SRA Snapshots Video Science™: Level A
correlation to
Kentucky Core Content for Science Assessment
Grade 3

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Physical Science
Structure and Transformation of Matter
SC-EP-1.1.1 Students will classify material objects by their properties. Objects are made of one or more materials such as paper, word, and metal. Objects can be described by the properties of the materials from which they are made. These properties and measurements of the objects can be used to separate or classify objects or materials. DOK 2
Chapter 8, Lesson 1, Video B, SE page 158; Video C, SE page 159; Lesson 2, Process Skill, SE page167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173

Physical Science
Structure and Transformation of Matter
SC-EP-1.1.2 Students should understand that objects have many observable properties such as size, mass, shape, color, temperature, magnetism, and the ability to interact and/or to react with other substances. Some properties can be measured using tools such as metric rulers, balances, and thermometers.
Chapter 8, Lesson 1, Video A, SE page157; Video B, SE page 158; Video C, SE page 159; Writing in Science, SE page 161; Process Skill, SE page 161; KnowZone, SE pages 168-169

Physical Science
Structure and Transformation of Matter
SC-EP-1-13 Students will describe the properties of water as it occurs as a solid, liquid, or gas. Matter (i.e., water) can exist in different states—solid, liquid, gas. Properties of those states of matter can be used to describe and classify them. DOK 2
Chapter 8, Lesson 2, Video A, SE page 163; Process Skill, SE page 167

Physical Science
Motion and Forces
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 magnets 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 2
Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Math in Science, SE page 147; Process Skill, SE page147

Physical Science
Motion and Forces
SC-EP-1.2.2 Students will describe the change on position over time (motion) of an object. An object's motion such as rolling different objects (e.g., spheres, toy cars) down a ramp, can be observed, described, compared, and graphed by measuring its change in position over time. DOK 2
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Writing in Science, SE page 139; KnowZone, SE pages 140-141; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Physical Science
Motion and Forces
SC-EP-1.2.3 Students 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 and pulling. 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
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Writing in Science, SE page 139; KnowZone, SE pages 140-141; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Physical Science
Motion and Forces
SC-EP-1.2.4 Students should 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.
Chapter 7, Lesson 1, Video A, SE page 135; KnowZone, SE pages 140-141

Physical Science
Motion and Forces
SC-EP-1.2.5 Students will • Explain that sound is a result of vibrations, a type of motion. • Describe pitch (i.e., low, high) as a difference in sounds that are produced. Vibration is a type of motion that can be observed, described, measured and compared. Sound is produced by vibrating objects. The pitch of the sound can be varied by changing the rate of vibration. The relationship between rates of vibration and produced sounds can be described and graphed. DOK 2
Chapter 9, Lesson 1, Video C, SE page 118; Writing in Science, SE page 183; Process Skill, SE page 183

Earth/Space Science
The Earth and the Universe
SC-EP-2.3.1 Students will describe and classify 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. Opportunities should be provided for observing, classifying, describing, discovering/identifying patterns, formulating questions, and designing simple investigations dealing with Earth materials in order to understand what those materials really are and how they change. DOK 2
Chapter 4, Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; Process Skill, SE page 79; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85 **Chapter 5, Lesson 1, Video A, SE page 91; Lesson 2, Video A, SE page99; Video B, SE page 100; Video C, SE page 101**

Earth/Space Science
The Earth and the Universe
SC-EP-2.3.2 Students will describe weather and weather data, looking for patterns, 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 measurements quantities such as temperature, wind direction and speed, and precipitation, Simple predictions can be made by analyzing collected data for patterns. DOK 2
Chapter 5, Lesson 1, Video B, SE page 92; Video C, SE page 93; Writing in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Video B, SE page 100; Math in Science, SE page 103; Process Skill, SE page 103; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; Process Skill, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Earth/Space Science
The Earth and the Universe
SC-EP-2.3.3 Students will describe the properties, locations and real or apparent movements of objects in the sky (e.g., Sun, clouds, moon). Objects in the sky (e.g., Sun, clouds, moon) 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
Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Writing in Science, SE page 123; Process Skill, SE page 123; KnowZone, SE pages 124-125; Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Earth/Space Science
The Earth and the Universe
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. Opportunities should be provided to make observations and recognize relationships between movements of objects and resulting phenomena, such as shadows, in order to make predictions and conclusions about those movements. DOK 2
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Process Skill, SE page117; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 **Earth in Space, SE page 205**

