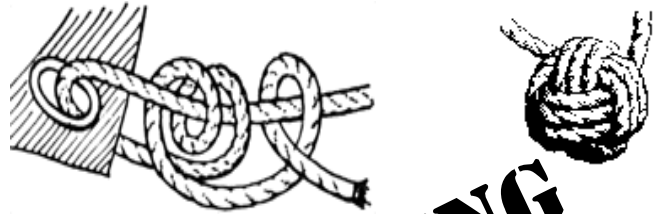


Visit the "Scouting with Mr. R." web site at:  
<http://www.relia.net/~thedane/scouting.html>

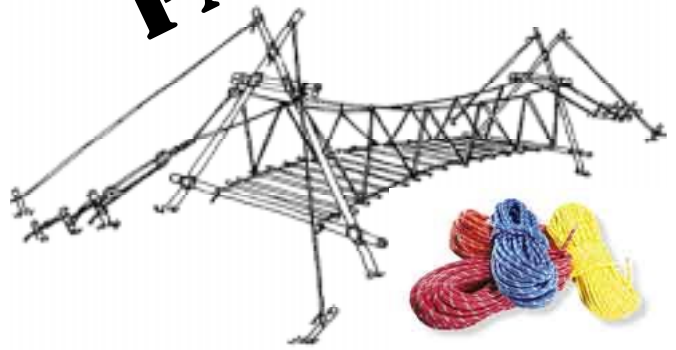
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# PIONEERING PASSPORT



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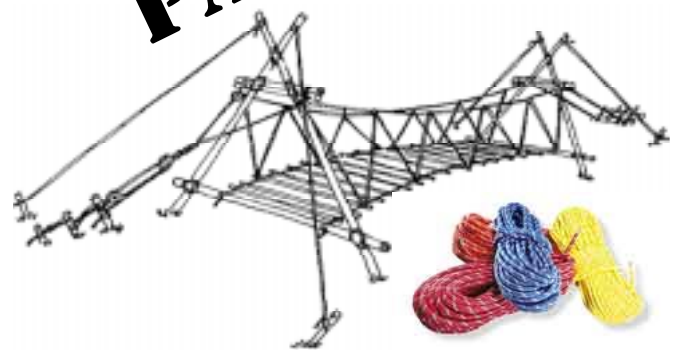
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# PIONEERING PASSPORT



**ROPE COIL (1)**

□ Demonstrate how to coil and throw a 40-foot length of 1/4 inch rope.

**ROPES (2)**

□ Present **FIVE** different rope samples, of any size or material. Explain the characteristics of each type of rope — its strength, mildew resistance, durability, and stretch. Explain where and how each type of rope can be used in pioneering.

● <http://www.aamstrand.com/Rope%20Characteristics.htm>

MATERIAL \_\_\_\_\_  
 STRENGTH \_\_\_\_\_ STRETCH \_\_\_\_\_  
 MILDEW RESISTANCE \_\_\_\_\_ DURABILITY \_\_\_\_\_  
 CHARACTERISTICS \_\_\_\_\_

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The most common use of a heaving line is at sea, to pull a cable to shore from a ship. A cable is not easily thrown over a distance of 10m [ ft] or more, so instead one throws a heaving line. The line is tied to the cable and when it has been received the cable can then be pulled over. To make it easier to throw one needs to connect a weight on the end of the line - usually a stone, lead-ball or a small bag of sand is connected to the end. Better still a small rope ball is tied on the end. It is neat, it will endure many tosses last long and it is easily thrown. That is what the monkey fist is was originally used for.

Now it is also used as fancy knot for key-rings, necklaces and so on. The knot can be done with or without a central core (i.e. a round stone or ball bearing) to add extra weight but it is recommended to use extra loops depending on the size of the object.

