

Station 2: Convection Cell

Materials:

- Clear, 500 mL beaker filled with water containing pencil shavings or parsley flakes settled on the bottom
- Bunsen burner and striker
- Hand and eye protection (safety glasses and oven mitt or tongs, etc.)
- Blue and red colored pencils

Procedure:

1. Set the beaker on the ring stand.
2. Wearing hand and eye protection, use the striker to light the burner.
3. Position the burner so that the flame is near one edge, not centered.
4. Note what happens to the shavings in the water after you put the burner under the beaker. Draw the behavior of the particles on the activity sheet using the colored pencils. Use the red pencil to show where the particles are moving upwards and blue for where they are moving downward.
5. Extinguish the burner and, using hand protection, move the beaker of water to the side to cool. (Be careful not to touch the ring stand as it will be hot.)