

COMMON CONVERSIONS

$$\text{One Btu} = .252 \text{ kilocalorie} \frac{1btu}{.252C}$$

$$\text{One Btu} = .000293 \text{ kilowatt-hour} \frac{1btu}{2.9 \times 10^{-4} kWh}$$

$$\text{One kilocalorie} = 3.97 \text{ Btu} \frac{1C}{3.97btu}$$

$$\text{One kilocalorie} = .0012 \text{ kilowatt-hour} \frac{1C}{1.2 \times 10^{-3} kWh}$$

$$\text{One kilowatt-hour} = 3,413 \text{ Btu} \frac{1kWh}{3413btu}$$

$$1 \text{ kWh} = 3.6 \text{ MJ and that } 1 \text{ Btu} = 1055 \text{ J} \frac{1kWh}{3.6MJ} \frac{1btu}{1055J}$$

$$\text{One kilowatt-hour} = 860 \text{ kilocalories} \frac{1kWh}{860C}$$

$$\text{One barrel of oil (42 US gallons)} = 1,410,579 \text{ kilocalories} \frac{1barrel}{42gal} \frac{1barrel}{1.4 \times 10^6 C} \frac{1gal}{3.8l}$$

$$\text{One barrel of oil} = 1,640.8 \text{ kilowatt-hours} \frac{1barrel}{1640kWh}$$

$$4840 \text{ square yards in an acre or } 43,560 \text{ ft}^2 \frac{1acre}{4840yd^2} \frac{1acre}{43,560ft^2}$$

$$1 \text{ Hectare} = 2.47 \text{ acres} \frac{1ha}{2.5acre}$$

$$1 \text{ sq}^2 \text{ mile} = 640 \text{ acres} \frac{640acre}{1mi^2}$$

$$1 \text{ metric ton} = 1000 \text{ kg} \frac{1MT}{1000kg}$$

$$1 \text{ metric ton} = 2204 \text{ lb} \frac{1MT}{2204lb}$$

Doubling Time = 70 / % Growth Rate

One BTU is the energy required to raise the temperature of one pound of water by one degree Fahrenheit.

The density of water is 1 gram/milliliter or approximately 8 pounds/gallon (U.S.).