KEC

## **K Education Centre**

## **GCSE Physics – Particles**

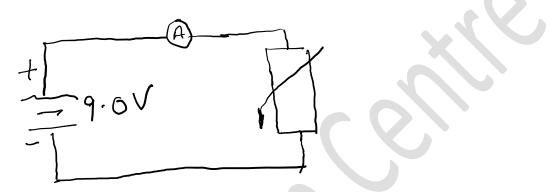
P4: Electric Circuits – Assignment 2

Assignment Questions

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## P4 : Electric Circuits( Components Characteristics & Series Circuit)

- Q: Draw the current potential difference graph for a diode.
- Q : Define Ohms law. Give example.
- Q : A thermistor is connected to a battery as shown in the diagram below.



- i) At 20 ° C the current through the ammeter is 0.8 A, and the potential difference across is 9.0 V. Calculate its resistance at this temperature.
- ii) What will happen to the ammeter reading if the thermistor's temperature is increased?
- Q: A 3.0 V cell is connected to a 4.0  $\Omega$  and 5.0  $\Omega$  resistor in series with each other.
  - i) Draw the circuit diagram for this arrangement.
  - ii) The current through the resistors.
- Q: Explain why adding more resistors in series increase the total resistance.