

Research Question: What happens in the combustion of a metal?

Introduction

Using a small amount of iron filling, I will make a controlled combustion reaction.

Procedures

First, place aluminum foil under oil lamp. Second, fill oil lamp with ethanol and light with match. Third, hold iron fillings from container into flame, being careful to not dump and to not peer over or into flame. Note any changes from before and after in the appearance of the iron fillings. Lastly, put out the flame.

Results:

After burning the iron darkened in color. It also sparkled when it burned.

Conclusion:

The combustion of metal is a chemical reaction. When iron was burned, it turned into rust or iron oxide.

Vocab:

Combustion reaction – a reaction that involved the burning of a reactant, with oxygen as the other reactant to provide fuel for the fire.

Metal – an element to the right of the “staircase” on the Periodic Table having specific properties, such as being shiny and malleable as well as conductive of heat and electricity.

Homonuclear diatomic – specific elements that exist, in the molecular state, as two atoms bonded rather than a single atom.