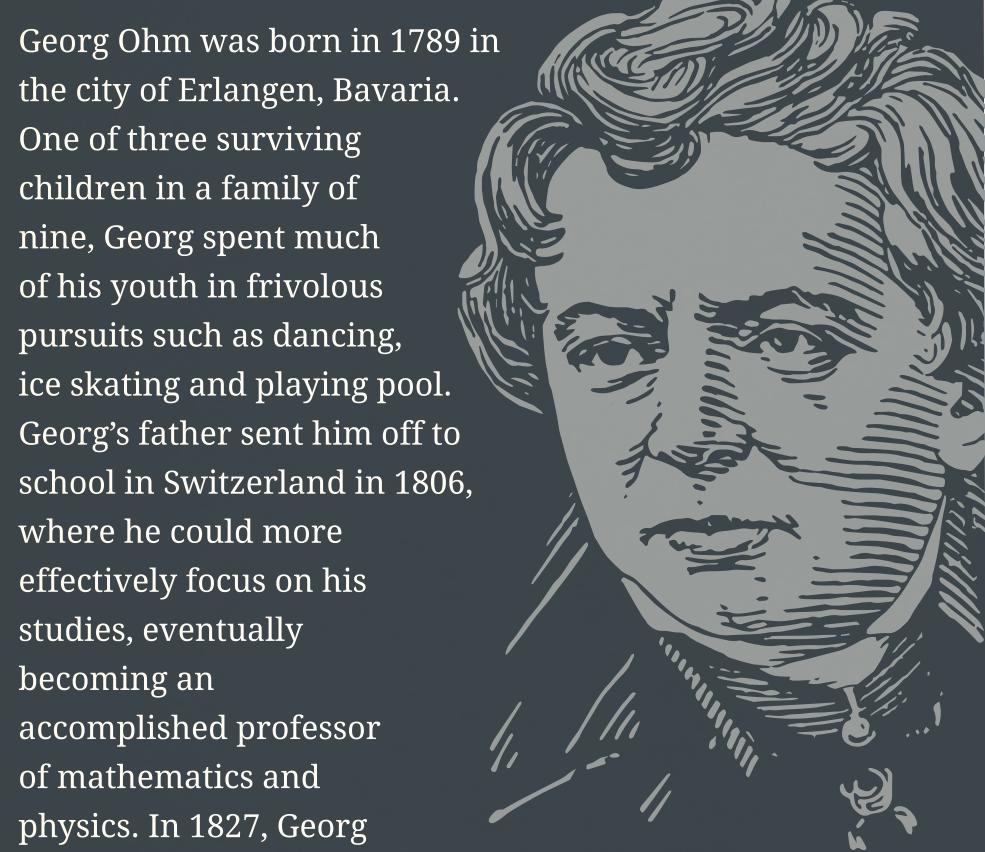


Ohm's Law

Ohm's Law represents the most basic understanding of how electricity works. It is a very simple set of equations that describe the relationships between voltage, current, resistance and power in an electrical circuit. A firm understanding of Ohm's Law can take you very far in electronics, and is one of the first principles taught to engineering students.

