

## *Building a Fire*

### **Basic Elements**

The three basic elements for a fire are fuel, flame (or intense heat), and air (oxygen). To build a wood fire, different sizes of wood -- tinder, kindling, and fuel -- should be assembled to allow for air circulation.

- **Tinder:** any small piece of material that burns as soon as it is touched with flame; wood shavings are a good example.
- **Kindling:** larger in diameter than tinder; must be thin enough to catch fire quickly before tinder burns out, but large enough to ignite the larger fuel.
- **Fuel:** the larger wood that keeps fire going.
- **Fire starters** are highly flammable materials that ignite at the touch of a match:
  - egg carton -- waxed sawdust, lint, or wood shavings;
  - trench candles -- rolled newspaper, tie with string, dip in wax



### **Building the Fire**

- Choose a spot with no overhanging tree limbs, rotting stumps, logs, grass, or leaves; clear the ground to bare earth or rock in a 3 foot circle.
- Always have a large bucket of water with a stick sitting in it near the fire.
- Tie back long hair, tuck in hood strings, roll up loose sleeves, check for tied and tucked in shoelaces, do not wear clothing with dangling ends while building or tending a fire.
- Plan a fire just big enough to do the job so fuel will not be wasted.

## Fire structure:

1. Make a small triangle, with three pieces of kindling;



or a 4-sided log cabin continuing to build up in layers;



or make a free-standing teepee.

2. Leave a space between the 2nd and 3rd layers of the triangle or log cabin; or leave one wide space between 2 upright pieces of the teepee. This space is where to light the fire with your match.



3. Place a handful of tinder in the center of your structure.



4. Strike the match close to the wood and close to the space left in the structure. Insert the lighted match into the space provided and light the tinder. Shield the tinder so it gets just the right amount of breeze to ignite the structure and burn upwards.



For the Camporee fire-building event, build the structure below a string 8" above the ground. Flames must burn through a string 20" above the ground.

### Putting Out a Fire

Let a roaring fire die down then stir the remaining structure and ashes apart with the stick that has been sitting in the water bucket and hand sprinkle with water---do not pour the bucket of water on the fire. Repeat until when a hand is passed over the fire circle several inches above no warmth from wood pieces or ash is felt anywhere in the fire circle.

