

**Electrolysis of H2O.**

**Chemicals available:**

1.0 M Na2SO4 and Bromothymol Blue

OR

1.0 M NaCl (won’t change colors).

0.1% Bromothymol Blue

**Materials for demonstration provided in kit:**

Ring stand, clamps and test tubes.

6V batter.

Wires with alligator clips.

Small graduated cylinder

Beaker

Adjustable height lab jack

**Materials used for multiple demos to add in**: NONE

**Materials you must grab immediately before:**  NONE

**Procedure for in class demo**:

Before class starts:

Put chosen solution in beaker

~800 mL of NaCl ***OR***

~800 mL of Na2SO4 and 15 mL Bromothymol Blue solution

Fill testtubes with chosen solution and clamp upside down in solution.

Insert exposed wire end into test tubes. Let alligator clip side hang freely outside the beaker until ready to use power.

When ready to start the procedure:

Clip alligator clips to the electrodes and allow to run.

Suggested: start processes before fully discussing with the students, it will take a bit of time to run, giving time for lecture/discussion/questions.

**Waste:**  Solutions can be reused. Place back in original bottle.