4H230

4-H Home Improvement

A Place to Write & Study

Record Book

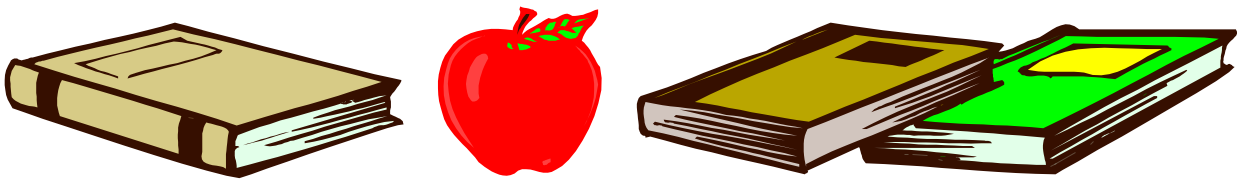
Name: _____ **Age:** _____

Club Name: _____ **Years in 4H:** _____

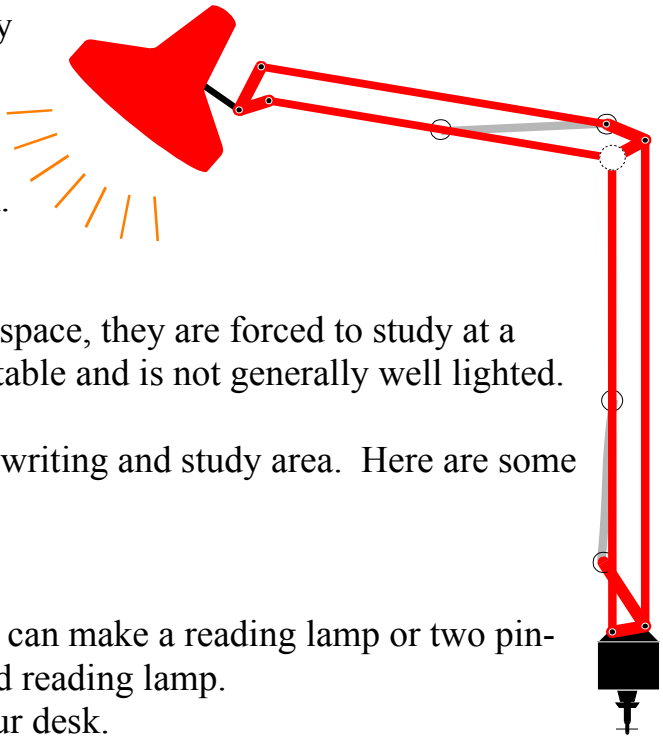
Revised September 2005 by Vera Collins Lake County 4-H Secretary Available on line at http://lake.ifas.ufl.edu/4-H/Projects.htm

PLEDGE:

I pledge - My Head to clearer thinking.
My Heart to greater loyalty,
My Hands to larger service, and
My Health to better living, for
My Club, My Community,
My Country and My World.



Most 4-H Club members your age spend many hours each week on school assignments, 4-H records, or other reading and writing. This work involves long periods of using your eyes, sitting in one position, and a lot of concentration.



Because many young people do not have a desk space, they are forced to study at a kitchen table or card table that is not too comfortable and is not generally well lighted.

In this project you will work on improving your writing and study area. Here are some things you may do:

1. Refinish, remodel, or make a desk.
2. Provide good lighting for your desk. You can make a reading lamp or two pin-up lamps for your desk area, or buy a good reading lamp.
3. Make a desk pad and pencil holder for your desk.
4. Make a Papier Mache Bowl
5. You may wish to make or purchase a waste-paper basket to use at your desk area.
6. If you need a place for books, you can build shelves for them.

A well planned study area will have a comfortable place to write, a convenient place for books, and will provide good lightning for reading and writing.

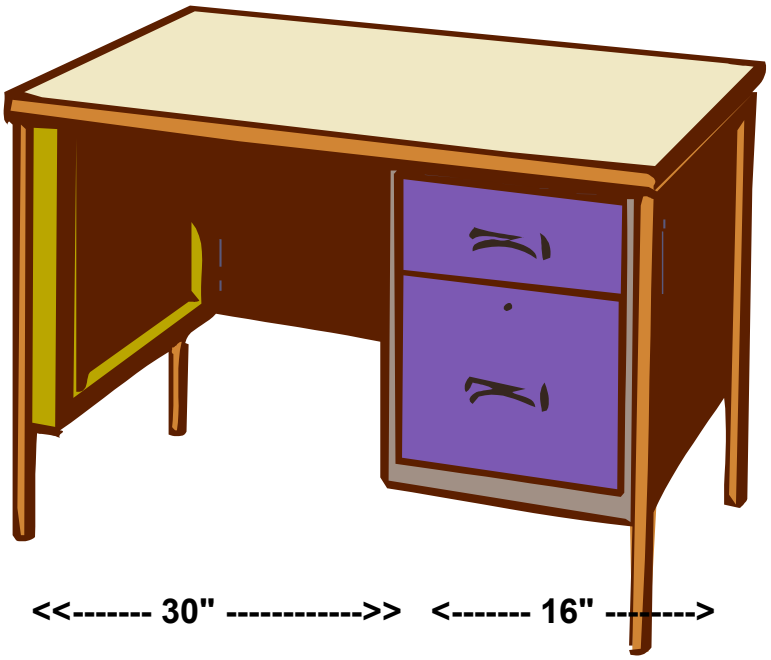
You will need to allocate a spot for your study area. This should be a reasonable quiet place where you can concentrate. The table or desk you choose or make should be a comfortable height for you.

