

SRA Snapshots Simply Science™
correlation to
Pennsylvania Academic Standards for Science and Technology
Grade 1

SRA Snapshots Simply Science™ consists of several components. Each level has Simply Science Video lessons (**Video**) that provide an introduction to or review of the unit science concepts. The Fiction Read Alouds (**RAF**) and Nonfiction Read Alouds (**RANF**) provide student friendly text that reinforces the science concepts in the video. The Teacher’s Idea Book (**TIB**) provides quick lesson activities and reproducible pages (**BLM**). The Vocabulary Photo Cards (**Cards**) contain engaging photos, definitions, and additional activities.

KEY:

Reference	Program Component
Video	Video lessons
RAF	Read Aloud - Fiction
RANF	Read Aloud - Nonfiction
TIB	Teacher’s Idea Book
BLM	Reproducible pages
Cards	Vocabulary Photo Cards

SRA Snapshots Simply Science™ Grade 1	
Life Science Unit 1: Living Things and Their Needs	
Program Components	Pennsylvania Academic Standards for Science and Technology
Video Living Things and Their Needs RAF “A Funny Frog” RANF “We Are Living Things” TIB pages 14, 15, 16, 17, 18, 19 BLM pages 70, 71, 72, 73, 74, 75, 76, 77, 78, 79 Cards 1, 2, 3, 4, 5, 6, 57, 64, 67, 68, 69, 71, 72, 76, 80, 81, 83, 84, 87, 88	3.3 Biological Sciences A. Know the similarities and differences of living things. <ul style="list-style-type: none"> • Identify life processes of living things (e.g., growth, digestion, react to environment). • Describe basic needs of plants and animals.
TIB page 19, Hands-On Science Activity <i>Group Living/Nonliving Things</i>	3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information.
SRA Snapshots Simply Science™ Grade 1	
Life Science Unit 2: Learning About Plants	
Program Components	Pennsylvania Academic Standards for Science and Technology
Video Learning About Plants RAF “Which Way to Sprout?” RANF “Plants Are Living Things” TIB pages 20, 21, 22, 23, 24, 25 BLM pages 80, 81, 82, 83, 84, 85, 86, 87, 88, 89 Cards 7, 8, 9, 10, 11, 12, 55, 56, 87, 88	3.3 Biological Sciences B. Know that living things are made up of parts that have specific functions. <ul style="list-style-type: none"> • Determine how different parts of a living thing work together to make the organism function.

Life Science Unit 2 (continued)	
Program Components	Pennsylvania Academic Standards for Science and Technology
TIB page 25, Hands-On Science Activity <i>Looking at Plant Parts</i>	3.2 Inquiry and Design A. Know that natural and human-made objects are made up of parts. <ul style="list-style-type: none"> Identify and describe what parts make up a system. C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.
SRA Snapshots Simply Science™ Grade 1 Life Science Unit 3: Habitats Are Everywhere	
Program Components	Pennsylvania Academic Standards for Science and Technology
Video Habitats Are Everywhere RAF “A Home for Maggie” RANF “A Habitat Is a Home” TIB pages 26, 27, 28, 29, 30, 31 BLM pages 90, 91, 92, 93, 94, 95, 96, 97, 98, 99 Cards 13, 14, 15, 16, 17, 18, 19, 66, 75, 82	3.3 Biological Sciences A. Know the similarities and differences of living things. <ul style="list-style-type: none"> Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. C. Know that characteristics are inherited and, thus, offspring closely resemble their parents. <ul style="list-style-type: none"> Identify characteristics for animals’ and plants’ survival in different climates.
TIB page 31, Hands-On Science Activity <i>Habitat Mobiles</i>	3.2 Inquiry and Design A. Know that natural and human-made objects are made up of parts. <ul style="list-style-type: none"> Identify and describe what parts make up a system. C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.
SRA Snapshots Simply Science™ Grade 1 Earth Science Unit 4: Learning About Earth’s Surface	
Program Components	Pennsylvania Academic Standards for Science and Technology
Video Learning About Earth’s Surface RAF “A Big Difference” RANF “Earth’s Many Resources” TIB pages 32, 33, 34, 35, 36, 37 BLM pages 100, 101, 102, 103, 104, 105, 106, 107, 108, 109 Cards 19, 20, 21, 22, 23, 24, 85, 90	3.5 Earth Sciences A. Know basic landforms and earth history. <ul style="list-style-type: none"> Describe earth processes (e.g., rusting, weathering, erosion) that have affected selected physical features in students’ neighborhoods. Identify the composition of soil as weathered rock and decomposed organic remains. B. Know types and uses of earth materials. <ul style="list-style-type: none"> Identify uses of various earth materials (e.g., buildings, highways, fuels, growing plants). Identify and sort earth materials according to a classification key (e.g., soil/rock type). D. Recognize earth’s different water resources. <ul style="list-style-type: none"> Know that approximately three-fourths of the earth is covered by water. Identify and describe types of fresh and salt-water bodies.

