



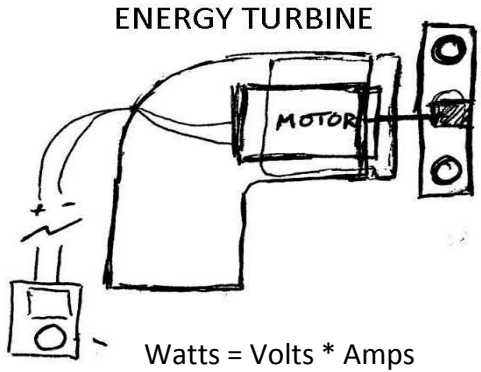
MEASURING THE WIND SPEED OF THE FAN Using an Anemometer (wind gauge)	miles per hour
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MEASURING THE ROTATIONS PER MINUTE (RPM's of the blades)	rotations per minute
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**ENERGY TURBINE**

ENERGY TURBINE DATA & CALCULATIONS	Value	Units
1 - Measure and Record the VOLT output		[Volts]
2 - Measure and Record the AMP output	x	[Amps]
3 - Calculate WATTS	=	[Watts]

WORK
Volts = Electric Potential
Amps = Measure of Current (Flow of Electricity per second)
Watts = Joules per Second [N*m/sec] Watts = Volts * Amps



**POWER TURBINE**

POWER TURBINE DATA & CALCULATIONS
1 - Find the MASS of the Load
2 - Calculate the WEIGHT of the Load (Weight = Mass * Gravity)
3 - Measure TIME to lift the load
4 - Measure DISTANCE that load is lifted
5 - Calculate ENERGY = Weight x Distance (WORK) = #2 x #4
6 - Calculate POWER = Energy / Time POWER = #5 / #3

Value	Units
	[Grams]
	[Newtons] [grams * meter/second <sup>2</sup> ]
	[Seconds]
	[Meters]
	[Joules] or [N*m or g*m <sup>2</sup> /s <sup>2</sup> ]
	[Watts or Joules/Second] [N*m/sec or g*m <sup>2</sup> /s <sup>2</sup> ]

WORK
1 Newton = 1 gram * gravity gravity = 9.8 meters/second <sup>2</sup>
1 Foot = .3048 Meters
Joule = (Weight * Distance)
1 Watt = 1 Joule/second = (Force * Distance) / Time