Recommended sizes for desks:

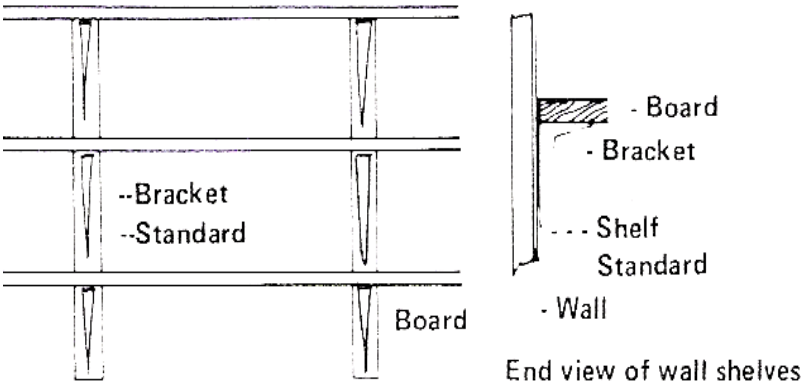
Height 28 to 30 inches
Length 36 inches or more

The size will depend partly on the space you have available. You may find a suitable table on the back porch or in a secondhand store that will serve as a desk when remodeled and refinished. You can find great information at this web site:

http://www.furnitureknowledge.com/how_to_refinish.htm



Above is a cabinet with a single set of drawers. If there is enough space, use a set of drawers on each side of the desk area. This arrangement would take 16 inches more space. There should be from 24 to 30 inches of knee space in the desk area.

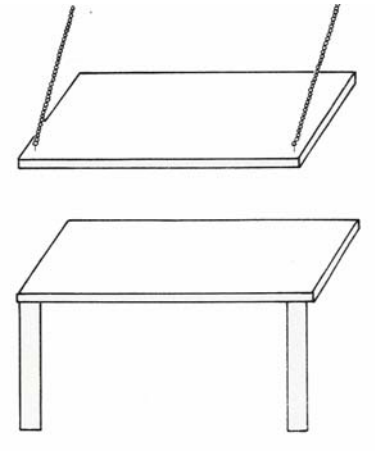


End view of wall shelves

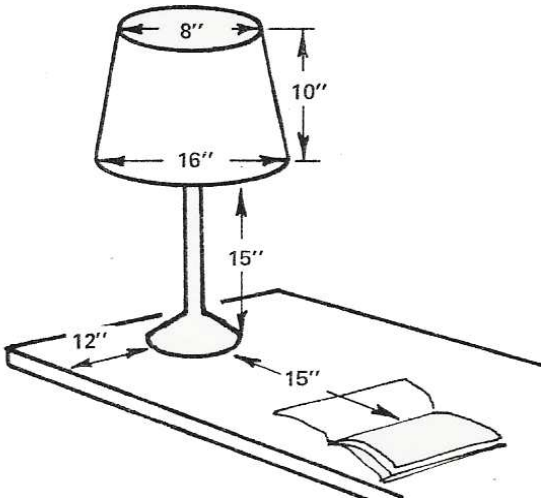
Book shelves are supported by adjustable shelf brackets. Use brackets which will support heavy loads as books will be stored here. Fasten the shelf standard to a sturdy wall with screws or toggle bolts. You can get the shelf standards and shelf brackets from a building supply company or a hardware store. To make the adjustable shelves, use these materials:

* Two shelf standards which are fastened securely to the wall.
* Two brackets for each shelf.
* One 8-inch wide board the length you want for each shelf, two or three shelves would be good near your study area.

The boards for the shelves should be sanded smooth and painted the color of the wall or desk or finished to match the desk.



A very simple type desk is one made by fastening a piece of plywood or a smooth door to the wall, supporting it with a chain at each end or with two legs.
The one with legs is more sturdy.

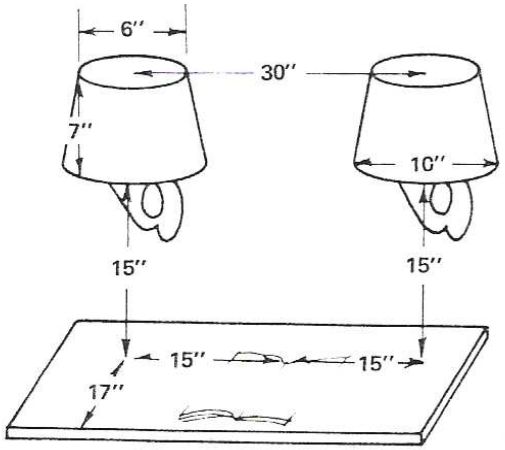


Good Lighting

Work goes faster in a study area well lighted and free from glare and shadows. Lamps should be properly placed and shaded. The study surface can be covered with a light colored blotter or other dull finished paper. A good chair can also help make studying easier. Use a straight chair or an adjustable posture chair. The seat of a chair is usually 18 inches from the floor. If this is too low for you, use a cushion in the chair.

As you sit, the eye position should be at least 14 inches above, the desk top. This locates your eyes in line with the bottom of the lamp shade and prevents you seeing the bright lining of the lamp shade.

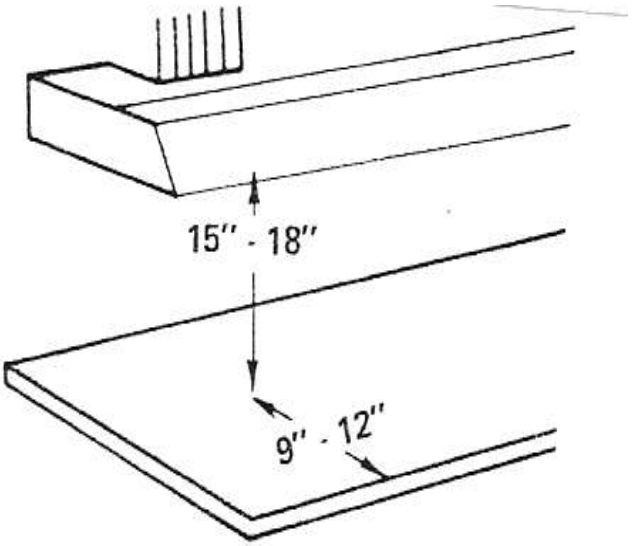
Table Lamp – Place lamp at left if you are right handed, or at right if you are left handed.
Glass diffusing bowl – 8 inch.
Bulb – 200 watts for desk work and general lightning is minimum.
Shade – Top 8-10 inch diameter; height, 9-12 inches; bottom 15-18 inch diameter.
Plastic diffusing disc – About one inch above bottom of edge of shade.