(Diagrams and text from “Roper’s Knot Page”)

● <http://www.realknots.com/knots/faqknot.htm>



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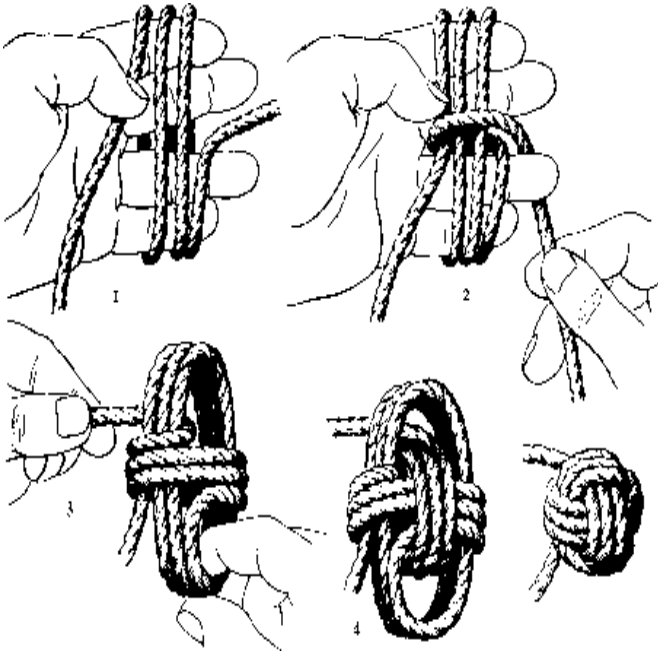
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**THE MONKEY FIST (FYI)**



The Monkey Fist is used as an end knot for a heaving line. A heaving line is a line used for throwing from one location to another. This enables a larger line that could not be thrown over the distance to be pulled over.

MATERIAL \_\_\_\_\_

STRENGTH \_\_\_\_\_ STRETCH \_\_\_\_\_

MILDEW RESISTANCE \_\_\_\_\_ DURABILITY \_\_\_\_\_

CHARACTERISTICS \_\_\_\_\_

\_\_\_\_\_

MATERIAL \_\_\_\_\_

STRENGTH \_\_\_\_\_ STRETCH \_\_\_\_\_

MILDEW RESISTANCE \_\_\_\_\_ DURABILITY \_\_\_\_\_

CHARACTERISTICS \_\_\_\_\_

\_\_\_\_\_

MATERIAL \_\_\_\_\_

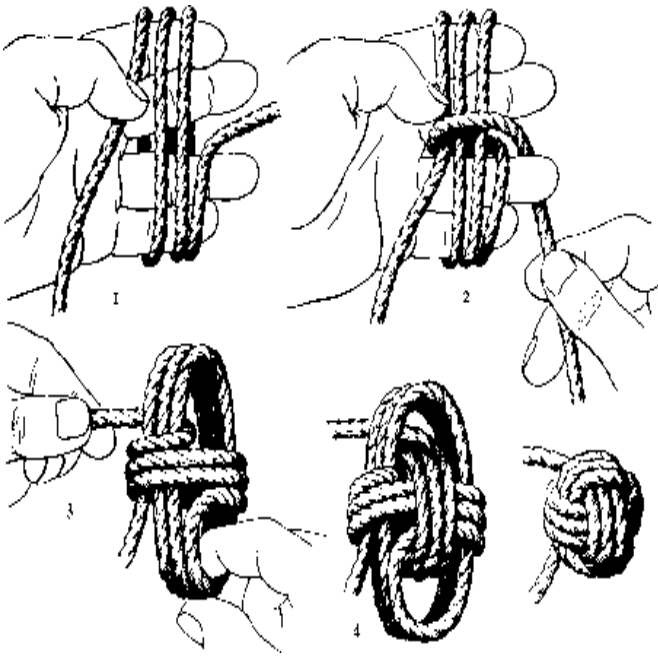
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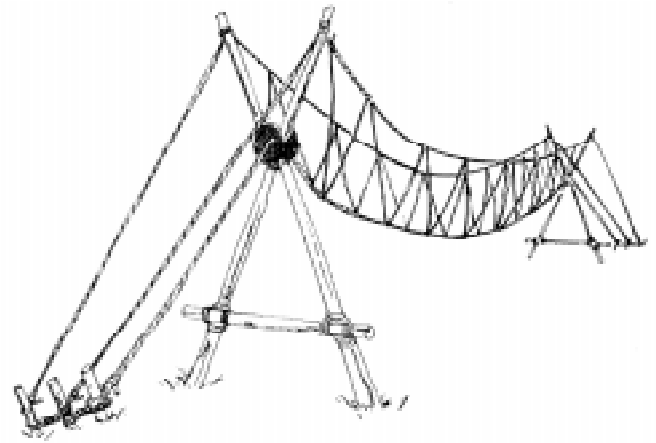
Man has been making rope for thousands of years. Tough fibers from many trees and plants have been used (bamboo leaves, coconut husks, hemp, cotton, sisal, jute, etc.).



