

GRADE TEN-COURSE PLAN-SCIENCE

An Introduction to Chemistry

TEXT: *An Introduction to Chemistry* (John Charlesworth)

Lab: Refer to possible options on previous pages

COURSE READINGS:

WEEK: READINGS: (Pages of *Chemistry*):

FIRST QUARTER: UNIT 1

Week 1: Introduction & pages 7-13.

Key points: **The Metric System:** metric prefixes, English-metric conversions, length conversions, mass conversions, volume conversions, density dimensions.

Assignment:: Practice Problems page 13.
Understand and memorize the chart page 12. Memorize the formula for density.
Lab recommended.

Week 2: pages 14-21.

Key points: **Converting Within the Metric System. How to Succeed at Solving Math Problems. Making Use of the Units.**

Assignment:: Practice Problems pages 15&21.
Understand and memorize the number line page 14.

Week 3: pages 22-28.

Key points: **The Dimensional Analysis Method. The Proportion Method.**

Assignment:: Practice Problems pages 27/28.
Lab recommended.

Week 4: pages 29-36.

Key points: **Density:** in relation to weight, volume, and temperature. Density changes in water, specific gravity.

Assignment:: Practice Problems pages 32/33, 35&36. Page 33.5, which is a review of pages 7-33, may be completed in this week or the next, based upon time. Memorize the densities of water and air.

Week 5: pages 37-41.

Key points: **Temperature Conversion:** Celsius and Fahrenheit. **Temperature, Pressure, and Gas Volume:** Charles' Law and the Kelvin temperature scale.