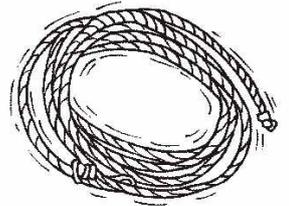


# Discovering Outdoors Sheet



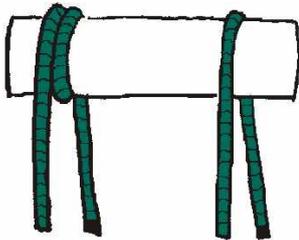
## LOTS OF TOP KNOTS

A knot is a fastening made by tying together pieces of string, cord, or rope. They are especially important for climbers and sailors; but everyone needs to tie a knot now and then. Think of your shoe laces or going fishing. There are lots of knots such as *stoppers*, *binders* and *hitches* and each is used for different purposes. Let's work through a few simple ones; the pictures should help!



To tie knots you will first need to understand a few words used to describe parts of a rope and a knot. These terms will help you recognise which part of a rope is being used at a particular part of tying a knot. So grab yourself a piece of rope about 2m long and have a go!

**ROUND TURN**- the rope forms one and a half circles around an object.

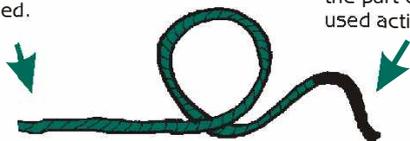


**TURN** - the rope is passed around one side of an object.

**BIGHT** - is a rope folded back on itself to form a short curve.

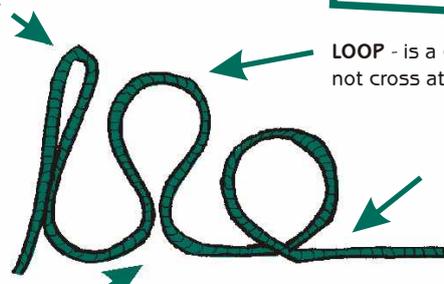
**STANDING PART** - is the part of the rope not being used.

**WORKING (or running) END** - is the part of the rope being used actively in tying the knot.



**LOOP** - is a circle of rope which does not cross at the neck of the loop.

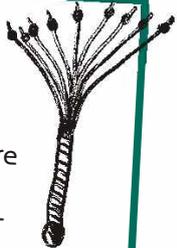
NECK OF LOOP



**CROSSING TURN**- the rope is crossed to form a full circle.

### DID YOU KNOW?

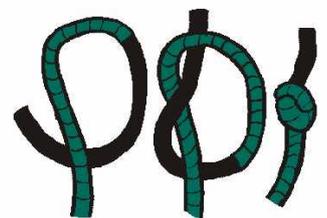
An Overhand Knot with many turns through a crossing turn is known as a **Blood Knot**. These were used at the end of the lashes of a 'cat-o'-nine-tails', a whip used for punishment. You may have seen one in a pirate movie!



## STOPPERS OR END KNOTS

The **Overhand Knot** or **Thumbknot** is the simplest knot of all. It is commonly used to temporarily 'stop' the end of a rope from fraying, to add weight when throwing or to prevent a lifeline rope from slipping through hands. So it belongs to a group of knots called *Stoppers* or *End Knots*. **Here's how to tie it:** form a crossing turn by taking the working end (black) behind the standing part; then place the working end in front and through the crossing turn and pull tight.

The **Figure Eight** is another useful "stop" knot to temporarily bulk out the end of a rope or cord. The finished knot looks like its name. It is better than using an Overhand Knot, because it does not jam so easily. **Here's how to tie it:** make a crossing turn by placing working end (black) over standing part; then take the working end first behind, then to the front of the knot; pass it through the crossing turn and pull tight.



Northern Territory Government



## BINDING KNOTS

The **Reef Knot** or **Square Knot** is very easy to learn but dangerous if not used properly. It should only be used as a binding knot, that is to tie on an object. It is not a long term or secure knot. **It must never be used to join two ropes.**

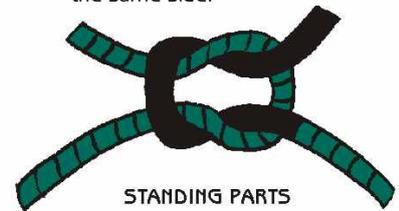
**Here's how to tie it:** holding one end of the rope in each hand, pass the left rope over the right, and tuck under; then pass the same rope, now in the right hand, over the left rope, and tuck under. Finally pull tight. Use this little ditty to help you remember, "Left over Right and Under, Right over Left and Under."