Earth/Space Science
The Earth and the Universe
SC-EP-2.3.5 Students should 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 in a cycle that lasts about a month.
Chapter 6, Lesson 3, Video C, SE page 115

Biological Science
Unity and Diversity
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. Based on observations of plants and animals in controlled settings, simple investigable questions should be posed, simple investigations designed, resulting data collected and analyzed, and consequences of similar situations predicted. DOK 2
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5, Writing in Science, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51**

Biological Science
Unity and Diversity
SC-EP-3.4.2 Students should understand that 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).
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Math in Science, SE page 13 Classification, SE page 202

Biological Science
Unity and Diversity
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 structures that serve different functions in growth, survival, and reproduction. For example, humans have distinct body structures for walking, holding, seeing, and talking. These observable structures should be explored to sort, classify, compare and describe organisms. DOK 2
Chapter 2, KnowZone, SE pages 30-31; Lesson 3, Video B, SE page40; Video C, SE page 41; Writing in Science, SE page 43; Process Skill, SE page 43

Biological Science
Unity and Diversity
SC-EP-3.4.4 Students will • Compare a variety of plant and animal life cycles to understand patterns of the growth, development, reproduction, and death of an organism. • Describe similarities and differences that allow for the classification of organisms. 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 that would allow classification of the cycles. DOK 2
Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

Biological Science
Biological Change
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. Making observations of fossils, describing them and using those descriptions as evidence to draw conclusions about the organisms and basic environments represented by the fossils should occur in order to promote understanding. DOK 2
Chapter 4, Lesson 2, Video B, SE page 76; KnowZone, SE pages 80-81

Unifying Ideas
Energy Transformations
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
Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Energy Transfer, SE page 203**

Unifying Ideas
Energy Transformations
SC-EP-4.6.2 Students will describe evidence of the sun providing light and heat to the Earth. Simple observations and investigations begin to reveal that the Sun provides the light and heat necessary to maintain the temperature on Earth. Based on those experiences, the conclusion can be drawn that the Sun's light and heat are necessary to sustain life on Earth. DOK 2
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4 **Chapter 2, Lesson 2, Video A, SE page 31**

Unifying Ideas
Energy Transformations
SC-EP-4.6.3 Students will analyze models of basic electrical circuits using batteries, bulbs and wires in order to determine whether a simple circuit is open or closed. Electricity in circuits can produce light. Describing and comparing models demonstrates basic understanding of circuits. DOK 2
Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191

Unifying Ideas
Energy Transformations
SC-EP-4.6.4 Students will • Describe light as traveling in a straight line unit it strikes an object. • Classify materials according to their properties of interaction with light (i.e., reflects, absorbs). Light can be observed and described as it travels in a straight line unit it strikes an object. Light can be reflected by a shiny object (e.g., mirror, spoon), refracted by a lens (e.g., magnifying glass, eyeglasses), or absorbed by an object (e.g., dark surface). Comparisons and classifications of interactions between surfaces and light can be observed and described based on evidence gained through simple investigations based on student generated questions. DOK 2
Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Unifying Ideas
Interdependence
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. Distinct environments support the lives of different types of organisms. When the environment changes, some plants and animals survive and reproduce, and others die or move to new locations. Observations should be made of a number of different environments in order to discover patterns and resulting cause and effect relationships between organisms and their environments. Connections and conclusions should be made based on the observable or collected data. DOK 2
Chapter 2, Lesson 1, Video A, SE page 25; Video V, SE page 26; Video C, SE page 27; Process Skill, SE page 29; KnowZone, SE pages 36-37 **Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63**

SRA Snapshots Video Science™: Level B
correlation to
Kentucky Core Content for Science Assessment
Grade 4

