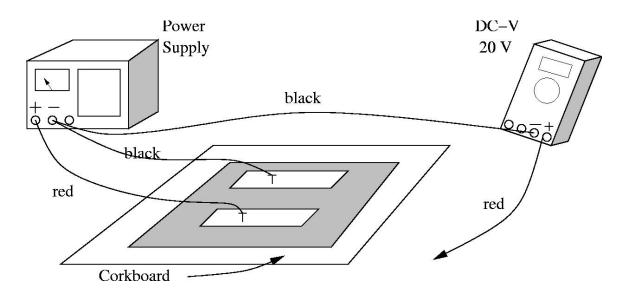
## **Electricity and Magnetism Module 3 – Equipment List**

The following items are required for Activity 9 - Electric Field Mapping.

No prior setup is required for this module. The students will set up the apparatus as shown in the diagram below.

## Equipment needed for each group of students:

Item	Quantity
Power supply	1
Multimeter (with 200 V DC range; 20 V DC as shown below may be insufficient)	1
Black wire with a piggy-back banana plug on one end, and an alligator clip on the	1
other end (to connect power supply to first conducting push pin)	
Red wire with a piggy-back banana plug on one end, and an alligator clip on the	1
other end (to connect power supply to second conducting push pin)	
Black wire with a banana plug on <i>both</i> ends	1
(to connect negative plug of power supply to negative plug of multimeter)	
Red wire with a banana plug on one end and a needle or banana plug on <i>the other</i>	1
end (connect one end to positive plug of multimeter)	
Corkboard	1
Black conductive paper with cm grid (e.g., Pasco PK-9025A)	4
Conducting push pins (silver painted)	2
Pre-prepared conductive paper (e.g. Pasco PK-9025A painted with silver ink	1 each
Pasco PK-9031B). The next two pages show the way they should be painted.	
Ruler	1



Kimberly Strong, 5 December 2007. Last revision February 22, 2009 by DH.

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