



Name: _____

KNOTS

Overhand Knot

<https://www.youtube.com/watch?v=Swdj5op25SM>

The THUMB KNOT, also called the OVERHAND BEND and OPENHAND KNOT, ranks higher than the SHEET BEND in security but it is among the weakest of the bends. It is used to make a stop on a rope end, to prevent the end from fraying or to stop the rope from slipping through a sheave.



Square Knot

<https://www.youtube.com/watch?v=6Bb6MeVQuwY>

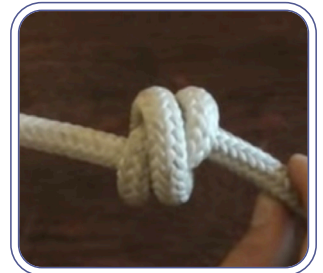
A SQUARE KNOT is tied by holding the two ends of the rope in the left and right hands. Place the left rope over the right and then the right rope over the left. It is one of the most common knots but is apt to slip considerably in the drawing up and occasionally spills and has to be retied.



Double Overhand Knot

<https://www.youtube.com/watch?v=6Bb6MeVQuwY>

The DOUBLE OVERHAND KNOT is called a BLOOD KNOT when used on a cat-o'-nine-tails, or the snapper of an ox whip. The JAM KNOT, the HALF HITCH, the FIGURE-EIGHT KNOT and the DOUBLE OVERHAND KNOT, are all first stuck through the eye and then tied around the standing part before being pushed forward and capsized around the neck of the hook. They are then drawn taut.





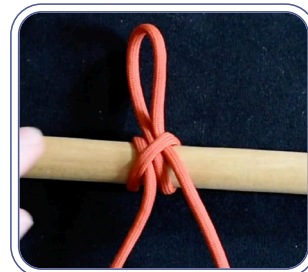
Name: _____

KNOTS

Slippery Hitch Knot

<https://www.youtube.com/watch?v=1JOdR1SMKjA>

The SLIPPERY HITCH is also known as the SLIPPERING HITCH is very useful because of the ease with which it can be released in emergency. It holds securely so long as there is a strain on the standing end.



Bow Knot

The ordinary BOW KNOT used by dressmakers, florists, confectioners, hatters etc., does not differ essentially from the neck tie bow except that a ribbon usually has one right side, so that it is necessary, by twisting the ribbon, to keep that side uppermost at all times.



Half Hitch Knot

https://www.youtube.com/watch?v=CCtz3hjU_Jo

The HALF HITCH, tied with the nip at the top with the end leading back through the hook, is secure if it is carefully adjusted before each fresh hoist.



Two Half Hitch Knot

<https://www.youtube.com/watch?v=77me4b5aARs>

TWO HALF HITCHES - a quick way in which to tie the knot to a post is to first form a loose GRANNY KNOT, leaving a long end. As the ship swings she will take up the slack and the GRANNY will capsize into TWO HALF HITCHES.



Lariat Loop Knot

<https://www.youtube.com/watch?v=3IGaMXz-Otw>

THE LARIAT or LASSO NOOSE is made by reeving the end of the lariat through a HONDA KNOT.





Name: _____

KNOTS

Overhand Bow Knot

<https://www.youtube.com/watch?v=139VxL9YSw4>

The BOWSTRING KNOT or HONDA KNOT appears to have been used by aborigines of several continents. It is the most compact and open of all loops. Mexican and American cowboys have adopted it for their lariats and call it the HONDA KNOT. The end may be either seized or knotted.

TWOFOLD OVERHAND BOW in actual formation this is the same as a TWO-STRAND FULL MATTHEW WALKER KNOT but one of the two ends leads reversely. It is decorative and symmetrical.



Cat's Paw Knot

<https://www.youtube.com/watch?v=3tpW-leHbNo>

The CAT'S PAW is the common HOOK HITCH for slings. It is used for securing a rope to a hook or a spar. It is most useful because it is so easily tied and is the best of all sling hitches. It is often recommended for a slippery rope. The knot spills instantly when removed from the hook. It is the hitch always used for heavy lifts.

To tie the CAT'S PAW in cargo slings: Grasp two bights and hold them well apart. Twist three full turns with both hands (away from you), then clap the bights together and place them over the hook.



Clove Hitch Knot

<https://www.youtube.com/watch?v=7HgHD55n1Do>

The CLOVE HITCH is used for securing a rope to a spar. This hitch, if pulled taut, will not slip up or down on a smooth surface. A useful start for lashings.

The BLACKWALL HITCH is a quick way to secure a rope to a hook. The strain on the standing end will hold the rope secure to the hook.





Name: _____

KNOTS

Blackwall Hitch Knot

<https://www.youtube.com/watch?v=SYslzaMI9zY>

The DOUBLE BLACKWALL HITCH has one more turn and is often recommended as preferable to the former knot. It appears, however, to be even less reliable. The second turn is sometimes jammed below the first in the manner of the AWNING KNOT, but this appears to be no improvement.



Granny Knot

<https://www.youtube.com/watch?v=rdCCQOc7-j0>

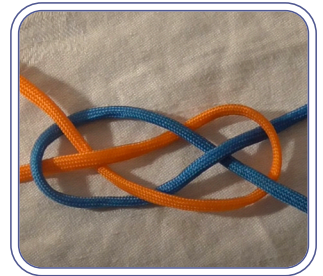
The GRANNY KNOT is tied by holding one end of the rope in the left hand and one end in the right hand. Place the left rope over the right making an overhand knot and then place the left rope over the right again forming the knot. If one end of a GRANNY KNOT is pulled, the knot will capsize into TWO HALF HITCHES, which makes a better knot than the REEF KNOT.



Double Carrick Bend Knot

<https://www.youtube.com/watch?v=uUFIP8jjdKE>

The CARRICK BEND or FULL CARRICK BEND is for the secure fastening of two ropes of even thickness together. It is particularly suitable for hawsers and steel cables. It can be readily undone and does not jam, as do many other bends and knots. It may be tied flat for decorative purposes. If tied in needlework, so that all four ends are to be employed, it is called a JOSEPHINE KNOT. The image illustrates the CARRICK BEND with both ends on the same side of the knot, which is less secure than the same knot formation with the ends diagonally opposite each other.





Name: _____

KNOTS

Fisherman's Knot

<https://www.youtube.com/watch?v=FeHm08FHTCM>

The FISHERMAN'S KNOT is used for joining two springy materials together; suitable for wire, fishing gut or vines. Two thumb knots (one on each rope) pulled tight. The knots lock together.



Lark's Head Knot

https://www.youtube.com/watch?v=-V_Qt15yPis

The LARK'S HEAD is an easy method of securing a rope to a ring or hook. If desired to make more secure, it can be stoppered, as shown, with an overhand or thumb knot.





Name: _____

KNOTS

Stevedore's Knot

<https://www.youtube.com/watch?v=JRWq0Te5Egc>

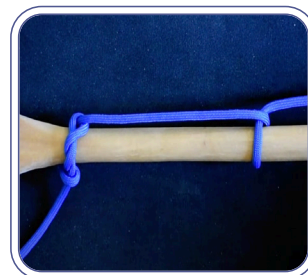
THE STEVEDORE KNOT is a SINGLESTRAND KNOT tied in the end of a rope to prevent unravelling.



Killick Hitch Knot

<https://www.youtube.com/watch?v=CN6EZr4aNf8>

A KILICK HITCH, also spelled and pronounced KELLIG, KELLAGH, KELLICK, KILLOCK AND KILLICK, consists of a TIMBER HITCH AND HALF HITCH that are drawn closely together around stone. In its stricter application a Killick is a stone-weighted wood anchor, while a stone used alone as an anchor is called a slingston and is used on rocky bottom where an anchor is apt to foul. It is employed in anchoring seines, lobster, crab and eel pots, small boat decoys, etc.



