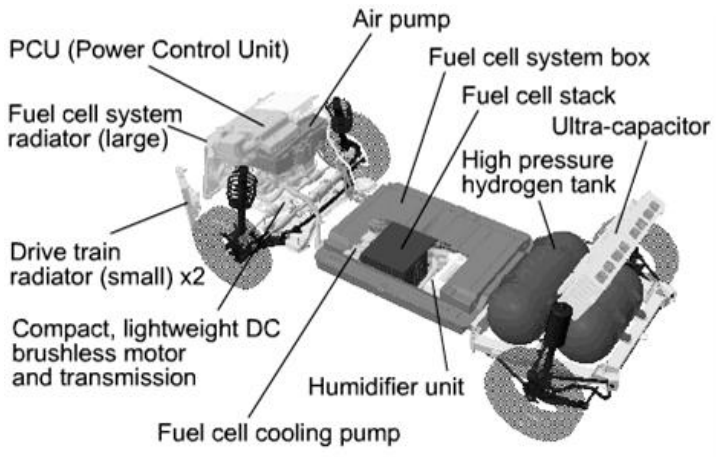
Interactive Problem Cap 1

Name_____ Block____



The ultracapacitor in the Honda FCX fuel-cell car has a huge capacitance of 8.00 F, yet it is still small enough to fit right behind the back seat of the car. If you were to construct a parallel-plate capacitor with two plates separated by a 1.00 mm air gap, what area would the plates need in order to have the same capacitance as Honda's ultracapacitor? (Hint: It would not fit behind the seat!)

Why?

Check your Why? with Mr. C before continuing.

How?

Show all work including substitution with units.

Open the short cut **IP Cap 1** 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.