

Harford District
2016 Cub Scout Day Camp
June 27 – July 1
Cubstruction

Knots



Station Volunteer's Guide

Thank you for being a station volunteer! The stations are the heart of camp and truly provide our scouts with an opportunity to try out a new skill (or build on one they know) while having a great time. Our volunteers' knowledge and enthusiasm is what makes our camp great!

To make running the station easier, please take some time to read through the station guide. While what is being covered at the station needs to remain as outlined, how it is covered is only one of many methods. If you find a better way to accomplish the requirements or if the method we have outlined doesn't seem to be working...please feel free to change it! This is only a guide...do what works best for you and the scouts coming to your station.

One other thing to keep in mind - some stations will be visited by all ranks. That means you may have 6 year olds through 11 year olds and may have to simplify or intensify the methods to meet the skills and knowledge of all the scouts.

Thanks again - we are glad to have you as part of Harford Day Camp!

Station Procedures

- The first station begins at 10:15 on Monday and 9:15 other days...so you have some time! We've tried to only schedule 2 dens at a time (max. 24 boys) but, there may be times when you have 3. Consult your station schedule so you will know who to expect and when.
- Greet dens as they arrive. Many will have a den cheer, ask to hear it!
- Once all the dens arrive or the start time has come, begin going through the procedures for the station. It is very important that you start and end on time! Each time slot lasts 45 minutes. If a den arrives 10 minutes late, they CANNOT stay 10 minutes past the end of the station...that would make you and then late for the next station. If a den doesn't get finished, suggest they come back during a break or take the remaining activity with them to work on at the den.
- Execute the station with energy and enthusiasm! Let the scouts do as much for themselves as possible. It doesn't need to be perfect, they just need to Do Their Best!
- Don't forget the beads. Each scout earns a bead at every station for participating. Beads can be given to the den leader for distribution.
- Once the den is finished, begin resetting for the next group.
- Close the station at the end of the day by packing/organizing the supplies and cleaning and disposing of all trash. Let the Program Director responsible for the station (either Tiger/Wolf/Bear or Webelos) know if supplies are running short!

Station Overview

Demonstration and hands-on learning will complete this station. Each rank will be shown how to tie specific knots and will have some practice time. Bears and Webelos will then work in groups and practice the knots learned by putting up an "A" frame tent. Then, the Boy Scout volunteers will take the scouts through a series of obstacles constructed from various knots. This fun activity will hopefully get the young scouts excited about what they can make and do when they learn their knots! Each scout takes his practice rope with him.

Set-up:

Obstacles will be set up by the Boy Scout volunteers and left in place all week. Practice ropes can be found in the station box. Practice the magic rope trick to use as an "ice breaker" when the station begins.

Break-Down

Return materials to the station bins and store under the tent for the night. If bad weather is forecasted, please bring the station bins to the Crouse Building for the night.

Station Objectives:

All scouts will get a chance to go through rope obstacles after learning the specifics for their rank.

Tiger

1. Learn to tie an overhand knot and a square knot.
2. Tie your shoelaces with a square bow knot.

Wolf

1. Learn to tie an overhand knot and a square knot.
2. Tie your shoelaces with a square bow knot.
3. Tie two cords together with an overhand knot.

Bear

1. Tie a square knot, bowline, two half hitch, and taut-line hitch.
[Tell or Demonstrate how each knot is used]
2. Put up an "A" frame tent using taut-line hitch or any other knots that you have learned.

Webelos II

1. Demonstrate you know how to tie the following knots and tell what their uses are:
 - a) Square Knot
 - b) Bow-line
 - c) Clove hitch
 - d) Two half hitches
 - e) Taut-line hitch.
2. Put up an "A" frame tent using taut line hitch or any other knots that you have learned.

Ice-Breaker: choose one that works best for you!

Knot Magic

"Knot" Impossible Trick

1. Hold the rope in your right hand, between your thumb and pinky. It should lay across your palm and the ends should extend to the back of your hand.
2. Now, turn your hand downwards and grab the end held by your thumb with your first finger and second finger.
3. Pinch this bit of rope and then turn your hand all the way down. This should cause the rope to slide off the back of your hand.
4. Give it a shake to help it along and when the rope falls off it will end up tied in a knot!