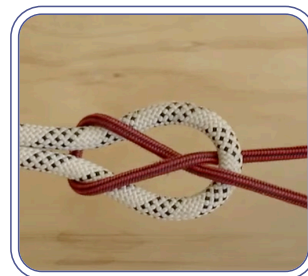
Sheet Bend Knot

<https://www.youtube.com/watch?v=RNJL27hY3Nc>

THE SHEET BEND is the common general utility bend aboard ship. It was formerly tied in a sheet which is a piece of running rigging that rims a sail, and this accounts for the origin of the name. It serves almost every purpose well, and unties readily without damaging the rope. It is always tied in the manner that has been described for the BOWLINE KNOT which is a LOOP KNOT of similar formation. But instead of tying an end to its own bight, one end is tied to a bight in another end.

THE SHEET BEND bears a number of other titles including THE BEND, SIMPLE BEND, ORDINARY BEND, COMMON BEND, SINGLE BEND. It is also called, in error, BECKET BEND. But a becket in this case is an EYE SPLICE and the knot resulting is a hitch which at sea is called a BECKET HITCH. The SHEET BEND is used to join or bend two ropes of unequal thickness together. The thicker rope is the bend.

THE DOUBLE SHEET BEND is similar to single sheet bend, but gives greater security; it is also useful for joining wet ropes. THE DOUBLE SHEET BEND is sometimes tied by another method. It may be more quickly made in this way, since it has one less tuck.





Name: _____

KNOTS

Timber Hitch Knot

<https://www.youtube.com/watch?v=TvTu1WFfsNo>

THE TIMBER HITCH is good for securing a rope to squared timber, round logs, etc. A good starting knot for all lashings. The standing end must pull straight through the loop, not backwards, or the rope may cut upon itself.



Miller's Knot

<https://www.youtube.com/watch?v=CN6EZr4aNf8>

The MILLER'S KNOT is a fairly good BINDING KNOT that is often given in farm bulletins. Any MILLER'S KNOT may employ a bight or loop for the final tuck instead of an end. This makes SLIP KNOTS of them and saves the bag from being damaged when the cord is being cut. It is a fairly good knot for a bag, being simple to tie, but is sometimes capsizes.



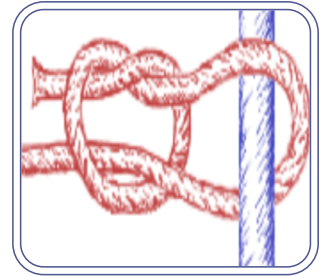


Name: _____

KNOTS

Running Knot

A DOUBLE RING or TAG KNOT, also called DOUBLE RUNNING KNOT, is used by lobster and crab men around their pots. As it has no ends, its security is never in question. It is an exceedingly practical knot that is commonly tied in hand.



Bowline Knot

<https://www.youtube.com/watch?v=68kY18j18DM>

The BOWLINE, BOWLING or BOLIN KNOT, sometimes called BOWLING'S KNOT. The name is derived from bow line, a rope that holds the weather leech of a square sail forward and prevents the -sail from being taken aback. As the line or rope that provided the knot is no longer in use, the BOWLINE KNOT is nowadays merely termed the "BOWLINE" the word "knot" being dropped.



A BOWLINE is used to form a loop that will not slip on a rope end.

To tie a BOWLINE: Grasp the end of a rope in the right hand and the standing part in the left hand. Cross the end of the rope over the standing part in the left hand, and with a turn of the right wrist put a single hitch around the rope end. Without shifting the grip of the right hand, pass the end of the rope to the left under the standing part, then down through the hitch that was first formed.

If a BOWLINE is to be towed through the water, a second HALF HITCH may be added. Wet knots are apt to jam, and the extra hitch lessens this tendency.

The BOWLINE with a BIGHT is used to make a double loop that will not slip on a rope end. Also called a BOSUN'S CHAIR.





Name: _____

KNOTS

Hitching Tie Knot

<https://www.youtube.com/watch?v=sLfThoYotgQ>

The HITCHED LOOP is a secure knot sometimes seen in a chest lashing. A LOOP KNOT or an EYE SPLICE is tied in one end, the other end is drove through the eye, and after it has been drawn up to the required tautness, a SINGLE HITCH is made with the end around the eye in the manner shown in the illustration.



Rolling Hitch Knot

https://www.youtube.com/watch?v=OX_kU_jYecU

The ROLLING HITCH is used to fasten a rope to a spar. This is a very secure fastening. The ROLLING HITCH formerly called MAGNUS and MAGNER'S HITCH, is simple to tie and the most reliable single knot under a lengthwise pull. It should be made and loaded carefully. This is the way the turns should be taken in bending to a spar.



Chain Hitch Knot

<https://www.youtube.com/watch?v=pAv87vAoNTA>

CHAIN KNOT When a rope is too long for its purpose one means of shortening it is the chain knot Remember to put a marlinspike or toggle through the last link before you put a strain on the rope.



Fisherman's Bend Knot

https://www.youtube.com/watch?v=waX_D3yvtgE

The FISHERMAN'S BEND is an ANCHOR HITCH. It is strong and will not jam. It is used on running rigging when it is not necessary for the hitch to spill on removal.



Halyard Bend Knot

<https://www.youtube.com/watch?v=PpT7aTKdglY>

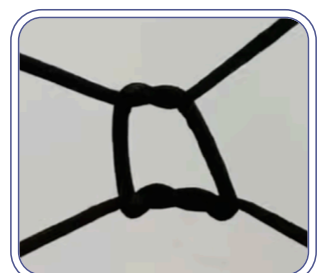
The STUDDING-SAIL HALYARD BEND and the TOPSAIL HALYARD BEND are YARD HITCHES.



Surgeon's Knot

<https://www.youtube.com/watch?v=OWLpGMf9FCI>

The LIGATURE KNOT is commonly called by laymen the SURGEON'S KNOT. But surgeons do not speak of the "SURGEON'S KNOT" any more than a sailor would speak of a "SAILOR'S KNOT".





Name: _____

KNOTS

Marlinspike Hitch Knot

<https://www.youtube.com/watch?v=8B10Q52vXcE>

The MARLINSPIKE HITCH is used for the hook of a tackle, to any rope where a smart pull is required. If tied loosely, the MARLINSPIKE HITCH will generally draw up to have a double bearing. In this form it is secure and easy to loosen. Also known as MARLINGSPIKE HITCH.



Midshipman's Hitch Knot

https://www.youtube.com/watch?v=jl74ln7yx_s

The MIDSHIPMAN'S HITCH is an old fashioned hitch often used to fasten a block or sheave to a rope's end.





Name: _____

CLOVE HITCH AND SQUARE LASHING

Clove Hitch

<https://www.youtube.com/watch?v=7HgHD55n1Do>

As the name suggests this knot is used to fasten the end of a rope to a pole or fixed object and is used for commencing and ending the square lashing. Pass the rope around the pole so that the end with which you are working passes under the standing part. Pass the rope around the pole a second time, above the standing part, making a turn that brings the end through the loop in the opposite direction from the standing part.



Square Lashing

https://www.youtube.com/watch?v=_Rli8Knk9Ok

This is used whenever spars cross at an angle, touching each other where they cross. It is started with a clove hitch around the upright spar immediately under the spot where the cross piece is to be.

Twist the end of the rope into the standing part then "wrap" the rope around the cross piece and upright binding them together.

