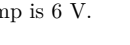
# Current and circuits

International Baccalaureate · IB Diploma · Physics · HL · Vocabulary in context

| Word | Example |
|---|---|
| **electromotive force** /ɪˌlektrəʊˈməʊtɪv fɔːs/ | The battery has an **electromotive force** of 9 V.<br> |
| **chemical cell** /ˈkemɪkl sel/ | A torch battery is a **chemical cell**. |
| **solar cell** | A **solar cell** turns sunlight into electricity. |
| **electric current** /ɪˈlektrɪk ˈkʌrənt/ | An **electric current** flows when the switch is closed. |
| **charge carrier** /tʃɑːdʒ ˈkærɪə/ | In a metal wire, each **charge carrier** is an electron. |
| **conductor** /kənˈdʌktə/ | Copper is a good **conductor** of electricity. |
| **insulator** /ˈɪnsjuːleɪtə/ | Plastic is an **insulator**. |
| **potential difference** /pəˈtenʃl ˈdɪfrəns/ | The **potential difference** across the lamp is 6 V.<br> |
| **resistance** /rɪˈzɪstəns/ | A thin wire has a high **resistance**. |
| **resistivity** /ˌriːzɪˈstɪvəti/ | Copper has a low **resistivity**, so it makes good wires. |
| **Ohm's law** /əʊmz lɔː/ | **Ohm's law** says current is proportional to voltage. |
| **ohmic** /ˈəʊmɪk/ | A metal wire at a steady temperature is **ohmic**. |
| **filament lamp** /ˈfɪləmənt læmp/ | A **filament lamp** gets hot when it lights up. |



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| Word | Example |
|---|---|
| **non-ohmic** | A diode is **non-ohmic**. |
| **thermistor** /ˈθɜːmɪstə/ | A **thermistor** measures the temperature. |
| **light-dependent resistor** /laɪt dɪˈpendənt rɪˈzɪstə/ | A **light-dependent resistor** has a low resistance in bright light. |
| **potentiometer** /pəˌtentɪˈɒmɪtə/ | Turn the **potentiometer** to change the output voltage. |
| **internal resistance** /ɪnˈtɜːnl rɪˈzɪstəns/ | The battery's **internal resistance** makes it warm. |
| **terminal potential difference** /ˈtɜːmɪnl pəˈtenʃl ˈdɪfrəns/ | The **terminal potential difference** falls when a large current flows. |
| **potential divider** /pəˈtenʃl dɪˈvaɪdə/ | Two resistors in a **potential divider** share the voltage. |