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Physical Science
Structure and Transformation of Matter
SC-04-1.1.1 Students will explain how matter, including water, can be changed from one state to another. Materials can exist in different states—solid, liquid, and gas. Some common materials, such as water, can be changed from one state to another by heating or cooling. Resulting cause and effect relationships should be explored, described, and predicted. DOK 3
Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Physical Science
Motion and Forces
SC-04-1.2.1 Students will interpret or represent data related to an object's straight-line motion in order to make inferences and predictions of changes in position and/or time. An object's motion can be described by measuring its change in position over time such as rolling different objects (e.g., spheres, toy cars) down a ramp. Collecting and representing data related to an object's motion provides the opportunity to make comparisons and draw conclusions. DOK 3
Chapter 8, Lesson 3, Video A, SE page 171

Physical Science
Motion and Forces
SC-04-1.2.2 Students will infer causes and effects of pushes and pulls (forces) on objects based on representations or interpretations of straight-line movement/motion in charts, graphs, and qualitative compassion. The position and motion of objects can be changed by pushing or pulling. The amount of change is related to the force (defined as the strength of the push or pull) used. The force with which a ball is hit illustrates this principle. Cause and effect relationships, along with predicted consequences related to the strength of pushes and pulls (force) of an object's position and motion should be explored and qualitatively compared. DOK 3
Chapter 8, Lesson 3, Video A, SE page 171

Physical Science
Motion and Forces
SC-04-1.2.3 Students will compare the rate of vibration to the pitch of sound that is produced in order to make inferences and predictions about the pitch of a sound based on graphical and observational data. Vibration is a type of motion that can be observed, described, measured and compared. Sound is produced by vibrating objects. The pitch of the sound can be varied by changing the rate of vibration. Relationships between the rate of vibration and the produced sound can be represented graphically. Inferences based on graphical and observational data can be used to make predictions about vibration rates and pitch. DOK 3
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Writing in Science, SE page 161; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB Pages 141-143; TG Page 156

Earth/Space Science
The Earth and the Universe
SC-04-2.3.1 Students will • Classify earth materials by the ways that they are used. • Explain how their properties make them useful for different purposes. Earth materials provide many of the resources humans use. The varied materials have different physical and chemical properties that can be used to describe, separate, sort, and classify them. Inferences about the unique properties of the earth materials yield ideas about their usefulness. For example, some are useful as building materials (e.g., stone, clay, marble), some as sources of fuel (e.g., petroleum, natural gas), or some for growing the plants we use as food. DOK 3
Chapter 4, Lesson 2, Video B, SE page 76; Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; Writing in Science, SE page 85; Process Skill, SE page 85; KnowZone, SE pages 86-87 **Chapter 5, Lesson 1, Video C, SE page 93** **Chapter 9, Lesson 3, Video A, SE page 191; Video B, SE page 192**

Earth/Space Science
The Earth and the Universe
SC-04-2.3.2 Students will describe and explain consequences of changes to the surface of the Earth, including some common fast changes (e.g., landslides, volcanic eruptions, earthquakes), and some common slow changes (e.g., erosion, weathering). The surface of the Earth changes. Some changes are due to slow processes such as erosion or weathering. Some changes are due to rapid processes such as landslides, volcanic eruptions, and earthquakes. Observations of the changes can be used to identify cause and effect relationships. Consequences of the changes, along with evidence-based proposed solutions, should be explored. DOK 3
Chapter 4, Lesson 1, Video B, SE page 70; Lesson 2, Video A, SE page 75

Earth/Space Science
The Earth and the Universe
SC-04-2.3.3 Students will represent and interpret weather and weather data in order to make generalizations and/or predictions about weather changes from day to day and over seasons. Weather changes from day to day and over seasons. Weather can be described by observations and measurable quantities such as temperature, wind direction and speed, and precipitation. Data can be displayed and used to make predictions. DOK 3
Chapter 5, Lesson 2, Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video B, SE page 106; Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89; TG page 102

Earth/Space Science
The Earth and the Universe
SC-04-2.3.4 Students will interpret a variety of representations/models (e.g., diagrams, sundials, distance of sun above horizon) of the sun's movement in the sky to identify patterns, recognize relationships, and draw conclusions about the Earth-Sun system. Changes in movement of objects in the sky have pattern that can be observed, described, and modeled. The Sun appears to move across the sky in the same way every day, but the Sun's apparent path changes slowly over seasons. Data collected can be used to identify patterns, recognize relationships, and draw conclusions about the Earth and Sun system. DOK 3
Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115; Process Skill, SE page 117 **Earth in Space, SE page 205**