In wrapping, rope goes outside the previous turn around the cross piece and inside the previous turn around the upright. After three or four right wrapping turns make two "frapping" turns between the timbers. Strain them tightly. Finish with a clove hitch around end of cross piece. Remember: "Start with a clove, wrap thrice, frap twice, end with a clove."





Name: _____

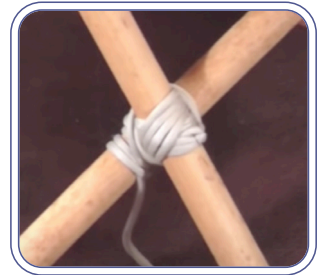
DIAGONAL LASHING

Diagonal Lashing

<https://www.youtube.com/watch?v=4xrKVkYyU9k>

This is used to “spring” two spars together, that is, to lash together two spars which tend to spring apart and which do not touch where they cross. The lashing is started with a timber hitch around both spars. The timber hitch is tightened so as to bring the two spars together.

Three or four turns of the lashing are then taken around one fork and three or four turns around the other fork. Two frapping (tightening) turns are taken about the lashing at the point where the spars cross and the lashing is finished off with a clove hitch around the most convenient spar.





Name: _____

SHEAR AND CONTINUOUS LASHING

Shear Lashing

<https://www.youtube.com/shorts/OL4ajlxhgmk>

Also known as Round lashing it is used for binding parallel spars together and for forming "shear legs" which support bridged and the like. Place the two timbers next to each other. Tie a clove hitch around one of them at appropriate place from the top. Bind the two timbers together by laying seven or eight turns of the rope around them, one turn beside the other. Make two frapping turns around the lashing turns between the timbers. Fasten rope with a clove hitch around the second timber. Open out the timbers.

NOTE: two sheer lashings without frappings are used to lash two timbers into one long one.



Continuous Lashing

<https://www.youtube.com/watch?v=D-fYhoXVcf8&t=181s>

Continuous lashing holds small sticks at right angles to long sticks and is useful in making table tops, seats, etc.. Follow these steps in laying a table top.

1. Cut sticks to desired size and trim ends. Next, notch the frame and place the crosspieces in correct position.
2. Make clove hitch on the frame, in middle of the rope, with knot underneath and ends out to sides. There should be equal lengths of rope on either side of the long stick. The hitch should be placed so that the ends of the rope pull the knot tight as they come up from under the long stick.
3. With one end in each hand, pull rope over one crosspiece and down under frame.
4. Cross rope, making an X. Pull rope tight.
5. Bring up and over second crosspiece. Repeat this procedure until all the crosspieces are lashed.
6. End with two half hitches or clove hitch and tuck ends of rope under last small stick.





Name: _____

SAMPLE CAMP FURNITURE

Camp Table / Drying Rack / Washing Up Station





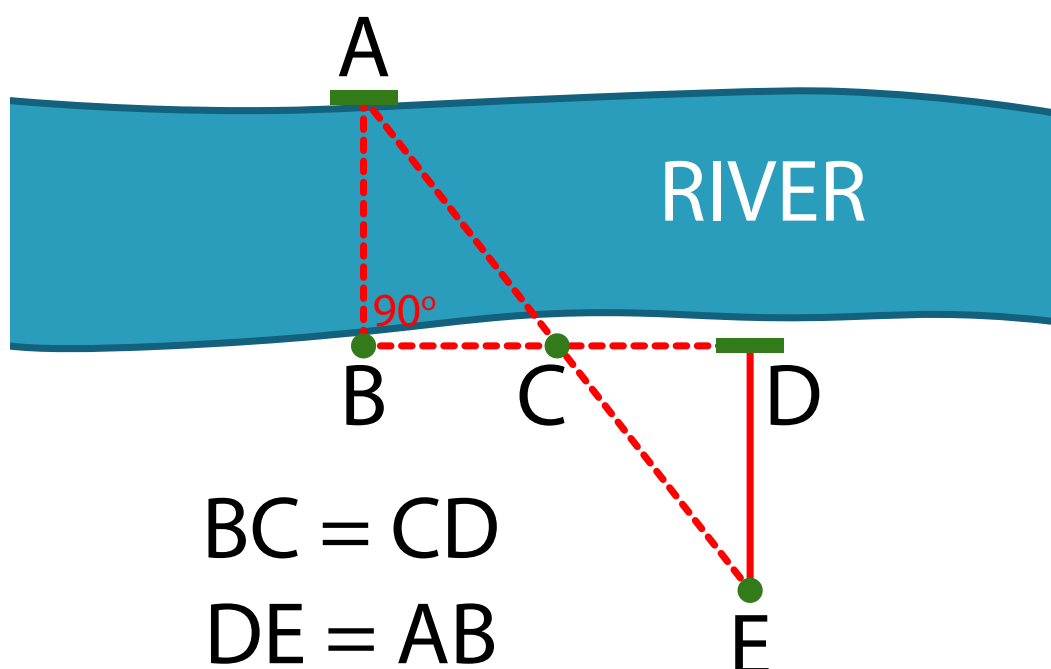
Name: _____

METHODS OF MEASURING DISTANCE

To help you judge distances, memorise your own measurements

My height is	cms
My handspan is	cms
The length of my arm is	cms
The length of my foot is	cms
The length of my finger is	cms
My reach length is	cms
The length of my normal walking pace is	cms

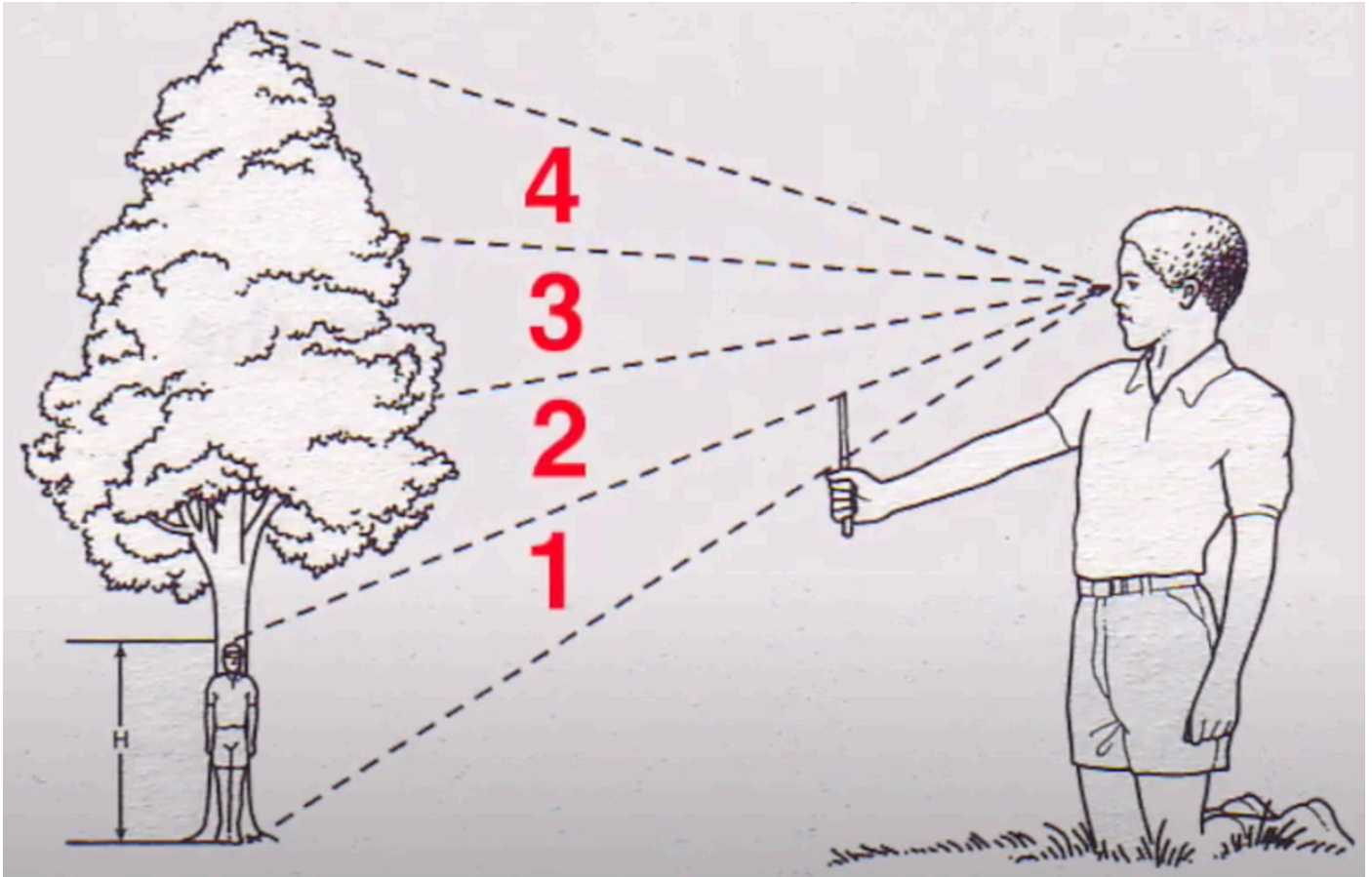
Method of Measuring the Distance across a River or Ravine





