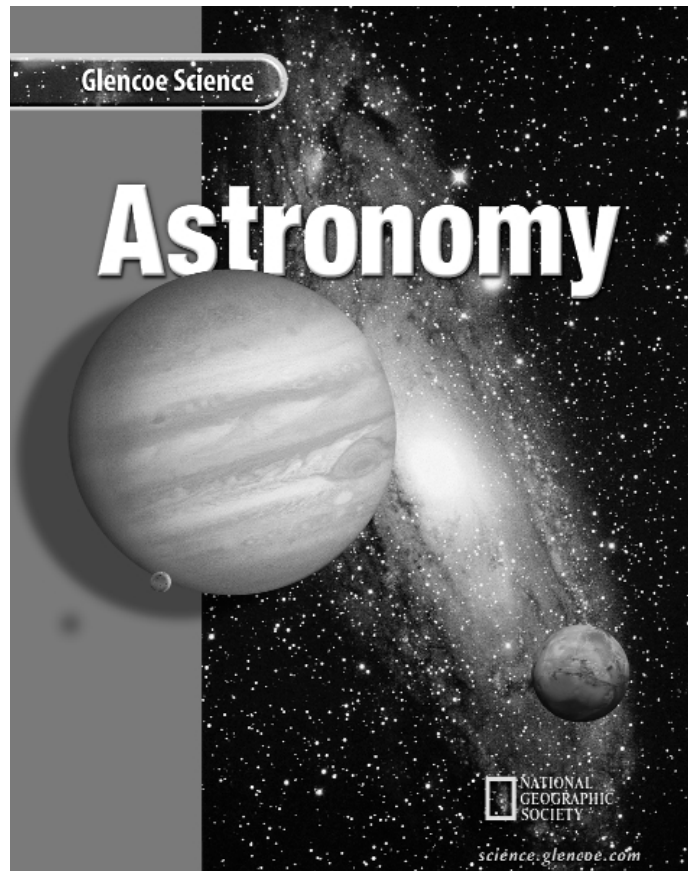


Lesson Plans



**Mc
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Glencoe Science

Student Edition

Teacher Wraparound Edition

Interactive Teacher Edition CD-ROM

Interactive Lesson Planner CD-ROM

Lesson Plans

Content Outline for Teaching

Directed Reading for Content Mastery

Foldables: Reading and Study Skills

Assessment

Chapter Review

Chapter Tests

ExamView Pro Test Bank Software

Assessment Transparencies

Performance Assessment in the Science

Classroom

The Princeton Review Standardized Test

Practice Booklet

Directed Reading for Content Mastery in Spanish

Spanish Resources

Guided Reading Audio Program

Reinforcement

Enrichment

Activity Worksheets

Section Focus Transparencies

Teaching Transparencies

Laboratory Activities

Science Inquiry Labs

Critical Thinking/Problem Solving

Reading and Writing Skill Activities

Cultural Diversity

*Laboratory Management and Safety in the Science
Classroom*

MindJogger Videoquizzes and Teacher Guide

Interactive Explorations and Quizzes CD-ROM

Vocabulary Puzzlemaker Software

Cooperative Learning in the Science Classroom

Environmental Issues in the Science Classroom

Home and Community Involvement

Using the Internet in the Science Classroom

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To the Teacher

Lesson planning guides are provided for each section of the chapter. Within the Lesson Plans you will see Student Edition features that may have an accompanying worksheet found in the Chapter Resources Booklet (CRB). These worksheets are shown in parentheses after the feature. For example:

_____ Before You Read, p. 37 (Foldables, p. 17, **CRB**)

The Foldables worksheet can be used with the Before You Read feature in the Student Edition.

Each Lesson Plan is divided into several parts:

- **Schedule** lists the recommended number of class sessions to be devoted to each section of the chapter. Both traditional and block scheduling recommendations are given.
- **Objectives** provides the section objectives. Here you will also find the correlations to National Science Standards for the section.
- **Motivate** lists various resources to introduce the chapter or section to the students.
- **Teach** lists Student Edition and Teacher Edition features that are used as you teach the material. You'll also find worksheet pages and other resources such as transparencies or Professional Series Books that are appropriate to use with the section.
- **Assess** provides references to the section assessment in the Student Edition as well as useful pages from the *Performance Assessment in the Science Classroom*.
- **Reteach/Reinforce** is where you will find worksheets that provide students with additional reinforcement of the chapter content.
- **Enrich/Apply** provides opportunities to challenge students with materials that go beyond the chapter content.
- **Chapter Assessment** lists Student Edition, worksheet, and transparency resources that assess students' knowledge of the chapter material.
- **Multimedia Options** pulls together the many multimedia materials that can be used as reinforcement, review, extension, and assessment with your students.

