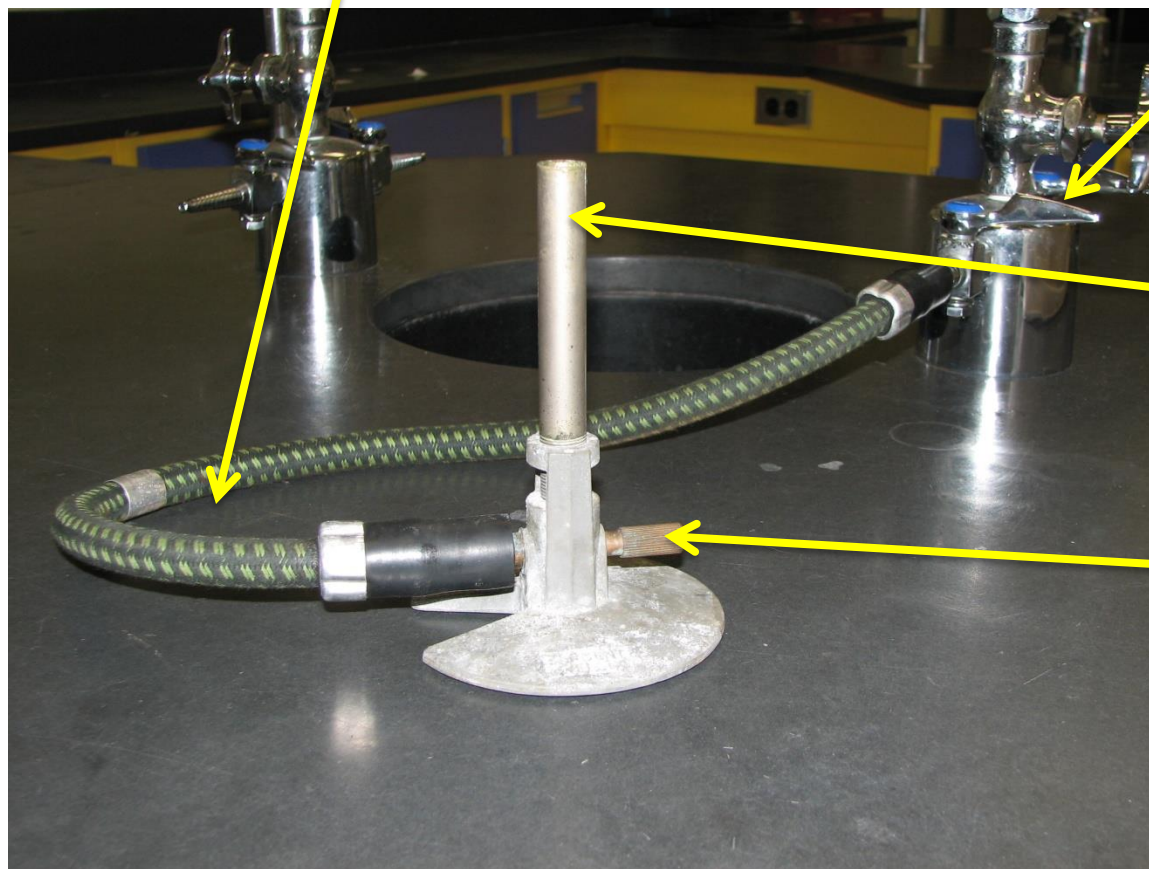


Technique – Bunsen Burner Setup

Burner Tubing - should have no cuts or deep cracks so that gas would leak.



