

FIRE LIGHTING

Fire lighting is one of the most exciting things the Cub encounters in the whole programme, since they are forbidden at home and school. Scouting gives the Cub the chance of exploring this, in a safe manner. With a little care and attention from us Leaders as well as the Cubs, a fire can be as safe as it is enjoyable.

In days gone by, Scouts could light fires by friction, “rubbing sticks together” or with only one match. You can of course do it this way if you want to – it’s not that difficult, but nowadays it is quite right to use a fire lighter in amongst the kindling. The most important thing is that one **NEVER** uses meth, paraffin or petrol to start a fire.

In the Bronze Arrow, we mentioned the safety tips for an open fire. These safety tips **must be revised** before continuing the Silver Arrow session.

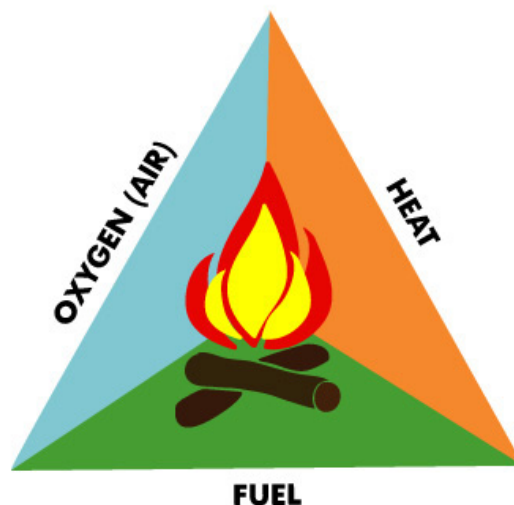
In this session the cub will learn

- o how to build the fire,
- o the precautions to be taken,
- o the fire layout and all the necessary things for an open fire cooking.

It is important that cooking should not be done in this stage. Cubs at this age are not well prepared to handle such things. Cooking will then be covered in the Gold Arrow.

Fire needs three elements in order to stay alight. These are:

- o **Air** All around the fireplace
- o **Fuel** Our fuel will be tinder, twigs (also called kindling) and logs
- o **Heat** Matches. You can also use fire starters to make it easier to light up the fire, but remember never to use paraffin or petrol.





Always remember the safety tips learnt in the Bronze Arrow:

- o Choose a safe spot which should be at least three (3) meters away from trees and bushes and at least four (4) meters away from the tent – to avoid accidents
 - o Build your fire downwind of your tent in an appropriate fire pit area – to avoid burning ashes from the fire from damaging the tents. The fire pit is to keep the fire from spreading out (and is easier to clean up, too)
 - o Keep your fire small and low.
 - o Only three persons at a time must be near the fire.
 - o Tuck scarves in shirts, so they don't catch fire. Some kind of rain jackets can be flammable
 - o **DO NOT** use rocks which are wet or damp as they may crack or explode when heated.
 - o If by accident someone catches fire, always remember **STOP DROP AND ROLL.**
- (see Dealing with emergencies – Silver Arrow) **NEVER** use methylated spirit, paraffin or petrol to start a fire.... (These were not listed in the Cub Book for safety reasons.) Mention the topic of paraffin and petrol and how dangerous they are.

Preparing wood before starting the fire:

- o First check that you are 3 meters away from the trees and set the area you are going to light the fire in it.
- o Then start collecting firewood.
- o Green (fresh) wood or damp wood that has been on the ground too long is not good.
- o Afterwards check the direction of the wind. (We want to build the fire in a way that the wind is able to pass through it, this helps the fire to keep lit and the wood to burn). However keep in mind that too much wind will blow the fire out.
- o To start a fire you need small sticks or twigs, dry leaves, dry grass and shavings.
- o Using Oily materials like the dried pine cones or the dead leaves of a palm tree will help to start the fire easier. (Note: It is illegal to pick pine cones directly from the tree and you cannot start a fire with them since they are full of water).
- o Place a few thick sticks at the bottom, then put small thin ones on them.
- o Put some leaves or pieces of the pine cone between the sticks and on the sticks.
- o Light the fire.

Have enough of everything on hand so that you will not have to leave your fire to search for more fuel once you have got it started.





Dried Pine Cones



Dried Palm Leaves

Kindling can easily be made by splitting a stick into several slices or shavings.

You can also do a fuzz stick. It is stood upright, with the shavings pointing to the ground, it quickly catches fire and flares up. If you do this make sure a Leader does this and not a Cub.



Fuzz Stick



Making a Fuzz Stick

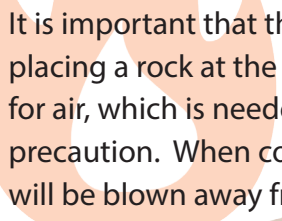
Prepare the cooking site:

Clear the area from dry grass and leaves. Remember that a fire set on dry grass spreads quickly especially if it is windy.

Building the Fireplace

Choose three rocks, two for the sides and the other for the back (as shown in the picture - Page 28 of the Cub Book). The sides should not be too high (10 to 12 cm is enough) but of the same height and as flat as possible at their tops so that the cooking utensil will lie evenly and safely on them. The back should be slightly higher so as to contain the flames. Remember not to use wet or damp rocks as they may crack or explode when heated. If the ground is wet, build your fire on a floor of sticks. Make sure that the fireplace (the rocks) are stable and unlikely to wobble.