Nylon was the first man made product to be introduced into rope making, providing stretch and permanance. Other oil-based synthetic fibres are commonly used today (polyester, fiberglass, polypropylene, polytheylene, and many others.



This picture shows the fibers of a coconut husk being separated to make a coconut rope.



**Troop Discipline?**



MATERIAL \_\_\_\_\_

STRENGTH \_\_\_\_\_ STRETCH \_\_\_\_\_

MILDEW RESISTANCE \_\_\_\_\_ DURABILITY \_\_\_\_\_

CHARACTERISTICS \_\_\_\_\_

\_\_\_\_\_

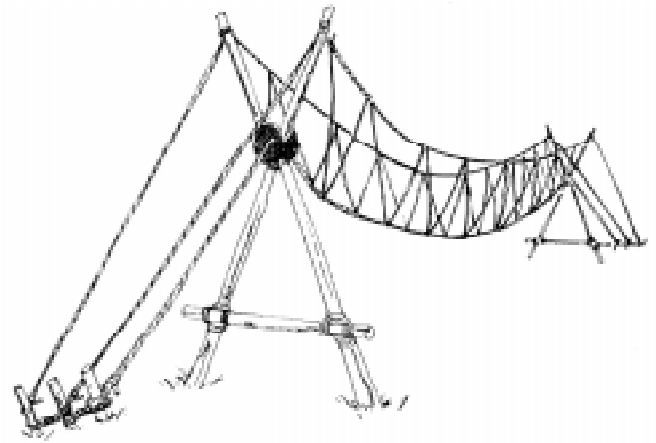
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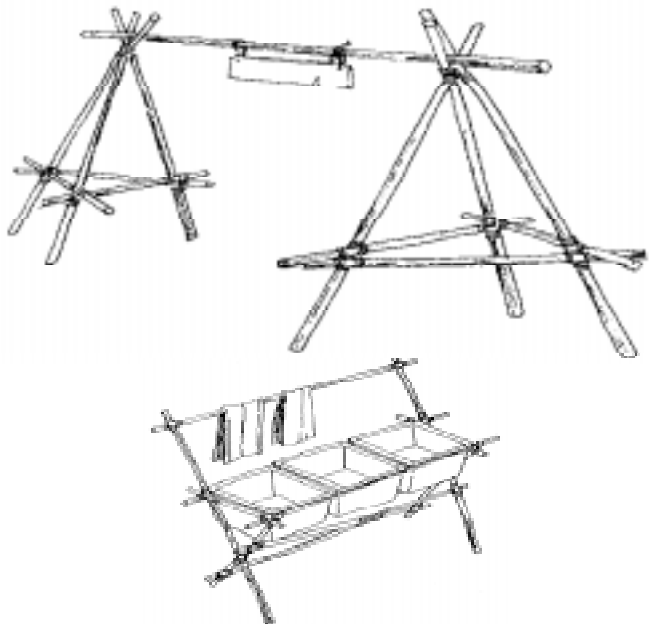


**Troop Discipline?**



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□ With a group of Scouts, build a pioneering project. Before building, present a rough sketch of the project and a list of the ropes and spars needed to build it.