Two Wall Lamps

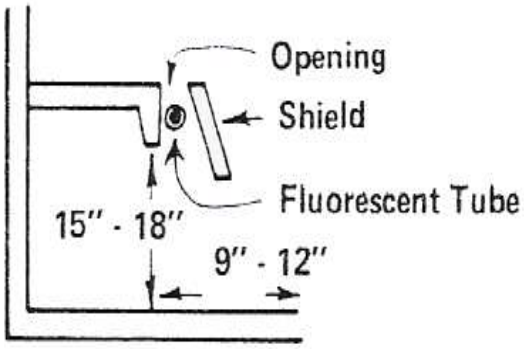
Diffuser – 6 inch plastic bowl, or flat plastic diffusing disc below bulb.

Bulb – 100 watts for each lamp.



Lighted Shelf

Bulb – Fluorescent, 36 inch, 30 watts, Deluxe Warm White in white enameled channel.
Shade – Mount 1/4 inch plywood face at an angle, as illustrated. Leave 2 inch space at top open. You can make your reading lamps. Directions for making lamps may be obtained from County Extension Office.



Good Lamp Shades

Choose lampshades which have these qualities:
* White inside - for greater reflection.
* Open at the top - for greater diffusion.
* Glare-less - translucent or opaque.

Translucent shades should filter out glare of lighted bulbs. Opaque shades should be used if shade is a dark or bright color on the outside or if the lamp is placed near a dark wall. The correct height from the desk is when the lower edge of the shade is at your eye level when you are seated in a comfortable chair.

Please write the definition of these words, referring to lighting:

Diffusion: _____

_____

Translucent: _____

_____

Opaque: _____

_____

Make A Study Lamp

What is Good Study Lighting?

Many years of research by lighting and eye specialists have been spent in defining good study lighting. The standards they have developed are very important in keeping your eyes from being strained or harmed in any way.

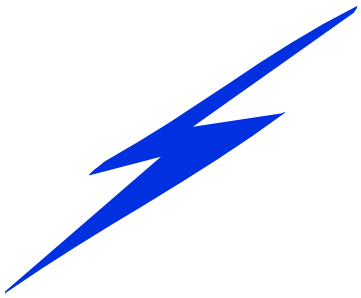
Since you will be making a study lamp, let us examine the qualifications of good study lighting. First, a good study lamp will not create a harsh glare on your work or in the lampshade itself. It will be soft and will not tire or hurt your eyes.

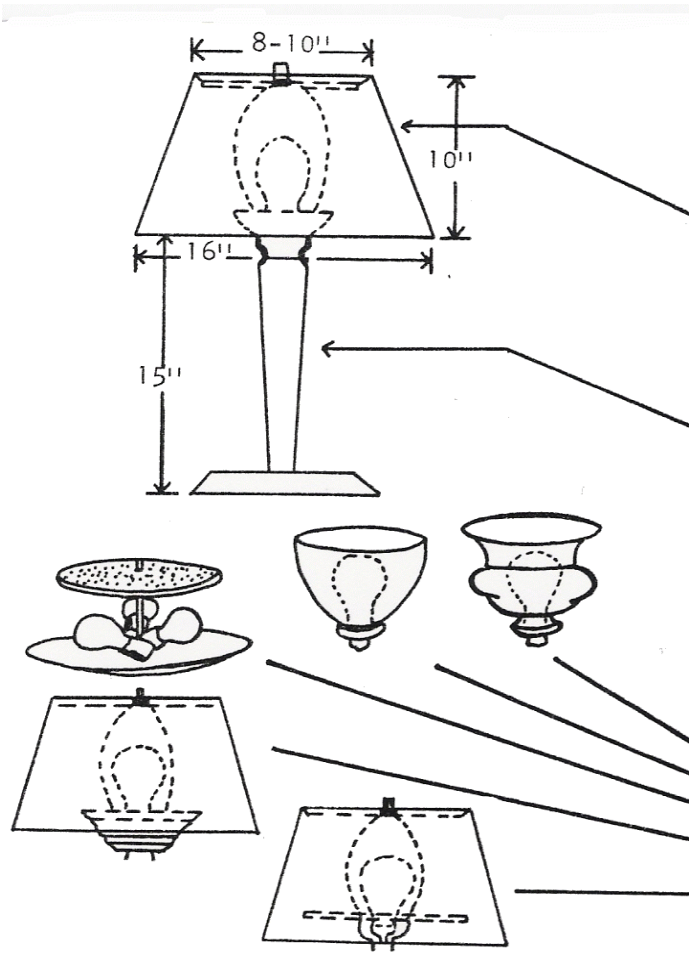
Second, it will not cause distinct shadows. The light will not be concentrated on one spot. It should surround you as well as your work surface with an evenly distributed light. Shadows and unevenly distributed light cause eyestrain because your eyes must constantly adjust from light to darkness.

Third, you must have the proper intensity of light. This is measured in "footcandles" by an instrument called a light meter. Too little light causes eyestrain, but too much brightness may tire your eyes quickly.

Fourth, a good study lamp must be properly proportioned and properly located with relation to your work. A lamp which is well proportioned and well positioned will provide good distribution of light.

Now let us find out what a study l
amp must have in order to meet
these qualifications.





What is a good Study Lamp?

Shade

Light color – fairly dense – correct size

Socket

At or slightly below lower edge of shade

Base

Minimum 200 watts for reading – 50-200-250 watts
100-200-300 watts – white inside frosted or soft white

Diffuser

CLM Glass
Bowl Shaped
Plastic Disc
Refracting Bowl

Fiberglass Diffusing Disc

A Good Study Lamp Should Do These Things:

* Provide enough light for the task it is used to light.
* Prevent glare. No direct light should be visible from above, beneath or through the shade.
* Give off some upward light to add to general lighting in the room.

