



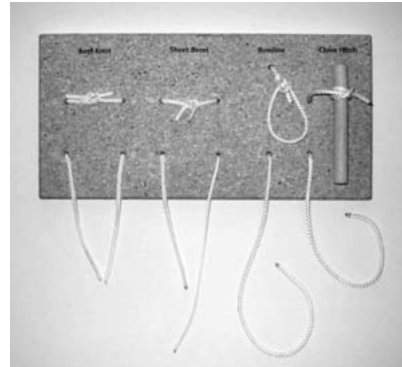
CUB SCOUT BOOMERANG TEST 3/14

KNOTTING/HANDCRAFT

Make a Knotting Board.

Resources

- Board base
- Dowels
- Glue
- Paint or varnish
- Paint brushes and paint pots
- Rope/Cord



Instructions

1. Apply two coats of paint/varnish to the Board Base, as per the instructions for the paint being used (Water based Estapol requires a minimum of 3 hours between coats, and oil based Estapol 8 hours. Sand lightly between coats). Paint the edges first, as these are often very absorbent. Clean up any drips/runs on the back (it is generally easier not to paint the back) of the board, then paint the front, ultimately using long, light strokes along the length of the Board to give a smooth finish.

To help holding the board while it is being painted, and standing while the paint is drying, hammer a 2" nail lightly into the centre of the back of the Board;

2. Glue the two 6 mm dowels into the 12.5 mm dowel and then into the Board Base.

This can be done before the Board Base is painted, but again, it makes it much more difficult to get a good brush finish. The dowels can also be painted after they have been glued in place, but this then delays the finishing of the Board while the paint dries;

3. Feed the pieces of cord through the respective holes in the upper section of Board Base:

Reef Knot	2 pieces 3 mm x 30 cm
Sheet Bend	1 piece 3 mm x 30 cm
	1 piece 1.5 mm x 35 cm
Bowline	1 piece 3 mm x 72 cm
Clove hitch	1 piece 3 mm x 58 cm

4. Tie the respective knots in the pieces of cord on the upper section of the board. Pull any excess cord through the back of the Board and tie a simple thumb knot in the cord behind the hole;
5. Feed the cords, from the back, through the holes in the lower section of the Board;
6. Label each of the knots.

Resource Preparation

Board Base

Particle Board	1200 x 900 x 12	\$8.92	Hardware Store
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Cut into pieces approx. 300 mm x 150 mm. Round corners and front face edges.

Drill holes according to the template (Knotting Board.pdf). Note that there are two holes (1/4") that are drilled only to a depth of 5-8 mm. Of the (12) holes that are drilled through the board, two are 3 mm in diameter and ten are 4 mm.

Holes may be drilled before or after painting, or even between coats. Note, however, that it is harder to paint a surface with holes in it—the holes tend to collect paint and create drips.

Dowel

Wooden Dowel	12.5 mm	\$4.05 / 2.4 m	Hardware Store
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Cut into 10 cm lengths. One 10 cm piece is required for each Board. Drill two holes, 6 mm dia. and 5-8 mm deep, according to the template (Knotting Board.pdf).

Dowel

Wooden Dowel	6 mm	\$2.66 / 2.4 m	Hardware Store
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Cut into 2.5 cm lengths. Two 2.5 cm pieces are required for each Board.

Glue

Aquadhere	100 ml	\$?	Hardware Store
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Any wood glue would do.

Rope

Venetian Blind Cord (Nylon)	3 mm	\$0.58/m	Hardware Store
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Cotton cord, arguably, produces a nicer result, but is 2-3 times the cost of the nylon cord quoted.

You will need 2.2 m of 3 mm cord per board. Cut pieces as follows:

3 x 30 cm (Reef Knot & half of the Sheet Bend)

1 x 72 cm (Bowline)

1 x 58 cm (Clove Hitch)

Seal the ends of the pieces of cord by gently and quickly heating them (you only need the cord in the flame for a fraction of a second) with a cigarette lighter flame. Mould/round the ends if necessary, immediately after removal from the flame, by squeezing gently and quickly between thumb and forefinger—watch you don't burn your fingers! (Don't let the kids try this!). This process will also facilitate feeding the cord through the holes in the Board Base.

Rope

Venetian Blind Cord (Nylon)	1.5 mm	\$0.42/m	Hardware Store
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Cut one piece 30 cm long, to be used as half of the Sheet Bend. Prepare as described above.

Paint Brush

'Cheapest Available'	25 mm	\$1.43	Hardware Store
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Cheap brushes can be a bit of a problem losing hairs on the job, but the price rises dramatically with quality. Anything smaller than 25 mm would make the present task a little tedious.

Paint/Varnish

Wattle Satin Estapol (Water Based) 500 ml \$18.14 Hardware Store

Water based, satin finish is far and away the most convenient. Clean up is in water, there is little odour, and the satin finish is a little more forgiving (than a gloss, or even matt finish) for beginners.