

Camp@Home - Activities

This activity idea was originally part of a Durham Scouts Camp@Home event. It has been adapted for broader use as part of the Scouting from Home programme

Activities at home should always be risk assessed and supervised by parents/carers, taking note of the specific safety advice provided



Fire Building Challenge

This activity should be appropriately supervised.

Almost anyone can light a fire – the trick is to not just make a flame, but to build and sustain a fire which would be suitable for a campfire, for cooking on, or to keep you warm.

To complete this challenge, you'll need somewhere safe to build and light a fire. You could clear some ground in your garden, use a corner of your back yard or place an old slab on a piece of lawn.

DO NOT light open fires indoors or on balconies.



How Does a Fire Work?

For a fire to work you need fuel, heat and oxygen (air). For wood to catch light it needs to reach a temperature of around 400 degC, which is difficult to achieve if your wood is wet, or if you try to apply a tiny flame to an enormous piece of wood.

If the wood is wet (or 'green' – from a living tree) most of the heat just turns the water or sap to steam. To build a fire you need to sustain a flame long enough to heat small pieces of wood to the point where all the moisture is driven out and it catches fire. You then use that to heat larger and larger pieces of wood until you eventually sustain a fire.

You'll need to collect materials to light your fire.

Tinder

Tinder is anything that will catch fire easily once it is hot enough. It's generally fine material with a loose structure that allows air in. It should be dry and catch fire from your ignition source. Ideally it will burn for a minute or more, to set your smallest kindling alight.

You could use

- Cotton wool
- Paper / cardboard
- Lint from a clothes dryer
- Birch bark
- Small dry twigs (no thicker than a toothpick)

Can you think of anything else that would work as tinder?

Kindling

You'll need some 'kindling' – small twigs, stick and branches ranging in size from pencil thickness, to as thick as an adult's thumb. These will need to be as dry as possible, so collect them a few days beforehand and put them somewhere safe and dry.

You'll need more than you think, so aim to fill a bag for life.

Sort them into approximate sizes – cocktail stick (tinder), pencil and thumb thickness, with a pile for each size.

Fuel

The fuel for your fire is larger pieces of wood which will burn for some time to give you the heat and light. This will range from thicker branches through to larger pieces of wood such as logs. Ideally these will also be dry, but don't worry too much if they are damp because if you build your fire properly, the heat from your small fire will heat the wood to the point it catches fire.

If your fuel just smokes because it is wet and refuses to catch fire, your small fire is too small and/or is not hot enough.

To sustain your fire, use the flames and heat from the thinner materials such as the small branches to help heat and set light to the larger pieces.

Ignition Source

You need a way to set your tinder alight. You can use a flint and steel, the sun and a magnifying glass or even the heat from rubbing sticks together (which is really hard to get right!). Whenever you can, use something reliable – matches (ideally waterproofed using candle wax) or a lighter.

Method

You can build the structure of your fire first (there are all sorts of designs) and place your tinder in the centre, OR you can start and then add your kindling and fuel as you go.

If you add your kindling and fuel as you go make sure that you have all of your kindling and fuel close to hand so that you don't have to go searching for more. Many fires go out because of lack of preparation and not having enough kindling and fuel to build a fire that sustains itself – the fire goes out while you search for more material.

Use your ignition source to set your tinder alight and slowly add your smallest kindling. At all times you need a balance of heat, oxygen (air) and fuel. Don't add too much kindling at once and work through

your kindling from your smallest pile to the largest pile. If you add too much material you may need to blow gently to add more air.

Using Your Fire

When your fire is sustainable you can use it as a camp fire, to cook on, to toast marshmallows or just sit around.

There are plenty of videos on YouTube on how to build and light a fire. Why not watch some and decide what will work best for you?

This activity can count towards the following badge requirements:



Beavers Camp Craft Activity Badge

<https://www.scouts.org.uk/beavers/activity-badges/camp-craft/>

This activity could meet the following requirements:

1. Collect wood and help to build a fire.
2. Cook on a fire or barbeque.



Cubs Backwoods Cooking Activity Badge

<https://www.scouts.org.uk/cubs/activity-badges/backwoods-cooking/>

This activity could meet the following requirements:

1. Show how to light a fire.
2. Help someone prepare a fire for cooking on.
3. Cook something using a billy can.
4. Cook something in the embers of a fire.
5. Cook something on a stick.
6. Show how to make the fire safe when you have finished with it. Extinguish the fire and make the area safe.



Scouts Outdoor Challenge Award

<https://www.scouts.org.uk/scouts/awards/outdoor/>

This activity could meet the following requirements:

3. Prepare and light an open fire
11. (f) Lead the cooking of a meal for the group and (h) Cook a backwoods meal with the group.



Explorers Survival Skills Activity Badge

<https://www.scouts.org.uk/explorers/activity-badges/survival-skills/>

This activity could meet the following requirements:

2. Demonstrate different techniques to light a fire.
3. Show how to build several different types of fire.