It is important that the opening of the fireplace is facing the wind. If the wind is too strong, try placing a rock at the opening but do not block the opening completely, as it would remove access for air, which is needed for the fire. Placing the opening of the fireplace facing the wind is a safety precaution. When cooking, the smoke emitted from the fire will not be directed to your face, but it will be blown away from you. Also, if the fire flares up and the wind is blowing, the flames are not directed to you, but they will be directed opposite to you.

After you have placed the rocks in position, you must dig a shallow hole about 4 cms deep in the middle of the fireplace, wide enough to place your tinder in. Do not scatter the earth; leave it in a pile to cover the remains of your fire before you leave the site.

Fire Layout

There are two commonly used layouts to light an open fire. These are the Pyramid layout and the Pagoda Layout (Platform Layout). We will see how to build both layouts.

The Pyramid Layout

This fire consists of a foundation framework of large logs laid side by side to form a solid base. A slightly shorter log is laid inside to help the fire light up. Due to its slanting position the fire burns faster. Keep adding logs slowly from all sides in order to hold its formation. It is ideal to surround the fire by a circular ring of rocks in order to control the fire in case it collapses to a particular direction. It is ideally used for campfires.



The Pagoda Layout

It is a lighter version of the Pyramid fire. It's similar in shape to the pyramid fire except the logs are layered only along the outside edge, with each level of logs slightly shorter than the ones beneath and each layer of logs is placed perpendicularly to those before. This creates a hollow wood platform into which smaller kindling can be placed inside and ignited. It can provide quick warmth and be the start of any number of larger blazes. It is ideally used for cookouts.



Both types of fires can be used as a source heat in a survival situation.





Getting the fire started

Kneel down in front of the opening with your back to the wind. Strike your match close to the ground and let it burn into a real flame. Cup your hands around the flame to protect it from the wind and put it to the Tinder. Add more fuel (pine cones, dried palm leaves, leaves, paper or tissue) as necessary but be careful not to choke the fire. Remember that a really efficient campfire cook does not allow high flames to develop or create a lot of unnecessary ash, which has to be cleared away.

Do you know what you can do to your matches so they will not get wet especially in winter cookouts? You can dip your matches in wax. This is done to protect the head of the match. If matches get wet, the wax will keep the head of the match protected from dampness.

By the time you have finished your meal, the fire should have died down and the rocks cooled off. It is time to put into practice what we have learnt, that is, to leave the place tidier than it was before we arrived.

Putting fire out

- o Remove the rocks and dispose of them by placing them near a wall or tree with the burnt side facing down.
- o Now sprinkle water on the ashes.
- o Cover the ashes with the soil you removed when digging the hole for the fireplace.
- o Clean up the cooking area and fireplace.
- o Collect any remaining wood and dispose of it carefully.
- o

Note: Collect any items or rubbish that was used to keep the area clean.

Suggestions:

Fire lighting should be done in an outdoor activity. It is important to revise the Bronze section before this part. Furthermore while doing this activity there should be a good number of leaders helping throughout the activity as it requires good attention of the cubs.



ACTIVITY FACT SHEET



Activity: Cookout



Objective: Learn how to construct a fire



Time: 2 hours



Outline: After an explanatory session at the HQ, now it is time for the cubs to get down to practice what they learnt. Divide the Silver cubs in teams of 3 plus Bronze Cubs. The cubs will have to work together in order to built a good fire. The Bronze Cubs can be safety wardens. The Silver Cubs will try out first hand where and how to build the fire. As a leader, be there to guide them if they have any queery or if they forgot any important points.



Equipment: Different type and sizes of wood, paper, grill, matches, first aid, and water. You can also take some marshmallows for the cubs to make smores and enjoy their fire.



Place: HQ/Campsite/Outdoors



Group Size: Bronze and Silver Section









3rd Parties: N/A



ACTIVITY FACT SHEET



During the Activity:

-  – Discuss **again** the safety tips as a group, and encourage Cubs to speak in front of their peers. Let the cubs explain their ideas how the fire is going to be built, then give them the corrected final version. In addition discuss the importance of leaving the place better than we found it.
-  – The cubs should work together when preparing the area, collecting wood and carrying the needed rocks and equipment.
-  – At the start of the session ask for suggestions from the Cubs about safety tips, how the fire is going to be built, if there are any important factors/conditions to be taken into consideration before setting the fire.
-  – Try both different fire layouts and see the differences and uses.
-  – Seeing an outdoor fire lighting up in front of their eyes for the first time could make them really happy and give them the feeling of being 'successful' in the task they set out to do.
-  – The fire can be used to explain the fact that some things that we use and are important to us, may bring bad/fatal consequences if we misuse them. In this case the fire is keeping us warm, but if we are not cautious we might get burned or if we don't take care of it, it may scatter.

After the Activity:

Whenever doing a cookout, make sure the cubs practice the rules and steps needed. They can even be asked to help out with fire preparation during camps, so that they can practice what they learnt.