Main gas valve – turns gas on or off

Barrel – adjusts air

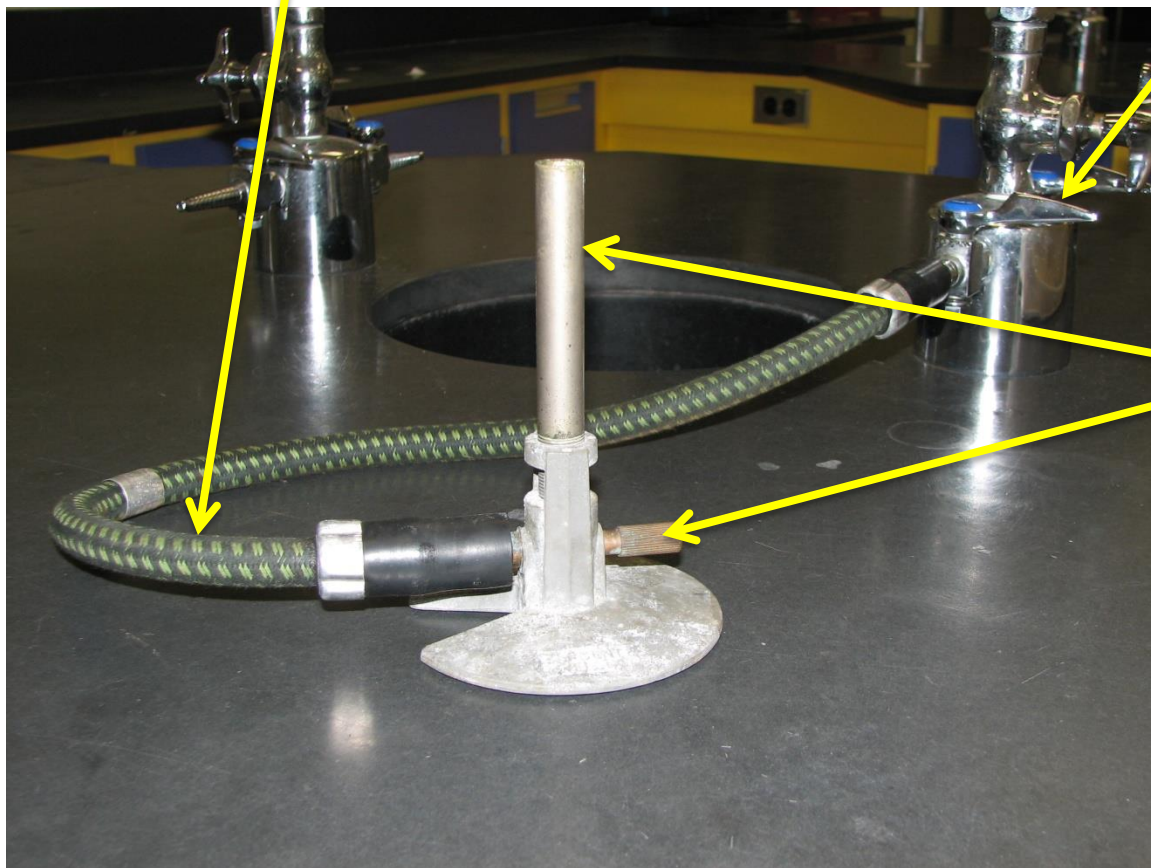
Needle valve – adjusts fuel (gas) and height of flame

Technique – Bunsen Burner Setup

1. Examine the Bunsen burner tubing for cuts and deep cracks.

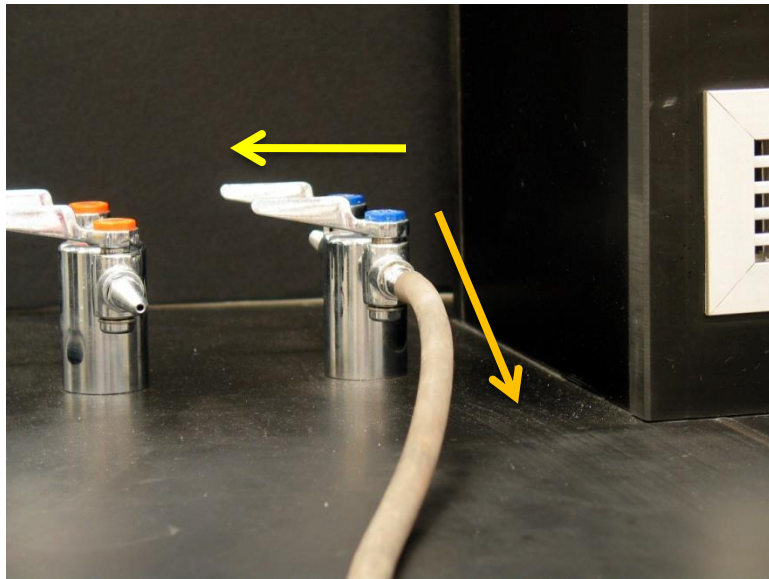
2. Attach the burner tubing securely to the main gas valve.