Name: _____

FINDING THE HEIGHT OF A TREE



- Using a Teen who knows his/her exact height, have him/her stand against the bottom of the tree you want to measure.
- Back off a convenient distance and hold a stick upright at arms length.
- Sight so that the end of the stick seems to touch the Teen's head.
- Put your thumb where his/her feet come.
- Holding the stick tight, move it up until your thumb comes in line with the Teen's head.
- Notice where the tip of the stick comes on the tree now, and holding the stick firmly, jump your thumb up again to this point.
- Count how many times you can measure the Teen's height on the tree.
- Multiply this number by the Teen's height and you have the height of the tree.



Name: _____

KNOTS

Tape Knot

https://www.youtube.com/watch?v=U_O-i-EZsVQ

The tape knot is a knot frequently used in climbing for joining two ends of webbing together, for instance when making a sling. The knot can be used for joining flat materials such as leather or tape.

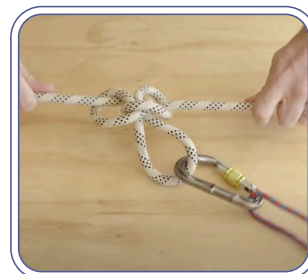


Alpine Butterfly Knot

<https://www.youtube.com/watch?v=0qtRkd0RiOY>

The Alpine Butterfly knot provides a secure loop in the middle of a piece of rope. Load can be safely applied: from the loop to either end of the rope; between the two ends with the loop hanging free; or to the loop with the load spread between the two ends.

The Alpine Butterfly Loop is useful anytime a secure loop is required in the middle of a rope. A good example is when a line of hikers wish to hook on along the length of a shared rope or as a possible option for the first part of a Trucker's Hitch. Also, if a length of rope is damaged, it is a wonderful way to isolate the damaged section so that the rope may still be used.



Prusik Knot

<https://www.youtube.com/watch?v=6mwmlprswFI>

Climbers carry Prusik cords mainly for emergency use, as they are lighter than other options. Prusiks are fast to place on a rope, and with practice can be placed with one hand. The loops of cord can be used as slings, and are thus multi-functional in a climbing environment.

Prusiks will work around two ropes, even two ropes of different diameters. Prusiks provide a strong attachment that will not damage or break the rope, and so are used in some rope-rescue techniques. Prusiks are good to use in hauling systems where multiple rope-grabs may be needed, and where mechanical rope-grabs are not available.





Name: _____

KNOTS

Truckies Hitch Knot

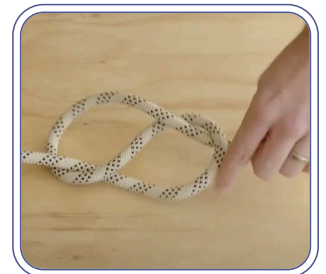
The trucker's hitch is a compound knot commonly used for securing loads on trucks or trailers. The general arrangement, using loops and turns in the rope itself to form a crude block and tackle, has long been used to tension lines and is known by multiple names



Figure Eight Knot

<https://www.youtube.com/watch?v=k1xRc0hkY48>

The figure eight knot is a type of stopper knot. It is very important in both sailing and rock climbing as a method of stopping ropes from running out of retaining devices. Like the overhand knot, which will jam under strain, often requiring the rope to be cut, the figure eight will also jam, but is usually more easily undone than the overhand knot.



The FIGURE EIGHT KNOT has a single rim part, which passes completely around the neck and it has another single part at the top which nips the end. The OYSTERMANS STOPPER has three parts around the rim and one part at the top which nips the end. This suggests a knot, between the two rim parts, and with the end nipped by a single top part.

Double Figure Eight Knot

<https://www.youtube.com/watch?v=a9CukNwBsjo>

The double figure eight knot has almost endless uses for the everyday outdoorsman, from tying down guy lines on a tent, hanging a bear bag with a carabiner, tying your kayak to the roof of your car, or just being used as a stopper to prevent a rope sliding through a cleat.

