SRA Snapshots Simply Science™
correlation to
Missouri Science Standards
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	**Missouri Science Standards**
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	**VII. Living Systems** **A. Structure/Function/Characteristics** **B. By the end of grade 2, all students should know that:** **1. Observable characteristics of living organisms can be used to sort and group them.** **a.** sort common objects based on color and/or shape and use this skill to sort common organisms. **VIII. Ecology** **A. Interactions** **By the end of grade 2, all students should know that:** **2. All organisms depend on one another and their environment to live and grow.** **a.** identify the common basic needs of organism and the ways in which they depend on each other and their environment.

Life Science Unit 1 (continued)	
Program Components	**Missouri Science Standards**
TIB page 19, Hands-On Science Activity *Group Living/Nonliving Things*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 1 Life Science Unit 2: Learning About Plants	
Program Components	**Missouri Science Standards**
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	**VII. Living Systems** **B. Life Processes** **By the end of grade 2, all students should know that:** **1. Organisms go through life cycles.** **A.** observe and record the phases in the life cycle of various organisms and compare the differences between species. **E. Adaptation/Evolution** **By the end of grade 2, all students should know that:** **1. Organisms have parts that enable them to live and survive in the world.** **a.** organize data, information, and ideas about how body parts enable the organism to live and survive.

Life Science Unit 2 (continued)	
Program Components	**Missouri Science Standards**
TIB page 25, Hands-On Science Activity *Looking at Plant Parts*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.
SRA Snapshots Simply Science™ Grade 1 **Life Science Unit 3: Habitats Are Everywhere**	
Program Components	**Missouri Science Standards**
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, 66, 75, 82	**VIII. Ecology** **A. Interactions** **By the end of grade 2, all students should know that:** **1. All living organisms interact with each other and their environment.** **a.** give examples of how living things affect their environment and other living things. **2. All organisms depend on one another and their environment to live and grow.** **a.** identify the common basic needs of organism and the ways in which they depend on each other and their environment.

Life Science Unit 3 (continued)	
Program Components	**Missouri Science Standards**
TIB page 31, Hands-On Science Activity *Habitat Mobiles*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 1 Earth Science Unit 4: Learning About Earth's Surface	
Program Components	**Missouri Science Standards**
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	**VI. Earth Systems** **A. Physical Systems** **By the end of grade 2, all students should know that:** **2. Earth's natural resources are limited.** **a.** conduct research to develop and evaluate information on the use and abuse of Earth's natural resources. **3. Earth's surface is composed of rocks, soils, water, and living organisms. Differences in these components can be used to classify them.** **a.** apply knowledge and skills to classify a variety of rocks or soil. **B. Processes of Systems** **By the end of grade 2, all students should know that:** **1. Water is stored all over Earth.** **a.** discover and evaluate patterns and relationships in information to predict and identify areas that store water. **2. Rocks change over time by weathering.** **a.** conduct research to develop and evaluate information to show how rocks change over time by weathering. **5. The surface of Earth changes slowly (e.g., erosion, weathering) or quickly (e.g., earthquakes, floods, rock/mud slides, volcanic activity).** **a.** present perceptions and ideas on ways the surface of Earth changes slowly or quickly.

Earth Science Unit 4 (continued)	
Program Components	**Missouri Science Standards**
TIB page 37 Hands-On Science Activity *What Comes from Earth's Surface?*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 1 Earth Science Unit 5: Weather on Earth	
Program Components	**Missouri Science Standards**
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	**VI. Earth Systems** **A. Physical Systems** **By the end of grade 2, all students should know that:** **1. Water reaches Earth in different forms (snow, hail, rain, fog, etc.).** **a.** conduct research to develop and evaluate information and ideas about how water in various forms reaches Earth. **4. The atmosphere has physical properties that are measurable and predictable.** **a.** conduct research to develop and evaluate information about the atmosphere; plan and make a written, oral, and visual presentation of the patterns of change over a period of time. **B. Processes of Systems** **By the end of grade 2, all students should know that:** **4. Seasons and changes in weather affect human and animal activity and plant growth.** **a.** apply the knowledge and skills learned from weather observation and investigations to study the effect on human and animal activity and plant growth.