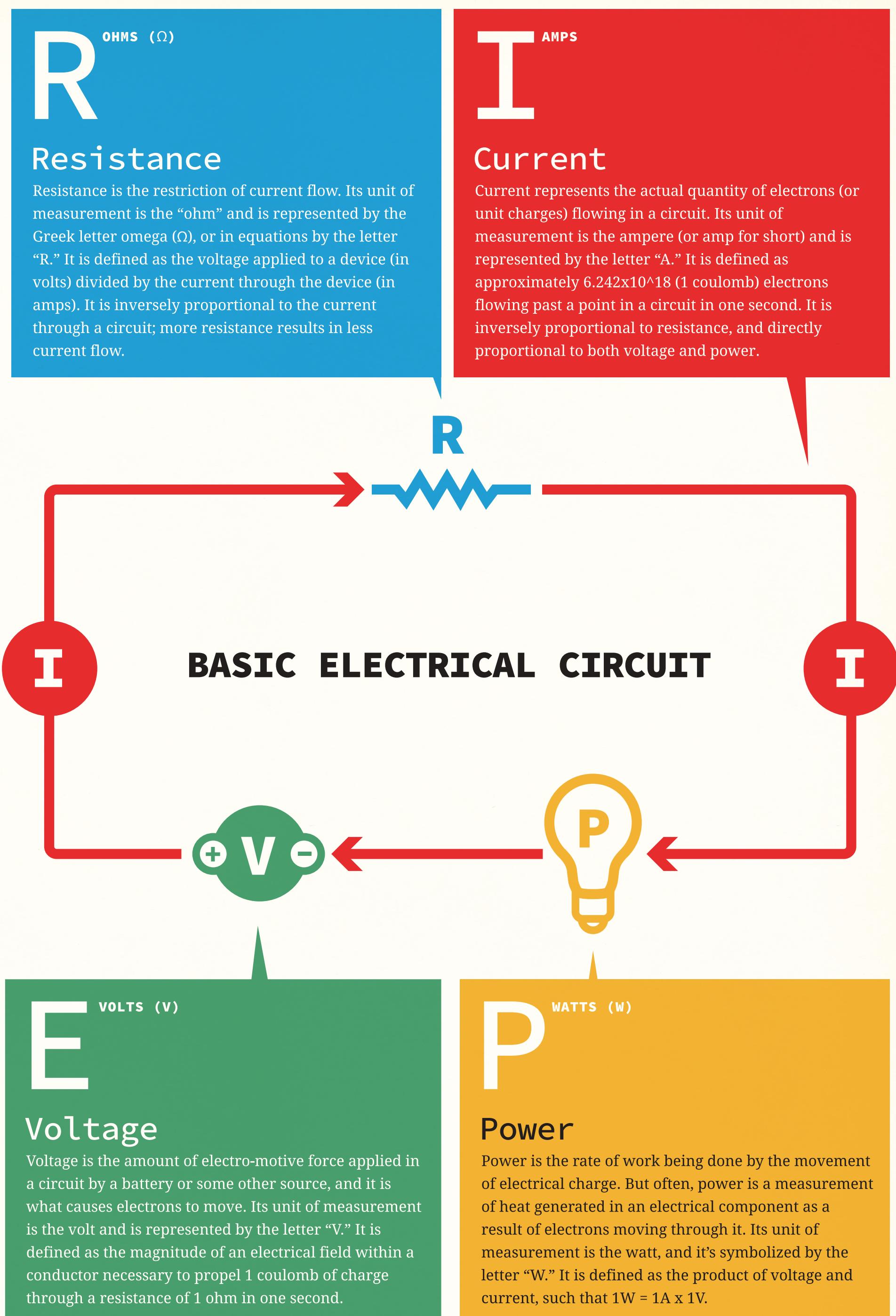
The Father of Resistance



Georg Ohm was born in 1789 in the city of Erlangen, Bavaria. One of three surviving children in a family of nine, Georg spent much of his youth in frivolous pursuits such as dancing, ice skating and playing pool. Georg's father sent him off to school in Switzerland in 1806, where he could more effectively focus on his studies, eventually becoming an accomplished professor of mathematics and physics. In 1827, Georg wrote his seminal work, *The Galvanic Circuit Investigated Mathematically*, in which he expounds upon the nature of electricity and what would ultimately become known as "Ohm's Law." Like many forward thinkers, his work was not immediately accepted by mainstream academia, but was taken as proven before his death in 1854 at the age of 65. <https://www.famousscientists.org>

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A triangular diagram with vertices labeled E , I , and R . The sides of the triangle are labeled with equations:

- Left side: $E = I \times R$
- Right side: $R = \frac{E}{I}$
- Bottom side: $I = \frac{E}{R}$

Solve for Whatever

Using the simple equations in the chart, you can easily calculate the values of any two of the critical circuit parameters, given any other two known factors.