Correlation to National Science Education Standards

Objectives	Book, Chapter, and Section
(UCP) Unifying Concepts and Processes	
1. Systems, order, and organization	F1-1, F2-1, F2-2, F2-3, F2-4, G4-1, G4-2, G4-3, H1-2, H1-3, H2-1, H2-2, H2-3, H2-4, H3-1, H3-2, H5-1, H5-3, I2-1, I2-2, I2-3, I3-3, I4-2, J3-2, J3-3, J3-4, J4-3
2. Evidence, models, and explanation	F3-1, F4-2, F4-3, F5-1, F5-2, F5-3, G3-1, G3-2, G3-3, G5-1, G5-2, G6-1, G6-2, G6-3, H1-3, H4-2, H5-2, I1-1, I2-3, I3-3, I4-1, I4-2, J1-1, J1-2, J1-3, J2-1, J2-2, J2-3, J3-1, J4-1, J4-4
3. Change, constancy, and measurement	F2-1, F3-2, F3-3, F4-1, F4-2, F4-3, F6-1, F6-2, F6-3, G1-2, G1-3, G5-3, G6-1, G6-2, G6-3, H1-3, H2-4, H3-3, H4-3, I1-2, I1-3, I2-2, I3-1, I3-3, I4-1, I4-2, I4-3
4. Evolution and equilibrium	F4-1, G2-1, G2-2, G2-3, G6-1, G6-2, G6-3, H1-1, H1-3, H2-1, H2-2, H2-3, H4-1, I3-2, J4-3
5. Form and function	F1-2, F1-3, F2-1, G1-1, J4-2
(A) Science as Inquiry	
1. Abilities necessary to do scientific inquiry	F1-1, F1-2, F1-3, F2-1, F2-2, F2-3, F2-4, F3-1, F3-3, F4-1, F4-2, F4-3, F6-1, F6-2, F6-3, G1-1, G1-2, G1-3, G2-1, G2-2, G2-3, G3-1, G3-2, G3-3, G4-1, G4-2, G4-3, G5-1, G5-2, G5-3, G6-2, G6-3, H1-1, H1-2, H1-3, H2-1, H2-2, H2-4, H3-1, H3-2, H3-3, H4-2, H5-1, H5-2, H5-3, I1-1, I1-2, I1-3, I2-1, I2-3, I2-3, I3-1, I3-3, I4-1, I4-2, I4-3, J1-1, J1-2, J1-3, J2-1, J2-2, J2-3, J3-1, J3-2, J3-3, J3-4, J4-1, J4-2, J4-4
2. Understandings about scientific inquiry	F4-3, G6-1, I3-3
(B) Physical Science	
1. Properties and changes of properties in matter	F2-1, F4-3, F6-2, F6-3, G5-3, H1-1, H1-2, H1-3, H4-2, H4-3, I4-1, I4-2, I4-3, J4-3
2. Motion and forces	F2-1, F4-3, F5-1, F5-2, F5-3, H2-1, H3-1, I1-3, J2-1, J3-2
3. Transfer of energy	F2-1, F3-1, F2-2, F4-3, F5-1, F5-2, F5-3, H1-1, H1-2, H1-3, H4-2, H4-3, I1-2, J2-1, J4-2
(C) Life Science	
1. Structure and function in living systems	H1-2, H5-2, I3-2, I4-2, I4-3
2. Reproduction and heredity	G5-1, G5-2, G5-3, G5-4
3. Regulation and behavior	H5-2
4. Populations and ecosystems	H2-2, H2-3, H2-4, H5-2, H5-3, I3-2, I4-2
5. Diversity and adaptations of organisms	G5-1, G6-1, G6-2, G6-3, H2-2, H2-3, H5-2, I3-2, I4-2
(D) Earth and Space Science	
1. Structure of the Earth system	F1-1, F1-2, F1-3, F2-1, F2-2, F2-3, F2-4, F3-1, F2-2, F3-3, F4-1, F4-2, F4-3, F5-1, F5-2, F5-3, F6-1, F6-2, F6-3, G1-1, G1-2, G1-3, G2-1, G2-2, G2-3, G3-1, G3-2, G3-3, G4-1, G4-2, G4-3, G5-1, G5-2, G5-3, , H1-1, H1-2, H1-3, H2-1, H2-2, H2-3, H2-4, H3-1, H3-2, H3-3, H4-1, H4-2, H4-3, H5-1, H5-3, I1-1, I1-2, I1-3, I2-1, I2-2, I2-3, I3-3, I3-1, I3-2, I4-1, I4-2, I4-3, J2-1, J2-2, J2-3
2. Earth's history	F4-1, F4-2, F4-3, G3-2, G5-1, G5-2, G5-3, G5-4, G6-1, G6-2, G6-3, H4-1
3. Earth in the solar system	H4-3, I1-1, J1-1, J1-2, J1-3, J3-1, J3-2, J3-3, J3-4, J4-1, J4-2, J4-3, J4-4

Correlation to National Science Education Standards (continued)

Objectives	Book, Chapter, and Section
(E) Science and Technology	
1. Abilities of technological design	F3-1, F2-2, I2-3, J2-3
2. Understandings about science and technology	F3-1, F2-2, G1-3, G2-3, G3-1, H2-2, H2-4, H3-2, H3-3, H4-3, I2-1, I2-3
(F) Science in Personal and Social Perspectives	
1. Personal Health	F3-1, F5-3, G4-2, H1-2, H1-3, H2-4, I4-1, I4-2, I4-3
2. Populations, resources, and environments	F1-3, F3-1, F2-2, F3-3, G2-3, H1-2, H1-3, H2-2, H2-3, H2-4, H3-1, H3-2, H3-3, H5-1, H5-3, I4-2, I4-3
3. Natural hazards	F5-3, F6-1, F6-2, G3-1, H2-1, H2-2, H2-4, H3-3, I2-1, I2-2, I4-1, I4-2
4. Risks and benefits	F3-1, F2-2, F3-3, G3-3, H2-2, H2-3, H2-4, H5-3, I4-1, I4-2, I4-3
5. Science and technology in society	F1-3, F2-4, F3-1, F2-2, F3-3, F5-3, G1-2, G1-3, G4-3, H1-2, H1-3, H2-3, H3-2, H5-3, I2-3, I4-1, I4-2, I4-3, J1-2, J1-3
(G) History and Nature of Science	
1. Science as a human endeavor	F3-3, F4-1, F4-2, F4-3, G2-3, G5-3, G6-3, H1-3, H2-4, H4-3, H5-3, I1-3, I2-3, I3-3, I4-3, J1-2, J2-3, J4-4
2. Nature of science	F3-3, F5-3, F6-3, G5-3, G6-3, H2-4, H4-3, H5-3, I3-3, I4-3, J3-4
3. History of science	F1-3, F4-1, F4-2, F4-3, G1-3, H2-4, I3-3, J2-3, J2-1, J4-4

