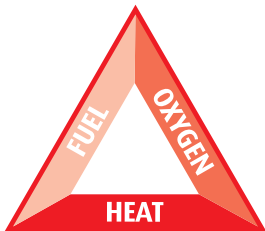


What is fire

FIRE is a chemical reaction and it needs **three** things for it to take place...



It is the result of fuel, heat and oxygen coming together, otherwise known as the FIRE TRIANGLE. Deprive the fire of any of them and it goes out. Keep them apart and the fire cannot start.

FUEL Something which will burn, in the form of either:

Solid such as furniture, plastics, paper.

Liquid such as cooking oil, nail varnish remover, petrol.

Gas such as propane or butane.

HEAT The heating and ignition of solids and liquids. The process of combustion takes place in two stages.

The first stage is when the solid or the liquid is heated to a temperature at which it gives off a flammable vapour.

The second stage is when this vapour is ignited by a flame or spark. When a flame touches a piece of paper it gives off a vapour, which quickly catches fire.

OXYGEN Before ignition can occur, the flammable gases or vapours have to mix with air. If there is too little air (oxygen), ignition cannot occur. Similarly, if too much air, the gas or vapour will be too dilute to ignite.

All of the opposite things are easily available:

Our homes, schools and workplaces are full of things that could burn (**fuel**), such as curtains, chairs and sofas, bookshelves, desks and blackboards. **Oxygen** is in the air all around us. **Heat** can be produced by many pieces of equipment in our houses and schools.

Once a fire has started and if it has an adequate supply of oxygen which is surrounded by material which can burn, it will spread.



Your chances of survival in a fire will depend on how quickly and safely you are able to react and escape. Most fires in the home can be prevented and a few of the common 'risks' are detailed in this section.