Another beauty of this knot is that it can be easily loosened. Just grab one loose end, pull it back over the knot in the opposite direction.

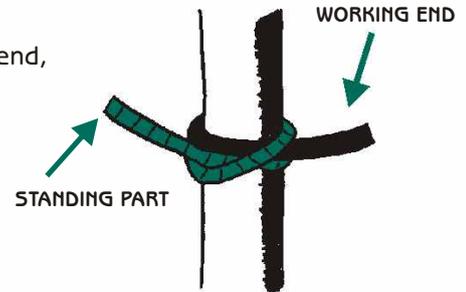
Used to attach a rope to a pole, the **Clove Hitch** provides a quick and secure knot. It rarely jams, and can in fact come undone if the pole turns. With practice, this can be easily tied with one hand!

**Here's how to tie it:** pass a rope around a pole to form a turn and cross the working end over the standing part; now repeat the turn but tuck the working end underneath the second turn and pull both ends to tighten.

WORKING ENDS on the same side.



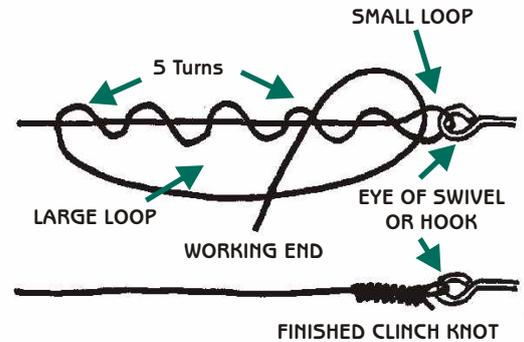
STANDING PARTS on the same side.



## FISHING HITCHES

The **Clinch Knot** is one of the quickest and easiest knots for tying fishing line to a hook. To make the turns fit tightly and snugly moisten the line first (spit is good!).

**Here's how to tie it:** pass the working end of the line through the eye of the hook, or swivel; double back; make at least five turns around the standing part of the line; pass the working end of the line through the first small loop, above the eye, and then through the large loop; finally pull the knot into shape and trim if necessary.

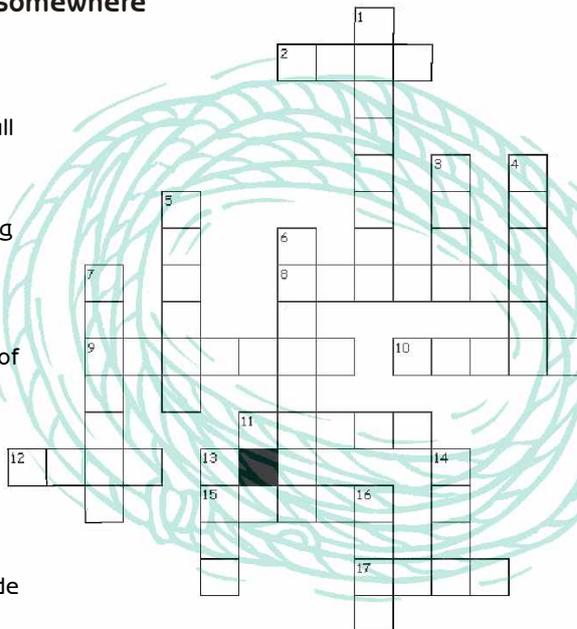


## KNOTWORDS

Use your new found Knot knowledge to complete this knotty crossword!  
You'll find all the answers somewhere  
On these pages!

### Down

1. A rope over itself forming a full circle.
3. A useful rope art.
4. For catching fish knot, rhyming with inch.
5. A good looking..... eight knot.
6. Not sitting, the ..... part of a rope.
7. A useful loop knot (rhymes with towline).
13. A knot and a place made of coral.
14. A circle of rope not crossing.
16. A rope passes around one side of an object.



### Across

2. The standing.....of a rope.
8. When you pull the knot together.
9. The ..... end of a rope.
10. A rope folded back on itself to form a short curve.
11. Useful to tie a rope to a pole.
12. To join two ropes.
15. A nice figure knot.
17. Rhymes with Pope.

## WEB WORLD OF KNOTS

Check out these cool websites! Some have drawings and the last one has cool animated knots to help you:  
<http://www.realknots.com/>  
<http://www.korpegard.nu/knot/index>  
<http://www.folsoms.net/knots/>

When you are feeling confident you can try the more difficult bends (to join two ropes) and loops (such as the bowline). Use this excellent book about knots to help:  
**DK Handbook of Knots(Expanded version)**  
 By Des Pawson (2004).

