

Rope Making Directions

Materials:

- 2- PVC "spinners" (1/2" PVC, 18" long)
- 2- PVC "dividers" (1/2" PVC 18" long)
- 2- T Posts (1 1/4" PVC, 4' long with "T" connectors)
- 1- length of yarn or other thin fiber per person in the group.
- 1- additional length of jute or sisal twine
- 2- 8" lengths of electrical tape
- 1- hook that will fit through the "T" connector (We made ours out of a coat hanger.)



Step #1 Have each person choose a strand.



Step #2 One at a time, each group member ties one end of his or her yarn around Spinner #1, then walks down 50 to 100 feet* to where another member is holding Spinner #2. (This person should be holding the spinner horizontally, like he/she is water skiing.) Once all are near the second spinner the facilitator gathers the fibers together, pulls them taut and ties them to spinner #2.

**The finished product will be a little shorter than 1/3 of the original length of the fibers.*

The strands before being gathered together and tied to the spinner.

Step #3 Add the jute or sisal twine to the fiber bundle.

Step #4 Carefully push the two Spinners with the yarn attached through the “T” connectors on the “T” Posts. Have two people hold the “T posts” in an upright position.

Step #5 Now have all the team members take turns rotating the spinners clockwise. How many times the strands have to be turned depends on the number of people in your group and the types of fibers. Twist the fibers until they are very tight. **Note:** Everyone **MUST** turn the spinners in the same direction.

Step #6 Carefully remove **ONLY** Spinner #2 (ski bar) from the “T post.”



PALs from Madison High School making their rope.

Step #7 The next step is kind of tricky. Have one person with one divider stand $\frac{1}{3}$ of the way down the twisted strands. Have him or her hold the divider in a vertical position against the rope, with the rope between him/her and the divider. Have another person stand another $\frac{1}{3}$ of the way down in the same position but on the opposite side. The person closest to Spinner #1 will pull the twisted strands back toward the person holding the "ski bar" while the other person pulls the strands back toward spinner#1. As this is happening, the person holding the “ski bar” is inching forward to meet the person pulling the strands towards him or her. **It is VERY important that the strands stay tight as this happens, go slowly!** This "folds" the strands into three. Loop one bight* over the "ski bar" and, using the hook, pull the other bight through the "T" connector and over the spinner.



Folding the rope with the “dividers.”

*A bight is a bend in a rope.

Step #8 Next have each person turn spinner#1 **counterclockwise** until it is tight.

Step #9 When the rope is tight use the electrical tape to bind each end. Remove Spinner #1 from the "T post."

Step # 10 Have the group play "Tug-of-War-Without-a-Loser." That is, have the group pull equally hard on each end of the rope so that the turns are "set." Finally, remove the spinners.



The tug-of-war-without-a-looser "sets" the turns in the rope.



Time to play with our new rope.