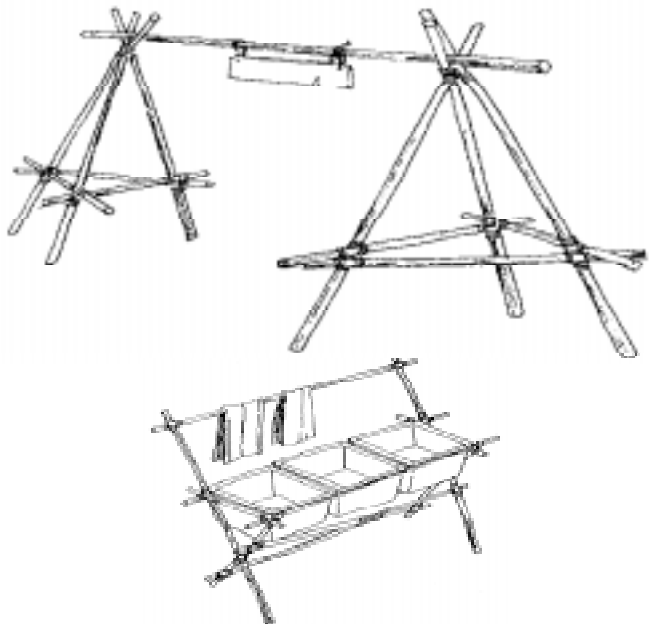


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**KNOTS (3)**

□ Demonstrate how to tie the following seven basic knots: square knot, timber hitch, clove hitch, bowline, sheepshank, sheet bend, and roundturn with two half-hitches. Also select five more knots found in the PIONEERING merit badge pamphlet. Tie each one for the examiner, and tell where it could be used in pioneering, camping, or other Scout activities.



square knot



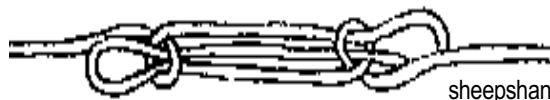
timber hitch



clove hitch



sheet bend



sheepshank

● <http://www.folsoms.net/knots/>

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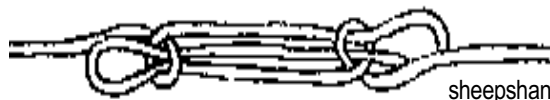
timber hitch