Earth/Space Science
The Earth and the Universe
SC-04-2.3.5 Students should understand that the moon moves across the sky on a daily basis such as the Sun. The observable shape of the moon can be described as it changes from day to day in a cycle that lasts about a month.
Chapter 6, Lesson 1, Video C, SE page 115; Process Skill, SE page 117

Biological Science
Unity and Diversity
SC-04-3.4.1 Students will • Compare the different structures and functions of plants and animals that contribute to the growth, survival and reproduction of the organisms. • Make inferences about the relationship between structure and function in organisms. Each plant or animal has structures that serve different functions in growth, survival, and reproduction. For example, humans have distinct body structures for walking, holding, seeing, and talking, Evidence about the relationship between structure and function should be used to make inferences and draw conclusions. DOK 3
Chapter 1, Lesson 1, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Writing in Science, SE page 13; Process Skill, SE page 113KnowZone, SE pages 14-15; Lesson 3, Video B, SE page 18 **Chapter 2, KnowZone, SE pages 36-37**

Biological Science
Unity and Diversity
SC-04-3.4.2 Students should understand that 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).
Chapter 1, Lesson 1, Video B, SE page4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Lesson 3, Video A. SE page 17; Process Skill, SE page 21 **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35**

Biological Science
Unity and Diversity
SC-04-3.4.3 Students will • Compare a variety of life cycles of plants and animals. • Draw conclusions in order to classify and make inferences about 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 actual organisms or models of organisms' life cycle should be used to classify and make inferences about an organism, DOK 3
Chapter 1, Lesson 1, Video C, SE page 19 **See also Level A;** **Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21**

Biological Science
Unity and Diversity
SC-04-3.4.4 Students will identify some characteristics of organisms that are passed from the parents, and others that are learned from interactions with the environment. Observations of plants and animals yield the conclusions that organisms closely resemble their parents at some time in their life cycles. Some characteristics (e.g., the color of flowers, the number of appendages) are passed to offspring. Other characteristics are learned from interactions with the environment such as the ability to ride a bicycle, and these cannot be passed on to the next generation. Explorations related to inherited versus learned characteristics should offer opportunities to collect data and draw conclusions about various groups of organisms. DOK 2
Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video C, SE page 11

Biological Science
Biological Change
SC-04-3.5.1 Students will use representations of fossils to: • Draw conclusions about the nature of the organisms and the basic environments that existed at the time. • Make inferences about the relationships to organisms 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. Making observations of fossils, describing them and using those descriptions as evidence to draw conclusions about the organisms and basic environments represented by the fossils should occur in order to promote understanding. DOK 3
Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 **Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84**

Unifying Ideas
Energy Transformations
SC-04-4.6.1 Students will analyze patterns and make generations about the basic relationships of plants and animals in an ecosystem (food chain). 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
Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, , SE page 40; Video C, SE page 41; Process Skill, SE page 43

Unifying Ideas
Energy Transformations
SC-04-4.6.2 Students will • Analyze data/evidence of the Sun providing light and heat to earth. • Use data/evidence to substantiate the conclusion that the Sun's light and heat are necessary to sustaining life on Earth. Simple observations, investigations, and data collection begin to reveal that the Sun provides the light and heat necessary to maintain the temperature on Earth. Evidence collected and analyzed should be used to substantiate the conclusion that the sun's light and heat are necessary to sustain life on Earth. DOK 3
Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Chapter 5, Lesson 1, Video A, SE page 91; KnowZone, SE pages 102-103** **Chapter 6, Lesson 1, Video A, SE page 113** **Chapter 8, Lesson 2, Video A, SE page 163**

Unifying Ideas
Energy Transformations
SC-04-4.6.3 Students will evaluate a variety of models/representations of electrical circuits (open, closed, series, and/or parallel) to: • Make predictions related to changes in the system. • Compare the properties of conducting and non-conducting materials. Electricity in circuits can produce light, heat, sound, and magnetic effects. Electrical circuits require a complete conducting path through which an electrical current can pass. Analysis of a variety of circuit models creates an opportunity to make predictions about circuits, as well as to demonstrate an understanding of the concepts of open and closed circuits and basic conducting and non-conducting materials. DOK 3
Chapter 9, Lesson 1, Video B, SE page 180; Video C, SE page 181

