone or block of wood for palm piece
(needs indentation, to hold shaft)
- A 4" x 3/4" straight branch or dowel for shaft
- Thong or gut string long enough to hold bow bent
- Bit of flint or sharpened steel rod

Instructions for Shaft:

Indent at center so thong loop won't slip. Drill hole for drill bit



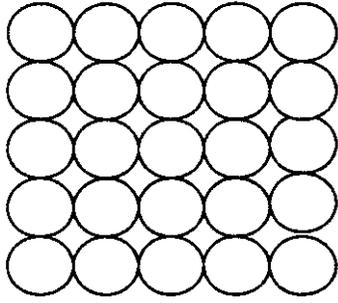
To Operate:

1. Tie thong to bend bow.
2. Loop thong around shaft indentation.
3. Bear down on palm piece with left hand (if you're right handed). This may require some adult assistance.
4. Saw the bow back and forth to rotate drill shaft.
5. Keep tension in the thong to prevent it from slipping on the shaft.

Wooden Trivet

Materials:

- 1 dowel - 4' x 1"
- Table saw
- Sandpaper
- Waxed paper
- Carpenter's glue
- Felt, 6"X6"



Cut the dowel into slices about 1 1/2" thick using table saw.

Sand any rough edges.

Lay a piece of waxed paper on the working surface. *It can be easily removed from the trivet after the glue has dried.* Begin gluing the slices together as shown in the picture.

When glue has dried, pull away waxed paper

Cut the felt piece to fit the back of the trivet.

Glue in place.

Weather Vane

Supplies:

20" Curtain Rod,

Wire coat hanger,

Glue

Tin or Aluminum

Broomstick or dowel

Bolts, washers, screws Enamel Paint

Construction:

1. Using patterns enlarged from above illustration, cut arrowhead, Webelos insignia and compass point initials from tin.
2. Roll edges so they will not be sharp and dangerous.
3. Paint with enamel.
4. Bolt arrowhead and Webelos insignia to ends to curtain rod.
5. Drill small holes in 4 sides of broomstick.
6. Solder initials to wire. Glue ends of wire in holes of broomstick.
7. Punch hole in middle of curtain rod.
8. Screw curtain rod to top of broomstick, using washers, so arrow will swing freely when the wind blows.
9. When installing vane, be sure that the stationary compass directional initials point correctly, i.e., N, due North, etc.

Purpose: Learn how to work with tools

Challenges: Wide range of abilities, obtaining adequate supervision, making a mess, inexpensive materials,

Solutions: This badge will be a favorite, but requires a lot of preparation. Some projects, like leather work and cardboard, can be held at your

regular meeting place. Others, like woodworking, should be held in a shop or garage where the sawdust can be contained easier. Because every Cub wants to do something, you'll need a large supply of hammers or set up cutting, sanding, nailing, and gluing stations. Have small groups rotate around as the work progresses. If everybody is starting fresh, you may need a second project to keep all boys busy. An adult helper or guide with each group or an adult supervisor at each station are both good methods. Remember, everyone is included in the clean-up.

Resources: Collection of materials will be a challenge. Check with local companies for wood scraps. Plywood is usable for most projects, but solid lumber such as pine is better for some cutouts. Hardwoods like oak, ash, and walnut are too hard for most Cubs to cut and shape; they may get frustrated. When hardwoods are needed, precut and rough sand them in advance, leaving the finishing work to the Cub. For leather crafts, check with companies for scraps that the boys can cut and tool. 6" square or round pieces of Masonite make good work surfaces for cutting and stamping operations. First projects should be simple. Key chains are easy and make good gifts. Clay projects are good for gifts and puppet heads that can be used for work in the Showman badge. Try a ceramic shop for advice and possible help with glazing and firing.

Planning: The Craftsman is a multi-meeting project, and the Cubs may also do a lot of work at home. The Cubs require a lot of supervision and help on most projects. Plan one adult for every two or three Cubs. Remember that tools used correctly are safe, but the incorrect use of tools can have serious consequences!

Activities:

The activities included in the Craftsman section of the Webelos book help the boys grasp a basic understanding of using hand tools while building something from scratch. As a Webelos den leader this leaves you with a lot of flexibility in helping the kids come up with ideas for FUN projects to build.

The key word here is FUN. If the project is not fun the kids will not participate and you will likely never finish. and remember these kids are 4th and 5th graders and do not yet have the skill level or attention span necessary to build a work of art.

They will require a lot of one on one attention during these activities. The best advise for you is to BE PREPARED for each den meeting and have a lot of help. If you decide to build these projects during the den meeting I suggest that you have everything set up and ready before the boys show up. Most project will take a minimum of 1 hour to complete.

The Webelos Scout Helps set a side both November and December for the Craftsman activity badge. Your best friends during this time are the boys'

parents. Who can resist a trip down to the local hardware store to get just the right tool for the job. Remember also that these projects are just in time for Christmas.

There are a lot of suggestions in the Webelos book for easy to medium hard projects. Experience has shown that boys this age are very eager to start cutting, hammering and gluing but don't know how to use the tools properly. Most of these young men have never used a coping saw or hammer before. Begin by explaining how to safely use the tools that you will need to do the project. Next demonstrate on a scrap piece of wood or plastic how to properly use each one. You will be very surprised to see how hard it really is to use a coping saw, if not properly done. This demonstration will save you a lot of time later on when the boys begin cutting on their projects. Let each boy try it on the scrap wood.

