

SRA Snapshots Simply Science™
correlation to
Kentucky Core Content for Science Assessment
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	Kentucky Core Content for Science Assessment
<p>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, 55, 56, 57, 60, 61, 63, 64, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p>*Hands-On Science Activity <i>Group Living/Nonliving Things</i></p>	<p>Big Idea: Unity and Diversity (Biological Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-3.4.1 Students will explain the basic needs of organisms. Organisms have basic needs. For example, animals need air, water and food; plants need air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. DOK 2 SC-EP-3.4.2 Students will understand that living things in the environment are classified as living, nonliving, and once living. Living things differ from nonliving things. Organisms are classified into groups by using various characteristics (e.g., body coverings, body structures).</p>

SRA Snapshots Simply Science™ Grade 1
Life Science Unit 2: Learning About Plants

Program Components	Kentucky Core Content for Science Assessment
<p>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, 69, 81, 84, 87, 88</p> <p>*Hands-On Science Activity <i>Looking at Plant Parts</i></p>	<p>Big Idea: Unity and Diversity (Biological Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-3.4.3 Students will describe the basic structures and related functions of plants and animals that contribute to growth, reproduction and survival. Each plant or animal has observable functions in growth, survival and reproduction. For example, humans have distinct structures for walking, holding, seeing and talking. These observable structures should be explored to sort, classify, compare and describe organisms. DOK 2 SC-EP-3.4.4 Students will describe a variety of plant and animal life cycles to understand patterns of the growth, development, reproduction and death of an organism. Plants and animals have life cycles that include the beginning of life, growth and development, reproduction and death. The details of a life cycle are different for different organisms. Observations of different life cycles should be made in order to identify patterns and recognize similarities and differences. DOK 2</p>

SRA Snapshots Simply Science™ Grade 1
Life Science Unit 3: Habitats Are Everywhere

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>Habitat Mobiles</i></p>	<p>Big Idea: Energy Transformations (Unifying Concepts) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. 2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed. SC-EP-4.6.1 Students will describe basic relationships of plants and animals in an ecosystem (food chains). Plants make their own food. All animals depend on plants. Some animals eat plants for food. Other animals eat animals that eat the plants. Basic relationships and connections between organisms in food chains can be used to discover patterns within ecosystems. DOK 2</p> <p>Big Idea: Interdependence (Unifying Concepts) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. 2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed. SC-EP-4.7.1 Students will describe the cause and effect relationships existing between organisms and their environments. The world has many different environments. Organisms require an environment in which their needs can be met. When the environment changes some plants and animals survive and reproduce and others die or move to new locations. DOK 2</p>

SRA Snapshots Simply Science™ Grade 1
Earth Science Unit 4: Learning About Earth’s Surface

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>What Comes from Earth’s Surface?</i></p>	<p>Big Idea: The Earth and the Universe (Earth/Space Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-2.3.1 Students will describe earth materials (solid rocks, soils, water and gases of the atmosphere) using their properties. Earth materials include solid rocks and soils, water and the gases of the atmosphere. Minerals that make up rocks have properties of color, luster and hardness. Soils have properties of color, texture, the capacity to retain water and the ability to support plant growth. Water on Earth and in the atmosphere can be a solid, liquid or gas. DOK 2</p>

SRA Snapshots Simply Science™ Grade 1

Earth Science Unit 5: Weather on Earth

Program Components

Kentucky Core Content for Science Assessment

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, 90

*Hands-On Science Activity
Seasons

Big Idea: The Earth and the Universe (Earth/Space Science)
Academic Expectations
2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems.
2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events.
2.3 Students identify and analyze systems and the ways their components work together or affect each other.
SC-EP-2.3.2 Students will describe patterns in weather and weather data in order to make simple predictions based on those patterns discovered. Weather changes from day to day and over seasons. Weather can be described using observations and measurable quantities such as temperature, wind direction, wind speed and precipitation. Simple predictions can be made by analyzing collected data for patterns.
DOK 2

