

# Early Theories of Matter

▶ pages 87–91  
▶ 1 class session(s)

## Section Objectives

- **Compare** and **contrast** the atomic models of Democritus and Dalton.
- **Define** an atom.

## National Science Content Standards

UCP.1, UCP.2; A.1; B.1, B.2, B.4; G.2, G.3

## Georgia QCC

1, 1.2, 2, 2.1

## Focus

\_\_\_\_\_ Section Focus Transparency 13 and Master

## Teach

- \_\_\_\_\_ Discovery Lab, *SE* p. 87
- \_\_\_\_\_ Quick Demo, *TWE* pp. 88, 90
- \_\_\_\_\_ Chemistry Journal, *TWE* p. 88
- \_\_\_\_\_ *Spanish Resources*, 4.1 *TCR*

## Assess

- \_\_\_\_\_ Section Assessment, *SE* p. 91
- \_\_\_\_\_ Check for Understanding, *TWE* p. 91
- \_\_\_\_\_ Reteach, *TWE* p. 91
- \_\_\_\_\_ *Study Guide for Content Mastery*, p. 19 *TCR*

## Enrichment/Application

- \_\_\_\_\_ Extension, *TWE* p. 91
- \_\_\_\_\_ *Cooperative Learning in the Science Classroom*, *TCR*

## Chapter Assessment

- \_\_\_\_\_ Assessment, *TWE* pp. 89, 91
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*
- \_\_\_\_\_ *Performance Assessment in the Science Classroom*, *TCR*

## Multimedia Options

- \_\_\_\_\_ **Chemistry Interactive CD-ROM**, Section 4.1 Video
- \_\_\_\_\_ **Vocabulary PuzzleMaker Software**, Ch. 4
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Chemistry Web site: [ga.science.glencoe.com](http://ga.science.glencoe.com)

# Subatomic Particles and the Nuclear Atom



► pages 92–97  
► 1 class session(s)

## Section Objectives

- **Distinguish** between the subatomic particles in terms of relative charge and mass.
- **Describe** the structure of the nuclear atom, including the locations of the subatomic particles.

## National Science Content Standards

UCP.1, UCP.2; A.2; B.1, B.4; G.1, G.2, G.3

## Georgia QCC

1, 1.2, 2, 5

## Focus

\_\_\_\_\_ Section Focus Transparency 14 and Master

## Teach

- \_\_\_\_\_ Problem-Solving Lab, *SE* p. 96
- \_\_\_\_\_ ChemLab 4, *SE* pp. 108–109
- \_\_\_\_\_ Quick Demo, *TWE* pp. 92, 94
- \_\_\_\_\_ Chemistry Journal, *TWE* p. 94
- \_\_\_\_\_ *ChemLab and MiniLab Worksheets*, pp. 14–16 *TCR*
- \_\_\_\_\_ *Laboratory Manual*, pp. 25–28 *TCR*
- \_\_\_\_\_ Teaching Transparencies 11–12 and Masters
- \_\_\_\_\_ *Spanish Resources*, 4.2 *TCR*

## Assess

- \_\_\_\_\_ Section Assessment, *SE* p. 97
- \_\_\_\_\_ Check for Understanding, *TWE* p. 97
- \_\_\_\_\_ Reteach, *TWE* p. 97
- \_\_\_\_\_ *Study Guide for Content Mastery*, p. 20 *TCR*

## Enrichment/Application

- \_\_\_\_\_ Extension, *TWE* p. 97
- \_\_\_\_\_ *Cooperative Learning in the Science Classroom*, *TCR*

## Chapter Assessment

- \_\_\_\_\_ Assessment, *TWE* pp. 93, 95, 96, 97
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*
- \_\_\_\_\_ *Performance Assessment in the Science Classroom*, *TCR*

## Multimedia Options

- \_\_\_\_\_ **Chemistry Interactive CD-ROM**, Section 4.2 Experiment, Demonstration, and Animation
- \_\_\_\_\_ **Vocabulary PuzzleMaker Software**, Ch. 4
- \_\_\_\_\_ **Cosmic Chemistry Videodisc**, Disc 1, Side 1
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Chemistry Web site: [ga.science.glencoe.com](http://ga.science.glencoe.com)

# How Atoms Differ

▶ pages 98–104  
▶ 2 class session(s)

## Section Objectives

- **Explain** the role of atomic number in determining the identity of an atom.
- **Define** an isotope and **explain** why atomic masses are not whole numbers.
- **Calculate** the number of electrons, protons, and neutrons in an atom given its mass number and atomic number.

