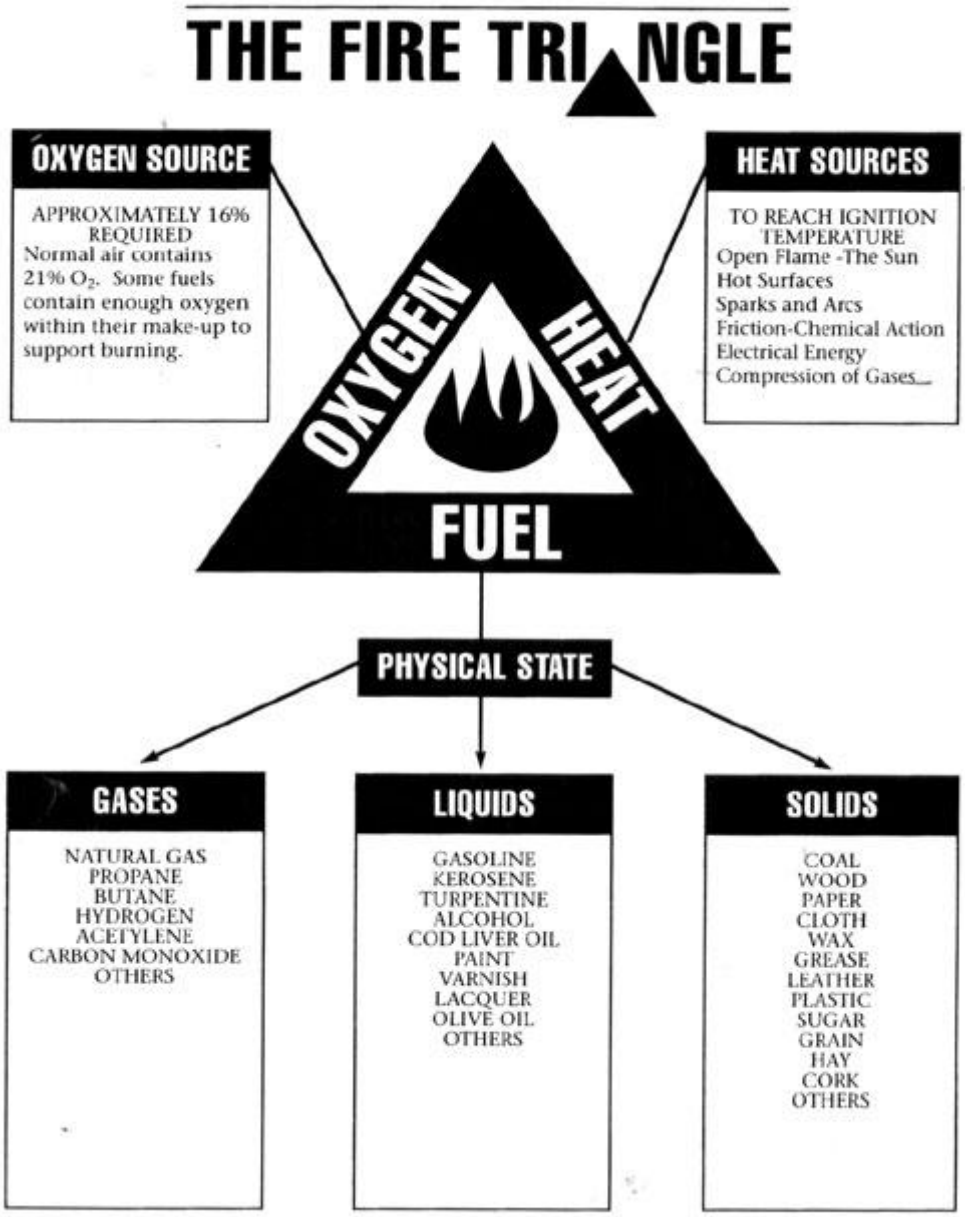
Fire Craft

Understanding the concept of the fire triangle is very important in correctly constructing and maintaining a fire. The three sides of the triangle represent:



If you remove any of these, the fire will go out. The correct ratio of these components is very important for a fire to burn at its greatest capability. The only way to learn this ratio is to practice.

Site Selection

You will have to decide what site and arrangement to use. Before building a fire consider:-

- The area (terrain and climate) in which you are in.
- The materials and tools available.
- Time: how much time you have?
- Need: why you need a fire?