3. Screw the barrel and the needle-valve all the way in (closed), then OPEN then about 1 turn.

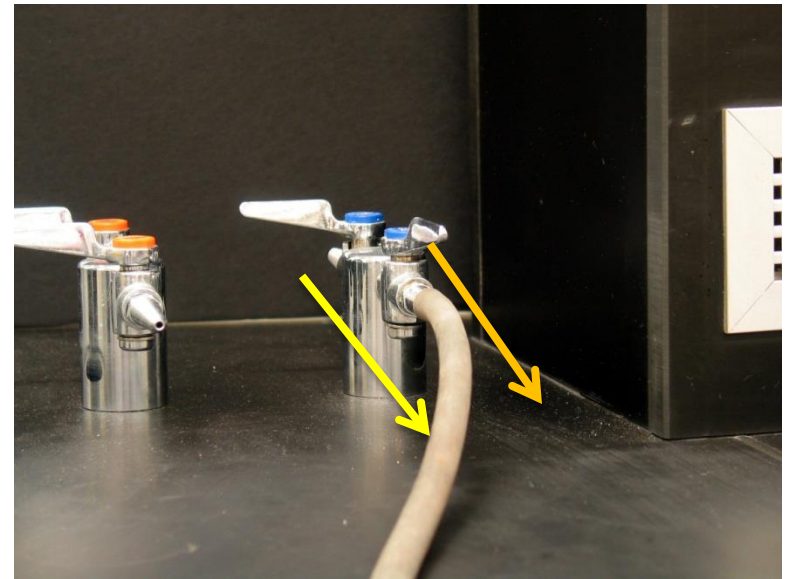


Technique – Lighting a Bunsen Burner

4. Turn the petcock (*main gas valve handle*) until it points straight, toward the rubber hose, and then.....



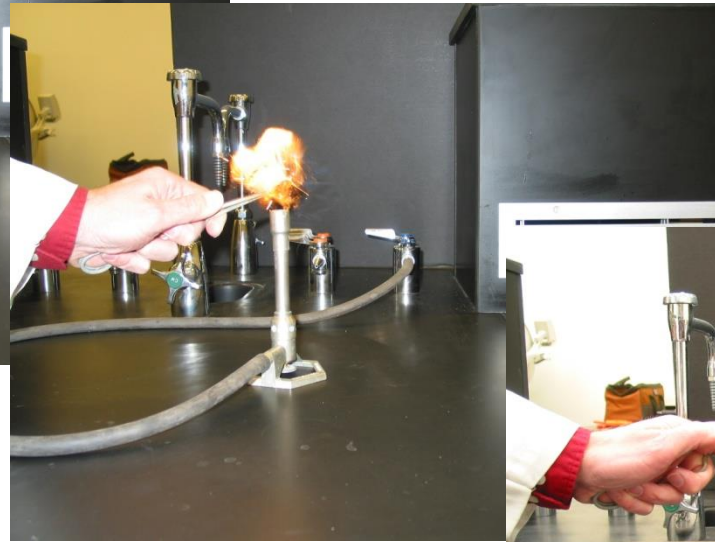
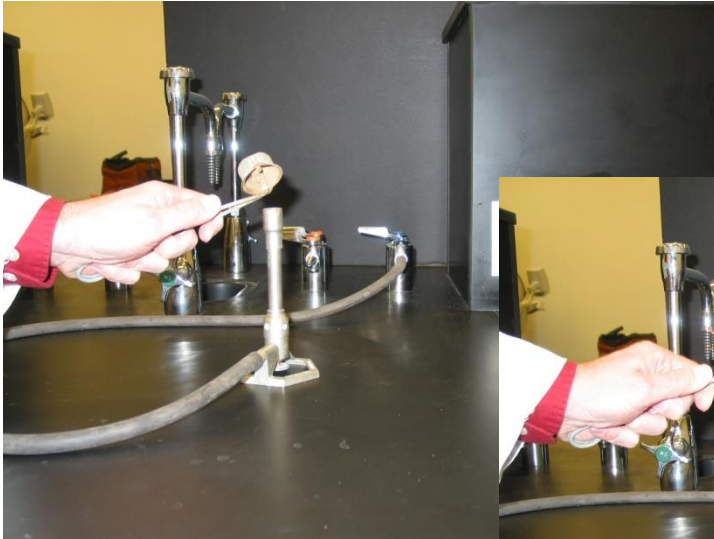
Closed



Open

Technique – Lighting a Bunsen Burner

..... Hold a striker just above the barrel top, and squeeze the striker handle to create a spark.