SRA Snapshots Simply Science™ Grade 1

Earth Science Unit 6: Earth in Space

Program Components

Kentucky Core Content for Science Assessment

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

*Hands-On Science Activity
Modeling Moon Phases

Big Idea: The Earth and the Universe (Earth/Space Science)
Academic Expectations
2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems.
2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events.
2.3 Students identify and analyze systems and the ways their components work together or affect each other.
SC-EP-2.3.3 Students will describe the properties, locations and real or apparent movements of objects in the sky (Sun, moon). Objects in the sky have properties, locations and real or apparent movements that can be observed and described. Observational data, patterns, and models should be used to describe real or apparent movements. DOK 2
SC-EP-2.3.4 Students will describe the movement of the sun in the sky using evidence of interactions of the sun with the earth (e.g., shadows, position of sun relative to horizon) to identify patterns of movement. Changes in movement of objects in the sky have patterns that can be observed and described. The Sun appears to move across the sky in the same way every day but the Sun’s apparent path changes slowly over seasons. Recognizing relationships between movements of objects and resulting phenomena, such as shadows, provides information that can be used to make predictions and draw conclusions about those movements. DOK 2
SC-EP-2.3.5 Students will understand that the moon moves across the sky on a daily basis much like the Sun. The observable shape of the moon can be described as it changes from day to day on a cycle that lasts about a month.

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

Program Components	Kentucky Core Content for Science Assessment
<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>*Hands-On Science Activity <i>Making Mixtures</i></p>	<p>Big Idea: Structure and Transformation of Matter (Physical Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. 2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed.</p> <p>SC-EP-1.1.1 Students will classify material objects by their properties providing evidence to support their classifications. Objects are made of one or more materials such as paper, wood, and metal. Objects can be described by the properties of those materials from which they are made. Those properties and measurements of the objects can be used to separate or classify objects or materials. DOK 3</p> <p>SC-EP-1.1.2 Students will understand that objects have many observable properties such as size, mass, shape, color, temperature, magnetism, and the ability to interact and/or react with other substances. Some properties can be measured using tools such as metric rulers, balances, and thermometers.</p> <p>SC-EP-1.1.3 Students will describe the properties of water as it occurs as a solid, liquid or gas. Matter (water) can exist in different states—solid, liquid or gas. Properties of those states of matter can be used to describe and classify them. DOK 2</p>

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

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>Big and Small Pushes</i></p>	<p>Big Idea: Motion and Forces (Physical Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-1.2.1 Students will describe and make inferences about the interactions of magnets with other magnets and other matter (e.g., magnets can make some things move without touching them). Magnets have observable properties that allow them to attract and repel each other and attract certain kinds of other materials (e.g., iron). Based on the knowledge of the basic properties of magnets, predictions can be made and conclusions drawn about their interactions with other common objects. DOK 3 SC-EP-1.2.2 Students will describe the change in position over time (motion) of an object. An object’s motion can be observed, described, compared and graphed by measuring its change in position over time. SC-EP-1.2.3 Students will describe the position and motion of objects and predict changes in position and motion as related to the strength of pushes and pulls. The position and motion of objects can be changed by pushing or pulling, can be explored in a variety of ways (such as rolling different objects down different ramps). The amount of change in position and motion is related to the strength of the push or pull (force). The force with which a ball is hit illustrates this principle. By examining cause and effect relationships related to forces and motions, consequences of change can be predicted. DOK 2 SC-EP-1.2.4 Students will understand that the position of an object can be described by locating it relative to another object or the background. The position can be described using phrases such as to the right, to the left, 50 cm from the other object.</p>

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

Program Components	Kentucky Core Content for Science Assessment
<p>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 49, 50, 51, 52, 53, 54</p> <p>*Hands-On Science Activity <i>Investigating Sound</i></p>	<p>This topic is not covered in the Grade 1 Kentucky Core Content for Science Assessment, however it aligns with National Science Education Content Standard B:</p> <p>Physical Science—Students should develop an understanding of properties of objects and materials, position and motion of objects, and light, heat, electricity, and magnetism.</p>