Describe what type of lighting you have in your room now._____

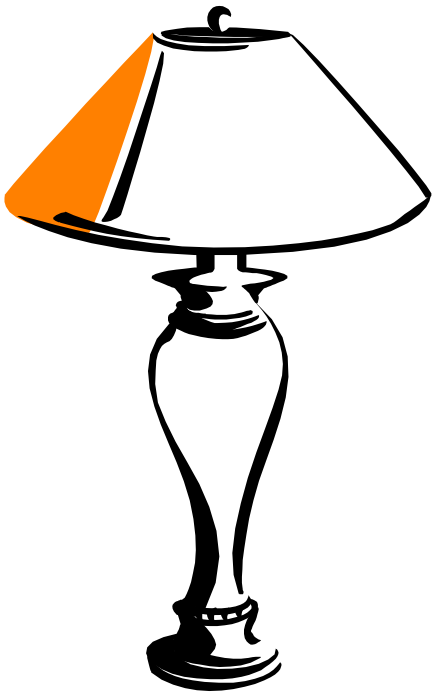
_____

_____

Materials You'll Need

* Two pieces of wood 1" x 2" x 13" for the stem.
* One piece of wood 7-1/2 x 7-1/2 x 3/4 for upper half of base.
* One piece of wood 8" x 8" x 3/4 for lower half of base.
* Lamp socket with 3 position switch for 3 light bulbs. Socket should be threaded for 1/8 inch pipe.
* A piece of 1/8 inch pipe 14-1/2 inches long threaded at both ends.
* Lock washer and nut to fit threaded pipe.
* Shade holder to fit socket. This will support the diffusing bowl. Shade holder not needed if bowl is threaded plastic.
* White lined shade with 16 inch bottom diameter.
* Three lights bulb (50-200-250 watt) or 200 watt bulb. This size will provide more than the minimum 70 footcandles on your work surface, but it will not cause glare. The bulb should be inside frosted or white, not colored.
* A 9- 3/8 inch diffusing bowl or other refracting or different device. Refractors may be dish shaped, clear plastic with prisms. They redirect the light to cover all of the working area. Glass or plastic diffusing disks are good. This makes the light softer and keeps it from glaring.
* Nine foot lamp cord with plug. It should not be smaller than No. 18 AWG UL approved conductor.
* Six 1-1/4 inch No. 10 flat head wood screws.
* Wood glue ---- fine sandpaper ---- carpenter's tools.

Steps to Take



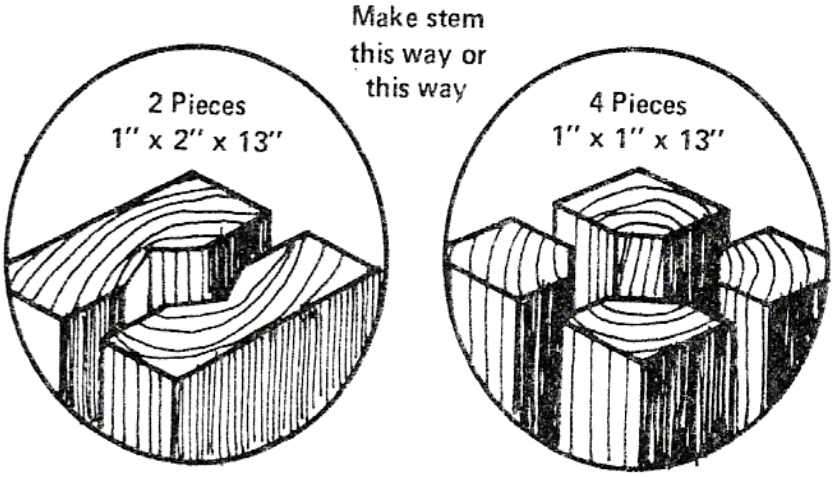
1) Prepare the base. Drill a 1/2 inch diameter hole in the center of the upper half of the base, this is 7-1/2 x 7-1/2 x 3/4 piece.

2) Drill a 1-1/4 inch diameter hole in the lower half of the base, this is the 8" x 8" x 3/4" piece.

3) In this same piece, drill a 1/4 inch hole from an edge to the center hole.

4) If you wish, round the upper edges of both pieces with a wood rasp and sand to a smooth finish. This gives you a base with a slightly different style.

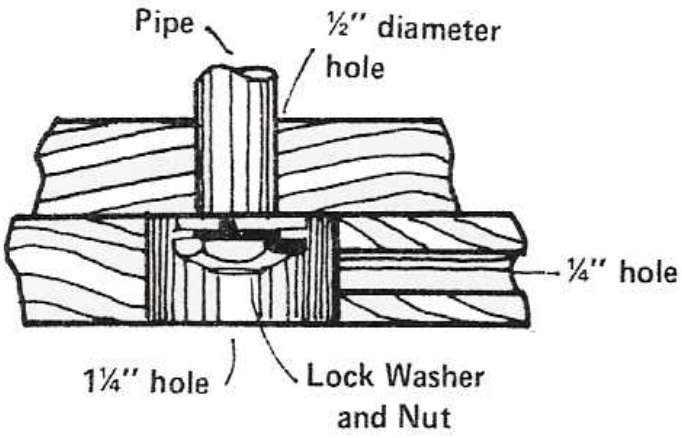
Make the Stem



1) Cut a "V" groove the length of each stem piece. Make sure the grooves match. Make grooves 7/16 inch wide and 1/4 inch deep. NOTE: Another way to make the stem is to take four pieces of wood 1" x 1" x 13" and bevel a corner the length of each piece. Then join the four pieces. Either method provides a channel for the pipe which will carry the wire up the stem.

2) Match the grooves and glue the stem pieces together. Follow instructions on the glue containers so you'll clamp the stem properly and let it dry long enough.