clove hitch



sheet bend



sheepshank

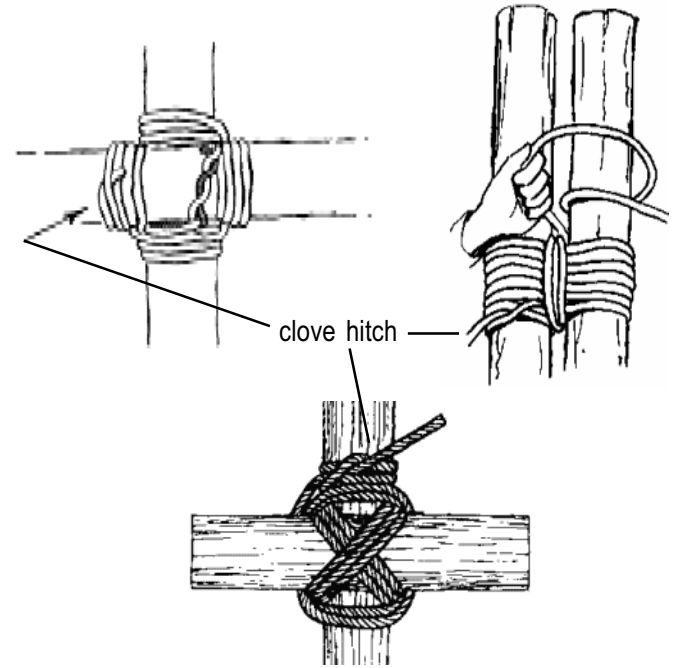
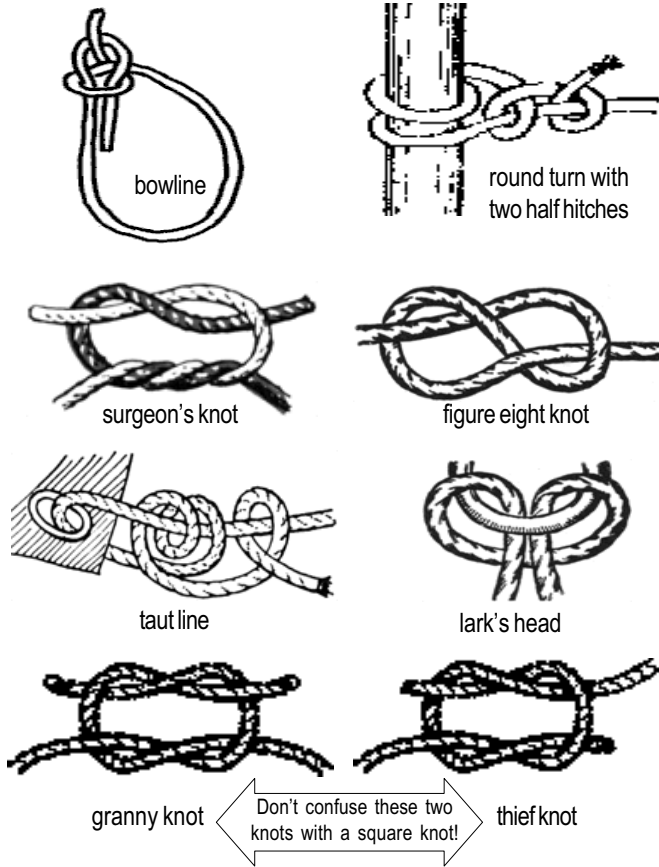
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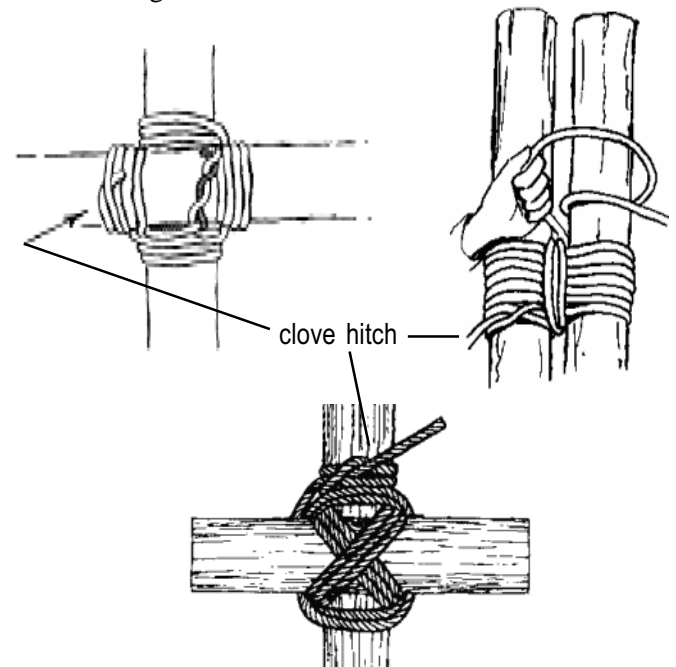
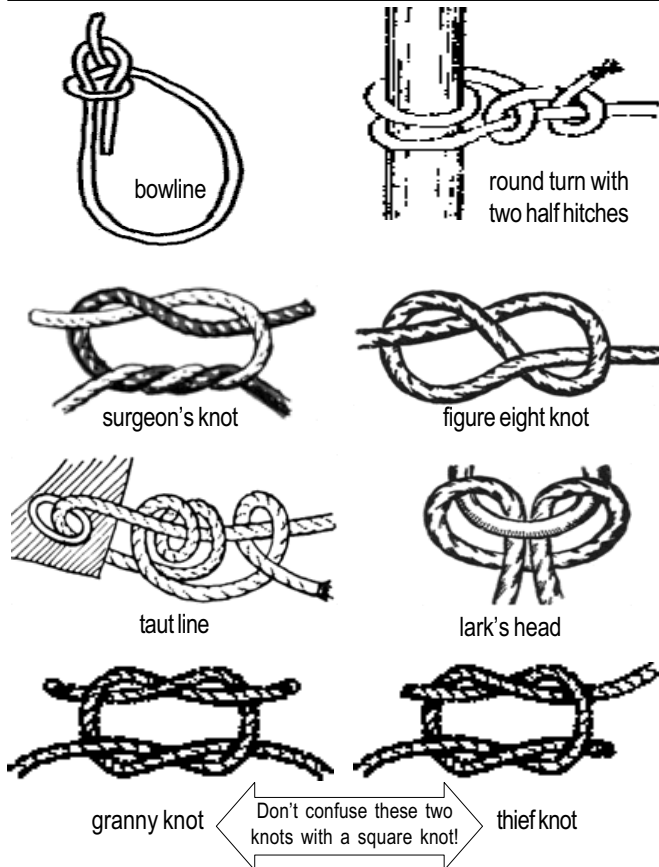
### LASHINGS (8)