SRA Snapshots Simply Science™
correlation to
Kentucky Core Content for Science Assessment
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	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>Grouping Animals</i></p>	<p>Big Idea: Unity and Diversity (Biological Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-3.4.1 Students will explain the basic needs of organisms. Organisms have basic needs. For example, animals need air, water and food; plants need air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. DOK 2 SC-EP-3.4.2 Students will understand that living things in the environment are classified as living, nonliving, and once living. Living things differ from nonliving things. Organisms are classified into groups by using various characteristics (e.g., body coverings, body structures). SC-EP-3.4.3 Students will describe the basic structures and related functions of plants and animals that contribute to growth, reproduction and survival. Each plant or animal has observable functions in growth, survival and reproduction. For example, humans have distinct structures for walking, holding, seeing and talking. These observable structures should be explored to sort, classify, compare and describe organisms. DOK 2</p>

SRA Snapshots Simply Science™ Grade 2
Life Science Unit 2: Learning About Animals

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>Modeling a Life Cycle</i></p>	<p>Big Idea: Unity and Diversity (Biological Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-3.4.4 Students will describe a variety of plant and animal life cycles to understand patterns of the growth, development, reproduction and death of an organism. Plants and animals have life cycles that include the beginning of life, growth and development, reproduction and death. The details of a life cycle are different for different organisms. Observations of different life cycles should be made in order to identify patterns and recognize similarities and differences. DOK 2</p>

SRA Snapshots Simply Science™ Grade 2
Life Science Unit 3: Ecosystems All Around

Program Components	Kentucky Core Content for Science Assessment
<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 13, 14, 15, 16, 17, 18, 67, 76, 77</p> <p>*Hands-On Science Activity <i>Caterpillar Camouflage</i></p>	<p>Big Idea: Energy Transformations (Unifying Concepts) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. 2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed. SC-EP-4.6.1 Students will describe basic relationships of plants and animals in an ecosystem (food chains). Plants make their own food. All animals depend on plants. Some animals eat plants for food. Other animals eat animals that eat the plants. Basic relationships and connections between organisms in food chains can be used to discover patterns within ecosystems. DOK 2</p> <p>Big Idea: Interdependence (Unifying Concepts) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. 2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed. SC-EP-4.7.1 Students will describe the cause and effect relationships existing between organisms and their environments. The world has many different environments. Organisms require an environment in which their needs can be met. When the environment changes some plants and animals survive and reproduce and others die or move to new locations. DOK 2</p>

SRA Snapshots Simply Science™ Grade 2
Earth Science Unit 4: Earth’s Natural Resources

Program Components	Kentucky Core Content for Science Assessment
<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>*Hands-On Science Activity <i>Hand-Made Fossils</i></p>	<p>Big Idea: The Earth and the Universe (Earth/Space Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-2.3.1 Students will describe earth materials (solid rocks, soils, water and gases of the atmosphere) using their properties. Earth materials include solid rocks and soils, water and the gases of the atmosphere. Minerals that make up rocks have properties of color, luster and hardness. Soils have properties of color, texture, the capacity to retain water and the ability to support plant growth. Water on Earth and in the atmosphere can be a solid, liquid or gas. DOK 2</p> <p>Big Idea: Biological Change (Biological Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.6 Students understand how living and nonliving things change over time and the factors that influence the changes. SC-EP-3.5.1 Students will describe fossils as evidence of organisms that lived long ago, some of which may be similar to others that are alive today. Fossils found in Earth materials provide evidence about organisms that lived long ago and the nature of the environment at that time. Representations of fossils provide the basis for describing and drawing conclusions about the organisms and basic environments represented by them. DOK 3</p>

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

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>What Can the Wind Blow?</i></p>	<p>Big Idea: The Earth and the Universe (Earth/Space Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-2.3.2 Students will describe patterns in weather and weather data in order to make simple predictions based on those patterns discovered. Weather changes from day to day and over seasons. Weather can be described using observations and measurable quantities such as temperature, wind direction, wind speed and precipitation. Simple predictions can be made by analyzing collected data for patterns. DOK 2</p>

