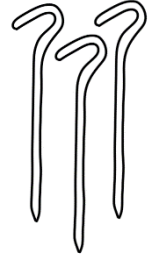
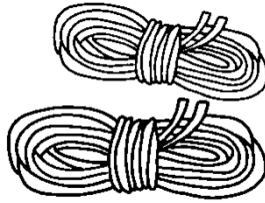
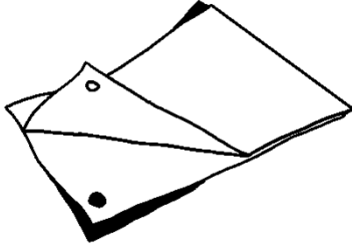


# STAY AT HOME ADVENTURES

## SHELTER BUILDING LITE KIT

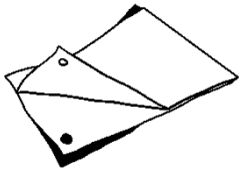
\*Adult supervision is required when using the equipment included in this kit\*

THIS KIT INCLUDES:

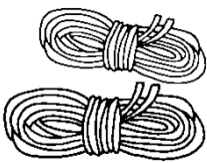


Make sure you colour all the pictures in!

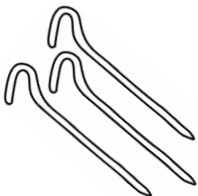
### ACTIVITY 1 – LEARNING THE NAMES OF YOUR EQUIPMENT – MATCH THE PICTURE AND NAME



**PARACORD** - for tying up your tarp



**TENT PEGS** - for pegging down your tarp



**TARP** - for creating your shelter

## ACTIVITY 2 – IMPORTANT KNOTS FOR SHELTER BUILDING – FILL IN THE GAPS AND TRY THE KNOTS

### Clove Hitch

A clove hitch is a simple hitch which is easy to \_\_\_\_\_ and untie. It is usually used for \_\_\_\_\_ off a lashing. It is \_\_\_\_\_ tied around something, like a pioneering \_\_\_\_\_, post or \_\_\_\_\_ handle.

