



Name, surname: A.C. Class: VI Subject: Electric current

English Version

The model is an associative image which shows the comparison of some notion, process or phenomenon of science or mathematics with some every day or natural object, process or phenomenon.

Notion , process or phenomenon	Electric current
Definition or explanation	An electric current is a flow of electric charge, moving electrons in a wire.
Model	
Description of the model	<p>Running water flowing through underground pipes. The running water acts like the electric current running through a wire (pipes). Using a pump we can push water through a pipe around a closed circuit.</p> <p>Electrons in a metal can jump from atom to atom, and that way carry negative charge around the circuit. Like a fluid, they are driven by a kind of electric pressure, known as voltage, because it is measured in units known as volts, named after the Italian scientist Alessandro Volta. An electric battery produces (by a chemical process) a voltage difference V between its two ends, and therefore acts like a pump.</p>

Versiunea în română

The model is an associative image which shows the comparison of some notion, process or phenomenon of science or mathematics with some every day or natural object, process or phenomenon.

Notion , process or phenomenon	Curentul electric este un flux de sarcini electrice
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Definition or explanation	Curentul electric
Model	<p>The image contains two diagrams side-by-side. The top diagram illustrates fluid flow in a pipe. An arrow labeled 'Fluid flow' points to the right above the pipe. The pipe has a 'Pump' in the middle. The left side of the pipe is labeled 'High pressure' and the right side is labeled 'Low pressure'. The bottom diagram illustrates electric current in a wire. An arrow labeled 'Electric current' points to the right above the wire. The wire has a 'Battery' in the middle. The left side of the wire is labeled 'High voltage' and the right side is labeled 'Low voltage'.</p>
Description of the model	<p>Apa care curge prin conducte subterane. Apa functioneaza pe acelasi principiu cu curentul electric care trece prin-un fir (conducta). Folosind o pompă putem împinge apa printr-o conductă în jurul unui circuit închis. Electronii dintr-un metal pot sari de la atom la atom, și în acest fel transporta sarcină negativă în jurul circuitului. La fel ca apa, care sunt condusi de un fel de presiune electrica, cunoscuta sub numele de tensiune, deoarece se măsoară în unități cunoscute sub numele de volți, numit după savantul italian Alessandro Volta. O baterie electrică produce (printr-un procedeu chimic) o diferență de tensiune V între cele două capete ale sale, și, prin urmare, acționează ca o pompă.</p>