

CHEM 233: HOMEWORK SHEET
EXAM II (Spring 2012-Dr. Babb)

- Chapter 4:**
- A. Alkane: Conformations and Newman Projections (pg. 129-137)
Homework: 4.18-4.23, 4.47-4.50
 - B. Cycloalkane: Conformations, Ring Strain, and Substitution (pg. 137-147)
Homework: 4.24-4.31, 4.56, 4.57, 4.59-4.62, 4.65
 - C. Alkane Reactions (pg. 147-151)
Homework: 4.32-4.35, 4.69, 4.70, 4.72
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- Chapter 5:**
- A. Stereochemistry: Chiral vs. Achiral, Stereogenic Centers (pg. 159-170)
Homework: 5.1-5.9, 5.11, 5.12, 5.35-5.39
 - B. R/S Designation of Stereogenic Centers (pg. 170-175)
Homework: 5.13-5.16, 5.43-5.47, 5.49
 - C. Diastereomers and Meso Compounds (pg. 175-182)
Homework: 5.17-5.27, 5.52-5.56, 5.59, 5.62
 - D. Physical Properties of Stereoisomers (pg. 182-188)
Homework: 5.34, 5.63
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- Chapter 6:**
- A. Organic Reactions: Writing and Types (pg. 197-199)
Homework: 6.1, 6.2, 6.26
 - B. Bond Breaking/Making and Bond Dissociation Energy (pg. 200-206)
Homework: 6.3-6.7, 6.27-6.29, 6.33-6.36
 - C. Thermodynamics and Kinetics of Organic Reactions (pg. 206-222)
Homework: 6.8-6.25, 6.38-6.40, 6.42, 6.44, 6.48, 6.51, 6.53
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- Chapter 7:**
- A. Alkyl Halides: Classific., Nomenclature, & Physical Prop. (pg. 229-234)
Homework: 7.1-7.7, 7.44-7.48
 - B. Alkyl Halides: Substitution Reactions (pg. 234-267)
Homework: 7.9-7.26, 7.28-7.41, 7.49-7.56, 7.58-7.62, 7.65-7.68, 7.70
 - C. Organic Synthesis (pg. 267-269)
Homework: 7.42, 7.43, 7.79
 - D. Carbocation Rearrangements in Substitution Reactions (pg. 334-335)
Homework: 9.24
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NOTE: Exam II is Thursday, February 23 (7-8:30 PM) and will cover most of the topics listed on this sheet. You are responsible for material covered in lecture, reading material in text and material covered in homework problems and problem sets. To the exam bring a #2 pencil, pen, and a photo ID