## National Science Content Standards

UCP.1, UCP.2; A.1; B.1, B.2; G.2

## Georgia QCC

1, 1.2, 2, 5, 5.1

## Focus

\_\_\_\_\_ Section Focus Transparency 15 and Master

## Teach

- \_\_\_\_\_ MiniLab, *SE* p. 102
- \_\_\_\_\_ Identifying Misconceptions, *TWE* p. 100
- \_\_\_\_\_ Chemistry Journal, *TWE* p. 100
- \_\_\_\_\_ *ChemLab and MiniLab Worksheets*, p. 13 *TCR*
- \_\_\_\_\_ Teaching Transparency 13 and Master
- \_\_\_\_\_ *Spanish Resources*, 4.3 *TCR*

## Assess

- \_\_\_\_\_ Section Assessment, *SE* p. 104
- \_\_\_\_\_ Check for Understanding, *TWE* p. 104
- \_\_\_\_\_ Reteach, *TWE* p. 104
- \_\_\_\_\_ *Study Guide for Content Mastery*, pp. 21–23 *TCR*
- \_\_\_\_\_ Math Skills Transparency 4 and Master

## Enrichment/Application

- \_\_\_\_\_ Extension, *TWE* pp. 101, 104
- \_\_\_\_\_ *Challenge Problems*, p. 4 *TCR*
- \_\_\_\_\_ *Cooperative Learning in the Science Classroom*, *TCR*

## Chapter Assessment

- \_\_\_\_\_ Assessment, *TWE* pp. 101, 102, 104
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*
- \_\_\_\_\_ *Performance Assessment in the Science Classroom*, *TCR*

## Multimedia Options

- \_\_\_\_\_ **Vocabulary PuzzleMaker Software**, Ch. 4
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Chemistry Web site: [ga.science.glencoe.com](http://ga.science.glencoe.com)

# Unstable Nuclei and Radioactive Decay

▶ pages 105–107  
▶ 2 class session(s)

## Section Objectives

- **Explain** the relationship between unstable nuclei and radioactive decay.
- **Characterize** alpha, beta, and gamma radiation in terms of mass and charge.

## National Science Content Standards

UCP.1, UCP.2; A.1; B.1, B.2, B.4, B.6; E.1, E.2; F.5, F.6; G.3

## Georgia QCC

1, 1.2, 2, 2.1, 3.1, 4, 5, 5.1, 7.1, 9.6, 16

## Focus

\_\_\_\_\_ Section Focus Transparency 16 and Master

## Teach

- \_\_\_\_\_ Chemistry and Society, *SE* p. 110
- \_\_\_\_\_ Quick Demo, *TWE* p. 106
- \_\_\_\_\_ Chemistry Journal, *TWE* p. 105
- \_\_\_\_\_ *Laboratory Manual*, pp. 29–32 *TCR*
- \_\_\_\_\_ Teaching Transparency 14 and Master
- \_\_\_\_\_ *Spanish Resources*, 4.4 *TCR*

## Assess

- \_\_\_\_\_ Section Assessment, *SE* p. 107
- \_\_\_\_\_ Check for Understanding, *TWE* p. 107
- \_\_\_\_\_ Reteach, *TWE* p. 107
- \_\_\_\_\_ *Study Guide for Content Mastery*, p. 24 *TCR*

\_\_\_\_\_ *Reviewing Chemistry: Preparing for the Georgia High School Graduation Test*, *TCR*

## Enrichment/Application

- \_\_\_\_\_ Extension, *TWE* p. 107
- \_\_\_\_\_ *Supplemental Problems*, pp. 5–6 *TCR*
- \_\_\_\_\_ *Cooperative Learning in the Science Classroom*, *TCR*

## Chapter Assessment

- \_\_\_\_\_ Chapter 4 Assessment, *SE* pp. 112–115
- \_\_\_\_\_ Assessment, *TWE* pp. 107, 109
- \_\_\_\_\_ *Chapter Assessment*, pp. 19–24 *TCR*
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*
- \_\_\_\_\_ *Performance Assessment in the Science Classroom*, *TCR*

## Multimedia Options

- \_\_\_\_\_ **Chemistry Interactive CD-ROM**, Section 4.4 Demonstration
- \_\_\_\_\_ **Vocabulary PuzzleMaker Software**, Ch. 4
- \_\_\_\_\_ **MindJogger Videoquizzes**, Ch. 4
- \_\_\_\_\_ **TestCheck Software**, Ch. 4
- \_\_\_\_\_ **Chemistry Interactive CD-ROM**, Chapter 4 quiz
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Chemistry Web site: [ga.science.glencoe.com](http://ga.science.glencoe.com)