

# First Class First Year: Knots and Lashings



# ***Knots and Lashings***

## **Learning Objectives**

- As a result of this experience, each participant should be able to:
- Complete advancement requirements T4a, T4b and T4c.
- Whip and fuse the ends of a rope.
- Tie a two half hitches and taut line hitch.

## **Materials Required**

- A frayed piece of rope.
- Ropes that need to be whipped and fused.
- One rope for each participant for knot tying.

## **Discovery**

- Show scouts a segment of rope that is badly frayed. Ask them how useful this rope is as compared a good piece. Introduce scouts to the notion of never cutting rope.

## **Teaching-Learning**

- I. Whipping and Fusing
  - A. Demonstrate to scouts how to fuse a rope.
  - B. Demonstrate to scouts how to whip a rope and let them practice.
- II. Demonstrate to Scouts the Two Half Hitches and let them practice.
- III. Demonstrate to Scouts the Taut Line Hitch and let them practice.
- IV. Using the EDGE method, have the scouts teach each other how to tie a square knot.

## **Application: Knot Relay**

Divide the patrol up into two teams. At the signal, one the member of each the team will run to the judges and tie a Taut Line and a Two Half Hitches. That patrol member then steps behind the judge and sits down. The first team with all members sitting behind their judge wins.

# Knots and Lashings

## TENDERFOOT Rank Requirements

Effective January 1, 2010

Leader initial and date

- |                                     |  |  |
|-------------------------------------|--|--|
| <input checked="" type="checkbox"/> | 1. Present yourself to your leader, properly dressed, before going on an overnight camping trip. Show the camping gear you will use. Show the right way to pack and carry it. (Pages 292–293, 297–298)                                       |  |
| <input type="checkbox"/>            | 2. Spend at least one night on a patrol or troop campout. Sleep in a tent you have helped pitch. (Page 302)  |  |
| <input type="checkbox"/>            | 3. On the campout, assist in preparing and cooking one of your patrol's meals. Tell why it is important for each patrol member to share in meal preparation and cleanup, and explain the importance of eating together. (Pages 327, 329–330) |  |
| <input checked="" type="checkbox"/> | 4a. Demonstrate how to whip and fuse the ends of a rope. (Pages 380–381)   |  |
| <input checked="" type="checkbox"/> | 4b. Demonstrate that you know how to tie the following knots and tell what their uses are: two half hitches and the taut-line hitch. (Pages 384–385)   |  |
| <input checked="" type="checkbox"/> | 4c. Using the EDGE method, teach another person how to tie the square knot. (Page 53)  |  |
| <input type="checkbox"/>            | 5. Explain the rules of safe hiking, both on the highway and cross-country, during the day and at night. Explain what to do if you are lost. (Pages 279, 282–283)  |  |
| <input type="checkbox"/>            | 6. Demonstrate how to display, raise, lower, and fold the American flag. (Pages 72–76)   |  |
| <input type="checkbox"/>            | 7. Repeat from memory and explain in your own words the Scout Oath, Law, motto, and slogan. (Pages 22–27)  |  |
| <input type="checkbox"/>            | 8. Know your patrol name, give the patrol yell, and describe your patrol flag. (Page 38)   |  |
| <input type="checkbox"/>            | 9. Explain the importance of the buddy system as it relates to your personal safety on outings and in your neighborhood. Describe what a bully is and how you should respond to one. (Pages 39, 63)  |  |

10a. Record your best in the following tests (Pages 96–99):

Current results

Push-ups \_\_\_\_\_

Pull-ups \_\_\_\_\_

Sit-ups \_\_\_\_\_

Standing long jump (\_\_\_\_ ft \_\_\_\_ in.)

1/4-mile walk/run \_\_\_\_\_

30 days later

Push-ups \_\_\_\_\_

Pull-ups \_\_\_\_\_

Sit-ups \_\_\_\_\_

Standing long jump (\_\_\_\_ ft \_\_\_\_ in.)