Look for a dry spot that:-

- Is protected from the wind.
- Is suitably placed in relation to your shelter (if any).
- Will concentrate the heat in the direction you desire.
- Has a supply of wood or other fuel available.

Fire Material

You need three types of materials to build a fire: Tinder, Kindling, and Fuel.

Tinder is dry material that ignites with little heat, a spark starts a fire. The tinder must be absolutely dry to be sure just a spark will ignite it. If you only have a device that generates sparks, charred cloth will be almost essential. It holds a spark for long periods, allowing you to put tinder on the hot area to generate a small flame. You can make charred cloth by heating cotton cloth until it turns black, but does not burn. Once it is black, you must keep it in an airtight container to keep it dry. Prepare this cloth well in advance.

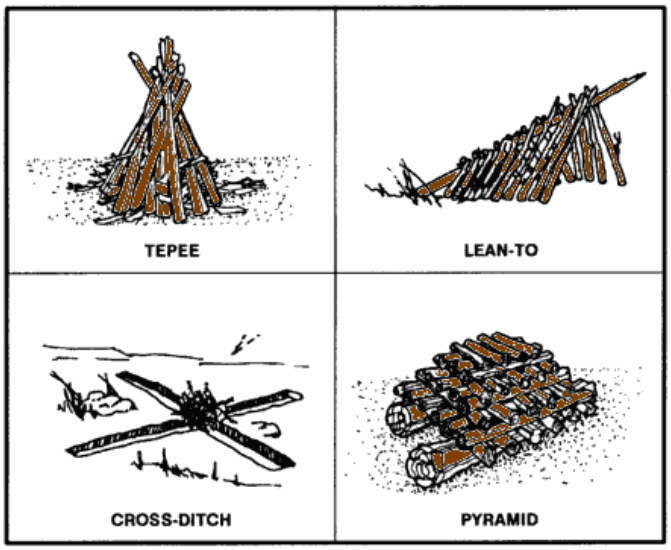
Kindling is readily combustible material that you add to the burning tinder. Again, this material should be absolutely dry to ensure rapid burning. Kindling increases the fire's temperature so that it will ignite less combustible material.

Fuel is less combustible material that burns slowly and steadily once ignited.

Tinder	Kindling	Fuel
• Birch Bark. • Shredded inner bark from cedar or chestnut. • Fine wood shavings • Dead grass, ferns, moss, fungi. • straw • sawdust • Dead evergreen needles • Bird down (Feathers) • Charred Cloth • Waxed paper • Cotton • Lint	• Small twigs • Small strips of wood • split wood • Heavy cardboard • Pieces of wood removed from inside of larger pieces • Wood that has been doused wit highly flammable materials i.e. petrol, oil, or wax	• dry standing wood and dry clean branches • Dry inside (heart) of fallen tree trunks and large branches • Green wood that is finely split • Dry grasses twisted into bunches • Peat dry enough to burn • Coal

Building a fire

There are several methods for building a fire, each of which has advantages. The situation you find yourself in will determine which fire to use.



Tepee
To make this fire, arrange the tinder and a few sticks of kindling in the shape of a tepee or cone. Light the centre. As the tepee burns, the outside logs will fall inward, feeding the fire. This type of fire burns well even with wet wood.

Lean-To
To build this fire, push a green stick into the ground at a 30-degree angle.
Point the end of the stick in the direction of the wind.
Place some tinder deep under this lean-to stick. Lean pieces of kindling against the lean-to stick. Light the tinder. As the kindling catches fire from the tinder, add more kindling.

Pyramid
To make this fire, place two small logs or branches parallel on the ground. Place a solid layer of small logs across the parallel logs. Add three or four more layers of logs or branches, each layer smaller than and at a right angle to the layer below it. Make a starter fire on top of the pyramid. As the starter fire burns, it will ignite the logs below it. This gives you a fire that burns downward, requiring no attention during the night.
There are several other ways to lay a fire that are quite effective. Your situation and the material available in the area may make another method more suitable.

Lighting Your Fire

Always light your fire from the upwind side. Make sure to lay your tinder, kindling, and fuel so that your fire will burn as long as you need it. Igniters provide the initial heat required to start the tinder burning. They fall into two categories: modern methods and primitive methods.