Magic Knots

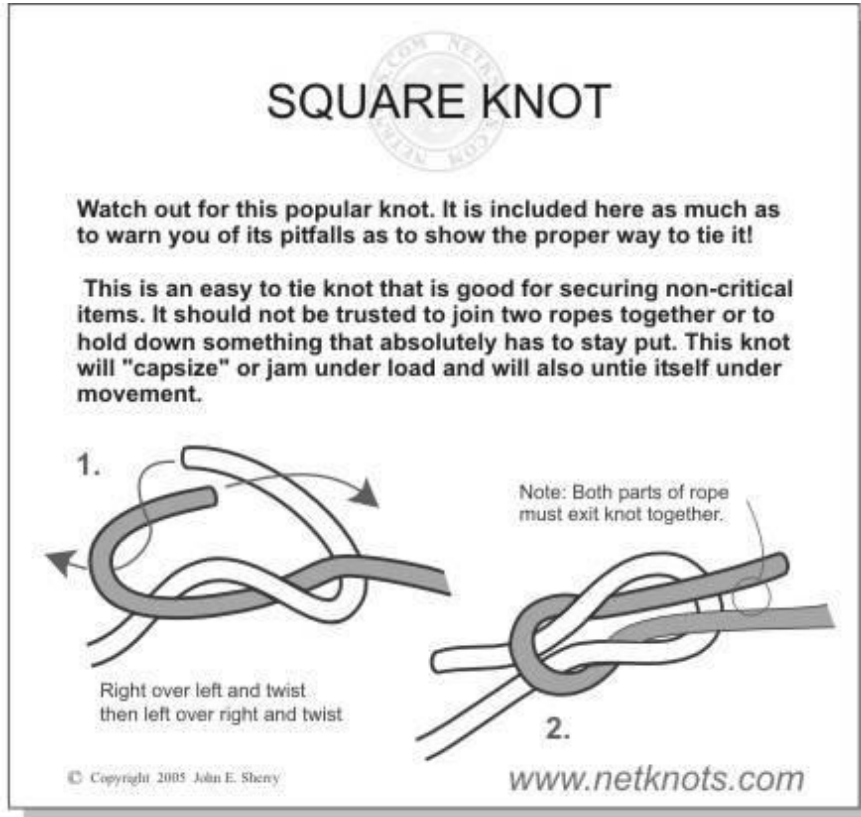
1. Start with the length of rope in your hands. Stretch it from hand to hand and hold it in your fingertips to show your audience that it's just one, long rope.
2. Hold the end of the rope with your left hand. Grab it about eight inches down from the end with your right hand.
3. With your right palm facing up and your thumb pointing right, take the rope in your right hand and bring it to your left hand. As you do this, twist your right hand ninety degrees to make a loop in the rope.

4. Repeat steps 2 and 3 until you have gathered the entire rope into loops. Now you should have your rope gathered up into a set of rings in your left hand. The number of rings you made will dictate how many knots you'll make. For example, if you made five rings with the rope, you'll be able to make 5 knots.
5. Place your bundled rope onto the table. Discreetly bring the original end you were holding up through the loops as you do this.
6. Wave your hands over the loops of rope and then quickly lift the rope up off the table. Bring the protruding end up through the loops as you do this to create the knots. Your audience will think they magically appeared!

Background that may be helpful....

