



a WOW Lab

**BLUEPRINT**

Invisible Energy

## Glossary

**electric charge** - a property of matter that causes it to be attracted or repelled by other charged matter. Particles with opposite charges attract whereas particles with like charges repel.

**electric field** - the space around an electric charge that exerts a force on other charged matter. It is a vector quantity.

**electric potential** - the potential for an electric charge to move in an electric field. It is a scalar quantity and is measured in volts (V).

**equipotential surface** - used to visualize points of equal potential around an electric field.

**fluorescence** - the emission of light or electromagnetic radiation by a substance that has absorbed radiation of a different wavelength.

**permittivity of free space,  $\epsilon_0$**  - a constant, equal to  $8.854 \times 10^{-12} \text{ A}^2 \text{ s}^4 \text{ kg}^{-1} \text{ m}^{-3}$  that relates units of electric charge to SI units. Permittivity describes how much resistance is encountered when forming an electric field, with a free space posing the least resistance.

**scalar quantity** - has only magnitude and not direction.

**Van de Graaff generator** - an electricity generator that produces static electricity by accumulating charge on a moving belt.

**vector quantity** - has both magnitude and direction.