

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 other end (to connect power supply to first conducting push pin)	1
Red wire with a piggy-back banana plug on one end, and an alligator clip on the other end (to connect power supply to second conducting push pin)	1
Black wire with a banana plug on <i>both</i> ends (to connect negative plug of power supply to negative plug of multimeter)	1
Red wire with a banana plug on one end and a needle or banana plug on <i>the other</i> end (connect one end to positive plug of multimeter)	1
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 Pasco PK-9031B). The next two pages show the way they should be painted.	1 each
Ruler	1





