Henry County Schools
First Grade Science Scope and Sequence

Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
	S2CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out. **S1CS3.** Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. **a.** Use ordinary hand tools and instruments to construct, measure, and look at objects. **c.** Identify and practice accepted safety procedures in manipulating science materials and equipment. **S1CS6.** Students will be familiar with the character of scientific knowledge and how it is achieved. Students will recognize that: **a.** When a science investigation is done the way it was done before, we expect to get a similar result. **b.** Science involves collecting data and testing hypotheses **c.** Scientists often repeat experiments multiple times, and subject their ideas to criticism by other scientists who may disagree with them and do further tests. **d.** All different kinds of people can be and are scientists. **S1CS7**. Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices: **a.** Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other. **b.** In doing science, it is often helpful to work as a team. All team members should reach individual conclusions and share their understandings with other members of the team in order to develop a consensus.	**Classroom Expectations & Procedures** **Safety, Introduction to Science and Scientific Method**	**4 weeks** Aug 3 – Aug 28

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Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
S1E1. Students will observe, measure, and communicate weather data to see patterns in weather and climate. **a.** Identify different types of weather and the characteristics of each type. **b.** Investigate weather by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal or on a calendar seasonally. **c.** Correlate weather data (temperature, precipitation, sky conditions, and weather events) to seasonal changes. **Big Idea:** Patterns in Weather and Climate	**S1CS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out. **S1CS2.** Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations. **a.** Use whole numbers in ordering, counting, identifying, measuring, and describing things and experiences. **b.** Readily give the sums and differences of single-digit numbers in ordinary, practical contexts and judge the reasonableness of the answer. **c.** Give rough estimates of numerical answers to problems before doing them formally. **d.** Make quantitative estimates of familiar lengths, weights, and time intervals, and check them by measuring. **S1CS3.** Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. **a.** Use ordinary hand tools and instruments to construct, measure, and look at objects. **c.** Identify and practice accepted safety procedures in manipulating science materials and equipment. **S1CS4.** Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters. **a.** Use a model—such as a toy or a picture—to describe a feature of the primary thing. **b.** Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change.	**Weather and Climate** (Unit A: Chapter 2) **Below Level** Weather and the Seasons **On-Level** Weather All Around **Above-Level** Whatever the Weather	**5 weeks** Aug 31 – Sept 18 Sept 28 – Oct 9

Henry County Schools
First Grade Science Scope and Sequence

Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
	S1CS5. Students will communicate scientific ideas and activities clearly. **a.** Describe and compare things in terms of number, shape, texture, size, weight, color, and motion. **b.** Draw pictures (grade level appropriate) that correctly portray features of the thing being described. **c.** Use simple pictographs and bar graphs to communicate data. **S1CS6.** Students will be familiar with the character of scientific knowledge and how it is achieved. Students will recognize that: **a.** When a science investigation is done the way it was done before, we expect to get a similar result. **b.** Science involves collecting data and testing hypotheses **c.** Scientists often repeat experiments multiple times, and subject their ideas to criticism by other scientists who may disagree with them and do further tests. **d.** All different kinds of people can be and are scientists. **S1CS7.** Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices: **a.** Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other. **b.** In doing science, it is often helpful to work as a team. All team members should reach individual conclusions and share their understandings with other members of the team in order to develop a consensus. **c.** Tools such as thermometers, rulers and balances often give more information about things than can be obtained by just observing things without help.		

Henry County Schools
First Grade Science Scope and Sequence

Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
S1E2. Students will observe and record changes in water as it relates to weather. **a.** Recognize changes in water when it freezes (ice) and when it melts (water). **b.** Identify forms of precipitation such as rain, snow, sleet, and hailstones as either solid (ice) or liquid (water). **c.** Determine that the weight of water before freezing, after freezing, and after melting stays the same. **d.** Determine that water in an open container disappears into the air over time, but water in a closed container does not. **Big Ideas:** Changes in Water and Water's Relation to Weather	**S1CS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out. **S1CS2.** Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations. **a.** Use whole numbers in ordering, counting, identifying, measuring, and describing things and experiences. **b.** Readily give the sums and differences of single-digit numbers in ordinary, practical contexts and judge the reasonableness of the answer. **c.** Give rough estimates of numerical answers to problems before doing them formally. **d.** Make quantitative estimates of familiar lengths, weights, and time intervals, and check them by measuring. **S1CS3.** Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. **a.** Use ordinary hand tools and instruments to construct, measure, and look at objects. **c.** Identify and practice accepted safety procedures in manipulating science materials and equipment. **S1CS4.** Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters. **a.** Use a model—such as a toy or a picture—to describe a feature of the primary thing. **b.** Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change.	**Changes in Water and Water's Relation to Weather** (Unit A: Chapter 2) **Below Level** Changes in Water **On-Level** Forms of Water **Above-Level** Weather Safety	**5 weeks** Oct 13 – Nov 20

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First Grade Science Scope and Sequence

Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
	S1CS5. Students will communicate scientific ideas and activities clearly. **a.** Describe and compare things in terms of number, shape, texture, size, weight, color, and motion. **b.** Draw pictures (grade level appropriate) that correctly portray features of the thing being described. **c.** Use simple pictographs and bar graphs to communicate data. **S1CS6.** Students will be familiar with the character of scientific knowledge and how it is achieved. Students will recognize that: **a.** When a science investigation is done the way it was done before, we expect to get a similar result. **b.** Science involves collecting data and testing hypotheses **c.** Scientists often repeat experiments multiple times, and subject their ideas to criticism by other scientists who may disagree with them and do further tests. **d.** All different kinds of people can be and are scientists. **S1CS7.** Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices: **a.** Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other. **b.** In doing science, it is often helpful to work as a team. All team members should reach individual conclusions and share their understandings with other members of the team in order to develop a consensus. **c.** Tools such as thermometers, rulers and balances often give more information about things than can be obtained by just observing things without help.		

