How to build a 1 match fire

Campfire Basic #1 = Dry Fuel

- *Fuel used to start a campfire with must be perfectly dry.*
  Trying to use green wood from a living tree or fuel that is laying on damp ground is a common mistake of greenhorn campers. Never chop a tree down or cut branches from a living tree. Instead, gather dead tree branches that have already fallen to the ground. Keep in mind, however, that wood that is laying on the ground may have absorbed moisture from the soil, so, if it has been raining, hunt for the dead branches that are hanging in trees or are otherwise suspended above the ground. Hanging limbs may be wet, but the rainwater will not have had a lot of time to soak in too deeply. Since the inside is of the log is still dry, it is a simple matter to split the wood with an ax to provide yourself with a nights supply of dry fuel. Furthermore, dry tinder for fire starting can be made by whittling out a large handful of wood shavings.

Campfire Basic #2 = Airflow

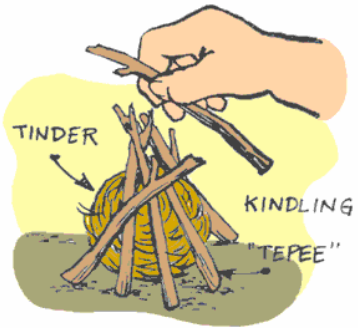
A campfire must have oxygen in order to burn. The only way you can get fresh oxygen to your fire is to build it so that air can easily flow through it. Listed below are two things you can do while building your fire that will dramatically increase the airflow to your campfire.

- *Stack your wood loosely so that air can easily flow through it.*
  A campfire with its wood stacked too tightly will do little more than smoke. Stack your kindling wood loosly so that there is plenty of room for the air to flow through them.
- *Make an air gap under the fire so that air can get in from below.*
  What does the air gap do for your campfire? Well, in the first few minutes after you light the fire, the heat from the flame will warm the air around it. Since warm air rises, that warm air will rise out of the top of the campfire. As the warm air rises out, it is replaced by fresh air from underneath which, in turn, gets hot and rises out. This cycle of warm air rising out and being replaced by fresh air from below is called the "draft" and creates a steady flow of fresh oxygen for the flame to "breath". An air gap underneath the fire makes it infinitely easier for the air to flow through it.
  To do this, lay sticks flat on the ground and space them an inch or two apart to make a platform for the firelay to set on. The sticks should be straight pieces an inch in diameter and eight to twelve inches long (or as long as they need to be to support the firelay). On top of the platform, stack the tinder and kindling for your campfire as you normally do. The spaces between the platform's sticks will serve as channels for the air to flow through to the underside of the fire. Eventually, the burning wood will collapse to the ground and fill the channels, but your fire will be well established by then.

Campfire Basic #3 = (Fuel thickness to heat) ratio

This is not as complicated as it sounds. Basically, all it means is that fuel will not burn unless your heat source will get it hot enough to burn. The thicker the wood is, the more heat that it takes to heat it up. A match does not produce a lot of heat. In fact, it is a very small source of heat. If you are going to get a campfire to light with the very first match, you must start with a very small or thin piece of fuel like paper, grass, or smaller-than-match size twigs. (but we, being woodsmen, don't use paper). A good rule of thumb given in the DVD Campfire Magic: How to Build One Match Campfires is to start off with a fuel that is smaller or thinner than a match. This match size or smaller fuel is called tinder, and, as long as it is dry, you know that it will burn with just a touch of a match.
Have you have ever started a fire, watched it burn a few minutes, then helplessly watched as it slowly burned itself out? My guess is that you probably tried to burn sticks that were too large for the available heat in the fire. Therefore, you should repeat after me: Each piece of wood that I add will be only slightly larger than the one before it; gradually increasing in size as the campfire's heat increases until the fire is hot enough to burn large logs. Otherwise, if you try to burn large sticks while the fire is still small, the fire will go out before the sticks get hot enough to burn. This is the number one reason why campfires fail to burn.

"Basically, one layer won't catch fire unless the previous layer provides enough heat to get it hot enough to catch fire"



One way to build a fire is to light the tinder and begin to add twigs to the fire that are, at first, very small. Larger and larger sticks are gradually added until the fire is at a full roar. However, I don't recommend hand feeding a fire this way because it involves hovering over a hot and smokey fire while guessing when to add more fuel to it. A much better way involves stacking the wood into a firebuild (or firelay) so that it feeds the proper size fuel to the fire automatically. However, since this is an article about the basics, I'll have to save the firelay for another day.