By yourself, build an H-frame trestle with ropes and spars using square and diagonal lashings. Demonstrate how to tie two spars together using a west country shear lashing.



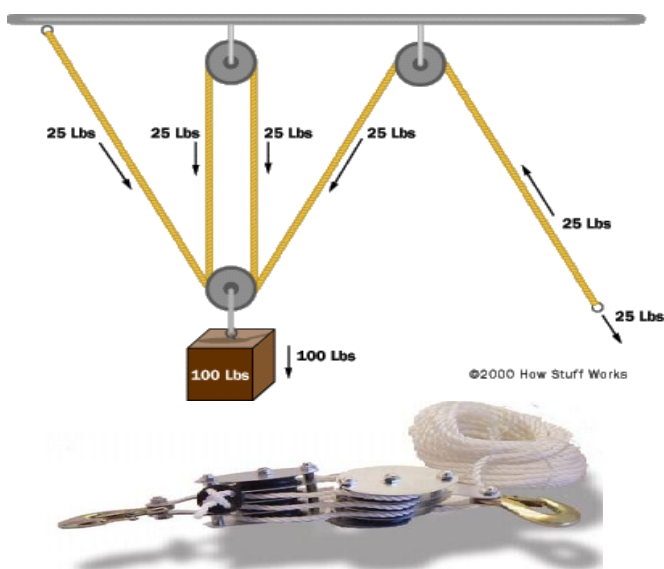
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## ROPE TACKLE (7)

□ Demonstrate the use of rope tackle to life a weight of 25 pounds. Pull a log at least 6 inches in diameter and 6 feet long with the tackle. Use the tackle to put a strain on a line.