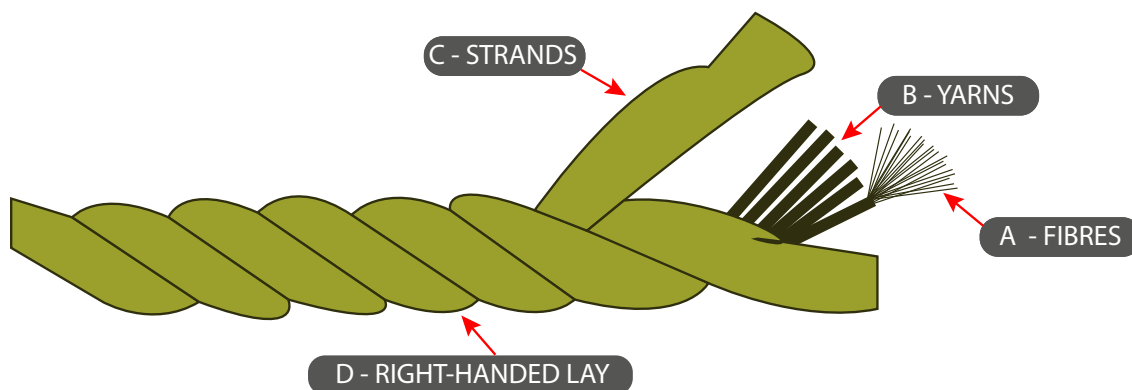




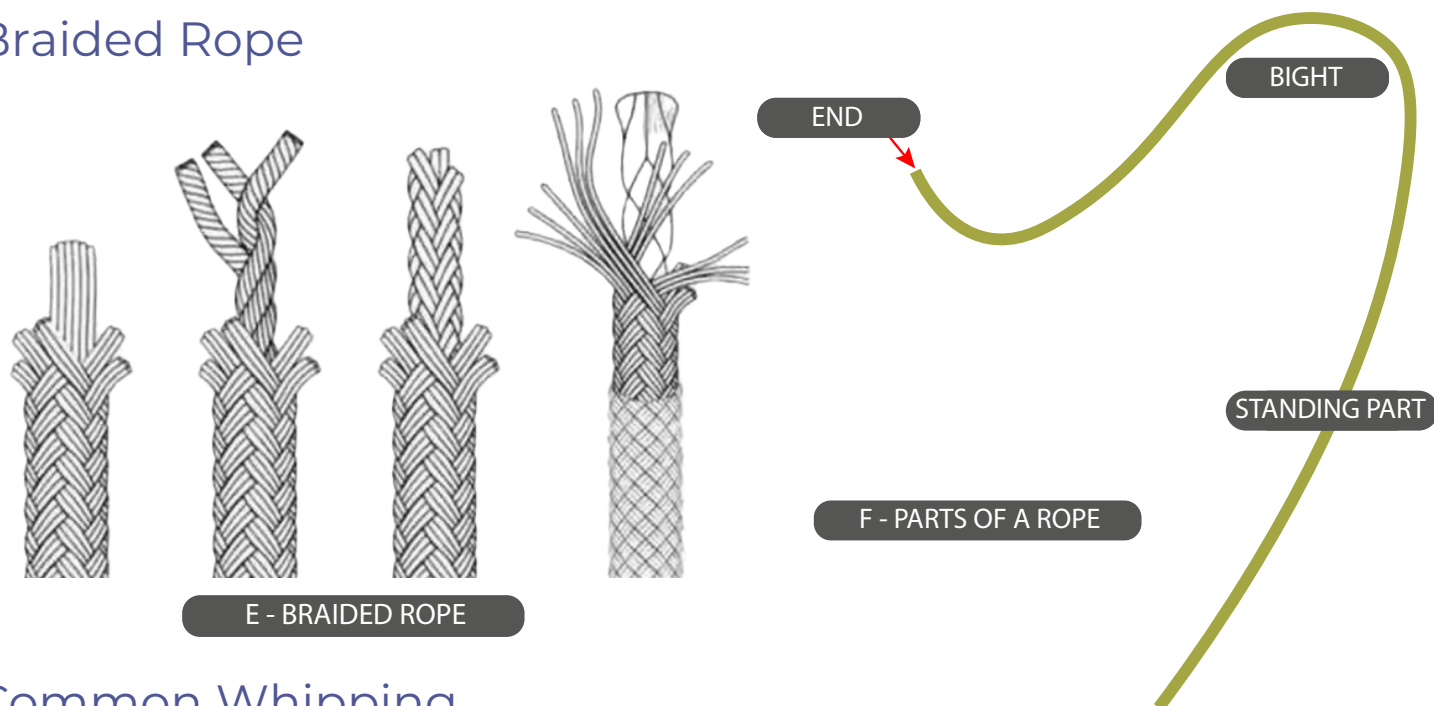
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ROPES