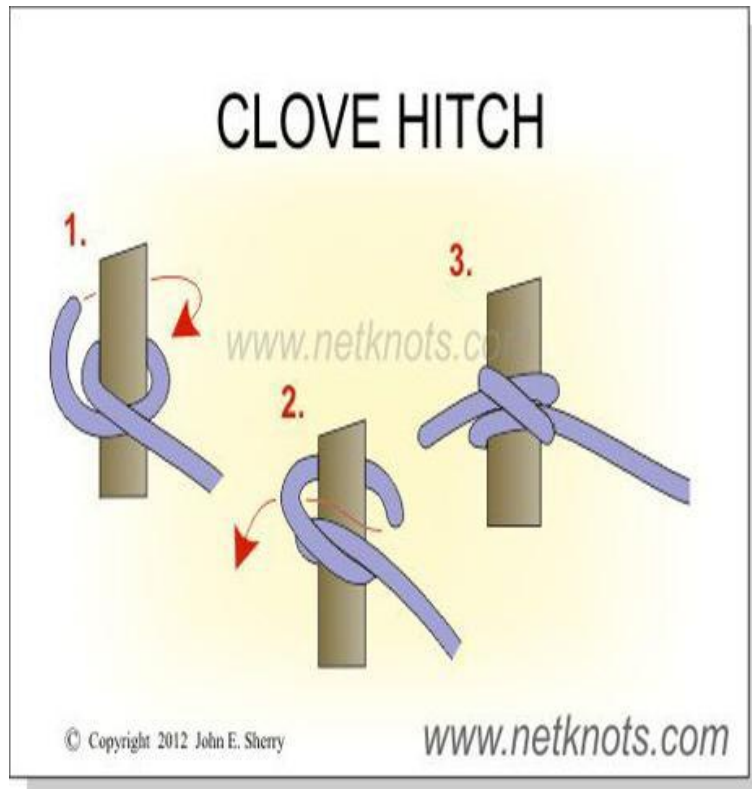
Square Knot: (aka "Reef Knot")

It is used to tie packages, and as a base for the shoe-bow. Sailors used it for binding rolled sails or better reefed sails. And that is where it got its english name from. Americans call it the square knot. Probably because it looks square, or possibly due to the fact that it was much used on square-rigged-ships



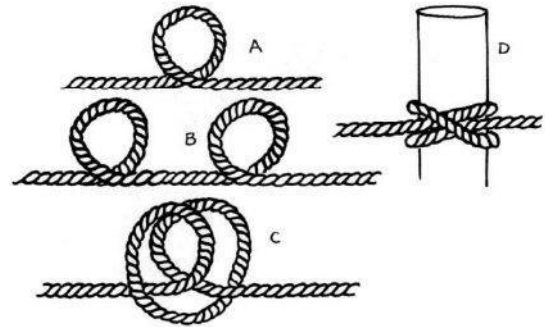
Clove Hitch

The clove hitch is one of the most widely used knots and it is used in starting and finishing lashings. Because it passes around an object in one direction, it puts very little strain on the rope fibers.



CLOVE HITCH NO. 1

Make two similar loops, side by side in the rope, Fig. A and B, slide them together so that they look like C. Slip over the end of the pole and pull tight as in D.

