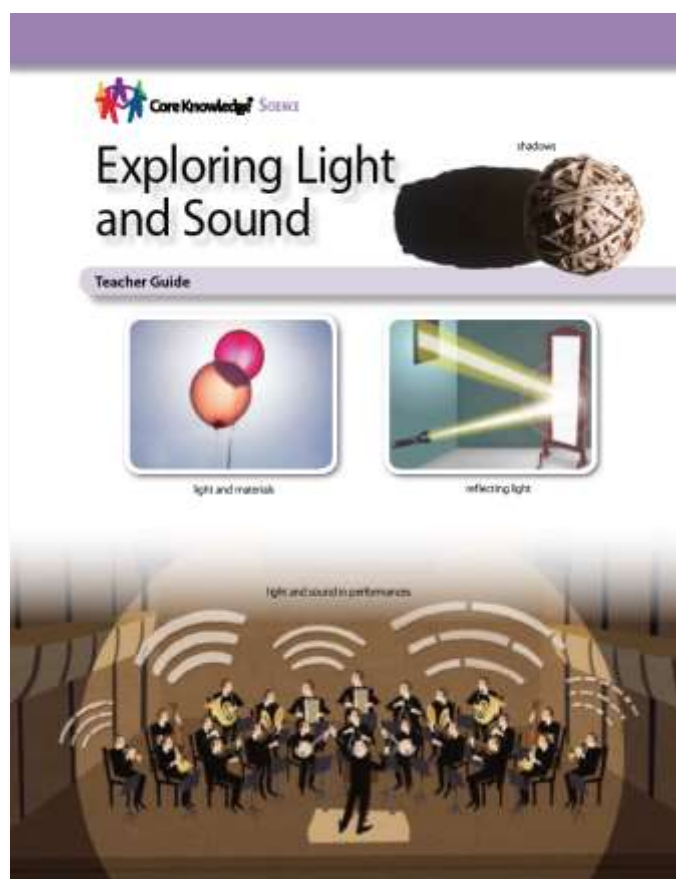


Exploring Light and Sound

Click on each lesson to access its online resources. Page numbers refer to pages in the Teacher Guide. Some links provide access to files created by the Core Knowledge Foundation, including PDF documents that you can download and view with the appropriate software (such as [Adobe Acrobat Reader DC](#)).

	About this Unit
Unit Opener	Unit Opener
Lesson 1	Segment 1
	Segment 2
	Segment 3
	Segment 4
	Segment 5
Lesson 2	Segment 1
	Segment 2
	Segment 3
	Segment 4
	Segment 5
Lesson 3	Segment 1
	Segment 2
	Segment 3
	Segment 4
	Segment 5
Lesson 4	Segment 1
	Segment 2
	Segment 3
	Segment 4
Unit Supplement	Unit Supplement
	Teacher Resources





Online Resources

About this Unit

Page	Resource Links
2	<p>Note to Teachers and Curriculum Planners</p> <ul style="list-style-type: none">• The learning progressions of Disciplinary Core Ideas PS2.A and PS2.B offer guidance regarding the scope and sequence of learning about forces and motion as well as types of interactions in the elementary grades and beyond.• Learn more about this core idea and its related content by reading the corresponding section of A Framework for K–12 Science Education. <p>See also the Teachers Resources section of this guide.</p> <p>[To see an overview of the entire Core Knowledge Science program, visit link]</p>
3	<p>This unit has been informed by the following Next Generation Science Standards (NGSS) Performance Expectations:</p> <p>Topic—Properties of Matter</p> <ul style="list-style-type: none">• 1-PS4-1• 1-PS4-2• 1-PS4-3• 1-PS4-4
9	<p>CKSci Online Resources</p> <p>Recommended Science Trade Books</p>
12	<p>NGSS References</p> <ul style="list-style-type: none">• DCI• CCC• SEP
13	<ul style="list-style-type: none">• Resources for Effective and Safe Classroom Activities• Materials Supply List: Grade 1 Unit 3 Exploring Light and Sound

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Unit Opener

Page	Resource Links
18	Disciplinary Core Idea: <i>PS4.C Information Technologies and Instrumentation</i> <ul style="list-style-type: none"> From the Framework: Pages 136–137
	Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none"> From the Framework: Pages 54–56 <i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none"> From the Framework: Pages 67–71
	Connection to Engineering, Technology and Applications of Science <i>Influence of Engineering, Technology, and Science on Society and the Natural World</i>
20	[VIDEO] Copland’s “Hoe-Down” [VIDEO] Gershwin’s “Rhapsody in Blue”

← [Table of Contents](#)

[Next Lesson](#) →

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 1 Opener

Page	Resource Links
26	NGSS References <ul style="list-style-type: none">• DCI• CCC• SEP

Lesson 1, Segment 1

Page	Resource Links
27	Disciplinary Core Idea: PS4.A <i>Wave Properties</i> <ul style="list-style-type: none">• From the Framework: Pages 131–133
	Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none">• From the Framework: Pages 54–56
	<i>3 Planning and Carrying Out Investigations</i> <ul style="list-style-type: none">• From the Framework: Pages 59–61
	<i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none">• From the Framework: Pages 67–71
	Crosscutting Concept: <i>1 Patterns</i> <ul style="list-style-type: none">• From the Framework: Pages 85–87

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 1, Segment 2

Page	Resource Links
33	Performance Expectation: <ul style="list-style-type: none">• 1-PS4-1 Evidence Statements for 1-PS4-1
	Disciplinary Core Idea: PS4.A <i>Wave Properties</i> <ul style="list-style-type: none">• From the Framework: Pages 131-133
	Science and Engineering Practice: <i>3 Planning and Carrying Out Investigations</i> <ul style="list-style-type: none">• From the Framework: Pages 59-61
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none">• From the Framework: Pages 87-89

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 1, Segment 3

Page	Resource Links
39	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-1 Evidence Statements for 1-PS4-1
	Disciplinary Core Idea: PS4.A <i>Wave Properties</i> <ul style="list-style-type: none"> • From the Framework: Pages 131–133
	Science and Engineering Practice: <i>3 Planning and Carrying Out Investigations</i> <ul style="list-style-type: none"> • From the Framework: Pages 59–61 <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none"> • From the Framework: Pages 54–56
	Crosscutting Concept: 2 <i>Cause and Effect</i> <ul style="list-style-type: none"> • From the Framework: Pages 87–89
41	[AUDIO] Sound Effects
42	[VIDEO] See Vibrations Make Things Jump

[← Table of Contents](#)

 [Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 1, Segment 4

Page	Resource Links
45	Disciplinary Core Idea: PS4.A <i>Wave Properties</i> <ul style="list-style-type: none">From the Framework: Pages 131-133
	Crosscutting Concept: 2 <i>Cause and Effect</i> <ul style="list-style-type: none">From the Framework: Pages 87-89

[← Table of Contents](#) [Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 1, Segment 5

Page	Resource Links
53	<p>Performance Expectation:</p> <ul style="list-style-type: none"> • 1-PS4-1 Evidence Statements for 1-PS4-1 <p>Disciplinary Core Idea: PS4.A <i>Wave Properties</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 133–136 <p>Science and Engineering Practice:</p> <p><i>1 Asking Questions and Defining Problems</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 54–56 <p><i>3 Planning and Carrying Out Investigations</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 59–61 <p>Crosscutting Concept: 2 <i>Cause and Effect</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 87–89
55	[VIDEO] Jug Band

← [Table of Contents](#)

[Next Lesson](#) →

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 2 Opener

Page	Resource Links
60	NGSS References <ul style="list-style-type: none"> • DCI • CCC • SEP

Lesson 2, Segment 1

Page	Resource Links
61	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> • From the Framework: Pages 133–136
	Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none"> • From the Framework: Pages 54–56 <i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none"> • From the Framework: Pages 67–71
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none"> • From the Framework: Pages 87–89
64	[VIDEO] Cave exploration The original video is no longer available, so we have replaced it with another. Please adjust the lesson plan accordingly.
66	[IMAGE] Van Gogh's "The Starry Night"

[← Table of Contents](#)

 [Next Lesson →](#)

Lesson 2, Segment 2

Page	Resource Links
67	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> From the Framework: Pages 133–136 <hr/> Science and Engineering Practice: 6 <i>Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none"> From the Framework: Pages 67–71 <hr/> Crosscutting Concept: 2 <i>Cause and Effect</i> <ul style="list-style-type: none"> From the Framework: Pages 87–89
69	[VIDEO] Fireflies [VIDEO] More Fireflies

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 2, Segment 3

Page	Resource Links
72	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-2 Evidence Statements for 1-PS4-2
	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> • From the Framework: Pages 133–136
	Science and Engineering Practice: <i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none"> • From the Framework: Pages 67–71
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none"> • From the Framework: Pages 87–89
73	[VIDEO] Boy Reading with Flashlight