CHAPTER
1

**Lesson
Plans**

Section 1 ■ Radiation from Space

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)
Single Periods: 2 sessions

Objectives

1. **Explain** the electromagnetic spectrum.
2. **Identify** the differences between refracting and reflecting telescopes.
3. **Recognize** the differences between optical and radio telescopes.

National Content Standards

UCP2, A1, D3

Motivate

- _____ Explore Activity, p. 7
- _____ Before You Read, p. 7 (Foldables, p. 13, **CRB**)
- _____ Section Focus Transparency 1, **TCR** (Transparency Master and Study Guide, p. 40, **CRB**)

Teach

- | | |
|---|--|
| _____ Content Background, pp. 6E–6F, TWE | ■_____ Activity: Building a Reflecting Telescope, p. 14 (Activity Worksheet, pp. 5–6, CRB) |
| _____ Health Integration, p. 9 | _____ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 29–31, CRB) |
| _____ Discussion, pp. 9, 11, TWE | _____ Science Inquiry Lab, p. 59, TCR |
| _____ Inclusion Strategies, pp. 9, 10, TWE | ■_____ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 43–44, CRB) |
| _____ Visual Learning, p. 10, TWE | _____ Laboratory Activity 1, pp. 9–12, CRB |
| _____ Science Journal, pp. 10, 11, TWE | _____ Spanish Resources, Section 1, CRB |
| _____ Quick Demo, p. 10, TWE | |
| _____ MiniLAB: Observing the Effects of Light Pollution, p. 12 (MiniLAB Worksheet, p. 3, CRB) | |

Assess

- _____ Section Assessment, p. 13
- _____ Skill Builder Activities, p. 13
- _____ Performance Assessment in the Science Classroom, pp. 89, 97, 109, 117, **TCR**

Reteach/Reinforce

- _____ Directed Reading for Content Mastery, pp. 15, 16, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 19, 20, **CRB**
- _____ Reinforcement, p. 23, **CRB**

Enrich/Apply

- _____ Enrichment, p. 26, **CRB**
- _____ Cultural Diversity, p. 51, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 1
- _____ Guided Reading Audio Program (English & Spanish), Ch. 1
- _____ Interactive CD-ROM, Presentation Builder, Ch. 1
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

Section 2 ■ Early Space Missions

Schedule

Block Schedule: 0.5 session (■ denotes activities recommended for block schedule.)

Single Periods: 1 session

Objectives

4. **Compare and contrast** natural and artificial satellites.
5. **Identify** the differences between artificial satellites and space probes.
6. **Explain** the history of the race to the Moon.

National Content Standards

UCP2, A1, D3, F5, G1

Motivate

- Section Focus Transparency 2, **TCR** (Transparency Master and Study Guide, p. 41, **CRB**)

Teach

- _____ Math Skills Activity, p. 16
- _____ Discussion, p. 16, **TWE**
- _____ Quick Demo, p. 16, **TWE**
- _____ Curriculum Connection, p. 16, **TWE**
- _____ Chemistry Integration, p. 18
- _____ Visual Learning, pp. 18, 19, **TWE**
- _____ Inclusion Strategies, p. 18, **TWE**
- _____ Use Science Words, p. 18, **TWE**
- _____ Activity, pp. 19, 20, **TWE**
- _____ Science Online, p. 20
- _____ Science Journal, p. 21, **TWE**
- _____ MiniLAB: Modeling a Satellite, p. 21 (MiniLAB Worksheet, p. 4, **CRB**)
- _____ Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 29–31, **CRB**)
- _____ Spanish Resources, Section 2, **CRB**

Assess

- Section Assessment, p. 22
- _____ Skill Builder Activities, p. 22
- _____ Performance Assessment in the Science Classroom, pp. 89, 151, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, p. 17, **CRB**
- _____ Spanish Directed Reading for Content Mastery, p. 21, **CRB**
- Reinforcement, p. 24, **CRB**
- _____ Mathematics Skill Activities, p. 15, **TCR**
- _____ Reading and Writing Skill Activities, p. 11, **TCR**

Enrich/Apply

- _____ Enrichment, p. 27, **CRB**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 1
- _____ Guided Reading Audio Program (English & Spanish), Ch. 1
- _____ Interactive CD-ROM, Exploration, Ch. 1
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

CHAPTER
1

**Lesson
Plans**

**Section 3 ■ Current and Future
Space Missions**

Schedule

Block Schedule: 2 sessions (■ denotes activities recommended for block schedule.)
Single Periods: 4 sessions

Objectives

7. **Explain** the benefits of the space shuttle.
8. **Identify** the usefulness of orbital space stations.
9. **Explore** future space missions.

