

FRUIT CELLS

Purpose

To test the ability of fruits and vegetables to act as electrolytes

Procedure

- 1 Choose one fruit or vegetable. Insert the two different electrodes into the fruit about 1 cm apart. Push them down to a depth of about 2 cm, making sure they remain about 1 cm apart.
- 2 Use the connecting wires to connect the electrodes to the voltmeter. Record the reading on the voltmeter scale.
- 3 Predict which fruit or vegetable will produce the largest voltage. Test your prediction by repeating steps 1 and 2 with the different fruits and vegetables.

Questions

- 4 What do you think would happen if you reversed the connections on the electrodes? Explain.
- 5 Would it be possible to use two or more fruits linked together to produce voltage? Draw a diagram of how you might accomplish this, and predict the voltage results. Test your prediction by connecting several fruits to a voltmeter.

Materials & Equipment

- straight pieces of copper wire (electrode)
- straightened paper clips (electrode)
- connecting wires
- voltmeter
- various fruits and vegetables (e.g., lemons, potatoes)