Earth Science Unit 5 (continued)	
Program Components	**Missouri Science Standards**
TIB page 43, Hands-On Science Activity *Seasons*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 1 Earth Science Unit 6: Earth in Space	
Program Components	**Missouri Science Standards**
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	**V. Universe** **A. Characteristics of the Universe** **By the end of grade 2, all students should know that:** **1. Earth is not alone in the universe. Most of the objects in the universe are separated by enormous distance.** **a.** present ideas and opinions about the relationship of the sun and moon to Earth and Earth's position in the universe. **b.** describe the major components of our solar system. **2. The sun, moon, and stars have recurring patterns.** **a.** evaluate information about the sun and moon and share to determine patterns, changes, and relationships. **B. Motions of the Universe** **By the end of grade 2, all students should know that:** **1. Objects in the sky move.** **a.** uses sense to gather information about the day sky through regular observations. **2. Earth makes a full rotation on its axis every 24 hours that causes the day/night cycle.** **a.** explain the relationship of the rotation of Earth and the day/night cycle. **3. Patterns of movement of some objects in the sky are cyclic.** **a.** discover and evaluate patterns in the sky.

Earth Science Unit 6 (continued)	
Program Components	**Missouri Science Standards**
TIB page 49, Hands-On Science Activity *Modeling Moon Phases*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 1 Physical Science Unit 7: Properties of Matter	
Program Components	**Missouri Science Standards**
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, 73, 90	**III. Matter and Energy** **A. Properties, Characteristics and Structures of Matter** **By the end of grade 2, all students should know that:** **1. Observable properties are used to identify objects.** **a.** identify physical properties of objects and sort according to specific properties. **b.** identify physical properties of objects that are detected through the senses. **d.** describe a material as its form and size is changed. **2. Matter had physical properties that can change.** **a.** identify ways heat and light affect common objects. **b.** compare and contrast the physical properties of a solid and liquid of the same material. **3. Mixtures are composed of different kinds of matter, each with distinct properties.** **a.** separate, sort, and group the components of a mixture by their properties.

Physical Science Unit 7 (continued)	
Program Components	**Missouri Science Standards**
TIB page 55, Hands-On Science Activity *Making Mixtures*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.
SRA Snapshots Simply Science™ Grade 1 **Physical Science Unit 8: Learning About Forces**	
Program Components	**Missouri Science Standards**
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	**IV. Force, Motion and Mechanical Energy** **A. Relative Motion** **By the end of grade 2, students should know that:** **1. An object's position can be described relative to another object (above, below, left of, right of, behind, or in front).** **a.** describe the position of an object relative to another object. **B. Types and Properties of Forces and Motion** **By he end of grade 2, all students should know that:** **1. Forces explain many kinds of motion (e.g., stopping, starting, falling, straight, zigzag, circular, vibrational).** **a.** express ideas on the type of motion an object is undergoing. **2. Force is any push or pull exerted by one object on another.** **a.** identify the forces on a moving object and predict the direction it will go. **C. Interactions of Forces and Motions** **By the end of grade 2, all students should know that:** **1. Magnets attract and repel each other and certain kinds of metals.** **a.** work as individuals and collaborate with others to identify the materials that are attracted to a magnet. **2. The movement of an object depends on the force applied and how much mass it has.** **a.** identify and analyze how much force is needed to move a variety of objects.