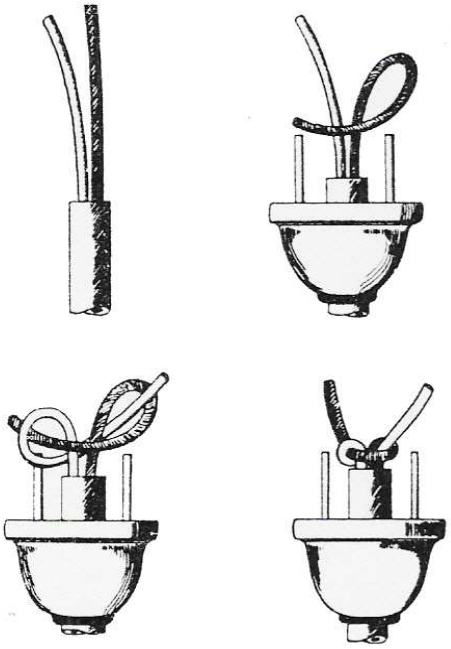
Now Assemble the Lamp



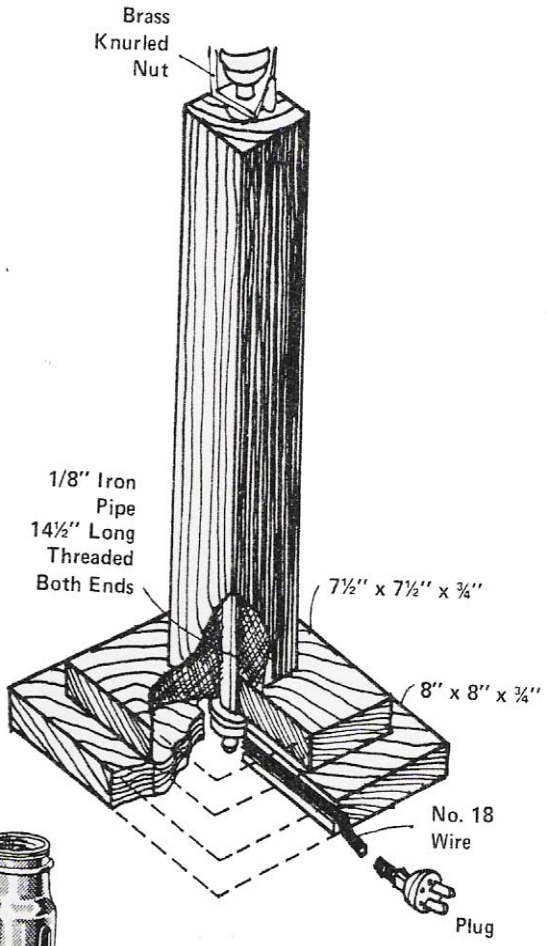
1) Center the stem over the hole in the upper half of the base and secure it from beneath with two wood screws. Countersink the screws.
2) Insert the pipe into the stem and top half of the base. Remove the socket and screw it onto the pipe at the top of the stem.
3) At the bottom of the stem, place the lock washer and nut on the pipe. Tighten the nut.
4) Thread the lamp cord through the hole in the bottom half of the base and stem. Pull the cord well up through the stem and knot it loosely so that it won't pull out when you assemble the base.

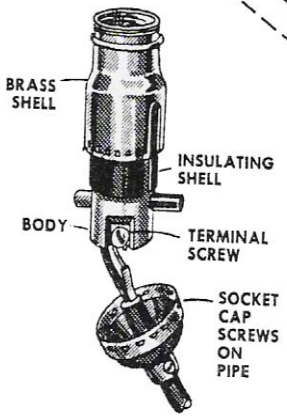
5) Strip insulation from the other end and attach to the plug, using Underwriter's Knot.
6) Center the stem and upper half of the base over the hole in the lower half of the base. Glue the base together. When it is dry secure it from the underside using one wood screw at each corner. Counter sink the screws.
7) Now untie the loose knot in the cord at the top of the stem. Strip the insulation from the ends of each wire and tie the Under Writers' Knot again here. Fasten to screw terminals of the light socket.
8) Assemble the socket and screw the shade holder onto the socket. Insert the bulb and place the shade on the completed lamp.

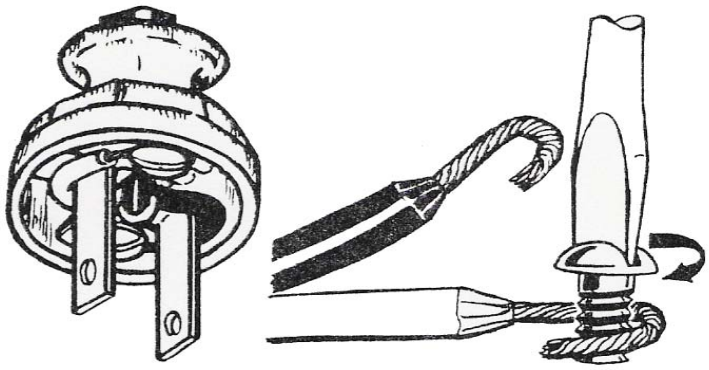
CAUTION: Please ask an adult to help with using power tools.



Tying An Underwriter's Knot







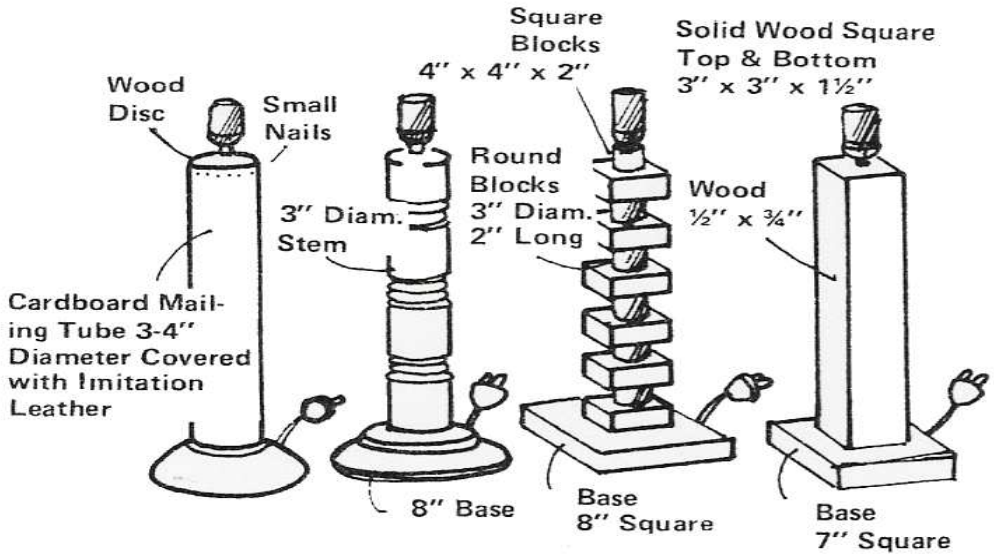
(Attaching Cord to Plug)

Variations You Can Make

You can finish your wood lamp with colored enamel, shellac, stain or varnish. Or you may want to cover it with imitation leather. You can vary the stem and base of your lamp to achieve different pleasing designs. Or perhaps you would like to make your own lamp design, using the same length stem and same size shade, diffusing bowl and bulb. Work your design out in detail and show it to your leader before starting work.