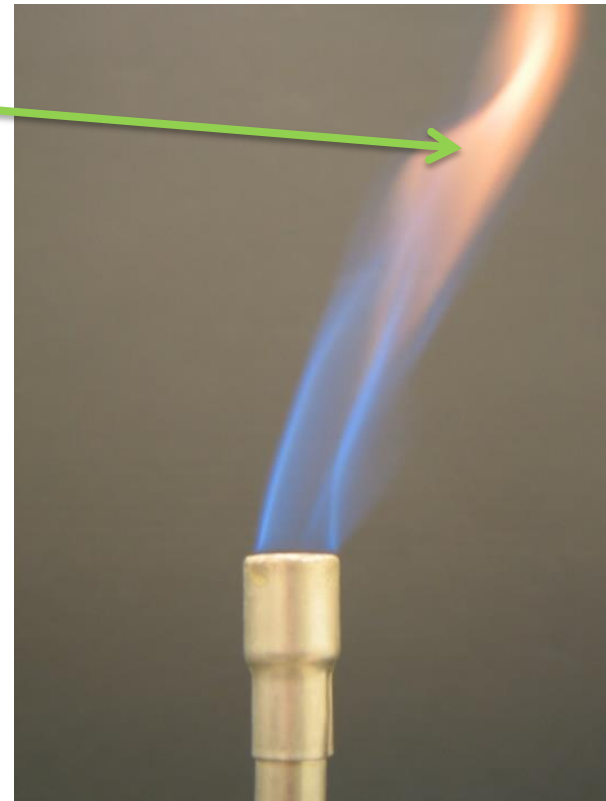


Technique – Adjusting a Bunsen Burner

5. Adjust the flame. With the barrel screwed all the way in, the flame will be very “cool” and yellow. Adjust the flame with the needle-valve (fuel) and barrel (air).