Unifying Ideas
Energy Transformations
SC-04-4.6.4 Students will • Analyze models/representations of light in order to generalize about the behavior of light. • Represent the path of light as it interacts with a variety of surfaces (i.e., reflecting, refracting, absorbing). Light can be observed as traveling in a straight line unit it strikes an object. Light can be reflected by a shiny object (e.g., mirror, spoon), refracted by a lens (e.g., magnifying glass, eyeglasses), or absorbed by an object (e.g., dark surface). Questions posed about the behavior and interaction of light with a variety of surfaces, can be explored through investigations using simple equipment. DOK 3
Chapter 8, Lesson 2, Video B, SE page 164

Unifying Ideas
Energy Transformations
SC-04-4.6.5 Students will • Identify ways that heat can be produced (e.g., burning, rubbing) and properties of materials that conduct heat between than others. • Describe the movement of heat between objects. Heat can be produced in many ways such as burning or rubbing. Heat moves from a wormer objects to a cooler one by contact (conduction) or at a distance. Some materials absorb and conduct heat better than others. Simple investigations can illustrate that metal objects conduct heat better than wooden objects. DOK 2
See Level A; **Chapter 8, Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173** **See also Level C;** **Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164**

Unifying Ideas
Interdependence
SC-04-4.7.1 Students will make predictions and/or inferences based on patterns of evidence related to the survival and reproductive success of organisms in particular environments. The world has many different environments. Distinct environments support the lives of different types of organisms. When the environment changes, some plants and animals survive and reproduce, and others die or move to new locations. Observations should be made of a number of different environments in order to discover patterns and resulting cause and effect relationships between organisms and their environments. Connections and conclusions should be made based on the observable or collected data. DOK 3
Chapter 1, Lesson 1, Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, 49; Lesson 3, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Process Skill, SE page 59**

Unifying Ideas
Interdependence
SC-04-4.7.2 Students will • Describe human interactions in the environment where they live. • Classify the interactions as beneficial or harmful to the environment using data/evidence to support conclusions. All organisms, including humans, cause changes in the environment where they live. Some of these changes are detrimental to the organism or to other organisms; other changes are beneficial (e.g., dams built by beavers benefit some aquatic organisms but are detrimental to others). By evaluating the consequences of changes using cause and effect relationships, solutions to real life situations/dilemmas can be proposed. DOK 3
Chapter 1, Lesson 1, Video C, SE page 5 **Chapter 2, Lesson 1, Video B, SE page 26; Lesson 3, Video C, SE page 41; Process Skill, SE page 43** **Chapter 3, Lesson 1, Video C, SE page 49; Lesson 2, Video C, SE page 57; Lesson 3, Video B, SE page 62; Video C, SE page 63; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 5, KnowZone, SE pages 102-103**

SRA Snapshots Video Science™: Level C
correlation to
Kentucky Core Content for Science Assessment
Grade 5

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Physical Science
Structure and Transformation of Matter
SC-05-1.1.1 Students will describe the physical properties of substances (e.g., boiling point, solubility, density). A substance has characteristic physical properties (e.g., boiling point, solubility, density) that are independent of the amount of the sample. DOK 2
Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144 **Chapter 8, Lesson 2, Video C, SE page 165**

Physical Science
Motion and Forces
SC-05-1.2.1 Students will interpret data in order to make qualitative (e.g., fast, slow, forward, backward) and quantitative descriptions and predictions about the straight-line motion of an object. The motion of an object can be described by its relative position, direction of motion, and speed. That motion can be measured and represented on a graph. DOK 3
Chapter 9, Lesson 1, Video A, SE page 179; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195

Physical Science
Motion and Forces
SC-05-1.2.2 Students should understand that forces are pushes and pulls, and that these pushes and pull may be invisible (e.g., gravity, magnetism) or visible (e.g., friction, collisions).
Chapter 9, Lesson 1, Video A, SE page 179; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195