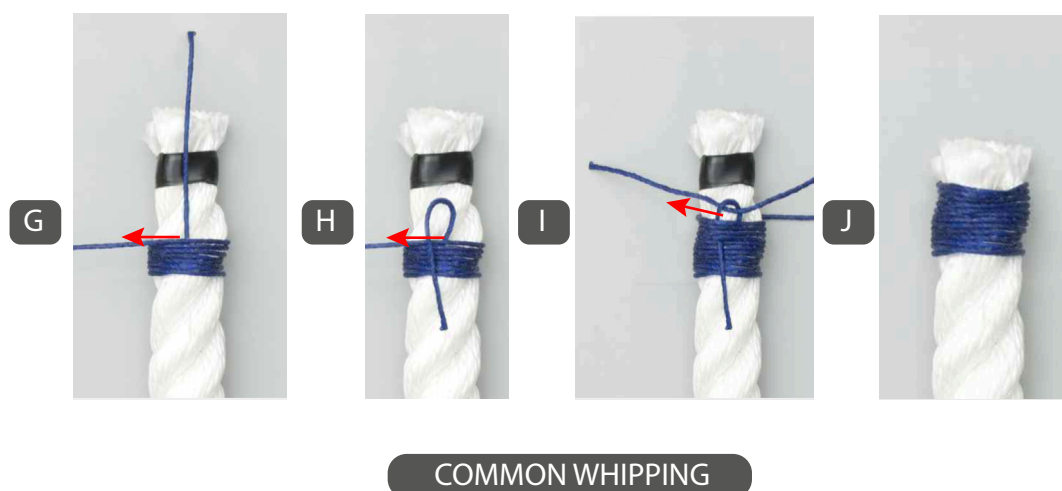
Right Handed Lay



Braided Rope



Common Whipping



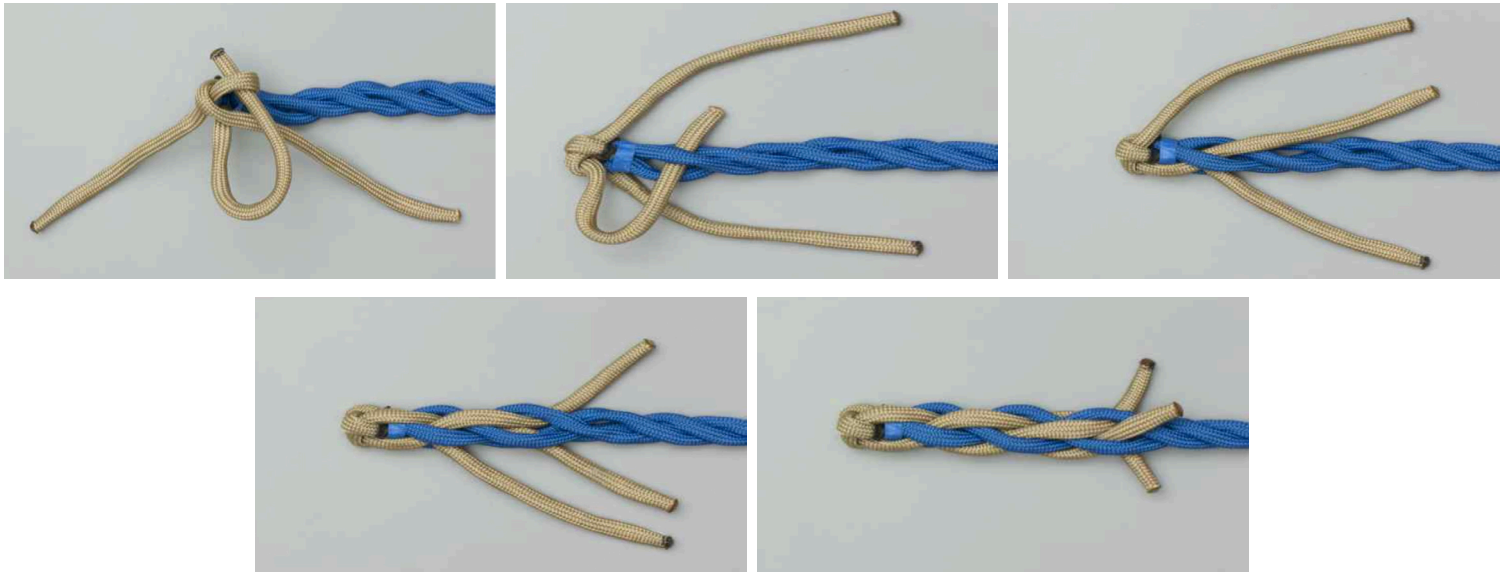


Name: _____

SPLICES

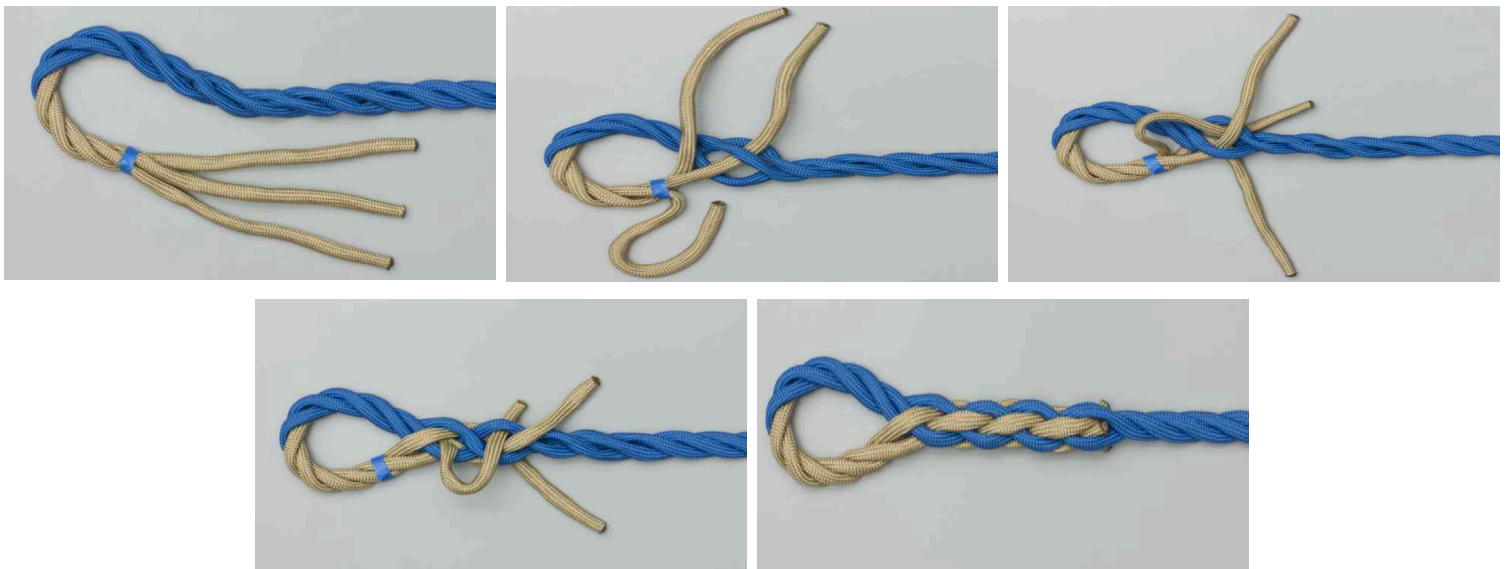
Back Splice

Form a Crown Knot by passing each strand over its neighbour and then tighten the knot. Splice each strand into the rope by passing it over and under alternate strands in the standing end. Complete a second and a third set of tucks to complete the back splice.



Eye Splice

Tape rope. Unravel enough for 5 tucks. Arrange strands. Pass centre one under a standing strand. Pass lower one under lower adjacent standing strand. Pass the upper strand under the upper adjacent standing strand. Repeat the process for the remaining sets of tucks. Remove the tape.