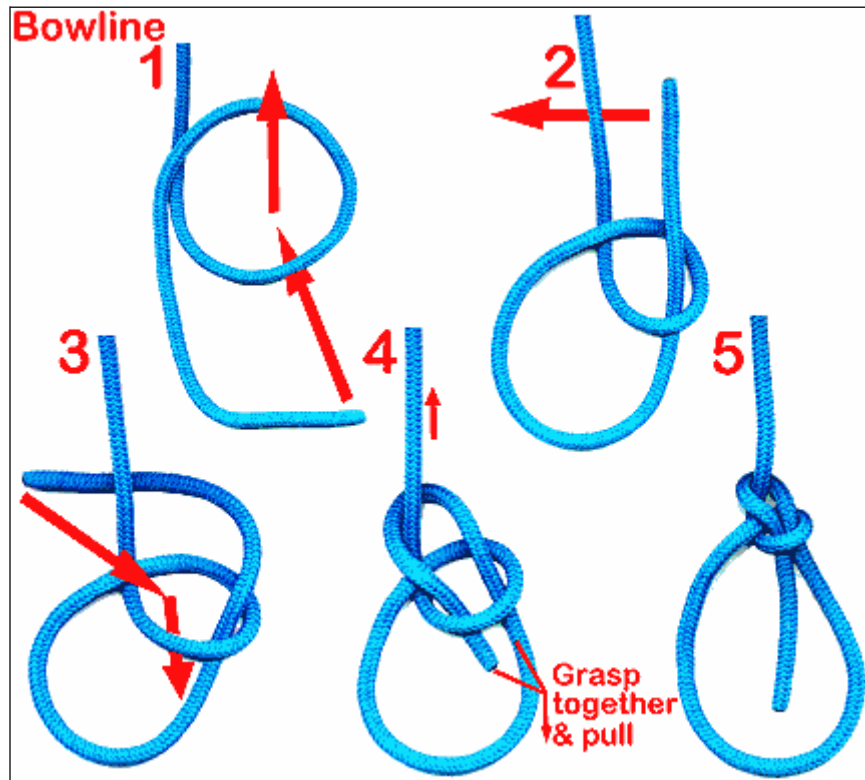


This is a most useful knot and is the start and finish of some lashings and is widely used in boat work, gadget making and pioneering and for making rope ladders. Passing around an object in one continuous direction, it puts almost no strain on the fibres.

There are many different ways of tying this knot, some useful, others merely interesting and amusing. Try your hand at tying as many variations as possible.

Bowline

If you're only going to learn one knot this season, here it is. The bowline is a very versatile knot. It is used to form a temporary loop in a line which may then be put over a piling or cleat. It can also be used to attach a line to an eye. This knot won't slip or jam and can be untied easily.



Two Half-Hitch

This is a type of knot, specifically a binding knot or hitch knot. It consists of an overhand knot tied around a post, followed by a half-hitch. Equivalently, it consists of a half-turn around a post followed by a clove hitch of the running end around the standing part.

The following three-step process for tying the two half-hitches is also explained in the image gallery below. Click on the images for high-resolution versions.

1. Begin by forming a clockwise loop around the pole, with the working end of the rope on top. Bring the working end through the loop. At this point, you have an overhand knot around the pole.
2. Bring the working end down and to the left. Loop it under the standing end. Pull the working end through the loop just formed, tighten, and slide the knot along the standing end up to the post.
3. A correctly tied two half hitches resembles a clove hitch tied around the standing end of the line, not a cow hitch.



