

CHEM 115
Winter 2000

HOMEWORK #4

Due: Feb 2, 2000
(in quiz section)

I. Write answers to the following problems.

*Within Chapter 3: 3-2, 3-6, 3-10, 3-14, 3-16, 3-18, 3-20
(answers in back of text)

*End of Chapter 3: 12, 14, 15, 16, 19, 24, 28, 29, 34

II. Chemistry in your daily life: Estimating the (daily, annual)
transportation-related CO₂ emissions from Puget Sound region

Data needed: * number of registered vehicles (est. equal to population)
* average miles driven per year (est 12,000 miles)
* average fuel efficiency (est 20 miles/gallon)

Express your estimated emissions in gallons of gasoline burned per day, and in metric tons of carbon emitted/year. (metric ton = 10⁶ grams, 2.2 lbs= 1 kg).

Exxon Valdez oil spill in Alaska(10 million gallons) would have supplied Puget Sound for how many days?