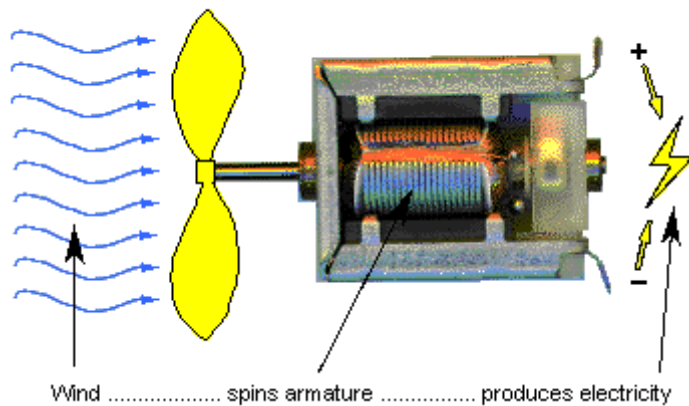


## Electricity Matters:

A "generator" and "motor" are essentially the same thing: what you call it depends on whether electricity is going into the unit or coming out of it. A generator produces electricity. In a generator, something causes the shaft and armature to spin. An electric current is generated, as shown in the picture (lightning bolt).

Lots of things can be used to make a shaft spin - a pinwheel, a crank, a bicycle, a water wheel, a diesel engine, or even a jet engine. They're different sizes but it's the same general idea. It doesn't matter what's used to spin the shaft - the electricity that's produced is the same.

### Generator produces electricity



A motor uses electricity. In a motor, the electricity comes in through wires attached to the positive (+) and negative (-) terminals. The electric current causes the armature and shaft to spin. If there's just a little current and it's a small motor, it won't do very much work (i.e. it can only spin a small fan). If it's a large motor and it's using a lot of electricity, it can do a lot of work (i.e. spin a large fan very fast; lift a very heavy load; or whatever the motor is being used for).

### Motor uses electricity

