Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Lesson 1: Powerhouse**

Direct current sources are required for many devices in the home and in a variety of other applications. Many common appliances from music players to heart pacemakers require some sort of battery to power the device. Can you determine which source supplies the greatest power?

**Doing the Science**

1. Click the “Simulation” button to open the Betavoltaics sim.

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 power it supplied 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** | **Power Supplied (Watts)** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Do You Understand?**

1. Which DC source supplied the largest amount of power? Which source supplied the least amount of power?

2. Discuss how power is different from energy.