National Content Standards

UCP2, A1, D3, F5

Motivate

- Section Focus Transparency 3, **TCR** (Transparency Master and Study Guide, p. 42, **CRB**)

Teach

- | | |
|---|--|
| _____ Discussion, pp. 24, 26, 27, 33, TWE | _____ Activity, pp. 27, 33, TWE |
| _____ Quick Demo, p. 24, TWE | ■ Activity: Star Sightings, pp. 30–31
(Activity Worksheet, pp. 7–8, CRB) |
| _____ Inclusion Strategies, pp. 24, 28, TWE | _____ Science and Society, pp. 32–33 |
| _____ Identifying Misconceptions, p. 24, TWE | _____ Content Outline for Teaching, Section 3
(Note-taking Worksheet, pp. 29–31, CRB) |
| _____ Science Online, pp. 25, 27 | _____ Home and Community Involvement, p. 31, TCR |
| _____ Visual Learning, pp. 25, 26, TWE | _____ Spanish Resources, Section 3, CRB |
| _____ Make a Model, p. 25, TWE | |
| _____ Lab Demonstration, p. 26, TWE | |

Assess

- Section Assessment, p. 29
- _____ Skill Builder Activities, p. 29
- _____ Performance Assessment in the Science Classroom, pp. 91, 151, 163, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, pp. 17, 18, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 21, 22, **CRB**
- Reinforcement, p. 25, **CRB**

Enrich/Apply

- _____ Enrichment, p. 28, **CRB**
- _____ Physical Science Critical Thinking/Problem-Solving, p. 5, **TCR**

Chapter Assessment

- | | |
|---|---|
| ■ Chapter Study Guide, pp. 34–35 | ■ Assessment Transparency, TCR , (Transparency Master and Study Guide, p. 45, CRB) |
| ■ Chapter Review, pp. 33–34, CRB | _____ Standardized Test Practice by The Princeton Review, pp. 7–10, TCR |
| ■ Chapter Assessment, pp. 36–37 | |
| ■ Chapter Test, pp. 35–38, CRB | |

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 1
- _____ Guided Reading Audio Program (English & Spanish), Ch. 1
- _____ MindJogger Videoquiz, Ch. 1
- _____ ExamView Pro Test Bank Software, Ch. 1
- _____ Interactive CD-ROM, Quiz, Ch. 1
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources

Section 1 ■ Earth

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)

Single Periods: 2 sessions

Objectives

1. **Examine** Earth's physical characteristics.
2. **Differentiate** between rotation and revolution.
3. **Discuss** what causes seasons to change.

National Content Standards

UCP2, A1, D3

Motivate

- _____ Explore Activity, p. 39
- _____ Before You Read, p. 39 (Foldables, p. 15, **CRB**)
- _____ Section Focus Transparency 1, **TCR** (Transparency Master and Study Guide, p. 44, **CRB**)

Teach

- _____ Content Background, pp. 38E–38F, **TWE**
- _____ Life Science Integration, p. 41
- _____ Visual Learning, pp. 41, 43, **TWE**
- _____ Quick Demo, pp. 42, 44, **TWE**
- _____ MiniLAB: Making Your Own Compass, p. 42 (MiniLAB Worksheet, p. 3, **CRB**)
- _____ Science Online, pp. 43, 45
- _____ Inclusion Strategies, p. 43, **TWE**
- _____ Discussion, p. 44, **TWE**
- _____ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 31–34, **CRB**)
- _____ Science Inquiry Lab, p. 41, **TCR**
- _____ Teaching Transparency, **TCR** (Transparency Master and Study Guide, pp. 47–48, **CRB**)
- _____ Laboratory Activity 1, pp. 11–12, **CRB**
- _____ Laboratory Activity 2, pp. 13–14, **CRB**
- _____ Spanish Resources, Section 1, **CRB**

Assess

- _____ Section Assessment, p. 45
- _____ Skill Builder Activities, p. 45
- _____ Performance Assessment in the Science Classroom, pp. 89, 91, 159, **TCR**

Reteach/Reinforce

- _____ Directed Reading for Content Mastery, pp. 17, 18, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 21, 22, **CRB**
- _____ Reinforcement, p. 25, **CRB**

Enrich/Apply

- _____ Enrichment, p. 28, **CRB**
- _____ Earth Science Critical Thinking/Problem-Solving, pp. 10, 14, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 2
- _____ Guided Reading Audio Program (English & Spanish), Ch. 2
- _____ Interactive CD-ROM, Presentation Builder, Ch. 2
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

CHAPTER
2

Lesson
Plans

Section 2 ■ The Moon—Earth’s Satellite

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)

Single Periods: 2 sessions

Objectives

4. **Identify** phases of the Moon and their cause.
5. **Explain** why solar and lunar eclipses occur.
6. **Infer** what the Moon’s surface features may reveal about its history.