1/4-mile walk/run \_\_\_\_\_

10b. Show improvement in the activities listed in requirement 10a after practicing for 30 days. (Pages 96–99)

11. Identify local poisonous plants; tell how to treat for exposure to them. (Pages 138–139)

12a. Demonstrate how to care for someone who is choking. (Pages 134–135)

12b. Show first aid for the following:

- Simple cuts and scrapes (Page 136)
- Blisters on the hand and foot (Page 137)
- Minor (thermal/heat) burns or scalds (superficial, or first-degree) (Page 148)
- Bites or stings of insects and ticks (Pages 142–143)
- Venomous snakebite (Pages 141–142)
- Nosebleed (Page 138)
- Frostbite and sunburn (Pages 150, 152)

13. Demonstrate Scout spirit by living the Scout Oath (Promise) and Scout Law in your every day life. Discuss four specific examples of how you have lived the points of the Scout Law in your daily life. (Page 30)

14. Participate in a Scoutmaster conference. (Page 34)

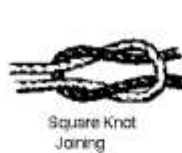
15. Complete your board of review. (Page 55)

NOTE: Alternate requirements for the Tenderfoot rank are available for Scouts with physical or mental disabilities if they meet the criteria listed in the Boy Scout Requirements book.

Downloadable requirements checklists for all ranks and videos to guide you through the Tenderfoot rank requirements may be found on the Handbook Web site, [www.bsahandbook.org](http://www.bsahandbook.org).

# Knots and Lashings

Learning how to tie knots takes practice. Carry a piece of cord in your pocket and several times a day, pull it out and tie the knots you have learned. Practice until you can tie them quickly – even with your eyes closed and you'll be confident and ready to use them whenever necessary.



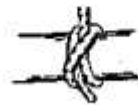
Square Knot  
Joining



Two Half Hitches  
Tenderfoot



Tautline  
Tenderfoot



Clove Hitch  
First Class



Timber Hitch  
First Class



Bowline  
First Class



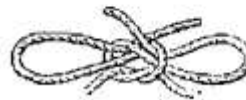
Sheet bend



Overhand Bend



Overhand



Square bow



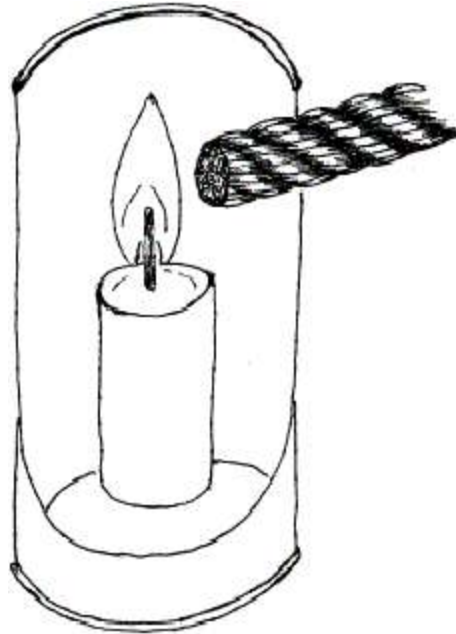
Slip or running knot

## A knot should:

- Be easy to tie
- Stay tied
- Be easy to untie

A *hitch* is a knot that ties a rope to something. Friction caused by the wraps of the rope holds the hitch in place.

