Science Competencies-Grade K		
Lin-Wood Proficiencies (COMPETENCY)	**I Can Statements**	**Standards** Performance Expectations Coded to National Crosscutting Concepts
1. Competency Statements for Nature of Science and Engineering Students will work collaboratively to make observations and predictions in order to answer testable questions and use their senses, tools and materials to find possible solutions to simple problems.	1. I can make observations (e.g., comparing plants and animals; movement of objects in the sky) and develop drawings, explanations, or demonstrations to represent what I've learned (e.g., predictable patterns in how things move or grow). 2. I can design and create a model or device to solve a specific problem (e.g., using light or sound to communicate over a distance). 3. I can support my predictions and conclusions using evidence (facts, observations, or measurements).	K-LS1-1, K-ESS2-1
2. Competency Statements for Patterns Students will observe patterns in the natural world (including humans), develop questions to investigate, make connections, and support connections with evidence.	1. I can investigate using observations, reading, media, etc. to describe patterns of living things (e.g., how they grow and survive, how parents help offspring). 2. I can investigate using observations, reading, media, etc. to describe or compare patterns in the natural world (e.g., changing seasons, local weather conditions, movement of sun and moon, Earth features). 3. I can use observations (e.g., observable patterns or properties) to support classifications of or make claims about different materials.	K-LS1-1, K-ESS2-1,
3. Competency Statements for Cause & Effect Students will investigate causal relationships that generate observable patterns and explain their thinking with evidence.	1. I can design simple tests to observe causes and to support or refute my own ideas. 2. I can conduct investigations and use data to support my conclusions about cause-effect relationships (e.g., effects of push-pull forces, heating, cooling, adding nutrients or sunlight). 3. I can analyze observations and data to determine if a model or design solution works as intended (e.g., to change the speed or direction of an object, which materials have the properties best suited for an intended purpose).	K-PS2-1, K-PS2-2, K-PS3-1, K-PS3-2, K-ESS3-2, K-ESS3-3,

4. Competency Statements for Scale, Proportion, and Quantity Students will describe and compare objects, situations, or events using relative scale* and standard and nonstandard measurement tools, units, and attributes when making observations or solving problems.	1. I can solve problems involving changes in measurement of objects or events (time, money, length, height, weight) using appropriate tools, techniques, and units. 2. I can describe and compare objects, situations, or events using relative scale and sizes of objects using terms such as: short- long, short-tall, heavy-light, more-less, large-small, thick-thin, etc.	
5. Competency Statements for Systems and System Models Students will explain how the parts of systems work together (e.g., an environment, including the animals and plants) in order to function effectively.	1. I can construct an argument supported by evidence for how living things (plants, animals, humans) use resources in the environment and sometimes change the environment to meet their needs. 2. I can represent the inter-relationships among the living and nonliving things of a given environment, using models.	K-ESS3-1, K-ESS2-2
6. Competency Statements for Energy and Matter in Systems Students will investigate, observe and describe solids, liquids, and gasses, and what happens when matter and energy is manipulated (e.g., heated, cooled, disassembled, reassembled).	1. I can construct an evidence-based account of how heat, light, motion, or sound energy affects other things, using my observations. 2. I can plan and conduct an investigation to see what happens when I change the amount of energy in a system.	K-PS2-1, K-PS2-2,
7. Competency Statements for Structure and Function Students will observe, demonstrate, and explain how the shape and stability* of structures of natural or designed objects are related to their functions.	1. I can develop simple models that mimic various structures and functions of living things (e.g., how structures of a plant or animal disperse seeds, how body structures help animals communicate, move, or meet their needs). 2. I can analyze how the structures of manmade materials or objects make them useful for specific purposes/functions.	K-2-ETS1-2
8. Competency Statements for Stability and Change of Systems Students will distinguish between changes in natural systems that happen rapidly and changes that happen over time.	1. I can use information from multiple sources, including observations of models, to provide evidence how things change and/or stay the same and that change can occur either slowly or rapidly.	2-ESS1-1, 2-ESS2-1