National Content Standards

UCP2, A1, D3

Motivate

- Section Focus Transparency 2, **TCR** (Transparency Master and Study Guide, p. 45, **CRB**)

Teach

- _____ Science Journal, p. 47, **TWE**
- _____ MiniLAB: Comparing the Sun and the Moon, p. 47 (MiniLAB Worksheet, p. 4, **CRB**)
- _____ Visual Learning, pp. 48, 52, **TWE**
- _____ Use Science Words, pp. 48, 51, **TWE**
- _____ Identifying Misconceptions, pp. 48, 50, **TWE**
- _____ Science Online, p. 49
- _____ Discussion, pp. 49, 50, 51, **TWE**
- _____ Activity, pp. 50, 51, 52, **TWE**
- _____ Lab Demonstration, p. 50, **TWE**
- _____ Physics Integration, p. 51
- _____ Problem-Solving Activity, p. 53
- Activity: Moon Phases and Eclipses, p. 55 (Activity Worksheet, pp. 7–8, **CRB**)
- _____ Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 31–34, **CRB**)
- _____ Spanish Resources, Section 2, **CRB**

Assess

- Section Assessment, p. 54
- _____ Skill Builder Activities, p. 54
- _____ Performance Assessment in the Science Classroom, pp. 127, 161, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, p. 19, **CRB**
- _____ Spanish Directed Reading for Content Mastery, p. 23, **CRB**
- Reinforcement, p. 26, **CRB**

Enrich/Apply

- _____ Enrichment, p. 29, **CRB**
- _____ Cultural Diversity, pp. 29, 71, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 2
- _____ Guided Reading Audio Program (English & Spanish), Ch. 2
- _____ Interactive CD-ROM, Exploration, Ch. 2
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

Section 3 ■ Exploring Earth's Moon

Schedule

Block Schedule: 2 sessions (■ denotes activities recommended for block schedule.)

Single Periods: 4 sessions

Objectives

7. **Describe** recent discoveries about the Moon.
8. **Examine** facts about the Moon that might influence future space travel.

National Content Standards

UCP2, A1, D3, E1, G1, G3

Motivate

- Section Focus Transparency 3, **TCR** (Transparency Master and Study Guide, p. 46, **CRB**)

Teach

- _____ Visual Learning, p. 57, **TWE**
- _____ MiniLAB: Modeling a Shaded Impact Basin, p. 57 (MiniLAB Worksheet, p. 5, **CRB**)
- _____ Activity, p. 58, **TWE**
- _____ Extension, p. 58, **TWE**
- _____ Discussion, pp. 59, 63, **TWE**
- Activity: Tilt and Temperature, pp. 60–61 (Activity Worksheet, pp. 9–10, **CRB**)
- _____ Science and History, pp. 62–63
- _____ Identifying Misconceptions, p. 65, **TWE**
- _____ Content Outline for Teaching, Section 3 (Note-taking Worksheet, pp. 31–34, **CRB**)
- _____ Home and Community Involvement, p. 24, **TCR**
- _____ Spanish Resources, Section 3, **CRB**

Assess

- Section Assessment, p. 59
- _____ Skill Builder Activities, p. 59
- _____ Performance Assessment in the Science Classroom, pp. 109, 127, 151, 159, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, pp. 19, 20, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 23, 24, **CRB**
- Reinforcement, p. 27, **CRB**
- _____ Mathematics Skill Activities, p. 3, **TCR**
- _____ Reading and Writing Skill Activities, p. 11, **TCR**

Enrich/Apply

- _____ Enrichment, p. 30, **CRB**

Chapter Assessment

- Chapter Study Guide, pp. 64–65
- Chapter Review, pp. 37–38, **CRB**
- Chapter Assessment, pp. 66–67
- Chapter Test, pp. 39–42, **CRB**
- Assessment Transparency, **TCR**, (Transparency Master and Study Guide, p. 49, **CRB**)
- _____ Standardized Test Practice by The Princeton Review, pp. 11–14, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 2
- _____ Guided Reading Audio Program (English & Spanish), Ch. 2
- _____ MindJogger Videoquiz, Ch. 2
- _____ ExamView Pro Test Bank Software, Ch. 2
- _____ Interactive CD-ROM, Quiz, Ch. 2
- _____ Science Web site: science.glencoe.com

CHAPTER
3

**Lesson
Plans**

Section 1 ■ The Solar System

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)
Single Periods: 2 sessions

Objectives

- | | |
|---|---|
| 1. Compare the Sun-centered and Earth-centered models of the solar system. | National Content Standards
UCP2, A1, D3, G3 |
| 2. Describe current models of the formation of the solar system. | |

Motivate

- _____ Explore Activity, p. 69
- _____ Before You Read, p. 69 (Foldables, p. 17, **CRB**)
- _____ Section Focus Transparency 1, **TCR** (Transparency Master and Study Guide, p. 48, **CRB**)

Teach

- _____ Content Background, pp. 68E–68F, **TWE**
- _____ Science Online, p. 71
- _____ Discussion, p. 71, **TWE**
- _____ Visual Learning, pp. 71, 73, **TWE**
- _____ Physics Integration, p. 72
- _____ Inclusion Strategies, p. 72, **TWE**
- _____ Use Science Words, p. 72, **TWE**
- _____ Science Journal, p. 72, **TWE**
- _____ Activity, p. 73, **TWE**
- _____ Activity: Planetary Orbits, p. 75 (Activity Worksheet, pp. 5–6, **CRB**)
- _____ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 35–38, **CRB**)
- _____ Home and Community Involvement, p. 48, **TCR**
- _____ Spanish Resources, Section 1, **CRB**

Assess

- _____ Section Assessment, p. 74
- _____ Skill Builder Activities, p. 74
- _____ Performance Assessment in the Science Classroom, pp. 89, 99, 127, **TCR**

Reteach/Reinforce

- _____ Directed Reading for Content Mastery, pp. 19, 20, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 23, 24, **CRB**
- _____ Reinforcement, p. 27, **CRB**
- _____ Reading and Writing Skill Activities, p. 47, **TCR**

Enrich/Apply

- _____ Enrichment, p. 31, **CRB**
- _____ Cultural Diversity, p. 29, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 3
- _____ Guided Reading Audio Program (English & Spanish), Ch. 3
- _____ Interactive CD-ROM, Presentation Builder and Exploration, Ch. 3
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, **TCR** = Teacher Classroom Resources

Section 2 ■ The Inner Planets

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)

Single Periods: 2 sessions

Objectives

3. List the inner planets and their relative order from the Sun.
4. Describe important characteristics of each inner planet.
5. Compare and contrast Venus and Earth.