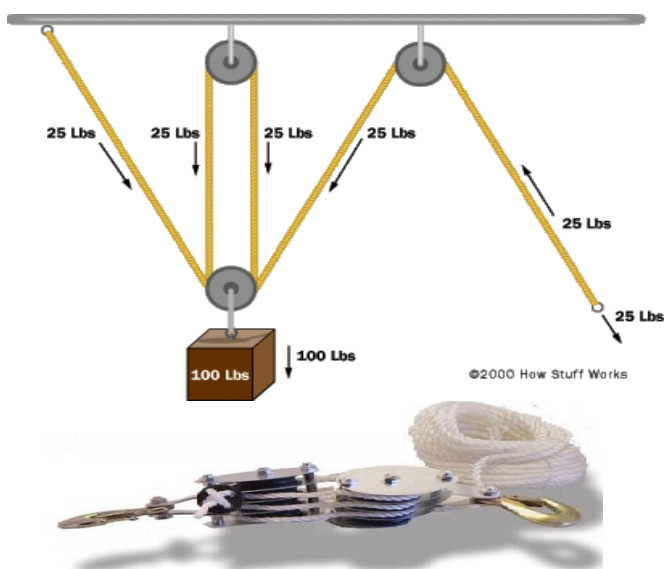


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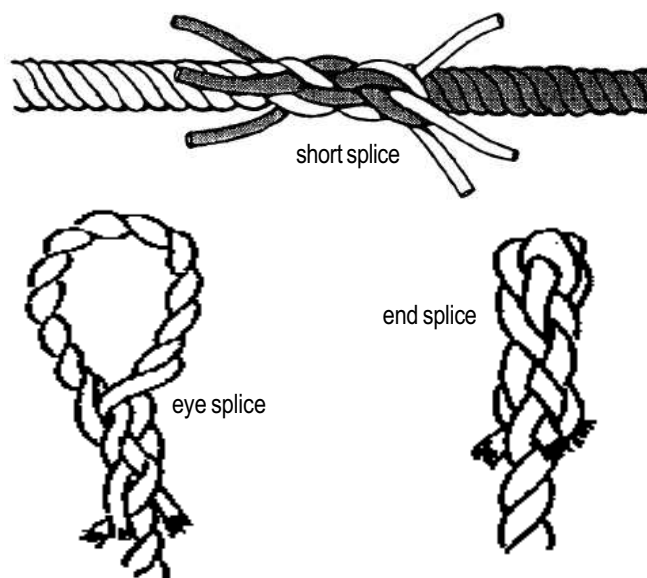


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## SPLICES (4)

□ Demonstrate how to make the back splice, eye splice, and short splice using 1/4-inch three-strand rope.



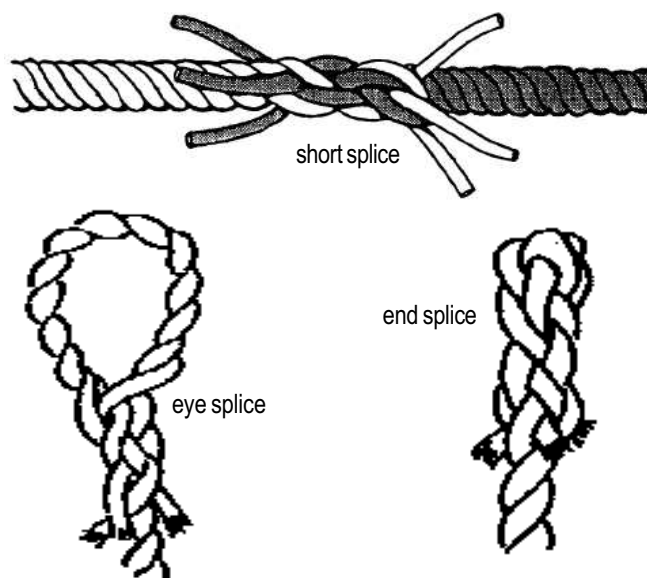
● <http://www.bsatroop357.org/forms/Splicing.pdf>

● <http://www.neropes.com/splice/>

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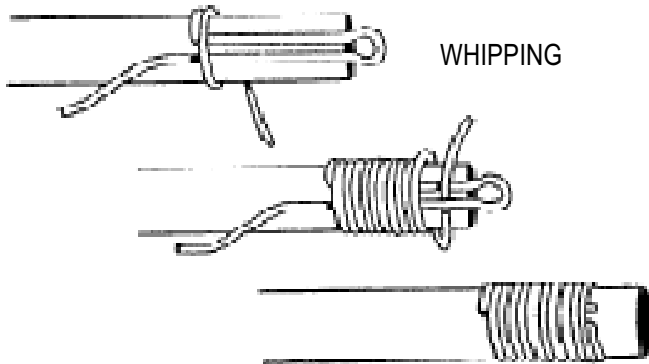
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## ROPE MAKING (5)



□ Construct a device or machine to make rope. Then use the device with binder twine to make a 6-foot length of rope consisting of three strands, each having three yarns. Also demonstrate one method of whipping the end of the rope.