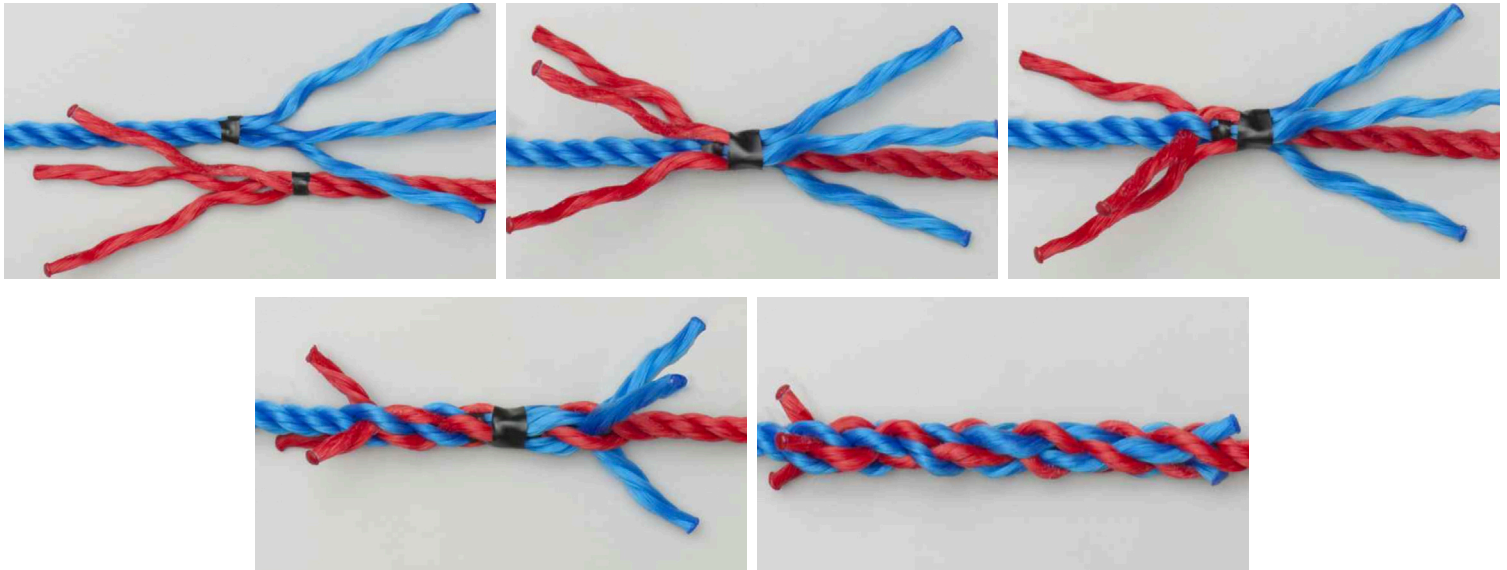


Name: _____

SPLICES

Short Splice

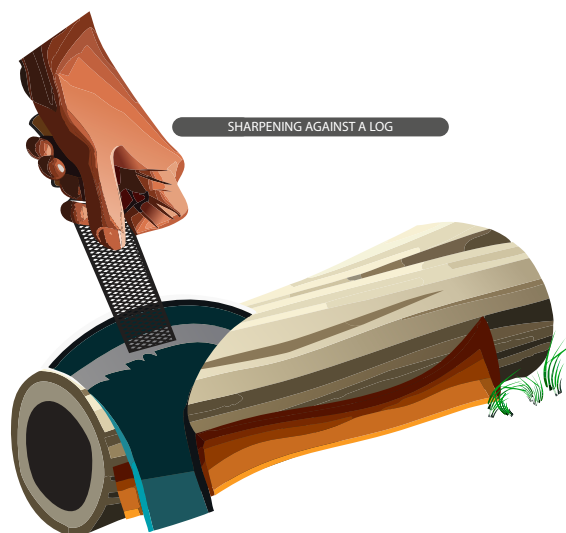
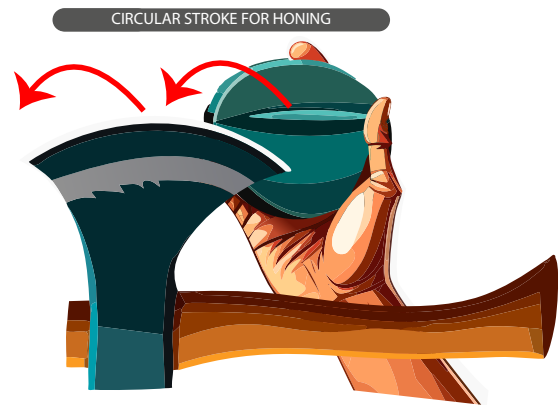
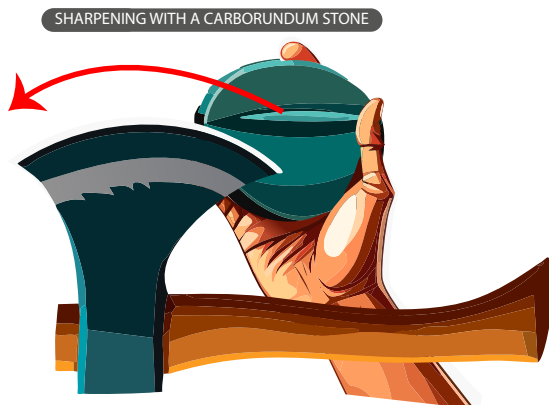
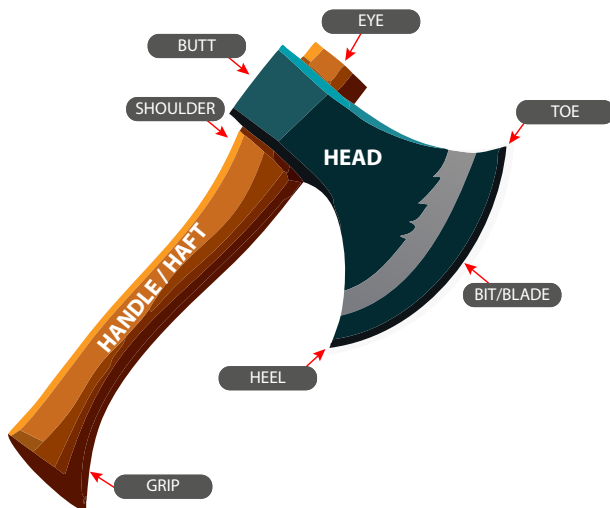
Tape the rope. Unravel enough for about 5 tucks. Push the ends into each other and tape the middle. Make the first complete set of tucks, and then another. Repeat this using the other end. Remove the tapes, tighten, and complete the remaining tucks.





Name: _____

PARTS OF AN AXE





Name: _____

SAFETY RULES FOR AXE AND KNIFE

Axe

1. A dull axe can be very dangerous, as it may bounce and strike the person using it. Keep your axe sharp so as to bite into the wood.
2. Always check the head of an axe before using it. An axehead that comes off a handle can fly through the air with the force of a bullet. One temporary means of tightening it is to soak it in water. The wood will expand and tighten in the head. At first opportunity, repair the axe permanently.
3. Never allow the axe to lie on the ground. When using it, cut in such a way that the blows will never end up in the sand or dirt, or your feet.
4. Never cut trees just for the fun of it. Misuse of an axe can damage a tree and finally destroy it. The misuse of an axe in a forest can give you and your club a bad name.
5. An axe is not a hammer, a mallet, or a wedge; do not use it as such unless it is designed for this purpose (eg a Kelly axe).
6. Before using an axe be sure that the area is clear around you and overhead. Be sure there is nothing the axe will catch on as you swing it. Everything must be more than two axe lengths away. This means the combined length of your arm and your axe.
7. An onlooker should stay at least two axe lengths away, for not only is the axe itself dangerous but flying chips can strike one in the eye.
8. It is dangerous to work with an axe when one is tired, for it is easy to lose control. Always rest when tired.
9. When the axe is not in use, keep it in its sheath. If the axe is to be used again soon, strike it into a log so that the blade is covered.
10. When carrying an axe it is best to keep it sheathed. Otherwise, carry it with the sharp edge turned outward, away from your body.
11. When handing the axe to someone else, always hand it handle first and head down.

Knife

Knife laws in Australia are among some of the strictest in the world. The legal definition of a knife in Australia is any instrument with a cutting edge or blade, and designed to be used as a weapon. It is illegal to carry any type of knife in a public place in Australia, except for utility knives, such as a Swiss Army knife or a pocket knife with a blade no longer than 10 cm.

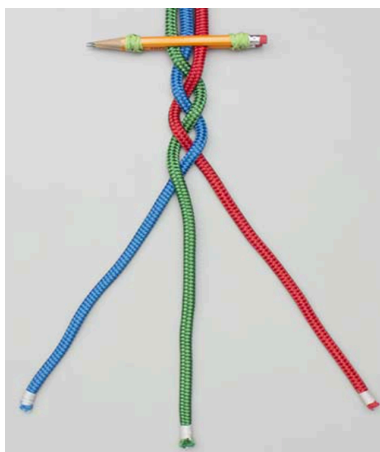
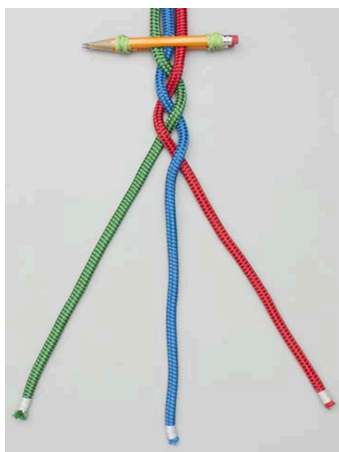
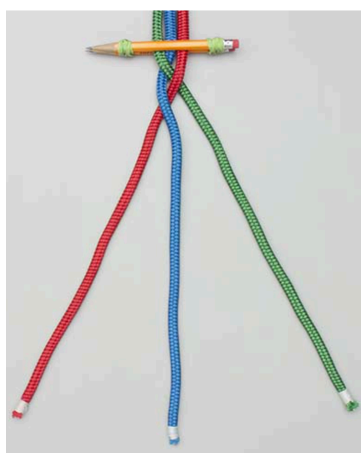
1. A knife is of no value unless it is one made of good steel that will hold an edge. A knife should be kept sharpened and free from rust at all times. When sharpening a knife, use the carborundum sharpening stone and draw the blade over the stone with the edge foremost. Each group should have a stone available for use by the Teens.
2. When whittling or cutting, always cut away from yourself, to prevent accident.
3. Never split a piece of wood with your knife by hammering it on the back of the blade. This will ruin the blade and will weaken the hinge.
4. Always keep the blade away from fire. If it is overheated, the temper of the steel will be affected, the knife will become soft, and will never hold an edge again, also the handle will probably go up in smoke.
5. When a pocket knife is not in use, be sure it is closed and in your pocket or back in the sheath. The sheath should be carried on the belt just back of the hip joint.
6. Remember your knife is a valuable tool and not a toy. Don't play with it or damage it in any way, but keep it in good condition so that when a need arises, it will be serviceable.
7. Never run with your knife open.
8. Throwing a knife into the ground will soon ruin it, not to mention any person who gets in the way.
9. A good woodsman never throws his knife into living trees, this also refers to carving initials etc. in trees.



Name: _____

THREE PLAIT ROPE

Start with the ends bound together. Pass one outside strand across the centre strand and then pass the other one across the centre one. Repeat alternating one side and then the other. Repeat again. Continue until you reach the desired length.





Name: _____

WATER PURIFICATION METHODS

Boiling

Boiling the water is the age-old remedy for every ill, whether caused by protozoa, bacteria or virus.

Chemical Purification

Tablets containing tetraglycine hydroperiodide, or TGHP (Globaline, Potable-Aqua) are convenient and readily available. A single fresh tablet dissolved in a litre of water gives the required iodine concentration of 8mg/litre.

