

## 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