● [http://www.bsatroop542.org/Knots\\_MakingRope.htm](http://www.bsatroop542.org/Knots_MakingRope.htm)

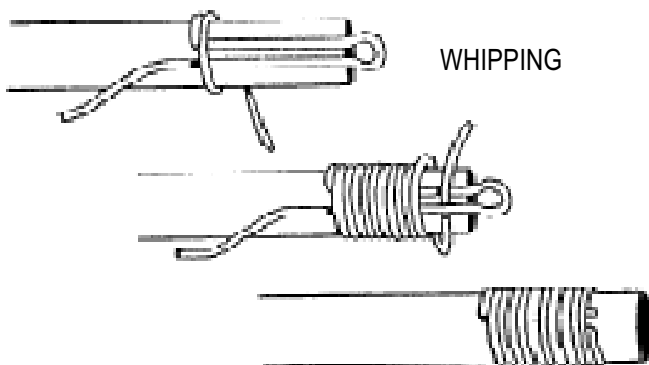


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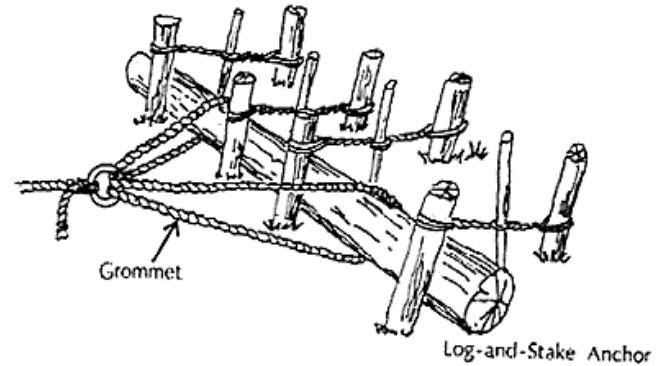
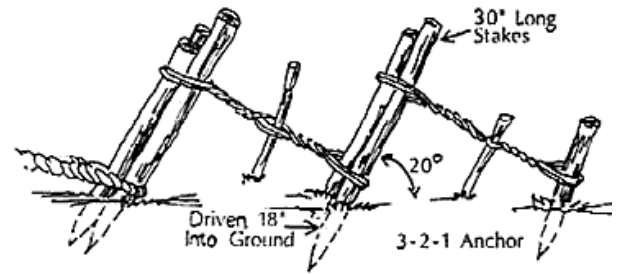
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## ANCHORS (6)

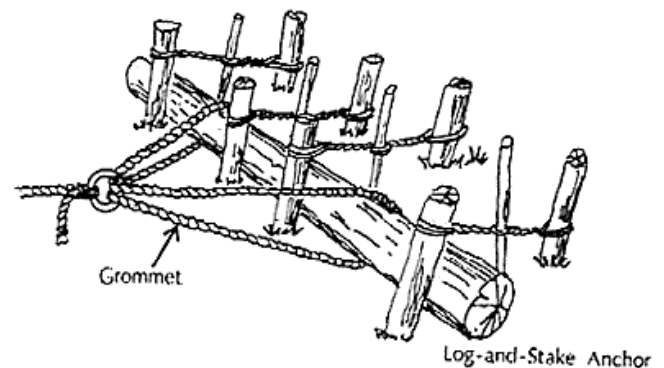
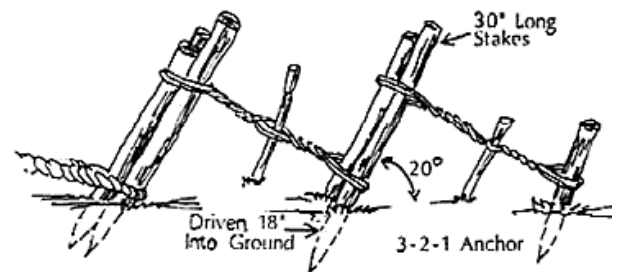
□ Build a three-two-one or a log-and-stakes anchor using pioneering stakes. Build the anchor at a size suitable to anchor one end of a monkey bridge.



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