

Physics 2

Elementary Physics of Energy

Homework 8

Due June 2, 2011 (In class)

Problem: (A) Using the reaction $6CO_2 + 6H_2O + 674\text{kcal per mole} \rightarrow C_6H_{12}O_6 + 6O_2$ as a prototype for agricultural growth, estimate the energy needed to grow 1 tonne of carbohydrate (glucose).

Problems from Ch. 5 of Ristinen & Kraushaar (pg. 168): 10, 11.

Problems from Ch. 6 of Ristinen & Kraushaar (pg. 205-207): 1,3, 14.
Problem 9 (only parts a,b omit parts c and d)

Note: if a problem involves a calculation you must show your work to receive credit.