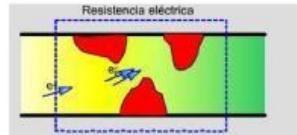
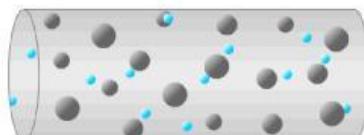


Electric quantities: Voltage, current and resistance

Speaker icon) **Voltage** is the _____ between the _____ at two points in a circuit. The **charge** always _____ from the point where the **energy is** _____ to the _____ **point**. If there is no **voltage** there is no **current**.

Speaker icon) **Voltage is represented** by the letter _____ and in the International System of Units (____) it is **measured** in _____ (V). This is also **called** _____.



Voltage /voltlich/ (V, **volts**)

Current /karent/ (I, **amps** /emps/)

Resistance /rizistens/ (R, **ohms**)

Speaker icon) The **current is** the **number of** _____ that _____ through **a specific point in 1** _____. It is **represented** by the letter _____ and in **SI units is** _____ in **amperes or amps** (____).

Speaker icon) The **resistance is** the _____ of the components of a **circuit to the flow** of the _____. It is **represented** by the letter _____ and in **SI units is measured** in **ohms** (Ω).

Measuring instruments

Speaker icon) A **voltmeter** _____ the **electrical** _____. To **measure** the voltage of a **component** you **connect** the **voltmeter** in _____. Normally a **voltmeter** has several **scales** (escalas) - it can **measure** _____ or **millivolts**.

Speaker icon) An **ammeter** **measures** the _____. To **measure** the **current** of a **receptor** you **connect** the _____ in _____. It can **measure** _____ or **milliamperes**.



Voltmeter /voltmita/

Ammeter /ammitta/

Multimeter /moltimita/

Speaker icon) A **multimeter** (or **polymeter**) **measures** different **electric** _____ (**voltage**, **current**, _____) on different **scales**. You **can choose** the best **scale** for different **quantities** using the **rotating** /routejtin/ **dial** /daiol/.

Ohm's Law

Speaker icon) The _____ **relationship** between _____, _____ and **resistance is** **Ohm's Law**, and **is expressed** mathematically as: $V=I \cdot R$



Speaker icon) This **shows** that **current** and **voltage** **are** directly _____ for any given _____.

Rational electricity use

Speaker icon) **Electrical energy** _____ **has** a **serious impact** on the _____. **There are** three **ways** we **can help** to _____ this **impact**:

Speaker icon) - **improve** the **energy** _____ of electrical **devices**,
- **reduce** _____ and
- **use** _____ **energy sources**