

FIRE TRIANGLE



To avoid fires, you need to know how they start, what kind of fires happen and how to put them out in a safe way. The fire triangle (or tetrahedron) is a simple way to understand the ingredients for most fires.

Fire is a chemical reaction that happens when a flammable object combusts and produces heat. There are three elements needed to start and keep a fire going - fuel, heat and oxygen.

Heat

Something to start the fire.

Natural heat sources such as lightning could start a fire. But most fires start because of people.

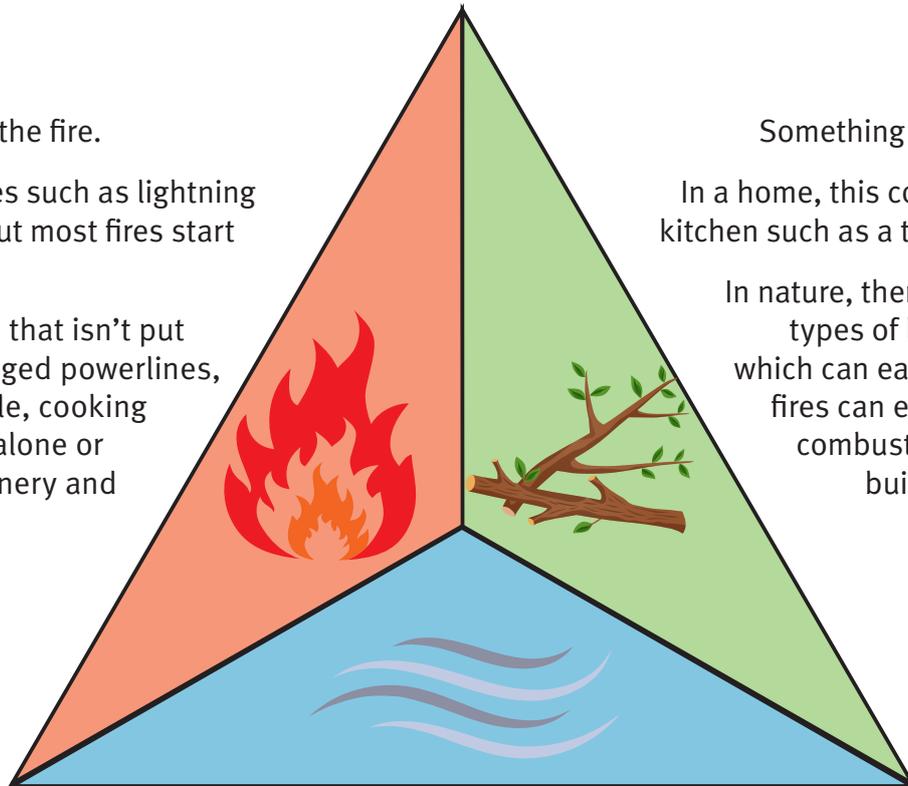
Such as a campfire that isn't put out properly, damaged powerlines, a cigarette or candle, cooking that has been left alone or sparks from machinery and power tools.

Fuel

Something that will burn easily.

In a home, this could be items in your kitchen such as a tea towel or curtains.

In nature, there are many different types of leaves and branches which can easily catch fire. These fires can easily spread to other combustible things like cars, buildings, and gardens.



Oxygen

Something to keep the fire going.

Oxygen supports the chemical reaction and helps the fuel burn.

When it burns, oxygen from the surrounding air mixes with the gases released from the fuel to make a flammable gas mix.

Wind will also help a fire burn and move.



Fuel catches fire when a heat source makes it hot enough. The oxygen then feeds the fire and makes it burn. To stop a fire, you need to remove one of these items.

