Wind Power Activity – Power Math Worksheet

\[ P = \text{power, Watts (W)} \quad E = \text{energy, Joules (J)} \]
\[ t = \text{time, seconds (s)} \]

1. What is the power produced by a wind generator that produces 500 J of electrical energy in 2 seconds? (Use \( P = \frac{E}{t} \) or \( W = \frac{J}{s} \))

2. How much electrical energy is produced in 3 seconds by a wind generator that has a power out of 1000 W? (Use \( E = P \times t \) or \( J = W \times s \))

3. A large wind generator has a power output of 5000 W. How long does it take to produce 500 J of electrical energy? (Use \( t = \frac{E}{P} \) or \( s = \frac{J}{W} \))