# *Tenderfoot 4a - Fusing*

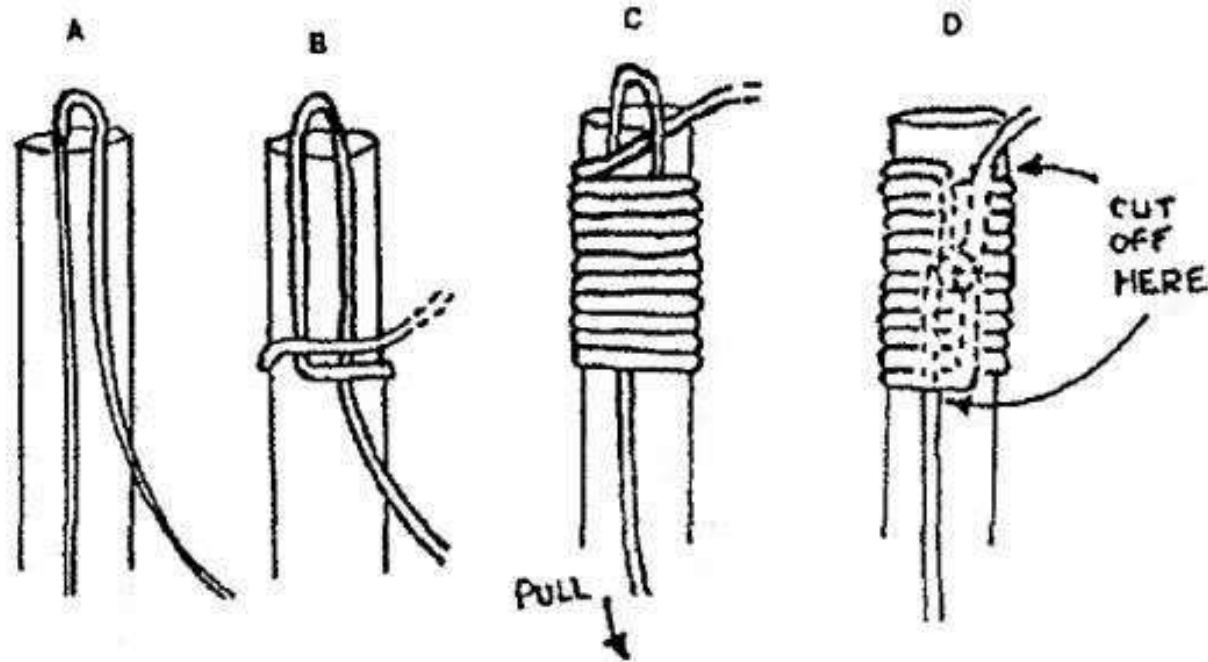


Plastic or nylon rope and cord melt when exposed to high heat.

1. Cut away frayed part of the rope.
2. Working in a well-ventilated area, hold each end a few inches above a lighted match or candle to melt and fuse the strands together.

Melted rope can be hot and sticky; ***don't touch the end until it has cooled.*** Do not try to fuse ropes made of manila, sisal, hemp, cotton, or other natural fibers, because they will burn rather than melt.

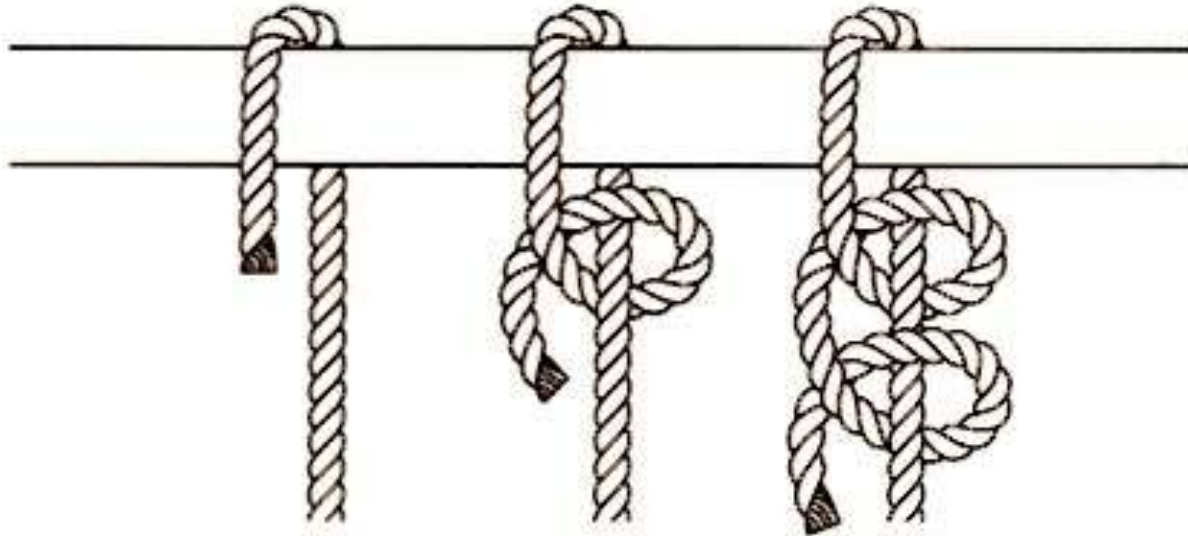
# *Tenderfoot 4a - Whipping*



With a rope that is already unraveling, cut off any unraveling part to even out the end.

- A. Take a piece of strong string – preferably waxed and at least 2 feet long – and form a loop with it.
- B. Lay to loop near the end of the rope and tightly wrap (whip) the string around the rope.
- C. When the whipping is at least as wide as the rope is thick, slip the end through the loop and pull hard.
- D. Trim off the excess string, then whip the rope's other end.

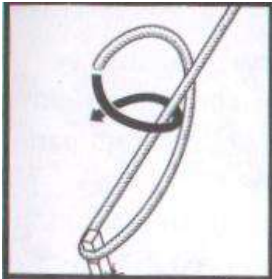
# *Tenderfoot 4b – Double Half Hitch*



This is a reliable and useful knot for attaching a rope to a pole or boat mooring .

- A. Pass the running around a pole.
- B. Slip the running end of around the standing end to form a loop and tuck the running end through the loop. (Hitch)
- C. Create a second hitch in the same manner as the first.
- D. Push the tow loops together and tighten.

