

Knot Master Program



Knots are a skill taught at every level of scouting. The Knot Master Program is designed to provide each scout an opportunity to learn essential knots as well as other fun and useful knots that you will use for the rest of your life. In addition to learning the knots, each scout is awarded with a five foot piece of white rope. This is just the start of the adventure.

After completing Level One, the scout is awarded with a carabineer and taught a special method for tying the five-foot piece of rope to the carabineer (the 'carry' knot). This allows the scout to carry the rope at all scout functions, and display his success in completing Level One. In addition, it provides one more element of the Boy Scout motto "Be Prepared", for there are countless uses for a five-foot piece of rope. Having tied a knot as part of your rank advancement doesn't count in the Knot Master Program. You must demonstrate that you still know it.

From here the Scout can continue to progress through the remaining four levels of the program. Upon completion of each level the scout is awarded with a different color of rope, Green, Blue, Red and finally Black. Upon obtaining the coveted Black rope, the scout is declared a true "Knot Master".

But in truth, the highest level of Knot Master can only be earned upon reaching the rank of Eagle Scout. At that point the Scout can wear the red, white and blue square knot over the left pocket of his Scout uniform for the rest of his life, as a symbol to all of his commitment and dedication to the ideals of Scouting.

Enjoy your knot tying adventure.

"Every Scout should be able to tie a knot. To tie a knot seems to be a simple thing, and yet there are right and wrong ways of doing it, and Scouts ought to know the right way. Very often it may happen that lives depend on a knot being properly tied."

"The right kind of knot to tie is one that you can be certain will hold under any amount of strain, and which you can always undo easily if you wish to. A bad knot is one which slips away when a hard pull comes on it, or which gets jammed so tight that you cannot untie it."

Lord Baden-Powell

Definitions common to ropes and knots

Rope – A large stout cord usually made of strands of fibers (or yarns) twisted or braided together.

Strand – Usually one of three or four individual cords (made of twisted yarns which are made out of fibers) that are twisted together to make a rope.

Standing part – This is the part of the rope that is generally not used in knot tying, either because it is fastened to another rope or spar, or because it is too long to be used conveniently.

Tag end – The running or working end of a rope. This is the part that you whip, splice or use to tie the knots or hitches

Knot – a combination of bights, bends and hitches.

Bight – This is the part of a rope that is doubled back on itself, or crossed over to make a loop.

Bend – A knot for fastening two ropes together.

Hitch – A temporary knot. Generally the knot which fastens a rope to something stiff, such as a spar or ring.

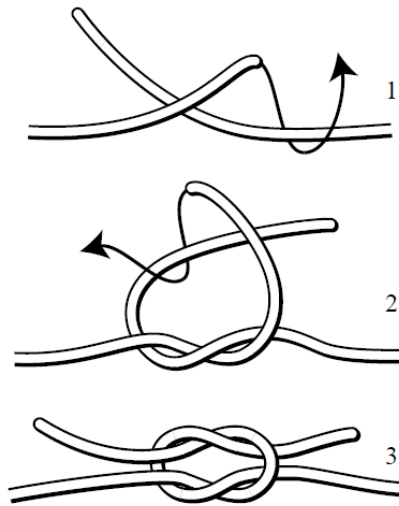
Eye – The opening in the center of a loop or bight.

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Level One – White Rope

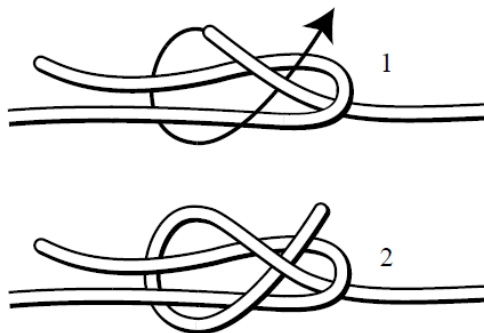
This level introduces six basic Boy Scout knots, a couple variations on those knots, and a few others you typically learn as you advance to First Class. These knots are commonly used throughout Scouting and you'll use them the rest of your life. In addition, the techniques you use to tie several of these knots serve as the foundation for future knots and lashings.

Square Knot



The Square Knot (also known as the Reef Knot or Joining Knot) is a common and simple binding knot. It is easily used to connect two ropes of equal size. You can loosen the square knot easily by either pushing the ends toward the knot or by “upsetting” the knot by pulling back on one end and pulling the other through the loops.

