

The Nature of Science



Chapter Pacing Guide

Please note that this pace is based on completing selected sections of the text in 90 classes, approximately 90 minutes each. Refer to the Course Planning Guide in the Teacher Edition for a complete list of time allotments assigned to each section.

Period	Content
0.5	1.1 Earth Science
0.25	1.2 Methods of Scientists
0.25	1.3 Communicating in Science
0.5	Chapter Assessment

Earth Science *pages 5–10*

Pacing Guide

1/2 period

Lesson

National Science Content Standards: UCP.1; A.1, A.2; C.4, C.5; D.2, D.3; E.1, E.2; G.1, G.2, G.3

Kentucky Core Content for Science Assessment: SIb, SIc; ACc

KEY: SE = Student Edition,
TWE = Teacher Wraparound Edition,
TCR = Teacher Classroom Resources

Objectives

- **Differentiate** among the four major branches of Earth science.
- **Contrast** the four systems of Earth.
- **Discuss** how Earth science affects your daily life.

Lesson Resources

- _____ Section Focus Transparency 1 and Master
- _____ Teaching Transparency 1 and Master
- _____ *Study Guide for Content Mastery*, pp. 1–2 TCR

Multimedia Resources

- _____ **MindJogger Videoquizzes**, Ch. 1
- _____ **Guided Reading Audio Program**, Section 1.1
- _____ *Using the Internet in the Science Classroom*, TCR
- _____ Glencoe Science Web Site: ky.science.glencoe.com

Optional Resources

- _____ *Laboratory Manual*, pp. 1–4 TCR

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Display the Section Focus Transparency and have students answer the questions. 	Section Focus Transparency 1 and Master	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Chapter 1 with the Introducing the Chapter feature. • Introduce Section 1.1. • Teach the main concepts of Section 1.1. 	TWE, p. 4 TWE, p. 5 TWE, pp. 5–10	30 minutes
In-Class Check <ul style="list-style-type: none"> • Complete the Check for Understanding and Reteach strategies. 	TWE, p. 10	5 minutes
Homework <ul style="list-style-type: none"> • Have students complete the Section 1.1 Assessment. • Assign relevant questions from Chapter 1 Assessment. 	SE, p. 10 SE, pp. 24–25	5 minutes

total = 45 minutes

Methods of Scientists pages 11–16

Pacing Guide

1/4 period

Lesson and GeoLab

National Science Content Standards: A.1, A.2; B.2, B.6; G.2
Kentucky Core Content for Science Assessment: SIb, SIc, SIe, SIf; ACc

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Objectives

- List the steps used in a scientific method.
- Compare and contrast experimental variables and controls.
- Identify basic SI units.
- Explain how to write numbers using scientific notation.

Lesson Resources

- _____ Section Focus Transparency 2 and Master
- _____ Teaching Transparency 2 and Master
- _____ *GeoLab and MiniLab Worksheets*, pp. 1–4 TCR
- _____ *Study Guide for Content Mastery*, pp. 3–4 TCR

Optional Resources

- _____ *Exploring Environmental Problems*, pp. 5–8 TCR
- _____ *Laboratory Manual*, pp. 5–8 TCR

Multimedia Resources

- _____ MindJogger Videoquizzes, Ch. 1
- _____ Guided Reading Audio Program, Section 1.2
- _____ *Using the Internet in the Science Classroom*, TCR
- _____ Glencoe Science Web Site: ky.science.glencoe.com

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Display the Section Focus Transparency and have students answer the questions. • Have students check homework answers. 	Section Focus Transparency 2 and Master TWE, pp. 10, 24–25	3 minutes
Discussion <ul style="list-style-type: none"> • Answer any questions about homework. 	SE, pp. 10, 24–25	2 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Section 1.2. • Teach the main concepts of Section 1.2. • Have students complete the MiniLab. 	TWE, p. 11 TWE, pp. 11–16 SE p. 12	15 minutes
In-Class Check <ul style="list-style-type: none"> • Assess students' answers to the MiniLab Analyze and Conclude questions and discuss their results. • Have students read the GeoLab and begin the procedure. (Note: this lab will take 40–50 minutes to complete.) • Complete the Check for Understanding and Reteach strategies. 	TWE, p. 12 SE, pp. 20–21 TWE, p. 16	2 minutes
Homework <ul style="list-style-type: none"> • Have students complete the Section 1.2 Assessment. • Assign relevant questions from Chapter 1 Assessment. 	SE, p. 16 SE, pp. 24–25	1 minute

total = 23 minutes

Communicating in Science pages 17–19

Pacing Guide

1/4 period

Lesson

National Science Content Standards: UCP.2, UCP.3; A.1, A.2; B.2; C.3, C.5; D.1, D.2, D.3, D.4; E.1, E.2; G.1, G.2, G.3

Kentucky Core Content for Science Assessment: 2.3.3; SIb, SIc; ACa, ACc

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Objectives

- List several ways in which scientific information is communicated.
- Differentiate between a scientific theory and a scientific law.

Lesson Resources

- _____ Section Focus Transparency 3 and Master
- _____ Teaching Transparency 3 and Master
- _____ *Study Guide for Content Mastery*, pp. 5–6 TCR

Multimedia Resources

- _____ MindJogger Videoquizzes, Ch. 1
- _____ Guided Reading Audio Program, Section 1.3
- _____ *Using the Internet in the Science Classroom*, TCR
- _____ Glencoe Science Web Site: ky.science.glencoe.com

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Display the Section Focus Transparency and have students answer the questions. • Have students check homework answers. 	Section Focus Transparency 3 and Master TWE, pp. 16, 24–25	3 minutes
Discussion <ul style="list-style-type: none"> • Answer any questions about homework. 	TWE, pp. 16, 24–25	2 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Section 1.3 • Teach the main concepts of Section 1.3. 	TWE, p. 17 TWE, pp. 17–19	10 minutes
In-Class Check <ul style="list-style-type: none"> • Complete the Check for Understanding and Reteach strategies. • Answer questions on Chapter 1 in preparation for the test. 	TWE, p. 19 TWE, pp. 4–25	5 minutes
Homework <ul style="list-style-type: none"> • Have students complete the Section 1.3 Assessment. • Assign relevant questions from Chapter 1 Assessment. 	SE, p. 19 SE, pp. 24–25	3 minutes

total = 23 minutes

Review and Assessment

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1/2 period

Review/Assessment

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Assessment Resources

- _____ GeoDigest Unit 1, SE pp. 48–49
- _____ Chapter Assessment, Ch. 1 TCR
- _____ Performance Assessment in the Science Classroom, TCR
- _____ Alternate Assessment in the Science Classroom, TCR
- _____ Performance Assessment in Earth Science, pp. 1–4 TCR

Multimedia Resources

- _____ MindJogger Videoquizzes, Ch. 1
- _____ ExamView Pro™ Test Bank, Ch. 1
- _____ Puzzlemaker Software, Ch. 1

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students check homework answers. 	TWE, pp. 19, 24–25	5 minutes
Reviewing the Chapter <ul style="list-style-type: none"> • Answer any questions about homework. • Answer any final questions about Chapter 1. 	TWE, pp. 19, 24–25 TWE, pp. 4–25	5 minutes
Assessment <ul style="list-style-type: none"> • Distribute the test and allow students to work quietly. 	Chapter Assessment, pp. 1–6 TCR	30–35 minutes
Closing <ul style="list-style-type: none"> • As students complete the test, have them read the Chapter 2 Opener. • If students have time, let them explore the Earth Science Online for Chapter 2. 	SE, pp. 26–27 ky.science.glencoe.com	0–5 minutes

total = 45 minutes