

## How to Light a Fire (Practice)

This activity does not create a campfire. It is simply practicing the process of creating a spark and lighting a tinder on fire. However to understand the goal, here is a complete description of the fire lighting process. Successful and safe campfire building is the result of good preparation.

1. First, ensure that all safety requirements have been met and that you have means for putting fires out. The complete process includes clearing a site within a 2m radius of the fire, of all combustible organic materials, and exposing mineral soil directly where the fire will be made. If the ground is wet, a raft of dry branches can be placed on the soil to protect your fuel from water.

2. Every fire needs; fuel, oxygen and a heat source to burn. The proper collection of fuel is what guarantees success. Fuel should be gathered in three sizes: tinder, kindling and fuel. Tinder is a highly flammable material that will ignite under a shower of sparks.

- Good tinder includes birch bark, dried lichens or fine dry grasses.
- Kindling is a fine piece of wood that will catch on fire from the tinder. It is gathered in a series of sizes, from match stick size up to thumb width.
- Fuel wood will produce a long-lasting fire. Once again it is gathered in a series of sizes from, thumb width to wrist size.
- Step one is lighting the tinder on fire. Step two is to use the fuel to ignite the kindling quickly.

3. Kindling is then added in expanding sizes until the fire is hot enough to burn fuelwood. Fuelwood is added as needed.

## Practice Fire Lighting

When doing this activity we have water, a shovel, a blanket and a properly stocked med kit on hand.

The goal of this activity is to practice using a match and then a Ferro rod to light a fire. A ferro rod is a small metal alloy rod. When struck with a harder metal, it produces hot sparks. Ferro rods are incredibly useful and an essential tool in bushcraft.

For this activity we use pieces of hardwood boards to practice on. 2"x10"24" are perfect. The fire boards protect the lawn from scaring and create a safe platform to work on. The fires will be allowed to go out as soon as the tinder is ignited or shortly after, so the boards will blacken but not burn.

Begin by having the children spread out on the lawn. A good distance between children is 2m. Each child is given a box of matches, a Ferro rod and a tinder. We collect birch bark before this activity. Make sure that when you are collecting the bark you only remove the loose hanging bits. **There are two lighting methods shown below.**

## Matches

The children will first practice lighting a match. To light a match, the match is held between the thumb and middle fingers and supported by the index finger.



The match is pulled towards the person lighting the match, along the friction strip and as it ignites, held at a slight downward angle to allow the matchstick to begin burning



Have the children practice a few times to get over their jitters and develop a sense of the process. Once they are comfortable they can light a small bundle of tinder on fire, no larger than a golf ball. The fire will burn for a few moments and then go out



## Ferro Rod

Ferro rods typically come with a striker. A striker is a small steel plate for “striking” against the ferro rod. It creates friction and will produce sparks.

At camp, we use our bushcraft knives instead of strikers but this is not necessary.

To light a fire with a Ferro rod is challenging the first time you try.

**Step 1** - Prepare the tinder. Using the finest pieces of birch bark, crumple and shred them until they form a soft fluffy ball of tinder.

**Step 2** - Position the striker in the middle of the tinder, held in your strong hand.

**Step 3** - Hold the ferro rod beneath the striker at a slight angle downward.

**Step 4** - Quickly pull the ferro rod away, while applying force upward into the striker. This motion will produce sparks aimed at the centre of the tinder. Students can repeat the process until they are confident and capable