Assemble a Lamp with a Lamp Kit

Follow the instructions in the kit. After making the lamp, check to see if it meets the good lighting requirements that you have learned. Use your lamp in a proper location for study.



Make a Desk Pad

To make a desk blotter holder you will need, in addition to basic tools, these things:

* A piece of heavy cardboard about 14" x 20"
* A roll of paper kitchen towels.
* A piece of corrugated cardboard such as grocers use.

Cut a piece of heavy cardboard 14" x 20". Cut a piece of self adhesive decorating covering 18" x 18" in the color selected for the lining of the desk pad. Remove backing sheet by running the thumb nail between the backing sheet and the adhesive paper. Peel apart. With the adhesive side of the paper up on a flat surface, place the cardboard in the center. One inch of cardboard will extend on two sides of the adhesive. Wrap the adhesive paper around the cardboard.

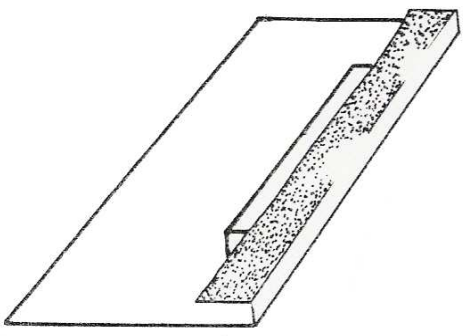
Cut two strips of corrugated paper from a corrugated paper box two inches wide and 14 inches long. This is done best with a metal edged ruler and a single edge razor blade or a sharp paring knife. To pad the pieces of corrugate, cut eight paper towels the exact size of each strip. Fasten to the corrugate with cellophane tape.

To cover the strip of padded corrugate, cut two strips of adhesive paper 8" x 8". Remove the backing sheet. With the adhesive side of the adhesive paper up on a flat surface, place one of the padded strips (padded side toward the adhesive) in the center, 1-1/2 inches from the edge. The long sides of the strip should be parallel to the long side of the adhesive paper.

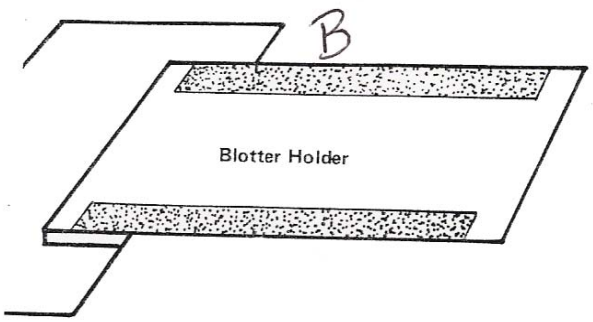
Wrap the 1-1/2 inch side of the adhesive paper tightly up over the top of the corrugate strip.

From now on all work will be done on what will be the bottom of the desk blotter holder.

The padded corrugate with the adhesive paper around it will have a squarish edge. Continue the crease on these corners out to the end of the adhesive. From the top corner of the extended adhesive paper, cut in toward and up to the corner of the corrugate. From the bottom corner of the extended adhesive paper, cut in toward and up to the bottom corner of the corrugate.

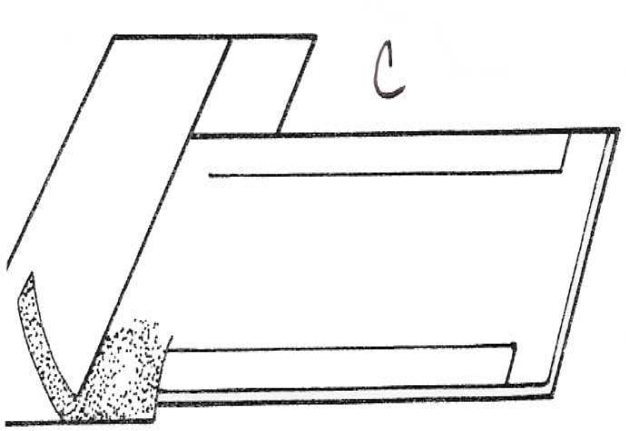


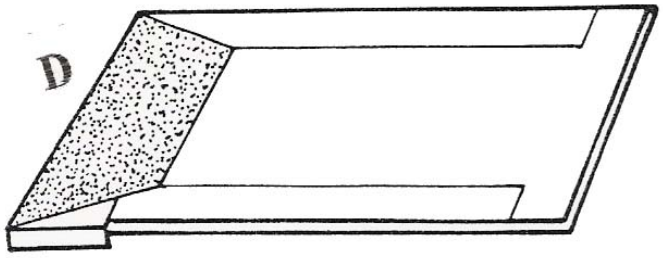
Fold the little resulting strip around the edge of the corrugate. Cut off the top corner along the top edge of the corrugate. Repeat procedure on the opposite end of the corrugate.



Place the adhesive covered cardboard (adhesive side down) over the corrugate up to the exact inside edge of the corrugate FIG B

Pull the side pieces of extended adhesive paper up over the end of the corrugate and snugly up over the cardboard. Continue the crease at both top and bottom to the end of the adhesive paper. Cut along the top crease in toward and up to the top corner of the blotter holder. Cut along the bottom crease in toward and up to the bottom of the blotter holder. Cut off the top flap along the edge of the blotter holder. Fold the narrow strip around the end of the blotter holder FIG C. Repeat the procedure on the opposite end.



