Trail to First Class Instructor Guide
Basic Knots and Rope Care

Requirements

<table>
<thead>
<tr>
<th>Scout</th>
<th>6. Demonstrate how to tie a square knot.</th>
</tr>
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<tbody>
<tr>
<td>Tenderfoot</td>
<td>4a. Demonstrate how to whip and fuse the ends of a rope.</td>
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<td>4b. Demonstrate how to tie two half hitch and taut-line hitch and explain their uses.</td>
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<td>4c. Use the EDGE method to teach another person how to tie the square knot.</td>
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<tr>
<td>First Class</td>
<td>8a. Demonstrate how to tie a bowline and describe its uses.</td>
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**EDGE Method of Teaching**

**Explain** how it is done

**Demonstrate** the steps

**Guide** the learners as they practice

**Enable** learners to succeed on their own

**Square Knot** (page 21)

The square knot is used as a binding knot to connect two ends of the same diameter rope (single line). Use a square knot to bind bandages, packages or securing objects.

**Whipping and Fusing** (page 380)

A permanent way to protect ropes from unraveling. Remember to cut away any part that has unraveled.

**Two Half Hitches** (page 384)

A hitch knot ties an object to a post or ring, and the two half hitch knot will slide to adjust the loop and will only attach to an object in one direction at a fixed length.

**Taut-line Hitch** (page 385)

A hitch knot ties an object to a post or ring, and the Taut-line hitch knot will slide to adjust the tension of the line between the object and the post or stake. Thus the line will become shorter and have a fairly secure loop.
### Bowline (page 388)
A bowline is used to make a non-slip loop at the end of a rope. It is so dependable it is referred to as a rescue knot since it can be tied around someone to or oneself one handed and used to lift people out of dangerous situations.

1. [Diagram of Bowline](#)

### Timber Hitch (page 386)
A Timber Hitch ties a rope to a round object like a tree or log and is used to start a diagonal lashing.

1. [Diagram of Timber Hitch](#)

### Clove Hitch (page 387)
A clove hitch holds a line to a post when being pulled in two directions or to start or end lashings.

1. [Diagram of Clove Hitch](#)
DEMONSTRATE HOW TO WHIP AND FUSE ROPE
(Instructor Outline)

Requirements
Tenderfoot: 4a. Demonstrate how to whip and fuse the ends of a rope.

Learning Objective: At the end of this period of instruction, the scout will be able to properly whip or fuse the ends of a rope on his own.

Enabling Learning Objectives:

1. Explain why rope ends must be fused, whipped or back spliced.
   - Rope is made from twisted or woven fiber and has a tendency to unravel.

2. Explain field expedient, temporary methods to whip the end of a rope.
   - Wrap end with duct tape.
   - Tie an overhand knot at each end.

3. Explain and show the two types of rope.
   – Natural fiber, non-natural fiber

4. Explain which type of rope should not be fused, and should be whipped or spliced.
   - Manila, sisal, hemp, cotton or other natural fibers.

5. Explain which type of rope is best to fuse.
   - Plastic, nylon rope that melts when exposed to high heat.

6. Using the EDGE method teach how to fuse rope
   - Well ventilated area
   - Sharp knife to cut away frayed rope
   - Lighted match or candle to melt and fuse strands together.
   - DO NOT TOUCH HOT ENDS UNTIL THEY COOL!

7. Using the EDGE method teach how to whip the ends of a rope
   - Sharp knife to cut away frayed rope
   - Two 2 foot pieces of waxed strong string.

Equipment Needed to Teach:
Sharp Knife
Whipping string (waxed dental floss)
Lighter & Candle
18” natural fiber rope/Scout
12” man made 3-strand rope/Scout
Samples of Fused, Whip and Spliced ends

Explain how it is done
Demonstrate the steps
Guide the learners as they practice
Enable learners to succeed on their own
DEMONSTRATE HOW TO Tie Basic Knots
(Instructor Outline)

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<td>8a. Demonstrate tying the bowline knot and describe several ways of using.</td>
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Learning Objective:  At the end of this period of instruction, the scout will be able to properly tie the knots on his own and explain their common uses.

Enabling Learning Objectives:

1. Explain the how to care for a rope to maintain its strength.
   - keep it coiled.
   - keep it dry and off the ground when stored.
   - keep the ends whipped, fused or spliced.

2. Explain how to choose the size of rope to match the job.

3. Explain the common uses of each knot.

4. Use the EDGE method to teach each of the knots one at a time.

Equipment Needed to Teach:

- Two pieces of 18” or longer rope per scout
- A wood pole
- A tent stake

**Explain how it is done**

**Demonstrate the steps**

**Guide the learners as they practice**

**Enable learners to succeed on their own**

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revised 2/23/2015