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Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
S1P1. Students will investigate light and sound. **a.** Recognize sources of light. **b.** Explain how shadows are made. **c.** Investigate how vibrations produce sound. **d.** Differentiate between various sounds in terms of (pitch) high or low and (volume) loud or soft. **e.** Identify emergency sounds and sounds that help us stay safe. **Big Ideas:** Light and Sound	**S1CS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out. **S1CS3.** Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. **a.** Use ordinary hand tools and instruments to construct, measure, and look at objects. **b.** Make something that can actually be used to perform a task, using paper, cardboard, wood, plastic, metal, or existing objects. **c.** Identify and practice accepted safety procedures in manipulating science materials and equipment. **S1CS6.** Students will be familiar with the character of scientific knowledge and how it is achieved. Students will recognize that: **a.** When a science investigation is done the way it was done before, we expect to get a similar result. **b.** Science involves collecting data and testing hypotheses **c.** Scientists often repeat experiments multiple times, and subject their ideas to criticism by other scientists who may disagree with them and do further tests. **d.** All different kinds of people can be and are scientists. **S1CS7. Students will understand important features of the process of scientific inquiry.** Students will apply the following to inquiry learning practices: **a.** Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other. **b.** In doing science, it is often helpful to work as a team. All team members should reach individual conclusions and share their understandings with other members of the team in order to develop a consensus.	**Light and Sound** (Unit B: Chapter 4) **Below Level** Light and Sound **On-Level** Investigating Light and Sound **Above-Level** Red, White, and Boom	**7 weeks** Nov 30 – Dec 18 Jan 5 – Jan 29

Henry County Schools
First Grade Science Scope and Sequence

Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
S1P2. Students will demonstrate effects of magnets on other magnets and other objects. **a.** Demonstrate how magnets attract and repel. **b.** Identify common objects that are attracted to a magnet. **c.** Identify objects and materials (air, water, wood, paper, your hand, etc.) that do not block magnetic force. **Big Idea:** Magnets	**S1CS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out. **S1CS3.** Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. **a.** Use ordinary hand tools and instruments to construct, measure, and look at objects. **b.** Make something that can actually be used to perform a task, using paper, cardboard, wood, plastic, metal, or existing objects. **c.** Identify and practice accepted safety procedures in manipulating science materials and equipment. **S1CS6.** Students will be familiar with the character of scientific knowledge and how it is achieved. Students will recognize that: **a.** When a science investigation is done the way it was done before, we expect to get a similar result. **b.** Science involves collecting data and testing hypotheses **c.** Scientists often repeat experiments multiple times, and subject their ideas to criticism by other scientists who may disagree with them and do further tests. **d.** All different kinds of people can be and are scientists. **S1CS7. Students will understand important features of the process of scientific inquiry.** Students will apply the following to inquiry learning practices: **a.** Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other. **b.** In doing science, it is often helpful to work as a team. All team members should reach individual conclusions and share their understandings with other members of the team in order to develop a consensus.	**Magnets** (Unit B: Chapter 5) **Below Level** Magnets **On-Level** What Can Magnets Do? **Above-Level** Magnetic Force	**5 weeks** Feb 1 – Feb 12 Feb 23 – Mar 11

Henry County Schools
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Co-Requisite Content Standard and Elements	Suggested Co-Requisite Characteristics of Science Standards and Elements	Lesson/Reading Support	Number of Weeks
S1L1. Students will investigate the characteristics and basic needs of plants and animals. **a.** Identify the basic needs of a plant. 1. Air 2. Water 3. Light 4. Nutrients **b.** Identify the basic needs of an animal. 1. Air 2. Water 3. Food 4. Shelter **c.** Identify the parts of a plant—root, stem, leaf, and flower. **d.** Compare and describe various animals—appearance, motion, growth, basic needs. **Big Idea:** Characteristics and Basic Needs of Plants and Animals	**S1CS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out. **S1CS3.** Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. **c.** Identify and practice accepted safety procedures in manipulating science materials and equipment. **S1CS4.** Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters. **a.** Use a model—such as a toy or a picture—to describe a feature of the primary thing. **b.** Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change. **S1CS5.** Students will communicate scientific ideas and activities clearly. **a.** Describe and compare things in terms of number, shape, texture, size, weight, color, and motion. **b.** Draw pictures (grade level appropriate) that correctly portray features of the thing being described. **c.** Use simple pictographs and bar graphs to communicate data. **S1CS6. Students will be familiar with the character of scientific knowledge and how it is achieved.** Students will recognize that: **a.** When a science investigation is done the way it was done before, we expect to get a similar result. **b.** Science involves collecting data and testing hypotheses **c.** Scientists often repeat experiments multiple times, and subject their ideas to criticism by other scientists who may disagree with them and do further tests. **d.** All different kinds of people can be and are scientists.	**Characteristics and Basic Needs of Plants and Animals** (Unit C: Chapters 6-7) **Below Level** All About Animals and All About Plants **On-Level** Animals Everywhere and Observing Plants **Above-Level** Web of Life and What Do You Eat?	**7 weeks** Mar 15 – Apr 1 Apr 11 – May 6

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	S1CS7. Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices: **a.** Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other. **b.** In doing science, it is often helpful to work as a team. All team members should reach individual conclusions and share their understandings with other members of the team in order to develop a consensus. **d.** Much can be learned about plants and animals by observing them closely, but care must be taken to know the needs of living things and how to provide for them. Advantage can be taken of classroom pets.	**Culminating End of the Year Science Learning Activities**	**3 weeks** May 9 – May 27