Earth Science Unit 4 (continued)

Program Components	Pennsylvania Academic Standards for Science and Technology
<p>TIB page 37 Hands-On Science Activity <i>What Comes from Earth’s Surface?</i></p>	<p>3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information. <p>3.2 Inquiry and Design B. Describe objects in the world using the five senses.</p> <ul style="list-style-type: none"> • Recognize observational descriptors from each of the five senses (e.g., see-blue, feel-rough). • Use observations to develop a descriptive vocabulary.

SRA Snapshots Simply Science™ Grade 1
Earth Science Unit 5: Weather on Earth

Program Components	Pennsylvania Academic Standards for Science and Technology
<p>Video Weather on Earth RAF “A Leaf’s Story” RANF “All About Weather!” TIB pages 38, 39, 40, 41, 42, 43 BLM pages 110, 111, 112, 113, 114, 115, 116, 117, 118, 119 Cards 25, 26, 27, 28, 29, 30, 53, 63, 73, 86</p>	<p>3.5 Earth Sciences C. Know basic weather elements.</p> <ul style="list-style-type: none"> • Identify cloud types. • Identify weather patterns from data charts (including temperature, wind direction and speed, precipitation) and graphs of the data. • Explain how the different seasons affect plants, animals, food availability and daily human life.
<p>TIB page 43, Hands-On Science Activity <i>Seasons</i></p>	<p>3.1 Unifying Themes E. Recognize change in natural and physical systems.</p> <ul style="list-style-type: none"> • Recognize change as fundamental to science and technology concepts. • Examine and explain change by using time and measurement. <p>3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 1
Earth Science Unit 6: Earth in Space

Program Components	Pennsylvania Academic Standards for Science and Technology
<p>Video Earth in Space RAF “The Mysterious Moon” RANF “Look Up!” TIB pages 44, 45, 46, 47, 48, 49 BLM pages 120, 121, 122, 123, 124, 125, 126, 127, 128, 129 Cards 31, 32, 33, 34, 35, 36, 86</p>	<p>3.4 Physical Science, Chemistry and Physics D. Describe the composition and structure of the universe and earth’s place in it.</p> <ul style="list-style-type: none"> • Recognize earth’s place in the solar system. • Explain and illustrate the causes of seasonal changes. • Identify planets in our solar system and their general characteristics. • Describe the solar system motions and use them to explain time (e.g., days, seasons), major lunar phases and eclipses.

Earth Science Unit 6 (continued)

Program Components	Pennsylvania Academic Standards for Science and Technology
<p>TIB page 49, Hands-On Science Activity <i>Modeling Moon Phases</i></p>	<p>3.1 Unifying Themes</p> <p>B. Know models as useful simplifications of objects or processes.</p> <ul style="list-style-type: none"> • Identify different types of models. • Identify and apply models as tools for prediction and insight. • Apply appropriate simple modeling tools and techniques. <p>C. Illustrate patterns that regularly occur and reoccur in nature.</p> <ul style="list-style-type: none"> • Use knowledge of natural patterns to predict next occurrences (e.g., seasons, leaf patterns, lunar phases). <p>E. Recognize change in natural and physical systems.</p> <ul style="list-style-type: none"> • Recognize change as fundamental to science and technology concepts. • Examine and explain change by using time and measurement. <p>3.2 Inquiry and Design</p> <p>C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information.

**SRA Snapshots Simply Science™ Grade 1
Physical Science Unit 7: Properties of Matter**

Program Components	Pennsylvania Academic Standards for Science and Technology
<p>Video Properties of Matter RAF “What’s the Matter?” RANF “Matter All Around” TIB pages 50, 51, 52, 53, 54, 55 BLM pages 130, 131, 132, 133, 134, 135, 136, 137, 138, 139 Cards 37, 38, 39, 40, 41, 42, 63, 73, 90</p>	<p>3.4 Physical Science, Chemistry and Physics</p> <p>A. Recognize basic concepts about the structure and properties of matter.</p> <ul style="list-style-type: none"> • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).
<p>TIB page 55, Hands-On Science Activity <i>Making Mixtures</i></p>	<p>3.1 Unifying Themes</p> <p>E. Recognize change in natural and physical systems.</p> <ul style="list-style-type: none"> • Recognize change as fundamental to science and technology concepts. • Examine and explain change by using time and measurement. <p>3.2 Inquiry and Design</p> <p>C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 1
Physical Science Unit 8: Learning About Forces

