

# MYTHBUSTERS

## & The Scientific Method

1. What myth are Jamie and Adam trying to bust?

**Purpose:** Will welding slag make a lighter explode?

2. What do they think will be the outcome of the experiment? Explain.

**Hypothesis:** The lighter will explode because it has

**Background Information** (fuel, oxygen and an ignition source)

3. Describe how they tested the myth.

**Experimentation:** ① Set up the welder to create sparks.  
② Positioned a lighter under the tip of the welder so slag falls on it.

1) Independent Variable: Type of Lighter

2) Dependent Variable: Explosion

3) Constants: Same welder, Same amount sparks, Same position of lighter

4) Control: a lighter at room temperature.

4. What observations did they make during their testing?

**Observations:** plastic melted, gas bubbles were produced, flames } Qualitative Observations

5. How did they interpret what they saw?

**Analysis:** The plastic melted releasing the fuel which was ignited by the welding slag.

6. What did Jamie and Adam conclude about the myth?

**Conclusion:** Welding slag can make a disposable lighter explode. Proving my hypothesis correct

7. Do the Mythbusters still have at the end of the show? Do you?