



## Time / Cost Estimate

### Time:

**Option A: Prep - 15 min**

**Wait - 24 hr**

**Active - 1 hr 30 min**

Option A is the time required if the students will be preparing the solutions. The estimated time for prep work in option A is only the time required to cut the vegetables and prepare the power cord. The active time will be split over two classes. During the first class, allocate 10 minutes for explanation, 30 minutes for the students to make the solution and 10 minutes for clean up. An overnight soaking is then required. A second class will be needed for the activity and explanations.

**Option B: Prep - 1 hr 30 min**

**Wait - 24 hr**

**Active - 45 min**

Option B is the time required if the instructor will be preparing the solutions. An overnight soaking of the vegetables is required. 45 minutes will be needed for the activity and explanations.

**Initial Cost: \$26.00 - \$109.00**

The majority of the expense for this activity is from the purchase of the metal salts, in particular copper chloride. The lower cost estimate reflects the purchase of only one metal salt, sodium chloride. The majority of the metal salts can only be purchased in larger quantities than what is necessary for one activity. This results in a higher initial cost, but the cost in future years will be lower. The salts will be viable for many years if stored correctly, avoiding contact with moisture.