Program Components	Pennsylvania Academic Standards for Science and Technology
Video Learning About Forces RAF “Queen of the Hill” RANF “Pushes and Pulls” TIB pages 56, 57, 58, 59, 60, 61 BLM pages 140, 141, 142, 143, 144, 145, 146, 147, 148, 149 Cards 43, 44, 45, 46, 47, 48	3.4 Physical Science, Chemistry and Physics C. Observe and describe different types of force and motion. <ul style="list-style-type: none"> Recognize forces that attract or repel other objects and demonstrate them. Describe various types of motion. Compare the relative movement of objects and describe types of motion that are evident. Describe the position of an object by locating it relative to another object or the background (e.g., geographic direction, left, up).
TIB page 61, Hands-On Science Activity <i>Big and Small Pushes</i>	3.1 Unifying Themes E. Recognize change in natural and physical systems. <ul style="list-style-type: none"> Recognize change as fundamental to science and technology concepts. Examine and explain change by using time and measurement. 3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 1
Physical Science Unit 9: Heat, Light, and Sound

Program Components	Pennsylvania Academic Standards for Science and Technology
Video Heat, Light, and Sound RAF “The Energy Challenge” RANF “Energy All Around” TIB pages 62, 63, 64, 65, 66, 67 BLM pages 150, 151, 152, 153, 154, 155, 156, 157, 158, 159 Cards 36, 49, 50, 51, 52, 53, 54, 59, 65	3.4 Physical Science, Chemistry and Physics B. Know basic energy types, sources and conversions. <ul style="list-style-type: none"> Identify energy forms and examples (e.g., sunlight, heat, stored, motion). Know and demonstrate the basic properties of heat by producing it in a variety of ways. Know the characteristics of light (e.g., reflection, refraction, absorption) and use them to produce heat, color or a virtual image.
TIB page 67, Hands-On Science Activity <i>Investigating Sound</i>	3.1 Unifying Themes E. Recognize change in natural and physical systems. <ul style="list-style-type: none"> Recognize change as fundamental to science and technology concepts. Examine and explain change by using time and measurement. 3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™
correlation to
Pennsylvania Academic Standards for Science and Technology
Grade 2

SRA Snapshots Simply Science™ consists of several components. Each level has Simply Science Video lessons (**Video**) that provide an introduction to or review of the unit science concepts. The Fiction Read Alouds (**RAF**) and Nonfiction Read Alouds (**RANF**) provide student friendly text that reinforces the science concepts in the video. The Teacher’s Idea Book (**TIB**) provides quick lesson activities and reproducible pages (**BLM**). The Vocabulary Photo Cards (**Cards**) contain engaging photos, definitions, and additional activities.

KEY:

Reference	Program Component
Video	Video lessons
RAF	Read Aloud - Fiction
RANF	Read Aloud - Nonfiction
TIB	Teacher’s Idea Book
BLM	Reproducible pages
Cards	Vocabulary Photo Cards

SRA Snapshots Simply Science™ Grade 2	
Life Science Unit 1: Organisms Are Living Things	
Program Components	Pennsylvania Academic Standards for Science and Technology
Video Organisms Are Living Things RAF “The Brave Beaver” RANF “Organisms Are Alive” TIB pages 14, 15, 16, 17, 18, 19 BLM pages 70, 71, 72, 73, 74, 75, 76, 77, 78, 79 Cards 1, 2, 3, 4, 5, 6, 7, 8, 11, 55, 57, 59, 62, 64, 65, 70, 72, 73, 80, 83, 87, 88	3.3 Biological Sciences A. Know the similarities and differences of living things. <ul style="list-style-type: none"> • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals.
TIB page 19, Hands-On Science Activity <i>Grouping Animals</i>	3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information.
SRA Snapshots Simply Science™ Grade 2	
Life Science Unit 2: Learning About Animals	
Program Components	Pennsylvania Academic Standards for Science and Technology
Video Learning About Animals RAF “Fun in the Rain Forest” RANF “Animals Are Living Things” TIB pages 20, 21, 22, 23, 24, 25 BLM pages 80, 81, 82, 83, 84, 85, 86, 87, 88, 89 Cards 7, 8, 9, 10, 11, 12, 55, 57, 59, 61, 62, 64, 70, 72, 80, 83, 87, 88	3.3 Biological Sciences C. Know that characteristics are inherited and, thus, offspring closely resemble their parents. <ul style="list-style-type: none"> • Identify characteristics for animals’ and plants’ survival in different climates. • Identify physical characteristics that appear in both parents and offspring and differ between families, strains or species.

