

Chemistry I
Mr. D. Scott
Test 1 Study Guide

This study guide may NOT be used or referred to during the test. Its sole purpose is to aid during the pre-test study and preparation time.

The only materials permitted for use during the test will be:

- Pencil
- Calculator
- Blank scrap paper

Format:

Part 1: Multiple Choice and Scantron Form

Part 2: Short answer requiring the ability to write an electron configuration, an orbital notation, and a dot notation.

Time: One class period

The following concepts and terms are asked about on the test:

Early ideas about atoms
What the ancient alchemists tried to accomplish
Measuring density with a balance and graduated cylinder
Identifying common metals by their appearance and density
The parts of Dalton's Atomic Theory
The knowledge gained by doing experiments with cathode rays
The knowledge gained by Rutherford's Gold Foil Experiment
Modern electronic structure
Orbital shapes
Properties of the nucleus & isotopes
Dot notation, orbital notation, electron configuration
Electron transition, photoelectric effect
Aufbau principle, Hund's Rule, Pauli Exclusion Principle
Quanta, photons
Quantum numbers: principle, orbital, magnetic, spin
Valence electrons
Radiation – alpha, beta, gamma

The following people are asked about (or at least their names will appear in a question)

Aristotle
Becquerel
Bohr
Boyle
Curie

Dalton
de Broglie
Democritus
Einstein
Heisenberg

Planck
Roentgen
Rutherford
Schrodinger
Thomson