National Content Standards

UCP1, A1, B2, D3

Motivate

- Section Focus Transparency 2, **TCR** (Transparency Master and Study Guide, p. 49, **CRB**)

Teach

- _____ Activity, p. 77, **TWE**
- _____ Extension, p. 77, **TWE**
- _____ Teacher FYI, pp. 77, 80, **TWE**
- _____ Discussion, p. 78, **TWE**
- _____ Visual Learning, p. 78, **TWE**
- _____ Quick Demo, p. 78, **TWE**
- _____ Curriculum Connection, p. 78, **TWE**
- _____ MiniLAB: Inferring Effects on Gravity, p. 79 (MiniLAB Worksheet, p. 3, **CRB**)
- _____ Science Online, p. 80
- _____ Math Skills Activity, p. 80
- _____ Inclusion Strategies, p. 80, **TWE**
- _____ Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 35–38, **CRB**)
- _____ Laboratory Activity 1, pp. 9–12, **CRB**
- _____ Spanish Resources, Section 2, **CRB**

Assess

- Section Assessment, p. 81
- _____ Skill Builder Activities, p. 81
- _____ Performance Assessment in the Science Classroom, pp. 46, 89, 173, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, pp. 19, 20, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 23, 24, **CRB**
- Reinforcement, p. 28, **CRB**
- _____ Mathematics Skill Activities, p. 1, **TCR**
- _____ Reading and Writing Skill Activities, p. 11, **TCR**

Enrich/Apply

- _____ Enrichment, p. 32, **CRB**
- _____ Earth Science Critical Thinking/Problem-Solving, p. 8, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 3
- _____ Guided Reading Audio Program (English & Spanish), Ch. 3
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

CHAPTER 3

Lesson Plans

Section 3 ■ The Outer Planets

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)

Single Periods: 2 sessions

Objectives

6. **Describe** the major characteristics of Jupiter, Saturn, Uranus, and Neptune.
7. **Explain** how Pluto differs from the other outer planets.

National Content Standards

UCP1, A1, D3

Motivate

- Section Focus Transparency 3, **TCR** (Transparency Master and Study Guide, p. 50, **CRB**)

Teach

- _____ Visual Learning, p. 83, **TWE**
- _____ Teacher FYI, pp. 83, 84, 88, 89, **TWE**
- _____ Cultural Diversity, p. 84, **TWE**
- _____ MiniLAB: Modeling Planets, p. 84 (MiniLAB Worksheet, p. 4, **CRB**)
- _____ Discussion, pp. 85, 86, **TWE**
- _____ Identifying Misconceptions, p. 85, **TWE**
- _____ Curriculum Connection, p. 85, **TWE**
- _____ Physics Integration, p. 86
- _____ Science Journal, p. 86, **TWE**
- _____ Activity, p. 88, **TWE**
- _____ Lab Demonstration, p. 88, **TWE**
- _____ Make a Model, p. 88, **TWE**
- _____ Inclusion Strategies, p. 89, **TWE**
- _____ Extension, p. 89, **TWE**
- _____ Content Outline for Teaching, Section 3 (Note-taking Worksheet, pp. 35–38, **CRB**)
- _____ Spanish Resources, Section 3, **CRB**

Assess

- Section Assessment, p. 87
- _____ Skill Builder Activities, p. 87
- _____ Performance Assessment in the Science Classroom, pp. 89, 123, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, p. 21, **CRB**
- _____ Spanish Directed Reading for Content Mastery, p. 25, **CRB**
- Reinforcement, p. 29, **CRB**

Enrich/Apply

- _____ Enrichment, p. 33, **CRB**
- _____ Physical Science Critical Thinking/Problem-Solving, p. 4, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 3
- _____ Guided Reading Audio Program (English & Spanish), Ch. 3
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, **TCR** = Teacher Classroom Resources

Section 4 ■ Other Objects in the Solar System

Schedule

Block Schedule: 1.5 sessions (■ denotes activities recommended for block schedule.)
Single Periods: 3 sessions

Objectives

8. Describe where comets come from and how a comet develops as it approaches the Sun.
9. Distinguish among comets, meteoroids, and asteroids.

