

Augusta Canal National Heritage Area

Grade 9-12

Physical Science Vocabulary

Acceleration	when something speeds up, slows down, or changes direction
Axle	A bar or shaft on which a wheel turns.
Energy Transformation	The conversion of one form of energy into another.
Force	A push or pull; all forces have both size and direction.
Gravity	A force of attraction between objects that is due to their masses.
Motion	An object's change in position over time when compared with a reference point
Rest	put something in a resting position, as for support or steadying
Mass	the amount of matter in an object
Weight	A measure of the gravitational force exerted on an object, usually by the Earth.
Work	The action that results when a force causes an object to move in the direction of the force.
Electricity	The flow of electrons
Electrons	A tiny negatively charged particle that orbits the core of an atom
Magnet	object that attracts certain materials
Turbine	A device that converts the kinetic energy of a moving fluid (gas or liquid) into electrical energy
Generator	machine that changes mechanical energy into electrical energy
Pulley	a grooved wheel around which is wrapped a rope, chain, or cable

Velocity	the speed of an object in a particular direction
Potential Energy	the capacity for doing work that a body possesses because of its position or condition.
Kinetic Energy	the energy a body possesses because it is in motion, is equal to $(1/2 mv^2)$ where m is its mass and v is its velocity
Mechanical Energy	energy associated with the motion of an object
Electrical Energy	Moving electrical charges that produce electricity and energy
Head	The distance the water falls (measured in feet) in a hydro power plant.
Flow	The amount of water flowing (measured in cubic feet persecond) in a hydro power plant.
Kilowatts	a unit of electrical power equal to 1,000 watts — abbr. <i>kW</i>
Watt	the absolute meter-kilogram-second unit of power equal to the work done at the rate of one joule per second or to the power produced by a current of one ampere across a potential difference of one volt : $\frac{1}{746}$ horsepower