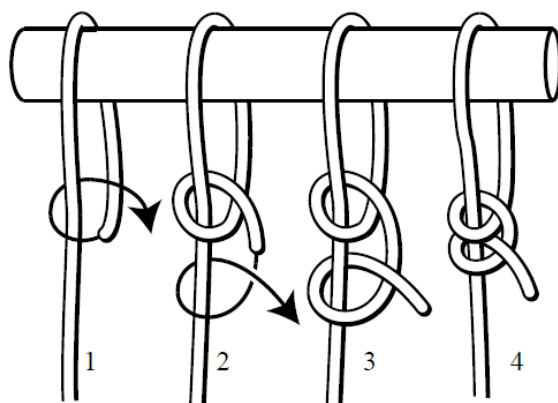
Sheet Bend



The Sheet Bend is an important knot for joining two rope ends, especially if the ropes are of different sizes. Sailors named it in the days of sailing ships when they would “bend” (tie) the “sheets” (ropes attached to the clew of the sail).

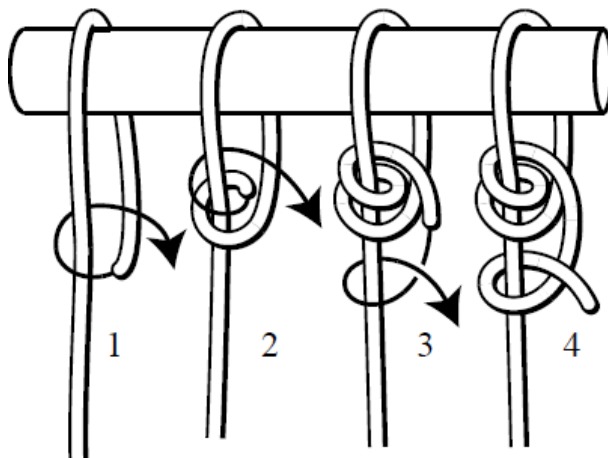
Begin with a bight in the larger rope. Bending the rope in a “U” shape is called a bight. Then weave the end of the smaller rope up through the eye, around the bight, and back under itself. Snug it carefully before applying any strain to the knot. The Sheet Bend can also be doubled or tripled by looping the smaller rope two or three times before completing the knot.

Two Half Hitches



This is a reliable and useful knot for attaching a rope to a pole or boat mooring. A single Half Hitch serves as the basis of many other knots. As the name suggests, this knot is just two Half Hitches, one after the other. The only “trick” to tying the Two Half Hitches is to go through the loop and over the rope as shown, and always keep the rope looping in the same direction. To finish, push them together and snug them by pulling on the standing part. A variation on this knot is to wrap the line around the pole twice (called a round turn) before tying the Two Half Hitches.

Taut Line Hitch

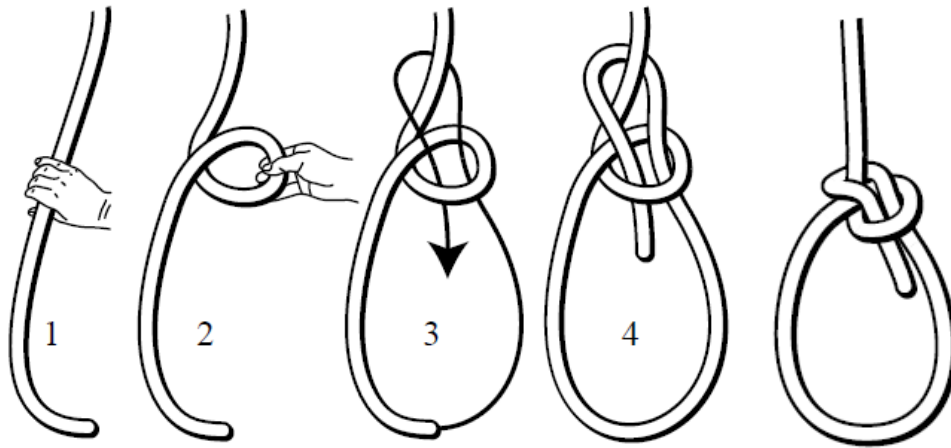


The Taut Line Hitch is an adjustable loop knot for use on lines under tension. It is useful when the length of a line will need to be periodically adjusted in order to maintain

tension. It is very similar to the Two Half Hitches except that before tying the second hitch the rope is wrapped a second time around the standing part (step 2 in the picture). Tension is maintained by sliding the hitch to adjust the size of the loop. It is typically used for securing tent lines or pulling a tarp tight.

