

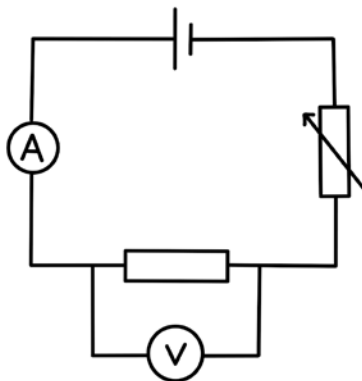
OCR A Physics GCSE

Topic P9: Practical Skills

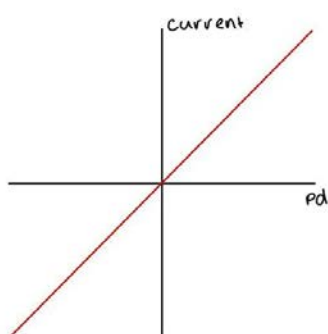
PAG 6



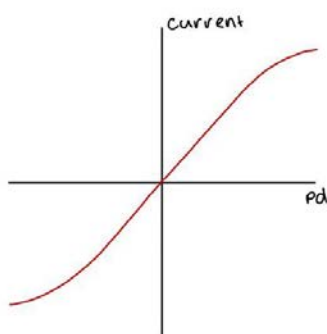
PAG 06: Investigating the IV characteristics of circuit elements.



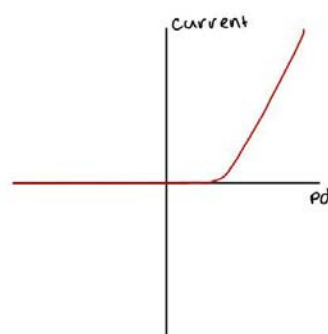
1. Set up the circuit as shown above with a **variable voltage supply**
2. Set the EMF at intervals from **0 to 6 V**, and measure the **potential difference** and **current** across the fixed resistor
3. **Reverse the connections** to the power supply to obtain negative values of V
4. **Repeat** the process three times and find **mean** values of I and V
5. Plot a graph of **I against V** and draw a line of best fit
6. Replace the fixed resistor with a **filament lamp, thermistor, LDR or Diode** and repeat procedure to obtain their I-V characteristics.



Resistor at constant temperature



Filament lamp



Diode

