Voltage can be thought of as the pressure or strength of electric power. All things being equal (see AMPS below), the higher the voltage the better, because high voltages pass more efficiently through wires and motors. Very high voltages (100+ volts) can give you a nasty shock because they also travel through people rather well, but the sort of voltages found on electric bicycles (12 - 36 volts) are quite safe. As a rule, a 12 volt system is fine for low-powered motors, but more powerful machines work better with 24 or 36 volts.