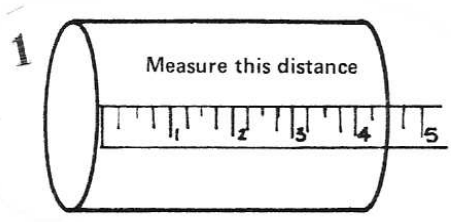


Pull up the large flap over the end. Cut a small diagonal piece off the flap after the end is covered. Stick the flap to the bottom of the blotter holder FIG D

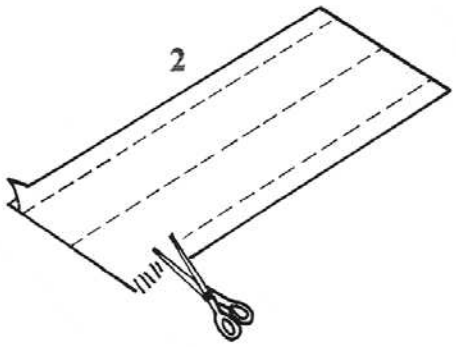
Make a Tin Can Pencil Holder

To make a pencil holder from an empty tin can that has the top and bottom rolled rim still in place, follow these instructions:

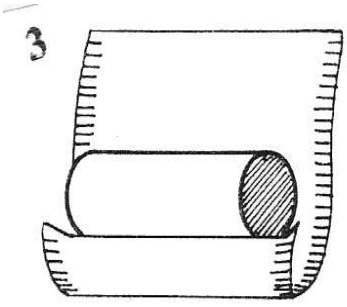
* Cut a strip of adhesive decorative covering two inches wider than the height of the can and long enough to go around the can.
* On the backing sheet, draw a straight line down the middle of the length of the strip.
* Measure the distance between the top and bottom rim of the tin can, the rounded side, not including the rim. Divided by two, mark this dimension above and below the center line. FIG 1



Draw straight lines the length of the adhesive strip at these points. From the edge of the strip, clip in towards and up to the outside straight lines at about 1/4 inch intervals FIG 2



Repeat along the other edge. Remove the backing sheet by running your thumb nail between the backing sheet and the adhesive. Peel apart. Apply the adhesive paper to the can so that the inner edge of the "fringes" extend to the inside edge of both top and bottom rim FIG 3

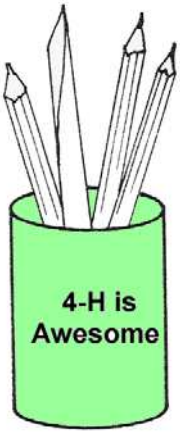


One by one, stick the fringed strips to the bottom of the can. Repeat at the top, securing the strips to the inside of the can. Place the can upright on the backing sheet and trace around the bottom of the can with a pencil. Cut out the circle and trim 1/8 inch off around the circle. Fit the circle to the bottom of the can; trim if necessary. Remove the backing sheet and secure the circle to the bottom of the can.

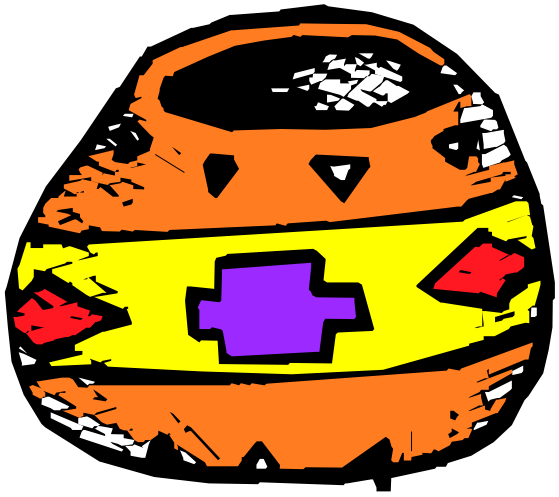
To line the bottom of the can, follow this procedure:

* On the backing sheet side of the adhesive paper, trace around the bottom of the can.
* Cut out the circle, then trim off about 1/8 inch. Fit into the bottom of the can before removing the backing sheet. Trim if necessary.
* Remove the backing sheet and apply the adhesive paper to bottom of can.

To cover the inside walls of the can, follow this procedure



* Measure the depth of the inside of the can up to the bottom of the rim.
* Cut a stip of adhesive paper as wide as the depth and long enough to go around the can.
* Fit before removing the backing sheet. Fit with the backing sheet facing the inside of the can to avoid wrinkling the adhesive paper.
* Remove the backing sheet and fit the strip in place.
* Small designs may be cut out of the lining color or other colored adhesive paper and applied to the outside of the can.



A bowl for your "catch all" stuff
Make a Papier Mache Bowl

You may not have clay or a kiln in which to bake finished pieces, but we can make something that looks like pottery using the papier mache technique, a craft in which layers of paper are pasted together to make a form. In this activity, we'll create a bowl and invent your own pictographs to use as surface decoration. By recycling newspapers and bags as art materials, we can help save natural resources and landfill space.

You will need:

Wallpaper paste Black or brown acrylic paint wax paper newspaper
plastic wrap lightweight, brown paper bag small glass or ceramic bowl
plastic container for paste masking tape paint brushes and pan

How to

1. Protect the table with newspapers, and work on a sheet of wax paper. Cover the outside and rim of the bowl with plastic wrap. Smooth it, pull the wrap tight, and tape it to the inside of the bowl. Place the bowl upside down on the wax paper. Mix the wallpaper paste according to the manufacturer's directions.

2. The brown bag is the first layer of paper applied to the bowl. To help soften the bag, tightly roll the paper into a ball. Smooth it out, and tear it into small squares or rectangles. Dip a paper strip into the mixture, and remove the extra paste by running the strip between your fingers and thumb.

3. Starting at the bottom or rim, lay the strip onto the bowl and smooth it. Repeat with anther strip, being careful to slightly overlap the first one. Continue pasting the paper in this way all around the rim of the bowl. When you've finished, cover the rest of the bowl with strips of brown paper.

4. Now apply a layer of black and white newsprint starting at the rim, as before. Next paste a layer of the colored comics to the bowl. Continue alternating between the newsprint and the comics until you've pasted at least four layers of each to the form. Using the two kinds of newspaper will help keep track of the number of layers added.

5. Finish the papier mache by applying another layer of brown paper. Allow the bowl to dry for at least twelve hours. Remove the bowl from the papier mache form and finish the rim by pasting brown paper all around the edge. When the bowl is completely dry, you're ready to paint it.

6. You can invent your own pictographs to use in decorating your bowl. Make symbols or designs to represent important ideas or to record events in your life. Use pictographs to express who you are, where you live, and what you like to do. After you've created a few symbols, draw them on the outside and/or inside of the bowl. Use acrylic paint to fill in the outline. When you've finished painting, set the bowl aside to dry.

Tips and Tricks: *When working with papier mache, it's better to tear the strips of paper, because torn strips lay better than cut ones. Also, the fibers in newspaper run in one direction, so tear the paper along the grain to obtain long strips. If you'd like to make a heavier bowl, just add five to ten more layers of papier mache to the form.. While the bowl is strictly decorative, you can help protect it with a coat of acrylic varnish*.

