



A typical car battery consists of six lead-acid cells. Each cell has a potential difference of 2.05 V across it. The negative electrode is at a potential of  $-1.685\text{ V}$ , while the positive electrode is at a potential of  $+0.365\text{ V}$ . What is the change in electric potential energy for one electron that is moved from the positive to the negative electrode of one of the cells?

Why?

**Check your Why? with Mr. C before continuing.**

How?

**Show all work including substitution with units.**

Open the short cut **E Pot 2** in the folder on one of the lab stations.  
Enter the answer you found above. Check your answer by hitting the check button.  
If your answer is not correct follow the interactive steps below the problem to work through the solution. Write the correct solution on the back of this page.