



1. Assemble the burner setup and light the fuel, as shown in Figure 1.
 - a. Gather the burner fuel, aluminum pie plate, burner stand, beaker, 2 oz. aluminum cup, and lighter or matches.
 - b. Place an aluminum pie plate on a solid work surface away from flammable objects.
 - c. Set the burner stand towards the back of the pie plate.
 - d. Fill the beaker with hot tap water as directed in the experimental protocol and place it on the center of the stand.

Note: If the instructions do not specify the required volume of water, fill the beaker until it is half full.

- e. Uncap the burner fuel and set cap aside. Place the burner fuel on the pie plate just in front of the stand.
- f. Use matches or a lighter to ignite the fuel. BE CAREFUL- the flame may be nearly invisible.
- g. Gently slide the fuel under the stand without disturbing the beaker.
- h. The small, 2 oz. aluminum cup will be placed over the fuel to extinguish the flame. Set the aluminum cup next to the burner setup so you are ready to extinguish the flame at any point.



Figure 1. Burner setup.

2. Allow the water to come to a rolling boil.
3. After the water has begun to vigorously boil, use the small, 2 oz. aluminum cup to extinguish the burner fuel flame. See Figure 2.
 1. Do not touch the metal stand or the beaker; they may be hot.
 2. Carefully slide the burner fuel canister out from underneath the burner stand. The sides of the burner fuel canister will be warm, but not hot.
 3. Place the aluminum cup directly over the flame to smother it. The cup should rest on top of the fuel canister, with little or no smoke escaping. Do not disturb the burner stand and beaker.
 4. Later, when you are cleaning up the materials and the burner fuel is completely cool, remove the aluminum cup and place the plastic cap back

on the fuel. Ensure that the plastic cap “snaps” into place to prevent fuel leakage and evaporation. The aluminum cup and fuel may be used in other experiments.



Figure 2. Extinguishing burner flame with metal cup.