Physical Science Unit 8 (continued)	
Program Components	**Missouri Science Standards**
TIB page 61, Hands-On Science Activity *Big and Small Pushes*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **1. Tools, especially measuring, magnifying, and photographic ones, can give more information than by observing using only the senses.** **a.** use magnifiers and accurate simple metric measuring tools to observe and measure things in new situations and tasks. **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **5. Objects and events are often observed and described quantitatively.** **a.** use whole numbers and simple fractions to measure and describe things. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 1 Physical Science Unit 9: Heat, Light, and Sound	
Program Components	**Missouri Science Standards**
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, 70, 73, 79	**III. Matter and Energy** **B. Characteristics, Forms and Sources of Energy** **By the end of grade 2, all students should know that:** **1. The sun is the primary source of light and heat for the Earth.** **a.** predict how sunlight will affect the temperature of air and water. **2. Energy can be converted into different forms.** **a.** identify and describe the transformation of energy from one form to another. **3. Sound is a form of energy that results from vibrations in matter. Sound has the qualities of loudness and pitch.** **a.** apply knowledge of sound, learned from altering loudness and pitch. **b.** change the pitch of a stringed instrument by changing the length of the strings and the loudness by the energy of the vibration. **C. Interactions of Matter and Energy** **By the end of grade 2, all students should know that:** **1. Objects that give off light may also give off heat.** **a.** identify and consider a variety of light sources to determine which gives off heat. **2. Heat causes materials to increase in temperature and feel warmer, or change state (gas, liquid, or solid).** **a.** select and apply strategies to show how heat causes materials to increase in temperature and makes it feel warmer.
TIB page 67, Hands-On Science Activity *Investigating Sound*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™
correlation to
Missouri Science Standards
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	**Missouri Science Standards**
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	**VII. Living Systems** **A. Structure/Function/Characteristics** **By the end of grade 2, all students should know that:** **1. Observable characteristics of living organisms can be used to sort and group them.** **a.** sort common objects based on color and/or shape and use this skill to sort common organisms. **C. Diversity** **By the end of grade 2, all students should know that:** **1. Organisms can be grouped by specific characteristics.** **a.** group organisms according to similar specific structures. **b.** compare living things using one or more structure attributes. **E. Adaptation/Evolution** **By the end of grade 2, all students should know that:** **1. Organisms have parts that enable them to live and survive in the world.** **a.** organize data, information, and ideas about how body parts enable the organism to live and survive.

Life Science Unit 1 (continued)	
Program Components	**Missouri Science Standards**
TIB page 19, Hands-On Science Activity *Grouping Animals*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Life Science Unit 2: Learning About Animals	
Program Components	**Missouri Science Standards**
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	**VII. Living Systems** **B. Structure/Function/Characteristics** **C. By the end of grade 2, all students should know that:** **1. Observable characteristics of living organisms can be used to sort and group them.** **a.** sort common objects based on color and/or shape and use this skill to sort common organisms. **B. Life Processes** **By the end of grade 2, all students should know that:** **1. Organisms go through life cycles.** **A.** observe and record the phases in the life cycle of various organisms and compare the differences between species. **C. Diversity** **By the end of grade 2, all students should know that:** **1. Organisms can be grouped by specific characteristics.** **a.** group organisms according to similar specific structures. **b.** compare living things using one or more structure attributes.

Life Science Unit 2 (continued)	
Program Components	**Missouri Science Standards**
TIB page 25, Hands-On Science Activity *Modeling a Life Cycle*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Life Science Unit 3: Ecosystems All Around	
Program Components	**Missouri Science Standards**
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, 55, 57, 59, 62, 64, 70, 72, 80, 83, 87, 88	**VII. Living Systems** **E. Adaptation/Evolution** **By the end of grade 2, all students should know that:** **1. Organisms have parts that enable them to live and survive in the world.** **a.** organize data, information, and ideas about how body parts enable the organism to live and survive. **VIII. Ecology** **A. Interactions** **By the end of grade 2, all students should know that:** **1. All living organisms interact with each other and their environment.** **a.** give examples of how living things affect their environment and other living things. **2. All organisms depend on one another and their environment to live and grow.** **a.** identify the common basic needs of organism and the ways in which they depend on each other and their environment.

