

## Fruit Clock Acidic Fruit Powered Clock

1014190

## Description

A potato fruit battery is an electrochemical battery, otherwise known as an electrochemical cell. An electrochemical cell is a cell in which chemical energy is converted to electric energy by a spontaneous electron transfer.

In the case of the potato, the zinc in the nail reacts with the copper wire. The potato acts as a sort of buffer between the zinc ions and the copper ions. The zinc and copper ions would still react if they touched within the potato but they would only generate heat. Since the potato keeps them apart, the electron transfer must take place over the copper wires of the circuit, which channels the energy into the clock.

## Setup

Setup of this unit is extremely simple.

- 1. Place your desired fruit or potato into the cups on either end of the clock.
- 2. Insert the red wire into one of the fruit.
- 3. Insert the green wire into the other fruit.
- 4. Insert the black wire into the fruit so that it bridges the two fruits together.

At this point the clock should now be powered and working

## Setting the time

On the front of the clock, below the screen there are three buttons.

M: Is used to, cycle through the modes, Time, Stopwatch & Set Alarm Hours and Minutes

**S:** Is used to, in time/clock mode set alarm, in Stopwatch it resets the timer, in set time it allows cycling between Hours and minutes.

**D**: Is used to, in stopwatch to start and stop the timer, in set time it is used to move hours and minutes forward one unit.