Yellow, “**luminous**”
flame

- Dirty
- Not very hot



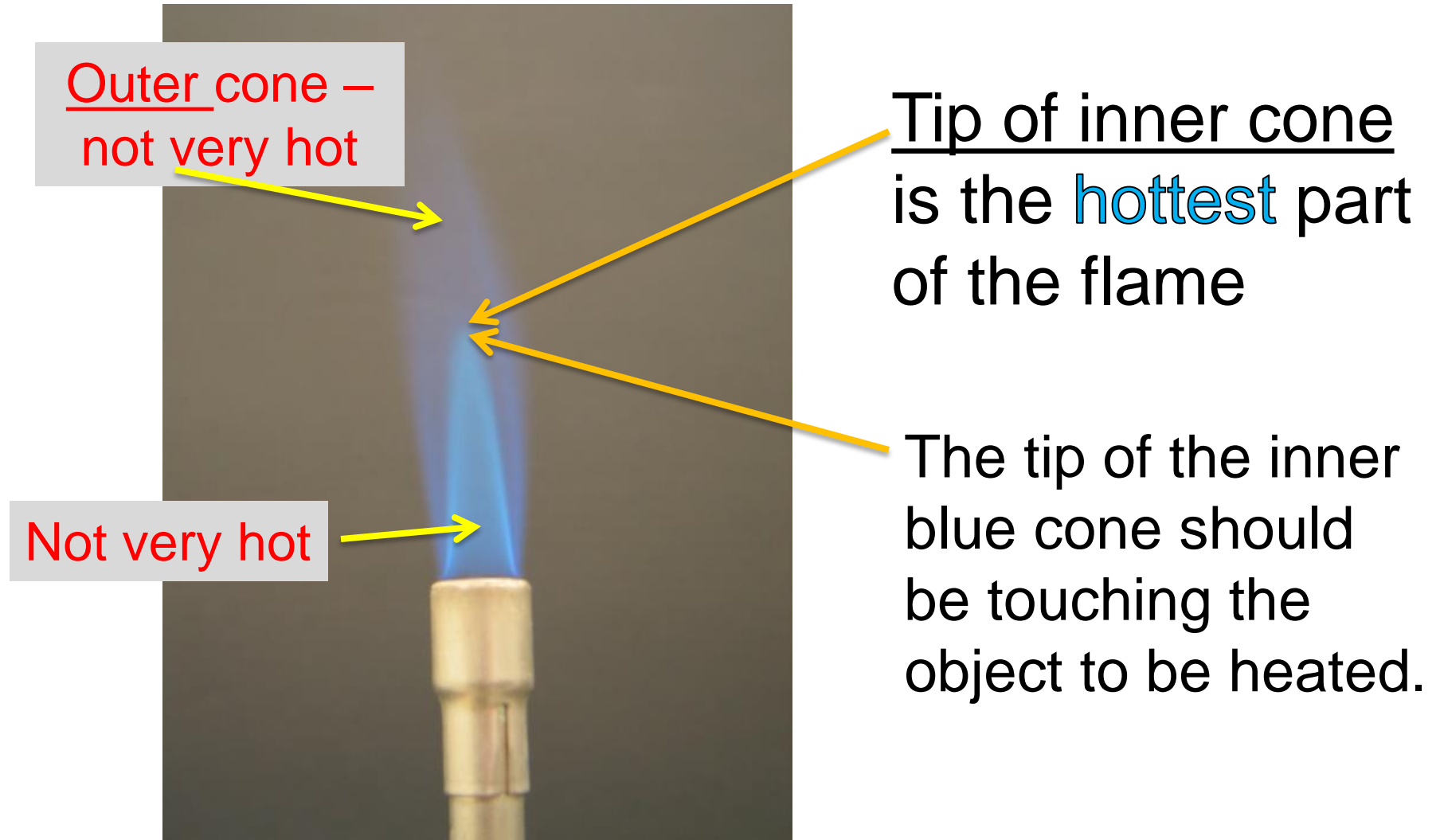
Technique – Adjusting a Bunsen Burner

6. With the barrel screwed all the way in, the flame will be very “cool” and yellow. To adjust the flame the needle-valve (fuel) and barrel (air) will need to be adjusted.
 - ✓ Unscrew the **barrel** (holding the base of the barrel) until the flame is blue and all yellow is gone.
 - ✓ Don't add so much air that you hear a “roar.” Your flame should be “**silent**” and **blue**.

Technique – Adjusting a Bunsen Burner

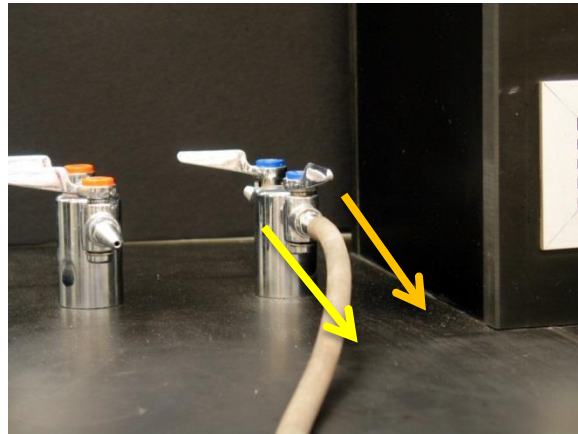
6. With the barrel screwed all the way in, the flame will be very “cool” and yellow. To adjust the flame the needle-valve (fuel) and barrel (air) will need to be adjusted.
 - ✓ The height of the flame can be raised by opening the **needle valve** (fuel).
 - ✓ To most efficiently heat a sample, the tip of the inner blue cone should be touching the object to be heated.

Perfect Flame - Silent, Blue (Non-luminous)

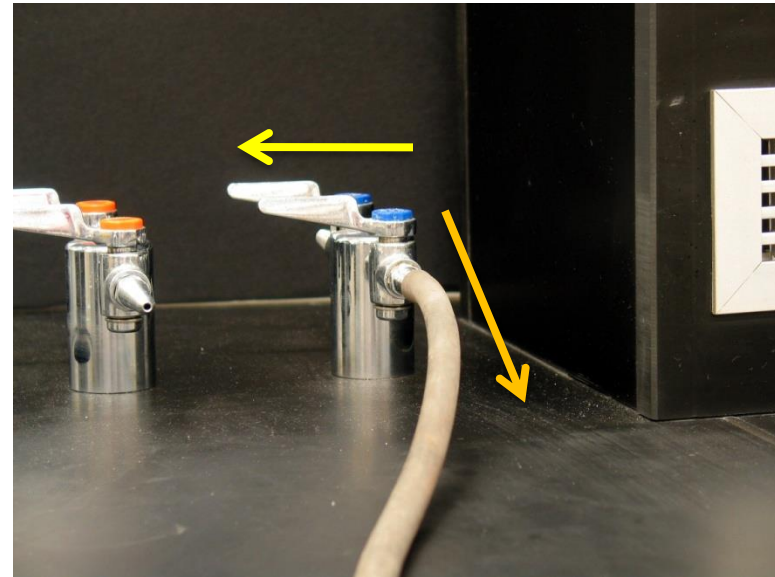


Technique – Turning Off a Bunsen Burner

7. Turn the petcock (*main gas valve handle*) until it points perpendicular to the burner tubing, all the way to the left *OR* all the way to the right.



Open



CLOSED

- ✓ Never leave a lit Bunsen Burner unattended.