Life Science Unit 3 (continued)	
Program Components	**Missouri Science Standards**
TIB page 31, Hands-On Science Activity *Caterpillar Camouflage*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Earth Science Unit 4: Earth's Natural Resources	
Program Components	**Missouri Science Standards**
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	**VI. Earth Systems** **A. Physical Systems** **By the end of grade 2, all students should know that:** **2. Earth's natural resources are limited.** **a.** conduct research to develop and evaluate information on the use and abuse of Earth's natural resources. **3. Earth's surface is composed of rocks, soils, water, and living organisms. Differences in these components can be used to classify them.** **a.** apply knowledge and skills to classify a variety of rocks or soil. **B. Processes of Systems** **By the end of grade 2, all students should know that:** **1. Water is stored all over Earth.** **a.** discover and evaluate patterns and relationships in information to predict and identify areas that store water. **2. Rocks change over time by weathering.** **a.** conduct research to develop and evaluate information to show how rocks change over time by weathering. **5. The surface of Earth changes slowly (e.g., erosion, weathering) or quickly (e.g., earthquakes, floods, rock/mud slides, volcanic activity).** **a.** present perceptions and ideas on ways the surface of Earth changes slowly or quickly.

Earth Science Unit 4 (continued)	
Program Components	**Missouri Science Standards**
TIB page 37, Hands-On Science Activity *Hand-Made Fossils*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Earth Science Unit 5: Weather and Water	
Program Components	**Missouri Science Standards**
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	**VI. Earth Systems** **A. Physical Systems** **By the end of grade 2, all students should know that:** **1. Water reaches Earth in different forms (snow, hail, rain, fog, etc.).** **a.** conduct research to develop and evaluate information and ideas about how water in various forms reaches Earth. **4. The atmosphere has physical properties that are measurable and predictable.** **a.** conduct research to develop and evaluate information about the atmosphere; plan and make a written, oral, and visual presentation of the patterns of change over a period of time. **B. Processes of Systems** **By the end of grade 2, all students should know that:** **4. Seasons and changes in weather affect human and animal activity and plant growth.** **a.** apply the knowledge and skills learned from weather observation and investigations to study the effect on human and animal activity and plant growth.

Earth Science Unit 5 (continued)	
Program Components	**Missouri Science Standards**
TIB page 43, Hands-On Science Activity *What Can the Wind Blow?*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **1. Tools, especially measuring, magnifying, and photographic ones, can give more information than by observing using only the senses.** **a.** use magnifiers and accurate simple metric measuring tools to observe and measure things in new situations and tasks. **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Earth Science Unit 6: Learning About Space	
Program Components	**Missouri Science Standards**
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	**V. Universe** **A. Characteristics of the Universe** **By the end of grade 2, all students should know that:** **1. Earth is not alone in the universe. Most of the objects in the universe are separated by enormous distance.** **a.** present ideas and opinions about the relationship of the sun and moon to Earth and Earth's position in the universe. **b.** describe the major components of our solar system. **2. The sun, moon, and stars have recurring patterns.** **a.** evaluate information about the sun and moon and share to determine patterns, changes, and relationships. **B. Motions of the Universe** **By the end of grade 2, all students should know that:** **1. Objects in the sky move.** **a.** uses sense to gather information about the day sky through regular observations. **2. Earth makes a full rotation on its axis every 24 hours that causes the day/night cycle.** **a.** explain the relationship of the rotation of Earth and the day/night cycle. **3. Patterns of movement of some objects in the sky are cyclic.** **a.** discover and evaluate patterns in the sky.
TIB page 49, Hands-On Science Activity *Stars in the Day Time*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Physical Science Unit 7: Characteristics of Matter	
Program Components	**Missouri Science Standards**
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, 66, 89	**III. Matter and Energy** **A. Properties, Characteristics and Structures of Matter** **By the end of grade 2, all students should know that:** **1. Observable properties are used to identify objects.** **a.** identify physical properties of objects and sort according to specific properties. **b.** identify physical properties of objects that are detected through the senses. **d.** describe a material as its form and size is changed. **2. Matter has physical properties that can change.** **a.** identify ways heat and light affect common objects. **b.** compare and contrast the physical properties of a solid and liquid of the same material. **3. Mixtures are composed of different kinds of matter, each with distinct properties.** **a.** separate, sort, and group the components of a mixture by their properties.
TIB page 55, Hands-On Science Activity *How Much Liquid?*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **1. Tools, especially measuring, magnifying, and photographic ones, can give more information than by observing using only the senses.** **a.** use magnifiers and accurate simple metric measuring tools to observe and measure things in new situations and tasks. **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Physical Science Unit 8: Forces and Motion	
Program Components	**Missouri Science Standards**
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	**IV. Force, Motion and Mechanical Energy** **A. Relative Motion** **By the end of grade 2, students should know that:** **1. An object's position can be described relative to another object (above, below, left of, right of, behind, or in front).** **a.** describe the position of an object relative to another object. **B. Types and Properties of Forces and Motion** **By he end of grade 2, all students should know that:** **1. Forces explain many kinds of motion (e.g., stopping, starting, falling, straight, zigzag, circular, vibrational).** **a.** express ideas on the type of motion an object is undergoing. **2. Force is any push or pull exerted by one object on another.** **a.** identify the forces on a moving object and predict the direction it will go. **3. Weight is a measurement of the attraction of gravity on a mass. Mass is the amount of matter of an object.** **a.** use the appropriate tools to weigh an object then find its mass. **C. Interactions of Forces and Motions** **By the end of grade 2, all students should know that:** **1. Magnets attract and repel each other and certain kinds of metals.** **a.** work as individuals and collaborate with others to identify the materials that are attracted to a magnet. **2. The movement of an object depends on the force applied and how much mass it has.** **a.** identify and analyze how much force is needed to move a variety of objects.
TIB page 61, Hands-On Science Activity *Magnets*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.