National Content Standards

UCP1, A1, D3, G2

Motivate

- Section Focus Transparency 4, **TCR** (Transparency Master and Study Guide, p. 51, **CRB**)

Teach

- | | |
|---|---|
| _____ Discussion, p. 91, TWE | _____ Oops! Accidents in Science, pp. 96–97 |
| _____ Activity, p. 91, TWE | _____ Content Outline for Teaching, Section 4 (Note-taking Worksheet, pp. 35–38, CRB) |
| _____ Science Journal, p. 91, TWE | ■ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 53–54, CRB) |
| _____ Identifying Misconceptions, pp. 91, 99, TWE | _____ Laboratory Activity 2, pp. 13–15, CRB |
| _____ Visual Learning, p. 92, TWE | _____ Spanish Resources, Section 4, CRB |
| _____ Teacher FYI, p. 92, TWE | |
| _____ Inclusion Strategies, p. 94, TWE | |
| ■ Activity: Solar System Distance Model, pp. 94–95 (Activity Worksheet, pp. 7–8, CRB) | |

Assess

- Section Assessment, p. 93
- _____ Skill Builder Activities, p. 93
- _____ Performance Assessment in the Science Classroom, pp. 123, 127, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, pp. 21, 22, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 25, 26, **CRB**
- Reinforcement, p. 30, **CRB**

Enrich/Apply

- _____ Enrichment, p. 34, **CRB**
- _____ Cultural Diversity, p. 31, **TCR**

Chapter Assessment

- | | |
|---|---|
| ■ Chapter Study Guide, pp. 98–99 | ■ Assessment Transparency, TCR , (Transparency Master and Study Guide, p. 55, CRB) |
| ■ Chapter Review, pp. 41–42, CRB | _____ Standardized Test Practice by The Princeton Review, pp. 15–18, TCR |
| ■ Chapter Assessment, pp. 100–101 | |
| ■ Chapter Test, pp. 43–46, CRB | |

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 3
- _____ Guided Reading Audio Program (English & Spanish), Ch. 3
- _____ MindJogger Videoquiz, Ch. 3
- _____ ExamView Pro Test Bank Software, Ch. 3
- _____ Interactive CD-ROM, Quiz, Ch. 3
- _____ Science Web site: science.glencoe.com

CHAPTER
4

**Lesson
Plans**

Section 1 ■ Stars

Schedule

Block Schedule: 0.5 session (■ denotes activities recommended for block schedule.)
Single Periods: 1 session

Objectives

1. **Explain** why the positions of constellations change throughout the year.
2. **Distinguish** between absolute magnitude and apparent magnitude.
3. **Describe** how parallax is used to determine distance.

National Content Standards

UCP2, A1, D3

Motivate

- _____ Explore Activity, p. 103
- _____ Before You Read, p. 103 (Foldables, p. 17, **CRB**)
- _____ Section Focus Transparency 1, **TCR** (Transparency Master and Study Guide, p. 48, **CRB**)

Teach

- | | |
|---|--|
| _____ Content Background, pp. 102E–102F, TWE | _____ Curriculum Connection, p. 107, TWE |
| _____ Science Journal, pp. 102, 105, TWE | _____ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 35–38, CRB) |
| _____ Identifying Misconceptions, p. 105, TWE | ■_____ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 53–54, CRB) |
| _____ MiniLAB: Observing Star Patterns, p. 105 (MiniLAB Worksheet, p. 3, CRB) | _____ Laboratory Activity 1, pp. 9–12, CRB |
| _____ Problem-Solving Activity, p. 106 | _____ Laboratory Activity 2, pp. 13–15, CRB |
| _____ Quick Demo, p. 106, TWE | _____ Home and Community Involvement, p. 35, TCR |
| _____ Inclusion Strategies, p. 106, TWE | _____ Spanish Resources, Section 1, CRB |
| _____ Activity, p. 107, TWE | |

Assess

- _____ Section Assessment, p. 108
- _____ Skill Builder Activities, p. 108
- _____ Performance Assessment in the Science Classroom, pp. 99, 123, 159, **TCR**

Reteach/Reinforce

- _____ Directed Reading for Content Mastery, pp. 19, 20, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 23, 24, **CRB**
- _____ Reinforcement, p. 27, **CRB**
- _____ Mathematics Skill Activities, p. 11, **TCR**

Enrich/Apply

- _____ Enrichment, p. 31, **CRB**
- _____ Earth Science Critical Thinking/Problem-Solving, p. 23, **TCR**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 4
- _____ Guided Reading Audio Program (English & Spanish), Ch. 4
- _____ Interactive CD-ROM, Presentation Builder, Ch. 4
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

Section 2 ■ The Sun

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)

Single Periods: 2 sessions

Objectives

4. **Describe** the structure of the Sun.
5. **Explain** how sunspots, prominences, and solar flares are related.
6. **Explain** why the Sun is considered an average star and how it differs from stars in binary systems.

National Content Standards

UCP5, A1, B3, D3

Motivate

- Section Focus Transparency 2, *TCR* (Transparency Master and Study Guide, p. 49, *CRB*)

Teach

- _____ Quick Demo, p. 110, *TWE*
- _____ Teacher FYI, p. 110, *TWE*
- _____ Fun Fact, p. 110, *TWE*
- _____ Science Online, p. 111
- _____ Visual Learning, p. 111, *TWE*
- _____ Use Science Words, p. 111, *TWE*
- _____ Curriculum Connection, p. 111, *TWE*
- Activity: Sunspots, p. 113 (Activity Worksheet, pp. 5–6, *CRB*)
- _____ Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 35–38, *CRB*)
- _____ Science Inquiry Lab, p. 43, *TCR*
- _____ Spanish Resources, Section 2, *CRB*

Assess

- Section Assessment, p. 112
- _____ Skill Builder Activities, p. 112
- _____ Performance Assessment in the Science Classroom, p. 93, *TCR*

Reteach/Reinforce

- Directed Reading for Content Mastery, p. 20, *CRB*
- _____ Spanish Directed Reading for Content Mastery, p. 24, *CRB*
- Reinforcement, p. 28, *CRB*