broom tie always starting pole

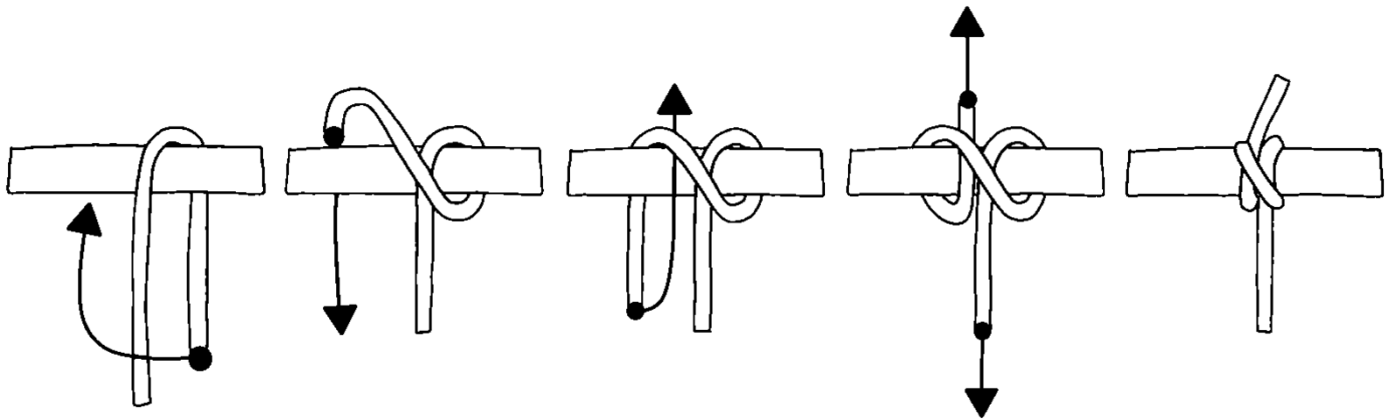
1

2

3

4

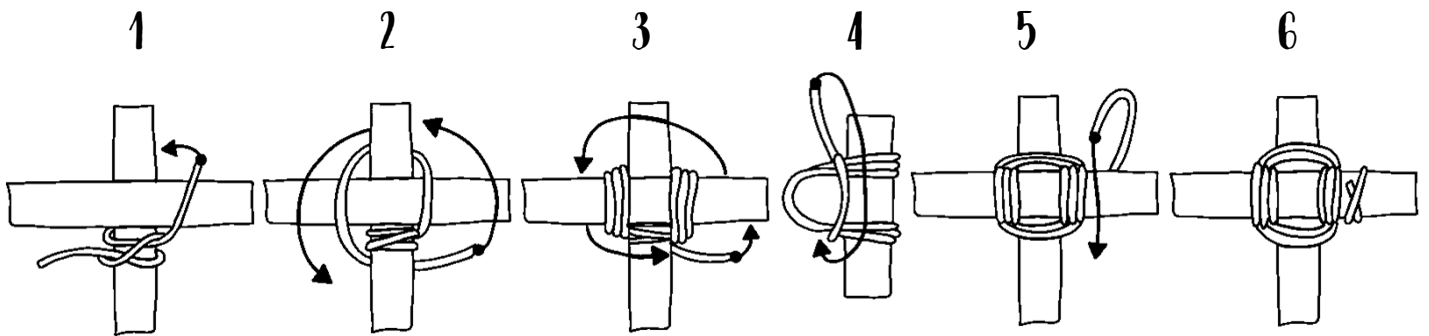
5



## Square Lashing

A square lashing is used to bind two poles together. This lashing works \_\_\_\_\_ when the \_\_\_\_\_ cross over each other at a \_\_\_\_\_ angle to make a \_\_\_\_\_. It is used for making A-frames for \_\_\_\_\_, rafts and camp gadgets.

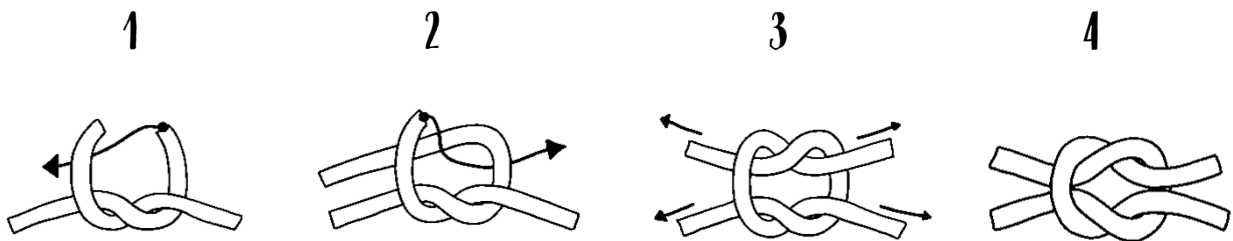
cross                      shelters                      right                      poles                      best



## Reef Knot

A reef knot is perfect for joining two pieces of rope together – this could be \_\_\_\_\_ ends of the same thickness or material. It is often used for tying \_\_\_\_\_ in first aid. If you are building a shelter and one of your ropes isn't long enough you could use a reef \_\_\_\_\_ to tie two ropes together for added \_\_\_\_\_.

length                      two                      knot                      bandages



## Alpine Butterfly

An alpine butterfly is a fixed loop knot, this means you tie a loop that will not move, \_\_\_\_\_ or tighten. It doesn't interfere with the lay of the rope – so it stays in a straight line like picture 3! Usually this knot is used in rock \_\_\_\_\_, but is also great as a tensioning knot. You can use it to create \_\_\_\_\_ - tying this knot and \_\_\_\_\_ the end through and pegging.

guylines

fixed

looping

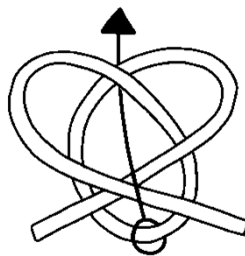
slip

climbing

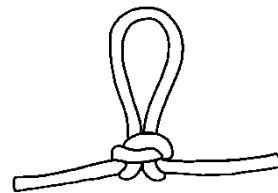
1



2



3



## Bowline

The bowline is a simple knot creating another \_\_\_\_\_ loop. It is great for climbing, securing ropes to an object and tensioning. No matter how \_\_\_\_\_ the knot has been tied, you will always be able to \_\_\_\_\_ it easily if there is no \_\_\_\_\_ on the knot.