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

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>Stars in the Day Time</i></p>	<p>Big Idea: The Earth and the Universe (Earth/Space Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. SC-EP-2.3.3 Students will describe the properties, locations and real or apparent movements of objects in the sky (Sun, moon). Objects in the sky have properties, locations and real or apparent movements that can be observed and described. Observational data, patterns, and models should be used to describe real or apparent movements. DOK 2 SC-EP-2.3.4 Students will describe the movement of the sun in the sky using evidence of interactions of the sun with the earth (e.g., shadows, position of sun relative to horizon) to identify patterns of movement. Changes in movement of objects in the sky have patterns that can be observed and described. The Sun appears to move across the sky in the same way every day but the Sun’s apparent path changes slowly over seasons. Recognizing relationships between movements of objects and resulting phenomena, such as shadows, provides information that can be used to make predictions and draw conclusions about those movements. DOK 2 SC-EP-2.3.5 Students will understand that the moon moves across the sky on a daily basis much like the Sun. The observable shape of the moon can be described as it changes from day to day on a cycle that lasts about a month.</p>

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

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>How Much Liquid?</i></p>	<p>Big Idea: Structure and Transformation of Matter (Physical Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other. 2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed. SC-EP-1.1.1 Students will classify material objects by their properties providing evidence to support their classifications. Objects are made of one or more materials such as paper, wood, and metal. Objects can be described by the properties of those materials from which they are made. Those properties and measurements of the objects can be used to separate or classify objects or materials. DOK 3 SC-EP-1.1.2 Students will understand that objects have many observable properties such as size, mass, shape, color, temperature, magnetism, and the ability to interact and/or react with other substances. Some properties can be measured using tools such as metric rulers, balances, and thermometers. SC-EP-1.1.3 Students will describe the properties of water as it occurs as a solid, liquid or gas. Matter (water) can exist in different states—solid, liquid or gas. Properties of those states of matter can be used to describe and classify them. DOK 2</p>

SRA Snapshots Simply Science™ Grade 2

Physical Science Unit 8: Forces and Motion

Program Components	Kentucky Core Content for Science Assessment
<p>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</p> <p>*Hands-On Science Activity <i>Magnets</i></p>	<p>Big Idea: Motion and Forces (Physical Science) Academic Expectations 2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems. 2.2 Students identify, analyze and use patterns such as cycles and trends to understand past and present events and predict possible future events. 2.3 Students identify and analyze systems and the ways their components work together or affect each other.</p> <p>SC-EP-1.2.1 Students will describe and make inferences about the interactions of magnets with other magnets and other matter (e.g., magnets can make some things move without touching them). Magnets have observable properties that allow them to attract and repel each other and attract certain kinds of other materials (e.g., iron). Based on the knowledge of the basic properties of magnets, predictions can be made and conclusions drawn about their interactions with other common objects. DOK 3</p> <p>SC-EP-1.2.2 Students will describe the change in position over time (motion) of an object. An object’s motion can be observed, described, compared and graphed by measuring its change in position over time.</p> <p>SC-EP-1.2.3 Students will describe the position and motion of objects and predict changes in position and motion as related to the strength of pushes and pulls. The position and motion of objects can be changed by pushing or pulling and can be explored in a variety of ways (such as rolling different objects down different ramps). The amount of change in position and motion is related to the strength of the push or pull (force). The force with which a ball is hit illustrates this principle. By examining cause and effect relationships related to forces and motions, consequences of change can be predicted. DOK 2</p> <p>SC-EP-1.2.4 Students will understand that the position of an object can be described by locating it relative to another object or the background. The position can be described using phrases such as to the right, to the left, 50 cm from the other object.</p>

SRA Snapshots Simply Science™ Grade 2

Physical Science Unit 9: Energy Is Everywhere

Program Components	Kentucky Core Content for Science Assessment
<p>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 49, 50, 51, 52, 53, 54</p> <p>*Hands-On Science Activity <i>Heat Energy</i></p>	<p>This topic is not covered in the Grade 2 Kentucky Core Content for Science Assessment, however it aligns with National Science Education Content Standard B:</p> <p>Physical Science—Students should develop an understanding of properties of objects and materials, position and motion of objects, and light, heat, electricity, and magnetism.</p>