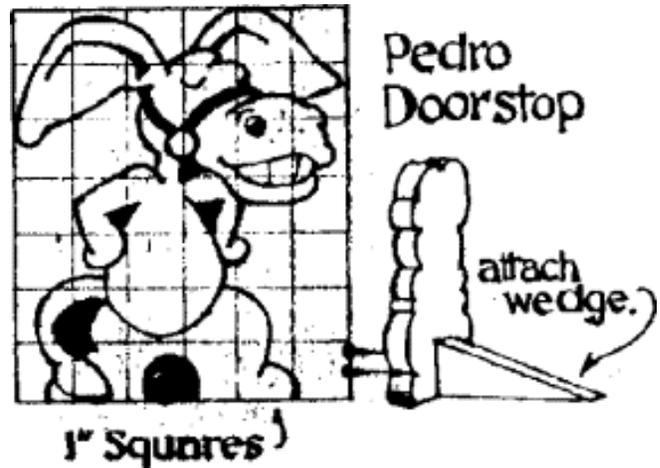
More Activities

- Visit furniture factory, lumber mill or lumberyard.
- Some local home centers offer special weekend classes for Webelos age children.
- Invite someone to give a demonstration on the safe use of tools.
- Visit a construction site or find out about helping with a Habitat for Humanity project.
- Visit a tannery or leather goods manufacturer.
- Invite someone to give a demonstration of leather craft and explain how to use leather tools.
- Invite someone to give a demonstration of metal work, using tin snips and a vise.
- Have a nail driving contest.
- Build a bridge for pack crossover ceremonies; tie it into the Engineering pin.
- Tie in with the Scholar pin and discuss how education helps when doing crafts and working in the technology field.

Pedro Doorstop

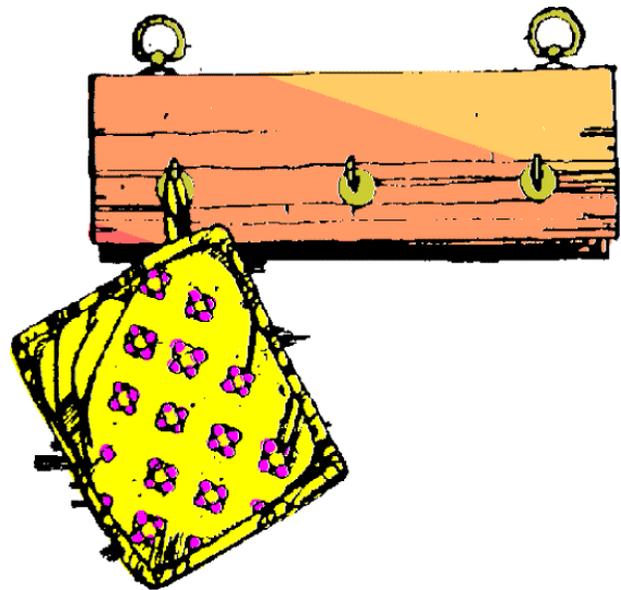
Use grid method to enlarge Pedro pattern to about 7-by-6 inches.

Trace on 1/2 inch plywood or scrap and
Cut with coping saw.
Paint as desired.

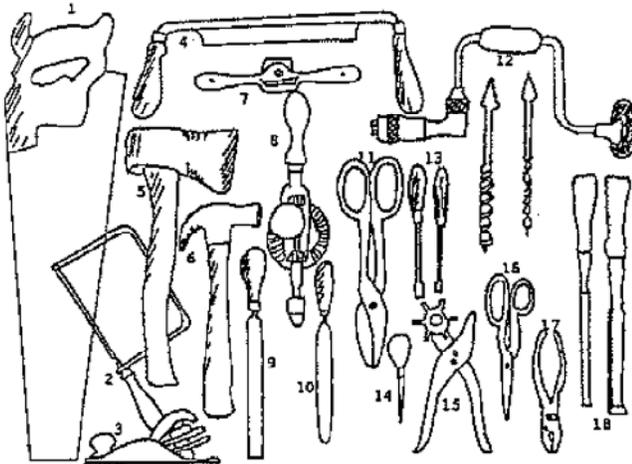


Potholder Hanger

Use scrap wood about 1-by-4-by-12 inches, L-shaped cup hooks, and picture hooks.



Name that Tool



Pictured above are some basic tools Webelos Scouts may use when working with wood, leather, or tin. Place the appropriate number next to the named tool.

- | | |
|---------------------------|-----------------------|
| _____ Awl | _____ Ax (hand) |
| _____ Brace & Bits | _____ Chisels |
| _____ Coping Saw | _____ Drawknife |
| _____ File | _____ Half-round File |
| _____ Hammer (claw) | _____ Hand Drill |
| _____ Leather Punch | _____ Plane |
| _____ Pliers (slip-joint) | _____ Saw |
| _____ Screwdrivers | _____ Shears |
| _____ Spokeshave | _____ Tin Snips |

Closing Thought

"I hold in my hand a pocket knife. This is a valuable tool because it can be used for many useful things. It is a dependable tool as long as the blade is kept sharp and free from rust, and the working parts are in good condition. If it is neglected and becomes dull and rusty, it will become dangerous.

"The same principle applies to us, as well. We have a body, which must be kept in good condition in order to work well. If we fail to take care of ourselves, we become rusty and dull just like a neglected knife. Do your best to keep fit and healthy this week."