

Title: To set up a simple electric circuit and use appropriate instruments to measure current, potential difference (voltage) and resistance, and establish the relationship between them (OP50)

Student Name: _____

Other students in Group: _____

Preparation and planning

Apparatus/resources needed _____

What am I going to vary in the experiment (the independent variable)? _____

What do I expect will vary with the above (the dependent variable)? _____

What *else* might change as I adjust this variable (think of light bulb)? _____

What I am going to control (keep constant/not allow change) in the experiment ? _____

Procedure

Labelled Diagram – To investigate how the current flowing in a conductor changes with the voltage applied across it.

Outline of method _____

Safety Precautions taken _____

Data, Results and Conclusions

Voltage (V)/volts	Current (I)/amps	V/I	Resistance (R)/ohms

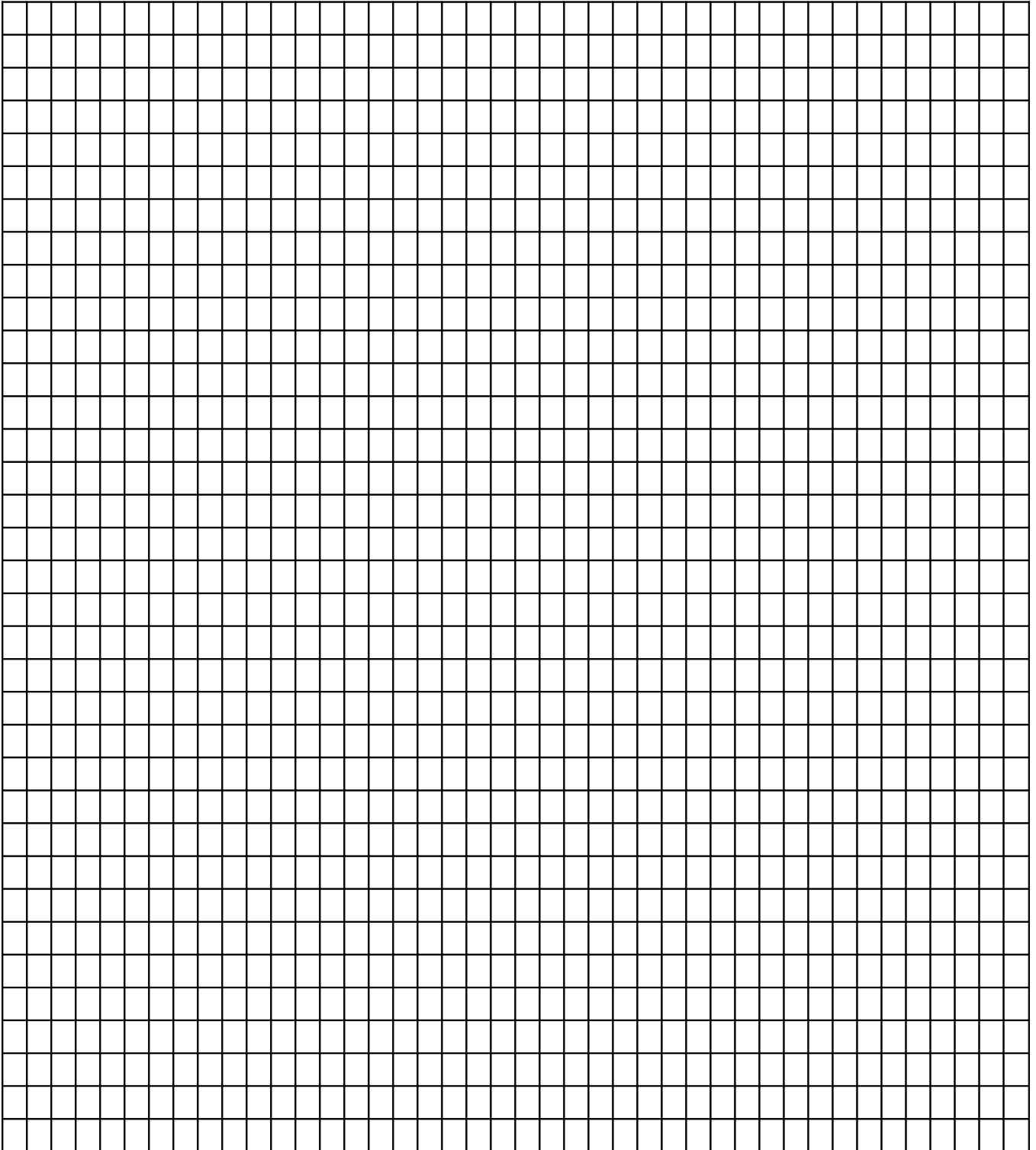
Draw a graph of the above results on the next page. Describe and explain the shape of the graph _____

Using the graph, work out the resistance of the conductor (show workings on graph page). _____

What does Ohm's Law state? _____

General comments _____

Graph of Voltage, V , across the conductor versus current, I , flowing through the conductor



Teacher Name: _____

Date of completion: _____

Student signature: _____