Earth/Space Science
The Earth and the Universe
SC-05-2.3.1 Students will • Describe the circulation of water (evaporation and condensation) from the surface of the Earth, through the crust, oceans, and atmosphere (water cycle). • Explain how matter is conserved in this cycle. Water, which covers the majority of the Earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle. Students should have experiences that contribute to the understanding of evaporation, condensation, and the conservation of matter. DOK 2
Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Process Skill, SE page 101 **The Planet Earth, SE page 204**

Earth/Space Science
The Earth and the Universe
SC-05-2.3.2 Students will explain interactions of water with Earth materials and results of those interactions (e.g., dissolving minerals, moving minerals and gases). Water dissolves minerals and gases and may carry them to the oceans. Observations and models of this process should provide the basis for explanations related to the interacting components within this system. DOK 3
Chapter 4, Lesson 2, Video A, SE page 77; Video B, SE page 78 **Chapter 7, Lesson 3, Video B, SE page 150**

Earth/Space Science
The Earth and the Universe
SC-05-2.3.3 Students will • Describe Earth's atmosphere as a relatively thin blanket of air consisting of a mixture of nitrogen, oxygen, and trace gases, including water vapor. • Analyze atmospheric data in order to draw conclusions about real life phenomena related to atmospheric changes and conditions. Earth is surrounded by a relatively thin blanket of air called the atmosphere. The atmosphere is a mixture of nitrogen, oxygen, and trace gases that include water vapor. The atmosphere has different properties at different elevations. Conclusions based on the interpretation of atmospheric data can be used to explain real life phenomena (e.g., pressurized cabins in airplanes, mountain-climber's need for oxygen). DOK 3
Chapter 4, Lesson 1, Video A, SE page 69 **Chapter 5, Lesson 1, Video A, SE page 91; Video B. SE page 92; Video C, SE page 93; Process Skill, SE page 95**

Earth/Space Science
The Earth and the Universe
SC-05-2.3.4 Students will • Analyze global patterns of atmospheric movement. • Explain the basic relationships of patterns of atmospheric movement to local weather. Global patterns of atmospheric movement can be observed and/or analyzed by interpreting patterns within data. Atmospheric movements influence local weather. Oceans have a major effect on climate, because water in the oceans holds a large amount of heat. Related data can be used to predict change in weather and climate. Consequences of these changes should be explored and discussed. DOK 3
Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; Process Skill, SE page 107

Earth/Space Science
The Earth and the Universe
SC-05-2.3.5 Students compare components of our solar system, including using models/representations that illustrate the system and resulting interactions. Earth is the third planet from the Sun in a system that includes the moon, the Sun, eight other planets and their moons, and smaller objects. The Sun, an average star, is the central and largest body in the solar system. Use of models and diagrams will provide understanding of scale within the solar system. DOK 2
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Process Skill, SE page 117

Biological Science
Unity and Diversity
SC-05-3.4.1 Students will describe and compare living systems to understand the complementary nature of structure and function. Observations and comparisons of living systems at all levels of organization illustrate the complementary nature of structure and function. Important levels of organization for structure and function include cells, tissues, organs, organ systems, organisms (e.g., bacteria, protests, fungi, plants, animals), and ecosystems. Explorations of the relationship between structure and function provide the basis for comparisons and classification schemes. DOK 2
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Process Skill, 13; Lesson 3, Video A, SE page 15; Video B, SE page 16, Video C, SE page 17; Process Skill, SE page 19

Biological Science
Unity and Diversity
SC-05-3.4.2 Students will explain the essential functions of cells necessary to sustain life. Cells carry on the many functions needed to sustain life. Models of cells, both physical and analogical, promote understanding of their structures and functions. Cells grow and divide, thereby producing more cells. This requires that they take in nutrients, which provide energy for the work that cells do and make the materials that a cell needs. DOK 2
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5, Process Skill, SE page 7

Biological Science
Unity and Diversity
SC-05-3.4.3 Students should understand that all organisms are composed of cells, the fundamental unit of life. Most organisms are single cells; other organisms, including plants and animals are multicellular.
Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video A, SE page15

