Chemistry 111
Spring 2006
Section 2

David Gross
824 Lederle
5-3170
dgross@biochem.umass.edu

Requirements

• Both lecture and lab sections are required
• Text: Kotz, Treichel and Weaver, Chemistry and Chemical Reactivity 6th Edition
• Safety goggles, Masterlock
• PRS clicker
Online information

http://colossus.chem.umass.edu/genchem

- lab information & assignments
- lecture materials
- OWL
Events in the next week

- Labs start on Tuesday, February 7
- CRC is open this week
- First OWL assignment due 2/7
- Lecture: Introduction and Chapter 1
  - Readings in Kotz, Treichel & Weaver
  - End-of-chapter questions

Overview

- Matter and its reactions
- Physical properties
- Qualitative description
- Quantitative description

Topics

- Elements & compounds
- Reactions
- Energetics
- Structure
1-Feb-06

hydrogen ($H_2$)  
$M = 2.0 \text{ g/mol}$

helium (He)  
$M = 4.0 \text{ g/mol}$

1-Feb-06

$2 \text{ } H_2 + O_2 \rightarrow 2 \text{ } H_2O + \text{ energy}$

He + O$_2$ → no reaction

- Elements vs. compounds
- Energy
- Stoichiometry
- Nomeclature
- Molecular structure
- Gas laws