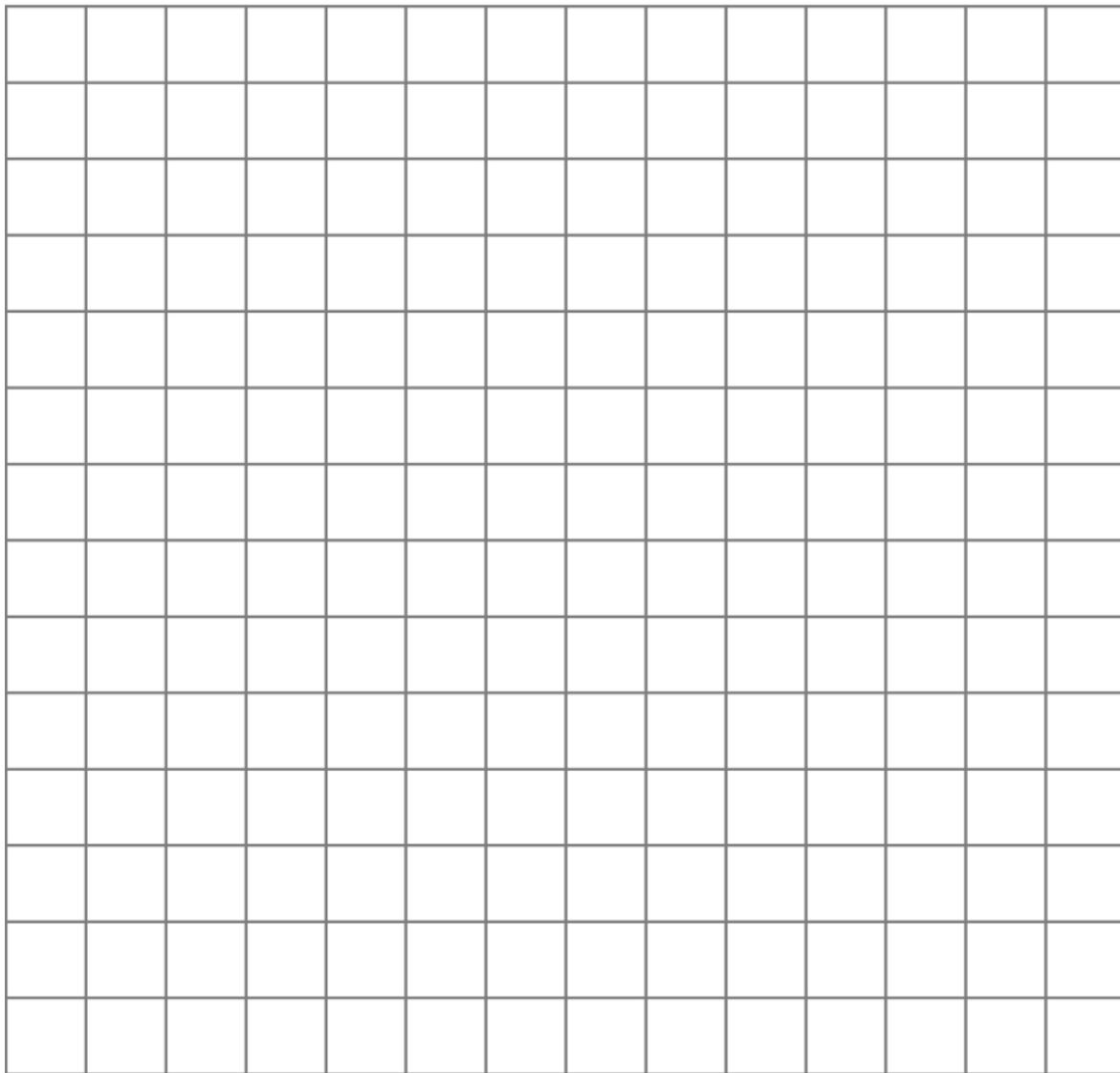


Ohm's Law Worksheet Regents Physics

1. Determine the direction of the electron flow
2. Define positive and negative terminals of the battery
3. What do black dots within the wire represent?
4. Complete the table:

<i>Voltage</i>	<i>Current</i>	<i>Resistance</i>
0.1 V		800 Ohms
2.0 V		
3.0 V		
4.0 V		
5.0 V		
9.0 V		
0.1 V		405 Ohms
2.0 V		
3.0 V		
4.0 V		
5.0 V		
9.0 V		
0.1 V		40 Ohms
2.0 V		
3.0 V		
4.0 V		
5.0 V		
9.0 V		

5. Graph your data below. Plot the voltage V as the ordinate (y-axis) and the current I as the abscissa (x-axis).
6. What kind of relationship did you obtain?
7. Calculate the slope, if possible



8. What is the physical meaning of the slope of the Current-Voltage graph?

9. Is it possible to decrease the resistance of the wire without changing the material it is made of?