SRA Snapshots Simply Science™ Grade 2 Physical Science Unit 9: Energy Is Everywhere	
Program Components	**Missouri Science Standards**
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	**III. Matter and Energy** **B. Characteristics, Forms and Sources of Energy** **By the end of grade 2, all students should know that:** **1. The sun is the primary source of light and heat for the Earth.** **a.** predict how sunlight will affect the temperature of air and water. **2. Energy can be converted into different forms.** **a.** identify and describe the transformation of energy from one form to another. **3. Sound is a form of energy that results from vibrations in matter. Sound has the qualities of loudness and pitch.** **a.** apply knowledge of sound, learned from altering loudness and pitch. **b.** change the pitch of a stringed instrument by changing the length of the strings and the loudness by the energy of the vibration. **C. Interactions of Matter and Energy** **By the end of grade 2, all students should know that:** **1. Objects that give off light may also give off heat.** **a.** identify and consider a variety of light sources to determine which gives off heat. **2. Heat causes materials to increase in temperature and feel warmer, or change state (gas, liquid, or solid).** **a.** select and apply strategies to show how heat causes materials to increase in temperature and makes it feel warmer.
TIB page 67, Hands-On Science Activity *Heat Energy*	**I. Scientific Inquiry:** **A. Processes of Scientific Inquiry** **By the end of grade 2, all students should know that:** **3. Words, pictures, numbers, models, and sounds can be used to describe objects and events.** **a.** create communications that describe and compare things in terms of number, shape, texture, size, odor, sound, mass, color, and motion. **B. Investigations** **By the end of grade 2, all students should know that:** **1. The breadth and style of investigations depend on the questions asked.** **a.** create and refine ideas and questions about the world by asking for information making careful observations, and trying things out. **b.** plan and conduct a simple investigation that includes formulating a question, gathering data, and constructing a reasonable explanation. **II. Scientific Relevance:** **C. Science as a Human Endeavor** **By the end of grade 2, all students should know that:** **1. Science is a way to solve problems; everybody can do scientific activities, discover some things about nature, and invent things and ideas.** **a.** work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.