

Team Name: _____ Date: _____

Wind Power! Math Worksheet

1. What is the power produced by a wind generator that produces 500 J of electrical energy in 2 seconds?

Use $P = E \div t$

where **P** = power (W), **E** = energy (J) and **t** = time in seconds.

$E =$ _____ J

$t =$ _____ seconds

$E \div t =$ _____ W

This is the power (P) produced.

2. How much electrical energy is produced in 3 seconds by a wind generator that has a power out of 1000 W?

Use. $E = P \times t$

$P =$ _____ W

$T =$ _____ seconds

$P \times t =$ _____ J

This is the energy (E) produced.

3. A large wind generator has a power output of 500 W. How long does it take to produce 500 J of electrical energy?

Use $t = E \div P$

$E =$ _____ J

$P =$ _____ W

$E \div P =$ _____ seconds

This is the time in seconds that it takes.