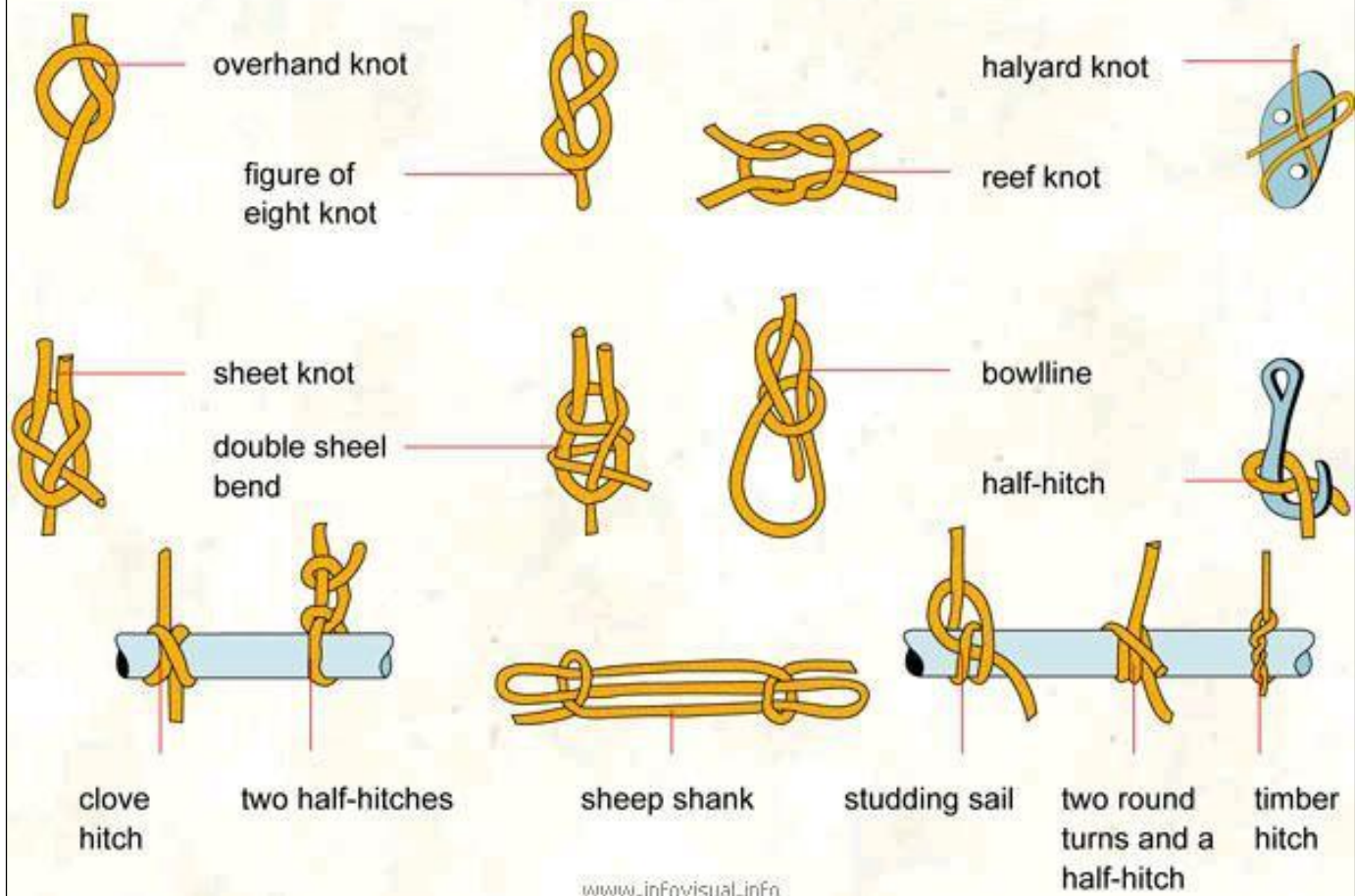
Taut-line hitch

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 made by tying a Rolling hitch around the standing part after passing around an anchor object. Tension is maintained by sliding the hitch to adjust size of the loop, thus changing the effective length of the standing part without retying the knot.

It is typically used for securing tent lines in outdoor activities involving camping, by arborists when climbing trees, for creating adjustable moorings in tidal areas, and to secure loads on vehicles. A versatile knot, the Taut-line hitch was even used by astronauts during STS-82, the second Space Shuttle mission to repair the Hubble Space Telescope.



DIFFERENT TYPES OF KNOTS



Putting up an "A" Frame Tent

Putting up an "A" frame tent takes several scouts working together. Several scouts will be holding poles while others tie the ropes and knots to secure the pole. Try to rotate the scouts so everyone has an opportunity to tie a knot.

The instructions are below. As leaders, you will need to give instructions and guide the scouts in completing this task.

1. The ridge pole is the pole that runs through the top of the tent. Lay the ridge pole on the ground. Place the tent over the ridge pole making sure the ridge pole is in the center of the tent.
2. There are 2 center poles, each having a nail on one end. The ridge pole has holes in each end. The hole on the ridge pole needs placed over the nail on each of the center poles. A scout is needed to hold each center pole.
3. Rope used to tie the center poles has pink whipping on the ends. Using one piece of this rope, tie a two half hitch at the top of each center pole. Allow 6" of rope to work with. These ropes do not need to be tight, adjustments can be made later.
4. Place a stake 3-4 feet perpendicular from the center pole. Tie the other end of the center rope to the stake using a taut-line hitch.
5. Each corner of the tent has a stake. These stakes need to be anchored in the ground at each corner of the tent.
6. Rope used to tie the corners of the tent have blue whipping. Tie a two half hitch at each tent corner. Secure the other end of this rope to the stake using a taut-line hitch.