# ***Tenderfoot 4b – Taut Line Hitch***

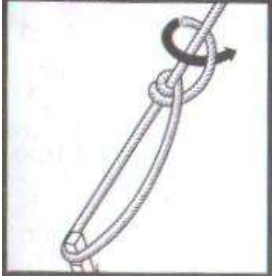


Pass the line around the tent stake

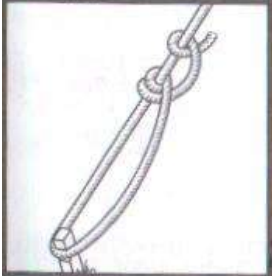


Bring the end under and over the standing part and twice through the loop you have formed.

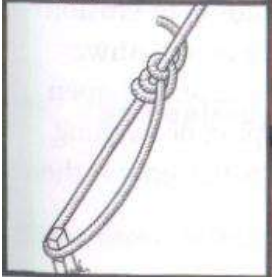
This knot is useful for setting tent guy lines and laundry lines



Again bring the running end under, over, and through the loop, but this time farther up the standing end.



Work any slack out of the knot



Slide the hitch to adjust the tension on the line

# ***Tenderfoot 4c – Using the EDGE Method to teach a Square Knot***

**E**: Explain how the skill is done.

**D**: Demonstrate the necessary steps.

**G**: Guide the learners as they participate.

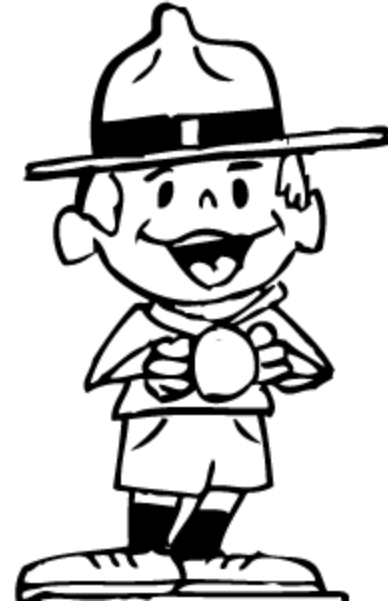
**E**: Enable them to use the new skill on their own.



Use this method to not only teach others how to do something, but to ensure that they “own” the information and can use it!

# *Tenderfoot 4c – Explain*

**E**: Explain how the skill is done.



Tell your student what you are going to do, then explain verbally how you are going to do it.

“Today we are going to learn the Square Knot, for this you will need one piece of rope at least 2 feet long.  
This knot is for....”

# ***Tenderfoot 4c – Demonstrate***

**D:** Demonstrate the necessary steps.



Show your student how to perform the task.

“Alright, first you take up both end, then you pass the left over right...”

# *Tenderfoot 4c – Guide*

**G:** Guide the learners as they participate.

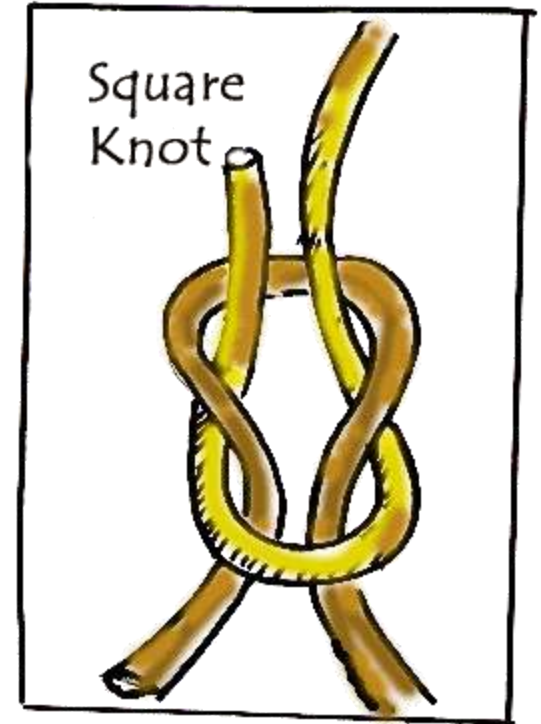


Have them walk through the task, with you guiding them step by step.

“Ok, next you will take the left end, and pass it over..”

# *Tenderfoot 4c – Enable*

**E:** Enable them to use the new skill on their own.



Now have them do it on their own, if they get stuck, go back to Demonstrate or Guide and show them again, until they are able to complete this step.