



## BURNING STEEL WOOL

### SCIENCE SAFETY

PLEASE follow these safety precautions when doing any science experiment.

- **ALWAYS** have an adult present.
- **ALWAYS** wear the correct safety gear while doing any experiment.
- **NEVER** eat or drink anything when performing any experiment.
- **REMEMBER** experiments may require marbles, small balls, balloons, and other small parts. Those objects could become a CHOKING HAZARD. Adults are to perform those experiments using these objects. Any child can choke or suffocate on uninflated or broken balloons. Keep uninflated or broken balloons away from children.

### INGREDIENTS

- Very Fine Steel Wool
- 9 Volt Battery
- Aluminum Foil

### INSTRUCTIONS

**STEP 1:** Place a large piece of aluminum foil on a flat surface.

**STEP 2:** Pull apart a steel wool pad and place the steel wool in the middle of the aluminum foil. Describe and classify the steel wool by its observable properties.

**STEP 3:** Ignite the steel wool by touching the two battery terminals, of the 9-volt battery, to the steel wool and observe. Describe and classify the steel wool by its observable properties.

**STEP 4:** Gently blow on the ignited steel wool and observe. Describe and classify the steel wool by its observable properties.

**STEP 5:** Allow the steel wool to cool and observe. Describe and classify the steel wool by its observable properties.

### EXPLANATION

The oxygen in the air combines with the iron, in the steel wool pad, to form rust.



### SCIENCE BACKGROUND

Matter is anything that has mass and takes up space. Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. Measurements of a variety of properties can be used to identify materials. Different properties are suited to different purposes.

### I CAN STATEMENTS

- ✓ I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

### NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter