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 2, Segment 4

Page	Resource Links
77	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none">From the Framework: Pages 133–136
	Science and Engineering Practice: <i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none">From the Framework: Pages 67–71
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none">From the Framework: Pages 87–89

[← Table of Contents](#) [Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 2, Segment 5

Page	Resource Links
90	Performance Expectation: <ul style="list-style-type: none">• 1-PS4-2 Evidence Statements for 1-PS4-2
	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none">• From the Framework: Pages 133–136
	Science and Engineering Practice: <i>2 Developing and Using Models</i> <ul style="list-style-type: none">• From the Framework: Pages 56–59 <i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none">• From the Framework: Pages 67–71
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none">• From the Framework: Pages 87–89

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 3 Opener

Page	Resource Links
97	NGSS References <ul style="list-style-type: none">• DCI• CCC• SEP

Lesson 3, Segment 1

Page	Resource Links
98	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none">• From the Framework: Pages 133–136
	Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none">• From the Framework: Pages 54–56 <i>3 Planning and Carrying Out Investigations</i> <ul style="list-style-type: none">• From the Framework: Pages 59–61
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none">• From the Framework: Pages 87–89
100	[VIDEO] Children Discovering Shadows

[← Table of Contents](#) [Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 3, Segment 2

Page	Resource Links
104	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-3 Evidence Statements for 1-PS4-3
	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> • From the Framework: Pages 133–136
	Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none"> • From the Framework: Pages 54–56 <i>3 Planning and Carrying Out Investigations</i> <ul style="list-style-type: none"> • From the Framework: Pages 59–61
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none"> • From the Framework: Pages 87–89

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 3, Segment 3

Page	Resource Links
110	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-3 Evidence Statements for 1-PS4-3
	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> • From the Framework: Pages 133-136
	Science and Engineering Practice: <p><i>3 Planning and Carrying Out Investigations</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 59-61 <p><i>4 Analyzing and Interpreting Data</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 61-63 <p><i>7 Engaging in Argument from Evidence</i></p> <ul style="list-style-type: none"> • From the Framework: Bottom of pages 71-74
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none"> • From the Framework: Pages 87-89

[← Table of Contents](#)

[Next Lesson](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 3, Segment 4

Page	Resource Links
117	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-3 Evidence Statements for 1-PS4-3
	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> • From the Framework: Pages 133–136
	Science and Engineering Practice: <p><i>3 Planning and Carrying Out Investigations</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 59–61 <p><i>4 Analyzing and Interpreting Data</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 61–63 <p><i>6 Constructing Explanations and Designing Solutions</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 67–71
	Crosscutting Concept: <p><i>2 Cause and Effect</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 87–89 <p><i>6 Structure and Function</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 96–98

[← Table of Contents](#)

[Next Lesson](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 3, Segment 5

Page	Resource Links
123	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-3 Evidence Statements for 1-PS4-3
	Disciplinary Core Idea: PS4.B <i>Electromagnetic Radiation</i> <ul style="list-style-type: none"> • From the Framework: Pages 133–136
	Science and Engineering Practice: <p><i>3 Planning and Carrying Out Investigations</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 59–61 <p><i>6 Constructing Explanations and Designing Solutions</i></p> <ul style="list-style-type: none"> • From the Framework: Pages 67–71
	Crosscutting Concept: <i>2 Cause and Effect</i> <ul style="list-style-type: none"> • From the Framework: Pages 87–89
125	[VIDEO] Flashlight Beam Tag

[← Table of Contents](#)
[Next Lesson](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 4 Opener

Page	Resource Links
139	NGSS References <ul style="list-style-type: none">• DCI• CCC• SEP

Lesson 4, Segment 1

Page	Resource Links
140	Disciplinary Core Idea: PS4.C <i>Information Technologies and Instrumentation</i> <ul style="list-style-type: none">• From the Framework: Pages 136–138
	Science and Engineering Practice: <i>8 Obtaining, Evaluating, and Communicating Information</i> <ul style="list-style-type: none">• From the Framework: Pages 74–77
	Connection to Engineering, Technology and Applications of Science Influence of Engineering, Technology, and Science on Society and the Natural World
142	[VIDEO] The Invention of Morse Code

[← Table of Contents](#) [Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 4, Segment 2