Biological Science
Biological Change
SC-05-3.5.1 Students will describe cause and effect relationships between enhanced survival/reproductive success and particular biological adaptations (e.g., changes in structures, behaviors, and/or physiology) to generalize about the diversity of species. Biological change over time accounts for the diversity of species developed over many generations. Examining cause and effect relationships between enhanced survival/reproductive success and biological adaptations (e.g., changes in structures, behaviors, and/or physiology), based on evidence gathered, creates the basis for explaining diversity. DOK 2
Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41

Biological Science
Biological Change
SC-05-3.5.2 Students should understand that all organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment.
Chapter 1, Lesson 1, Video B, SE page 4 **Chapter 2, Lesson 2, Video A, SE page 31**

Unifying Ideas
Energy Transformations
SC-05-4.6.1 Students will • Classify energy phenomena as kinetic or potential. • Describe the transfer of energy occurring in simple systems or related data. Energy can be classified as kinetic or potential. Energy is a property of many substances and energy can be found in several different forms. For example, chemical energy as found in food we eat or in the gasoline we burn in out car. Heat, light (solar), sound, electrical energy and the energy associated with motion (called kinetic energy) are examples of other forms of energy. Objects can also have energy simply by virtue of their position, called potential energy. Energy is transferred in many ways. Simple systems should be observed, and relevant data collected, in order to describe the transfer of energy occurring. DOK 2
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skill, SE page 161; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Process Skill, SE page 167

Unifying Ideas
Energy Transformations
SC-05-4.6.2 Students should understand that the Sun is a major source of energy for changes on Earth's surface. The Sun loses energy by emitting light. A tiny fraction of that light reaches Earth, transferring energy from the Sun to Earth.
Chapter 3, Lesson 1, Video C, SE page 49 **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 3, Video C, SE page 105** **Chapter 6, Lesson 1, Video A, SE page 113** **Chapter 8, Lesson 1, Video A, SE page 157**

Unifying Ideas
Energy Transformations
SC-05-4.6.3 Students will • Draw conclusions about the transfer of energy within models/representations of electrical circuits as evidenced by the heat, light, sound, and magnetic effects that are produced. • Describe changes with the system that would affect the transfer of energy. Electrical circuits provide a means of transferring electrical energy. This transfer can be observed and described as heat, light, sound and magnetic effects are produced. Models and diagrams can be used to support conclusions and predict consequences of change within an electrical circuit. DOK 3
Chapter 8, Lesson 1, Video A, SE page 157; Lesson 3, Video A, SE page 171; Video B, SE page 172; Process Skill, SE page 175

Unifying Ideas
Energy Transformations
SC-05-4.6.4 Students will identify predictable patterns and make generalizations about light and matter interactions using data/evidence. Light energy interacts with matter by transmission (including refraction), absorption, or scattering (including reflection). Questions related to these phenomena should drive the design of simple investigations that will yield evidence of the predictable patterns associated with these interactions. DOK 3
See Level B: **Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165**

Unifying Ideas
Energy Transformations
SC-05-4.6.5 Students should understand that heat energy moves in predictable ways, flowing from warmer objects to cooler ones, until both objects reach the same temperature. By examining cause and effect relationships, consequences of heat movement and conduction can be predicted and inferred.
Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Process Skill, SE page 167

Unifying Ideas
Interdependence
SC-05-4.7.1 Students will • Describe and categorize populations of organisms according to the function they serve in an ecosystem (e.g., producers, consumers, decomposers). • Draw conclusions about the effects of changes to populations in an ecosystem. Populations of organisms can be categorized by the function they serve in an ecosystem. Plants and some microorganisms are producers because they make their own food. All animals, including humans, are consumers, and obtain their food by eating other organisms. Decomposers, primarily bacteria and fungi, are consumers that use waste materials and dead organisms for food. Food webs identify the relationships among producers, consumers, and decomposers in an ecosystem. Using data gained from observing interacting components with an ecosystem, the effects of changes can be predicted. DOK 3
Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43 **Chapter 3, Lesson 1, Video C, SE page 49**

Unifying Ideas
Interdependence
SC-05-4.7.2 Students should understand that a population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem.
Chapter 3, Lesson 1, Video A, SE page 47; Lesson 2, Video A, SE page 53; Video B, SE page 54; Video C, SE page 55; Process Skill, SE page 57