The Two Half Hitches is a knot that will always slide down the standing part of the rope to the pole. So you might as well slide it down when you tighten the knot. Wrapping the rope a second turn around the standing part before tying the second hitch is what keeps the Taut Line Hitch from sliding like the Two Half Hitches.

Bowline



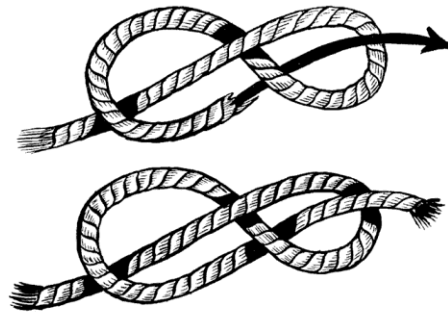
The Bowline has been called the “king of knots”. It will never slip or jam if properly made and, thus, is excellent for tying around a person in a rescue. Begin by forming an overhand loop, or eye in the standing part. The way you form the loop matters. Look at the picture, grab the line using your right hand with the back of your hand up and roll your hand over to face palm up. This simple trick will always work! Take the tag end up through the eye, around behind the standing part, and back through the eye where it came from. Tighten as shown in the last picture. There are many different ways to tie a Bowline. Try tying one around your waist using only one hand.

Bowline on a Bight



The Bowline on a Bight forms two loops, but they must be of the same size. Start by making a good sized bight (creating the double rope in the picture) and an overhand loop or eye just like you do for a regular Bowline. Bring the end loop up through the eye and then bring it down around the entire knot. Set the knot (tighten) before putting any weight on it.

Figure-Eight Knot



The Figure-Eight Knot is very important in both sailing and rock climbing as a method of stopping ropes from running out of retaining devices. It creates a bulkier end on the rope than just an overhand knot.

Carrick Bend

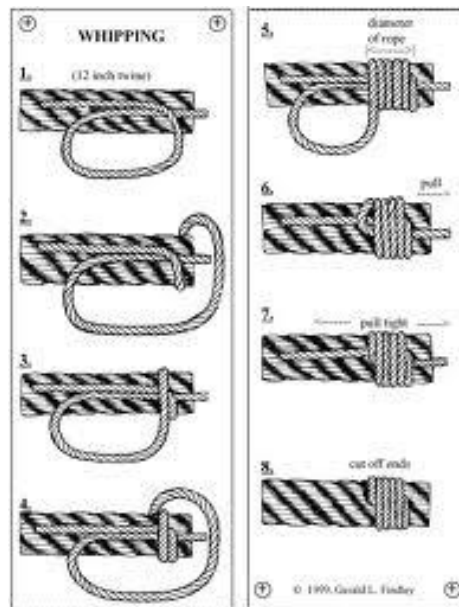


The Carrick Bend is used to join two heavy lines together. It's basically two back-to-back sheet bends. After forming the Carrick Bend the tag end or each rope is usually tied or whipped to the standing part of the same rope to help make sure it won't come undone. The Carrick Bend is not used often for joining lines anymore but it does serve as the foundation for many decorative knots. Remember this later!

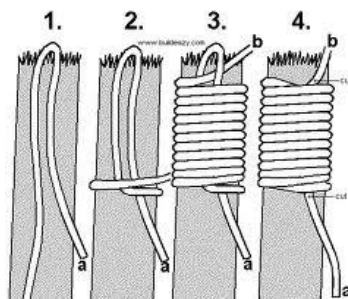
Whipping a Rope

Whipping the end of a rope prevents it from separating or fraying. Once learned it's very easy to tie but it seems to be one of the first things a Scout forgets when it comes to tying knots or caring for a rope. There are several different ways to whip the end of a rope, including some pretty fancy ones used by sailors. The following illustrations show the "loop" method and the "bight" method. Try them both and you will get a better idea of how and why they work. Take your pick, or learn them both, they each work just as well. Which one is your favorite?

Loop Method



Bight Method



Cleat Hitch

The cleat hitch is a simple knot that's very useful. Aside from mooring boats next to a dock you should use the cleat hitch whenever raising a flag. Basically the tension pulling on the standing part of the rope and cleat, looped over the top of the tag end, holds the hitch secure.