Life Science Unit 2 (continued)	
Program Components	Pennsylvania Academic Standards for Science and Technology
<p>TIB page 25, Hands-On Science Activity <i>Modeling a Life Cycle</i></p>	<p>3.1 Unifying Themes B. Know models as useful simplifications of objects or processes.</p> <ul style="list-style-type: none"> Identify different types of models. Identify and apply models as tools for prediction and insight. Apply appropriate simple modeling tools and techniques. <p>3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.
<p>SRA Snapshots Simply Science™ Grade 2 Life Science Unit 3: Ecosystems All Around</p>	
Program Components	Pennsylvania Academic Standards for Science and Technology
<p>Video Ecosystems All Around RAF “A Remarkable River” RANF “Ecosystems in Action” TIB pages 26, 27, 28, 29, 30, 31 BLM pages 90, 91, 92, 93, 94, 95, 96, 97, 98, 99 Cards 7, 8, 11, 13, 14, 15, 16, 17, 18, 55, 57, 62, 64, 70, 72, 80, 83, 87, 88</p>	<p>3.3 Biological Sciences A. Know the similarities and differences of living things.</p> <ul style="list-style-type: none"> Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. <p>C. Know that characteristics are inherited and, thus, offspring closely resemble their parents.</p> <ul style="list-style-type: none"> Identify characteristics for animals’ and plants’ survival in different climates.
<p>TIB page 31, Hands-On Science Activity <i>Caterpillar Camouflage</i></p>	<p>3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.
<p>SRA Snapshots Simply Science™ Grade 2 Earth Science Unit 4: Earth’s Natural Resources</p>	
Program Components	Pennsylvania Academic Standards for Science and Technology
<p>Video Earth’s Natural Resources RAF “The Missing Rock” RANF “Digging in the Dirt” TIB pages 32, 33, 34, 35, 36, 37 BLM pages 100, 101, 102, 103, 104, 105, 106, 107, 108, 109 Cards 19, 20, 21, 22, 23, 24, 78, 79, 82, 89</p>	<p>3.5 Earth Sciences A. Know basic landforms and earth history.</p> <ul style="list-style-type: none"> Describe earth processes (e.g., rusting, weathering, erosion) that have affected selected physical features in students’ neighborhoods. Identify the composition of soil as weathered rock and decomposed organic remains. Describe fossils and the type of environment they lived in (e.g., tropical, aquatic, desert). <p>B. Know types and uses of earth materials.</p> <ul style="list-style-type: none"> Identify uses of various earth materials (e.g., buildings, highways, fuels, growing plants). Identify and sort earth materials according to a classification key (e.g., soil/rock type). <p>D. Recognize earth’s different water resources.</p> <ul style="list-style-type: none"> Know that approximately three-fourths of the earth is covered by water. Identify and describe types of fresh and salt-water bodies.

Earth Science Unit 4 (continued)**Program Components**

TIB page 37, Hands-On Science Activity *Hand-Made Fossils*

Pennsylvania Academic Standards for Science and Technology**3.1 Unifying Themes****B. Know models as useful simplifications of objects or processes.**

- Identify different types of models.
- Identify and apply models as tools for prediction and insight.
- Apply appropriate simple modeling tools and techniques.

3.2 Inquiry and Design**C. Recognize and use the elements of scientific inquiry to solve problems.**

- Generate questions about objects, organisms and/or events that can be answered through scientific investigations.
- Design an investigation.
- Conduct an experiment.
- State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 2**Earth Science Unit 5: Weather and Water****Program Components**

Video Weather and Water
RAF “Felicia and the Four Seasons”
RANF “All About Weather!”
TIB pages 38, 39, 40, 41, 42, 43
BLM pages 110, 111, 112, 113, 114, 115, 116, 117, 118, 119
Cards 25, 26, 27, 28, 29, 30, 41, 60, 66, 75, 81, 85, 90

Pennsylvania Academic Standards for Science and Technology**3.5 Earth Sciences****C. Know basic weather elements.**

- Identify cloud types.
- Identify weather patterns from data charts (including temperature, wind direction and speed, precipitation) and graphs of the data.
- Explain how the different seasons affect plants, animals, food availability and daily human life.

TIB page 43, Hands-On Science Activity *What Can the Wind Blow?*

3.1 Unifying Themes**E. Recognize change in natural and physical systems.**

- Recognize change as fundamental to science and technology concepts.
- Examine and explain change by using time and measurement.