Page	Resource Links
145	<p>Disciplinary Core Idea: PS4.A <i>Wave Properties</i></p> <ul style="list-style-type: none"> From the Framework: Pages 131–133 <p>PS4.B <i>Electromagnetic Radiation</i></p> <ul style="list-style-type: none"> From the Framework: Pages 133–136 <p>PS4.C <i>Information Technologies and Instrumentation</i></p> <ul style="list-style-type: none"> From the Framework: Pages 136–138 <p>ETS1.A <i>Defining and Delimiting Engineering Problems</i></p> <ul style="list-style-type: none"> From the Framework: Pages 204–206 <p>ETS1.B <i>Developing Possible Solutions</i></p> <ul style="list-style-type: none"> From the Framework: Pages 206–208 <p>ETS1.C <i>Optimizing the Design Solution</i></p> <ul style="list-style-type: none"> From the Framework: Pages 208–210 <hr/> <p>Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i></p> <ul style="list-style-type: none"> From the Framework: Pages 54–56
150	[VIDEO] The Little Red Hen

[← Table of Contents](#)

[Next Lesson →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Lesson 4, Segment 3

Page	Resource Links
156	Performance Expectation: <ul style="list-style-type: none">• K-2-ETS1-1 Evidence Statements for K-2-ETS1-1
	Disciplinary Core Idea: PS4.C <i>Information Technologies and Instrumentation</i> <ul style="list-style-type: none">• From the Framework: Pages 136–138 ETS1.A <i>Defining and Delimiting Engineering Problems</i> <ul style="list-style-type: none">• From the Framework: Pages 204–206
	Science and Engineering Practice: <i>1 Asking Questions and Defining Problems</i> <ul style="list-style-type: none">• From the Framework: Pages 54–56

← [Table of Contents](#)

[Next Lesson](#) →

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).

Lesson 4, Segment 4

Page	Resource Links
161	Performance Expectation: <ul style="list-style-type: none"> • 1-PS4-4 Evidence Statements for 1-PS4-4 • K-2-ETS1-2 Evidence Statements for K-2-ETS1-2 • K-2-ETS1-3 Evidence Statements for K-2-ETS1-3
	Disciplinary Core Idea: <i>PS4.C Information Technologies and Instrumentation</i> <ul style="list-style-type: none"> • From the Framework: Pages 136–138 <i>ETS1.B Developing Possible Solutions</i> <ul style="list-style-type: none"> • From the Framework: Pages 206–208 <i>ETS1.C Optimizing the Design Solution</i> <ul style="list-style-type: none"> • From the Framework: Pages 208–210
	Science and Engineering Practice: <i>2 Developing and Using Models</i> <ul style="list-style-type: none"> • From the Framework: Pages 56–59 <i>4 Analyzing and Interpreting Data</i> <ul style="list-style-type: none"> • From the Framework: Pages 61–63 <i>6 Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none"> • From the Framework: Pages 67–71
	Crosscutting Concept: <i>6 Structure and Function</i> <ul style="list-style-type: none"> • From the Framework: Pages 96–98

[← Table of Contents](#)

[Next Lesson →](#)



Online Resources

Unit Supplement

Page	Resource Links
169	Science and Engineering Practice: 6 <i>Constructing Explanations and Designing Solutions</i> <ul style="list-style-type: none">From the Framework: Pages 67–71
	Understanding about the Nature of Science <ul style="list-style-type: none">Scientific Investigations Use a Variety of MethodsScience Is a Human EndeavorScience Addresses Questions About the Natural and Material World
	Crosscutting Concept: 2 <i>Cause and Effect</i> <ul style="list-style-type: none">From the Framework: Pages 87–89
	Connection to Engineering, Technology and Applications of Science Influence of Engineering, Technology, and Science on Society and the Natural World

[← Table of Contents](#)

[Teacher Resources →](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).



Online Resources

Teacher Resources

Page	Resource Links
12	Resources for Effective and Safe Classroom Activities
13	Materials Supply List: Grade 1 Unit 3 <i>Exploring Lights and Sound</i>
207	Activity Pages Answer Key
212	Safety in the Science Classroom: <ul style="list-style-type: none">• NSTA Safety Resources• Safety Resources for Elementary Teachers
	Teacher Guide Appendices: <ul style="list-style-type: none">• Appendix A: Glossary• Appendix B: Safety for Activities• Appendix C: Strategies for Acquiring Materials• Appendix D: Advance Preparation• Appendix E: Unexpected Activity Results

← [Table of Contents](#)

CKSci Online Resources include links to sites external to the Core Knowledge Foundation and the coreknowledge.org website. These external sites are owned and operated by third-parties, and the Core Knowledge Foundation is not responsible for any errors or omissions in either the links themselves or the content of the websites. If you experience any difficulties when attempting to access one of the linked resources found here, please [contact us](#).