Describe the place you used for study before taking this project. Include a picture

_____

_____

_____

_____

_____

Picture:

Describe the place you now use to study. Include a picture

_____

_____

_____

_____

_____

Picture:

What did you learn in this project: _____

_____

_____

_____

_____

_____

Below describe any interesting experiences you encountered in the project

_____

_____

_____

_____

_____

Describe the articles you made in this project

_____

_____

_____

_____

_____

_____

_____

_____

Give an itemized account of expenses for this project:

Date	Item	Amount

total expenses for this page _____

More expenses

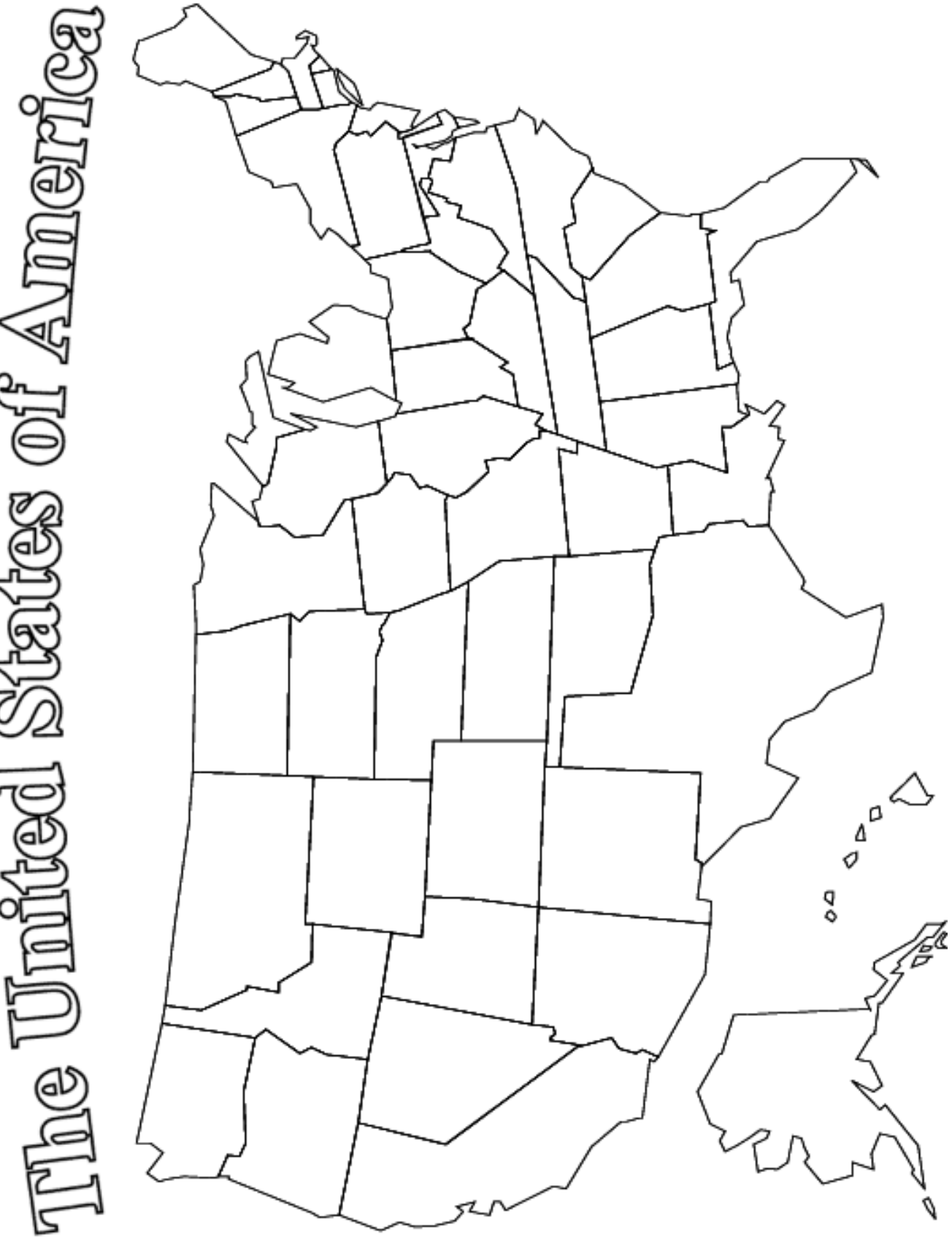
Date	Item	Amount

Total expenses from this page _____

Total expenses from previous page _____

Grand total for project: _____

Color page for fun - can you name the states?



Project Summary

LEADERSHIP

List your accomplishments both in this project and as a member of your club, county council, etc.
Ex: participate in TLC as the delegate to District VIII meetings.

Date	Please Describe

COMMUNITY SERVICE

List in detail your individual or club community service accomplishments and the purpose for the service.
Ex: Our 4-H Club saw a need for a food drive & collected 200 items that were delivered to the needy.

Date	Activities and Events

PRESENTATIONS

List in ***detail*** the demonstrations, speeches, exhibits, workshops where you presented. Also list the topic of your presentation & the level at which you participated at.
Ex: County Events Demonstration -" How to prepare your Rabbit for Show" Check County

Date	Activity	Topic	Please check level				
			Individual	Club	Cnty	District	State

CLUB ACTIVITIES

What activities did you participate in with your 4-H Club.
Ex: Workshops, fair, field trips, judging trips

Date	Activities

NEWSPAPER Articles and/or Pictures of your 4-H Project

NEWSPAPER Articles are extra and will not be deducted.
If you or your 4-H club was in the newspaper please attach the article here.

For project pictures, be sure to include captions describing each photograph. If possible show (The Beginning of your project (work being done and (your completed project.
(Minimum of 3 pictures). You may insert pages as needed.

Your 4-H Story

In your story include as many of the following as possible.

7. What 4-H work has meant to you.
8. What you have learned.
9. What safety practices you used in your project.
10. How you managed your project.
11. What you can do to improve your project next year.
12. About your trip to Congress, camp, the fair, etc.
13. What you did to *"Make the Best Better".*
14. About any other 4-H experiences.

UNIVERSITY OF FLORIDA

IFAS EXTENSION