3.2 Inquiry and Design**C. Recognize and use the elements of scientific inquiry to solve problems.**

- Generate questions about objects, organisms and/or events that can be answered through scientific investigations.
- Design an investigation.
- Conduct an experiment.
- State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 2
Earth Science Unit 6: Learning About Space

Program Components	Pennsylvania Academic Standards for Science and Technology
Video Learning About Space RAF “Janie’s Space Journey” RANF “Earth in Space” TIB pages 44, 45, 46, 47, 48, 49 BLM pages 120, 121, 122, 123, 124, 125, 126, 127, 128, 129 Cards 31, 32, 33, 34, 35, 36, 86	3.1 Unifying Themes C. Illustrate patterns that regularly occur and reoccur in nature. <ul style="list-style-type: none"> Use knowledge of natural patterns to predict next occurrences (e.g., seasons, leaf patterns, lunar phases). 3.4 Physical Science, Chemistry and Physics D. Describe the composition and structure of the universe and earth’s place in it. <ul style="list-style-type: none"> Recognize earth’s place in the solar system. Explain and illustrate the causes of seasonal changes. Identify planets in our solar system and their general characteristics. Describe the solar system motions and use them to explain time (e.g., days, seasons), major lunar phases and eclipses.
TIB page 49, Hands-On Science Activity <i>Stars in the Day Time</i>	3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 2
Physical Science Unit 7: Characteristics of Matter

Program Components	Pennsylvania Academic Standards for Science and Technology
Video Characteristics of Matter RAF “Irene’s Exploration” RANF “All About Matter” TIB pages 50, 51, 52, 53, 54, 55 BLM pages 130, 131, 132, 133, 134, 135, 136, 137, 138, 139 Cards 37, 38, 39, 40, 41, 42, 56, 66, 89	3.4 Physical Science, Chemistry and Physics A. Recognize basic concepts about the structure and properties of matter. <ul style="list-style-type: none"> Describe properties of matter (e.g., hardness, reactions to simple chemical tests). Know that combining two or more substances can make new materials with different properties. Know different material characteristics (e.g., texture, state of matter, solubility).
TIB page 55, Hands-On Science Activity <i>How Much Liquid?</i>	3.1 Unifying Themes E. Recognize change in natural and physical systems. <ul style="list-style-type: none"> Recognize change as fundamental to science and technology concepts. Examine and explain change by using time and measurement. 3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 2**Physical Science Unit 8: Forces and Motion**

Program Components	Pennsylvania Academic Standards for Science and Technology
Video Forces and Motion RAF “Carlos’s Skateboard” RANF “Motion, Magnets, and More!” TIB pages 56, 57, 58, 59, 60, 61 BLM pages 140, 141, 142, 143, 144, 145, 146, 147, 148, 149 Cards 43, 44, 45, 46, 47, 48, 71	3.4 Physical Science, Chemistry and Physics C. Observe and describe different types of force and motion. <ul style="list-style-type: none"> Recognize forces that attract or repel other objects and demonstrate them. Describe various types of motion. Compare the relative movement of objects and describe types of motion that are evident. Describe the position of an object by locating it relative to another object or the background (e.g., geographic direction, left, up).
TIB page 61, Hands-On Science Activity <i>Magnets</i>	3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.

SRA Snapshots Simply Science™ Grade 2**Physical Science Unit 9: Energy Is Everywhere**

Program Components	Pennsylvania Academic Standards for Science and Technology
Video Energy Is Everywhere RAF “The Low-Energy Band” RANF “All About Energy” TIB pages 62, 63, 64, 65, 66, 67 BLM pages 150, 151, 152, 153, 154, 155, 156, 157, 158, 159 Cards 41, 49, 50, 51, 52, 53, 54, 63, 69, 84, 86	3.4 Physical Science, Chemistry and Physics B. Know basic energy types, sources and conversions. <ul style="list-style-type: none"> Identify energy forms and examples (e.g., sunlight, heat, stored, motion). Know and demonstrate the basic properties of heat by producing it in a variety of ways. Know the characteristics of light (e.g., reflection, refraction, absorption) and use them to produce heat, color, or a virtual image. C. Observe and describe different types of force and motion. <ul style="list-style-type: none"> Identify characteristics of sound (pitch, loudness, and echoes).
TIB page 67, Hands-On Science Activity <i>Heat Energy</i>	3.2 Inquiry and Design C. Recognize and use the elements of scientific inquiry to solve problems. <ul style="list-style-type: none"> Generate questions about objects, organisms and/or events that can be answered through scientific investigations. Design an investigation. Conduct an experiment. State a conclusion that is consistent with the information.