



Betavoltaics

STEM Sims

Lesson 2: Energy Source

Energy is defined as the ability to do work. Direct current sources supply electrical energy through the transformation of chemical or some other kind of energy. Do all DC sources have identical energies?

Doing the Science

1. Start the Betavoltaics Simulation by clicking on the “Sim” tab.
2. Click on one of the direct current sources located at the top of the screen.
3. Click the red “Start” button on the source testing device.
4. Record the source name and the amount of energy in Table 1.
5. Repeat steps 2-4 above, until all sources are tested. Make sure to record your data in Table 1.

Table 1. DC Sources’ Power

DC Source	Energy (Watts×hours/kg)

Do You Understand?

1. Which DC source supplied the greatest amount of energy per unit mass? Which source supplied the least amount of energy?
2. Discuss how a source can have a large energy value, yet deliver a small amount of power.