

A long-exposure photograph of a person standing in a dark field at night, holding a glowing steel wool fire. The fire creates a large, fan-shaped pattern of bright yellow and orange sparks that radiate outwards, forming a semi-circle. The person is silhouetted against the bright light of the fire. The background is a dark, clear night sky.

# Steel Wool

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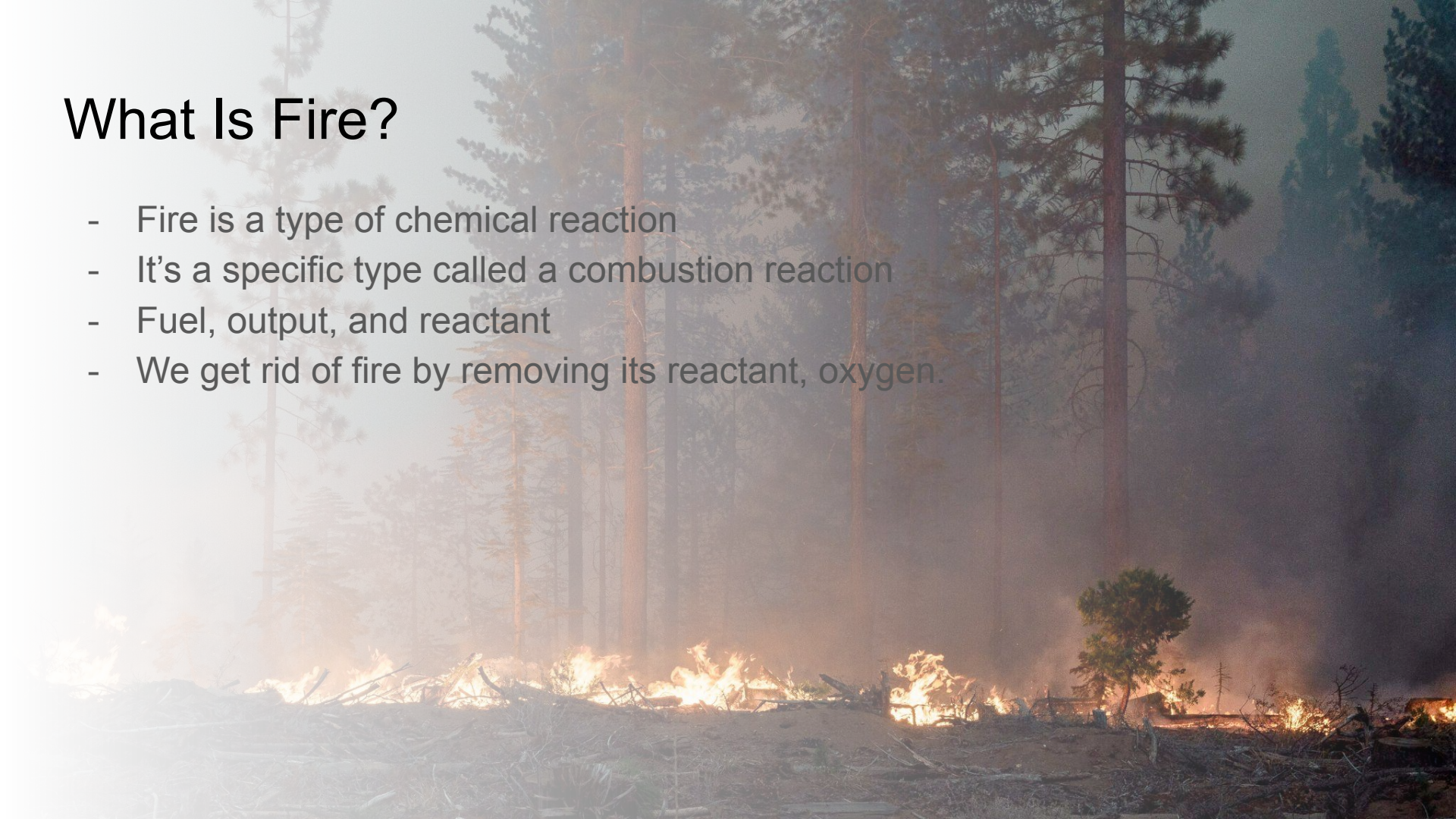
# Ingredients

- ❖ Thick and Thin steel wool
- ❖ Aluminum Trays
- ❖ 9-volt batteries



# What Is Fire?

- Fire is a type of chemical reaction
- It's a specific type called a combustion reaction
- Fuel, output, and reactant
- We get rid of fire by removing its reactant, oxygen.



## Steel Wool:

- Steel wool is 98% iron and 2% oxygen
- The oxygen is trapped inside of the wool
- The steel heats up to 1535 degrees celsius, so you shouldn't touch it or you will be severely burned

# Procedure:

1. Take a wool from the bags. Only take one thin and one thick!
2. Place the steel wool in the tray
3. Touch the tips of the 9-volt battery to the wool and watch the chemical reaction take place
4. Do not touch it, if you do you will get an extremely severe burn
5. Try blowing on it as the reaction happens. Does it speed up or slow down?

# Questions:

Why do you guys think the thin wool burned better than the thick one?

If you did blow on it, what effect did it have? Why would this make the reaction happen faster?

Thank You For Listening