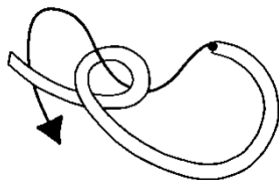
undo

tight

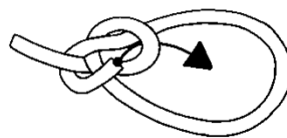
fixed

tension

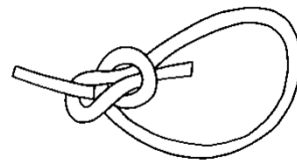
1



2



3



### ACTIVITY 3 – PARACORD AND HOW TO CUT IT

#### Facts about paracord:

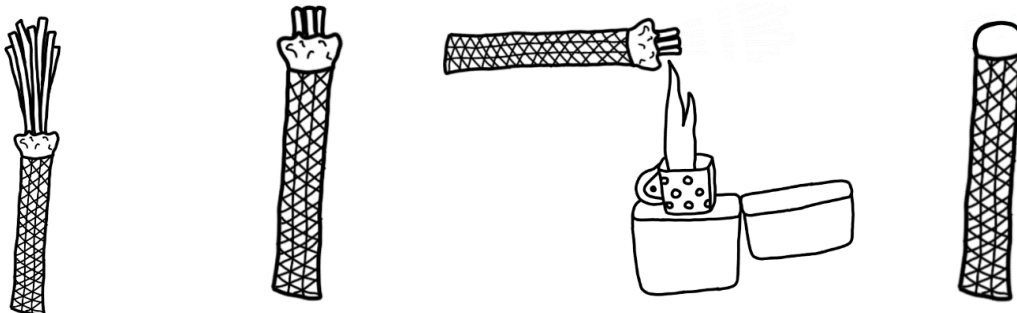
- Paracord has been used by the military for decades, its main use was for suspension lines for American paratroopers during the Second World War.
- Paracord is made up of a core of 7 threads, which is inside of a woven nylon or polyester jacket.
- Paracord is very lightweight and strong.
- You can cut paracord without a blade! It can be cut using nothing but itself and some elbow grease.
- You can use paracord for all sorts of things including:
  - o Shelter building
  - o Crafting: bracelets, keyrings, lanyards
  - o Bigger Crafting: DIY Hammocks, chairs, steering wheel cover
  - o Injury: arm sling and securing a splint

#### Safely Melting Ends

You may need to cut your paracord into different lengths to help you build your shelter. Once you have cut your paracord, you'll be able to see the core of threads inside. You need to melt the end to ensure that the core threads do not pull all of the way through – weakening your cord.

#### You will need adult supervision when melting the ends!

1. You've cut your paracord to the right length. The core threads might be poking out of the end. You need to trim them, so they are much shorter.
2. Using a lighter, candle or gas ring – hold the tip of the cord almost, but not quite in the flame. The ends will start to melt.
3. Keep melting until you get a dome shape of the end. The end will be very HOT and will stick to your skin, so do not touch it.
4. Dunk the end in a glass of water to cool and set it.



## Top Shelter Building Tips:

- Think about the wind direction – you want to build your shelter so the wind doesn't blow inside.
- Make sure the ground is dry, so you won't get damp in your shelter.
- Choose somewhere with even ground – if there are dips in the ground and it rains you may end up with puddles!