Enrich/Apply

- _____ Enrichment, p. 32, *CRB*
- _____ Cultural Diversity, p. 29, *TCR*

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 4
- _____ Guided Reading Audio Program (English & Spanish), Ch. 4
- _____ Using the Internet in the Science Classroom, *TCR*
- _____ Science Web site: science.glencoe.com

CHAPTER
4

**Lesson
Plans**

Section 3 ■ Evolution of Stars

Schedule

Block Schedule: 1 session (■ denotes activities recommended for block schedule.)
Single Periods: 2 sessions

Objectives

- | | |
|--|-----------------------------------|
| 7. Describe how stars are classified. | National Content Standards |
| 8. Explain how the temperature of a star relates to its color. | UCP1, UCP4, B1, D3 |
| 9. Describe how a star evolves. | |

Motivate

- Section Focus Transparency 3, **TCR** (Transparency Master and Study Guide, p. 50, **CRB**)

Teach

- _____ Physics Integration, p. 115
- _____ Inclusion Strategies, p. 115, **TWE**
- _____ Extension, pp. 115, 117, 118, **TWE**
- _____ Science Online, p. 116
- _____ Lab Demonstration, p. 116, **TWE**
- _____ Use Science Words, p. 116, **TWE**
- _____ Make a Model, p. 116, **TWE**
- _____ Teacher FYI, pp. 116, 117, 118, **TWE**
- _____ Chemistry Integration, p. 117
- _____ Visual Learning, p. 117, **TWE**
- _____ Fun Fact, p. 118, **TWE**
- _____ Discussion, p. 119, **TWE**
- _____ Content Outline for Teaching, Section 3 (Note-taking Worksheet, pp. 35–38, **CRB**)
- _____ Spanish Resources, Section 3, **CRB**

Assess

- Section Assessment, p. 119
- _____ Skill Builder Activities, p. 119
- _____ Performance Assessment in the Science Classroom, p. 93, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, p. 21, **CRB**
- _____ Spanish Directed Reading for Content Mastery, p. 25, **CRB**
- Reinforcement, p. 29, **CRB**

Enrich/Apply

- _____ Enrichment, pp. 33, **CRB**

Multimedia Options

- _____ Vocabulary Puzzlemaker Software, Ch. 4
- _____ Guided Reading Audio Program (English & Spanish), Ch. 4
- _____ Interactive CD-ROM, Exploration, Ch. 4
- _____ Using the Internet in the Science Classroom, **TCR**
- _____ Science Web site: science.glencoe.com

Section 4 ■ Galaxies and the Universe

Schedule

Block Schedule: 2 sessions (■ denotes activities recommended for block schedule.)
Single Periods: 4 sessions

Objectives

10. Identify the three main types of galaxies.
11. List several characteristics of the Milky Way Galaxy.
12. Describe evidence that supports the Big Bang theory.

National Content Standards

UCP2, A1, D3

Motivate

- Section Focus Transparency 4, **TCR** (Transparency Master and Study Guide, p. 51, **CRB**)

Teach

- | | |
|--|--|
| _____ Visual Learning, pp. 121, 124, 129, TWE | _____ Use an Analogy, p. 125, TWE |
| _____ Cultural Diversity, p. 121, TWE | ■ Activity: Measuring Parallax, pp. 126–127
(Activity Worksheet, pp. 7–8, CRB) |
| _____ Inclusion Strategies, p. 122, TWE | _____ Science Stats, pp. 128–129 |
| _____ Curriculum Connection, p. 122, TWE | _____ Discussion, p. 128, TWE |
| _____ MiniLAB: Measuring Distance in Space, p. 122
(MiniLAB Worksheet, p. 4, CRB) | _____ Content Outline for Teaching, Section 4
(Note-taking Worksheet, pp. 35–38, CRB) |
| _____ Quick Demo, p. 123, TWE | _____ Spanish Resources, Section 4, CRB |
| _____ Extension, pp. 123, 124, TWE | |
| _____ Activity, pp. 124, 128, TWE | |

Assess

- Section Assessment, p. 125
- _____ Skill Builder Activities, p. 125
- _____ Performance Assessment in the Science Classroom, pp. 89, 123, 159, **TCR**

Reteach/Reinforce

- Directed Reading for Content Mastery, pp. 21, 22, **CRB**
- _____ Spanish Directed Reading for Content Mastery, pp. 25, 26, **CRB**
- Reinforcement, p. 30, **CRB**
- _____ Reading and Writing Skill Activities, p. 47, **TCR**

Enrich/Apply

- _____ Enrichment, p. 34, **CRB**

Chapter Assessment

- | | |
|---|---|
| ■ Chapter Study Guide, pp. 130–131 | ■ Assessment Transparency, TCR , (Transparency Master and Study Guide, p. 55, CRB) |
| ■ Chapter Review, pp. 41–42, CRB | _____ Standardized Test Practice by The Princeton Review, pp. 19–22, TCR |
| ■ Chapter Assessment, pp. 132–133 | |
| ■ Chapter Test, pp. 43–46, CRB | |

Multimedia Options

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- _____ Guided Reading Audio Program (English & Spanish), Ch. 4
- _____ MindJogger Videoquiz, Ch. 4
- _____ ExamView Pro Test Bank Software, Ch. 4
- _____ Interactive CD-ROM, Quiz, Ch. 4
- _____ Science Web site: science.glencoe.com