The compound is stable in an unopened bottle but loses iodine when exposed to the air; bottles of tablets should probably be discarded a few months after first being opened. Use is very easy, demanding only that the disinfected water be visually inspected to ensure that enough iodine has been released to produce a definite brown colour. A single tablet, let stand 10-20 minutes, ordinarily suffices. A second tablet should be used in very cloudy water, and 20-30 minutes allowed in cold water.

Tincture of iodine, sold at pharmacies, is widely recommended but has little if any advantage over the TGHP.

There are also a wide range of water purification tablets available from Camping Stores and Pharmacies, that are easy to use (following instructions carefully).

Filtration

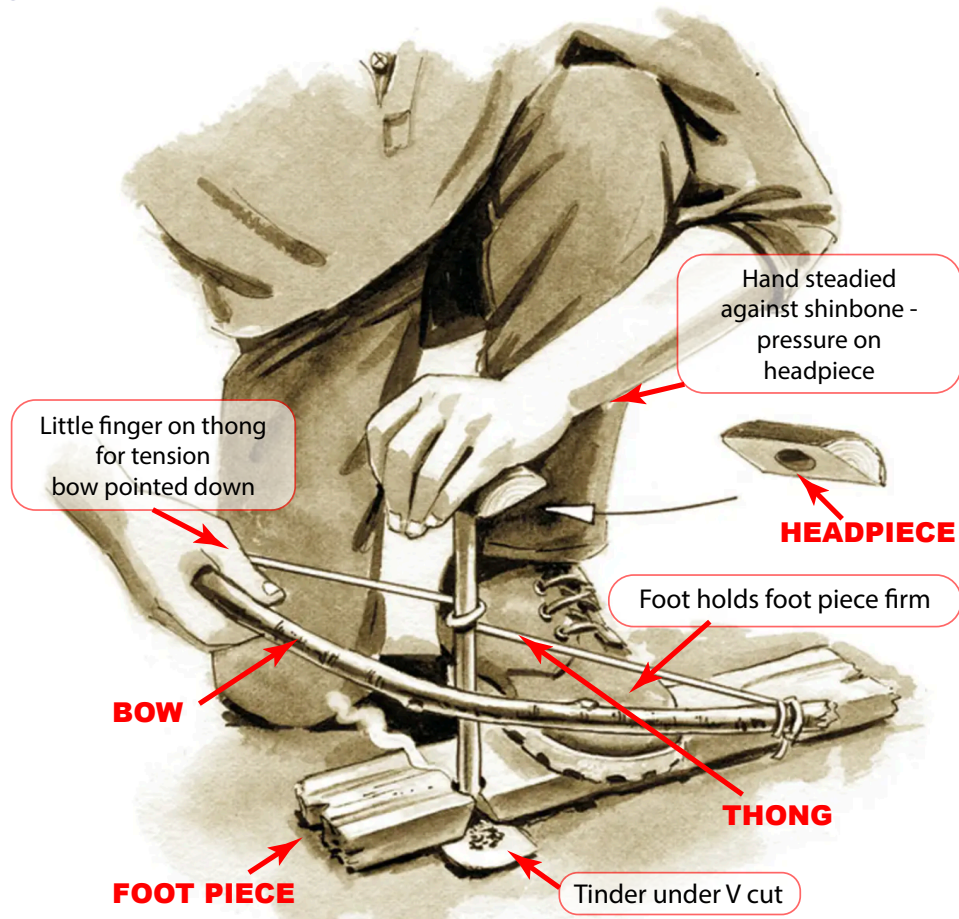
Plenty of commercial products are available such as the Lifestraw and other systems that have a filtration system in place. Always ensure that the filtration system you chose to use is suitable and appropriate for the environment you are in.



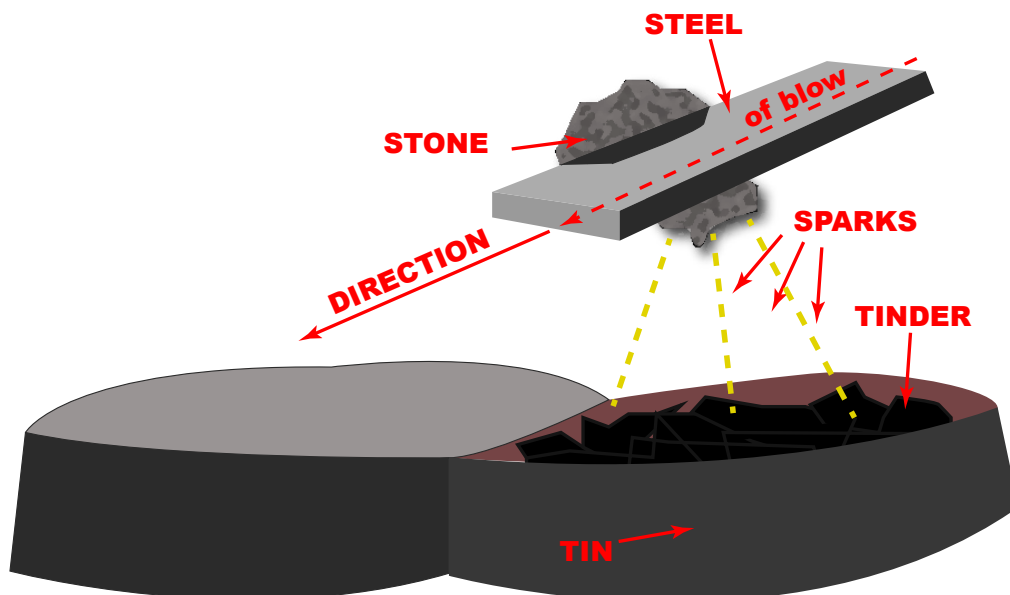
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FIRE LIGHTING

By Friction



By Flint and Steel

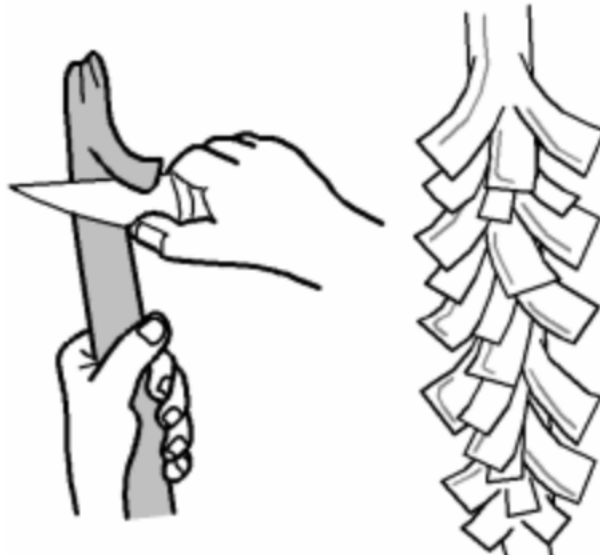




Name: _____

WET/SNOW WEATHER FIRE PREPARATION

Fuzz Sticks



To create a fuzz stick, find the driest stick you can. It can be any size or shape, but something thumb-thick, straight, and a foot long is ideal. Hardwood sticks are more difficult to carve, yet they burn for a long time. Softwoods are easy to carve, but short lived.

After you have made your selection, strip any bark off with a knife to further remove any moisture. Start carving long thin curls near one end of the stick. Work your way backward while spiralling your cuts to create a shaggy-looking stick. Any shavings at all will improve the stick's flammability, but the best fuzz sticks are loaded with many curly pieces. You could also dribble some oil, wax, pitch, or other flammable on your fuzz stick for an added burning value.

Fire Building in the Snow