## ACTIVITY 4 – TRY OUT SOME DIFFERENT SHELTER DESIGNS

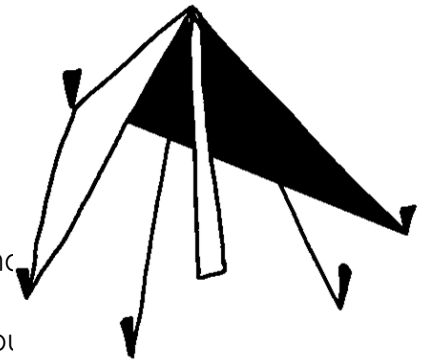
### DESIGN 1

#### Equipment

- 1 x pole (broom handle, branch, etc)
- Tarp, pegs, rope

#### Method

- Start by laying your tarp out flat and find the middle of one end. Peg this down.
- Find the middle of the other end and lift it up using the pole. You should be starting to see the triangle shape at the front.
- Then peg down the front corners and tuck the back corners inside the shelter. Get someone to hold the pole.
- Then you need to use a clove hitch in the middle of your rope at the top of the pole, then peg each end down to the ground at a 45 degree angle.



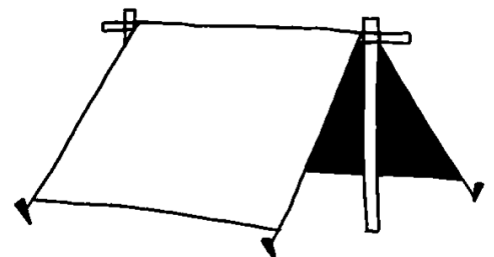
### DESIGN 2

#### Equipment

- 3 x poles (broom handle, branch, etc)
- Tarp, pegs, rope

#### Method

- Start by laying your poles out – 2 for the uprights and 1 over the top to create a square without a bottom. Now you need to square lash the poles where they cross.
- Now lay your tarp over the top of your frame, try and find the middle line of the tarp and line it up with the cross pole. With some help (you'll probably need two people to help you), lift the frame up.
- Now you need to start pegging one side down to the ground. Once you've pegged one side, make sure everything is looking square, then peg the other side. You can add guylines to each upright pole if it needs more stability.



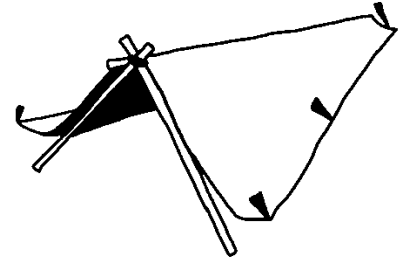
## DESIGN 3

### Equipment

- 3 x poles (broom handle, branch, etc)
- Tarp, pegs, rope

### Method

- Start by laying out 2 poles, making them cross over whilst looking like a triangle – this is an A-frame. Square lash these together.
- Now add the third pole. Do this by standing up the A-frame and getting someone to hold it.
- Then prop the third pole in the top of the cross of your A-frame and lash them all together.
- Now you can lay your tarp over the top. Peg the front corners out and tuck the back corners inside the shelter.



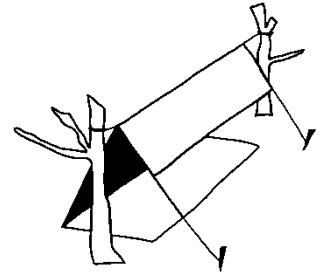
## DESIGN 4

### Equipment

- 2 trees approx. 1-2 metres apart
- Tarp, pegs, rope

### Method

- First thing you need to do is string a rope between your two trees. If your rope is not long enough you can use a reef knot to add length.
- Tie one of end the rope to the first tree, using a bowline.
- Then take the other end down to your other tree. Tie an alpine butterfly in your rope, wrap the rope round the tree and feed it back through the loop you created.
- Pull the rope back towards the second tree – this should be tensioning the rope, now tie it off.
- Now drape your tarp over the top, start pegging the floor corners, like in the picture.
- Then tie a rope to the two roof corners and peg them down.



## DESIGN 5

### Equipment

- 1 tree
- Tarp, pegs, rope

### Method

- First thing you need to do is tie one end of your rope to the tree. Use a bowline for this.
- Now at the other end of your rope, tie a bowline, so you have a loop you can peg down to the ground.
- Drape your tarp over the rope. Peg the tarp down at the back where it touches the ground, then pull the tarp tight and peg the front corners down. You then can tuck the back corners inside your shelter.

