Joliet Public Schools District 86
Grade 5 Science Curriculum

Unit Title	NGSS Standards	Unit Overview
Matter and Its Interactions **Trimester 1** ***~ 6 weeks***	• **5-PS1-1-** Develop a model to describe that matter is made of particles too small to be seen. • **5-PS1-2-** Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. • **5-PS1-3-** Make observations and measurements to identify materials based on their properties. • **5-PS1-4-** Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	This unit organizes performance expectations with a focus on helping students begin to understand the conservation of matter and its particulate nature. Matter of any type can be subdivided into particles that are too small to see and students will conduct measurements of a variety of properties to be used to identify materials.
Ecosystems **Trimester 2** ***~ 6 weeks***	• **LS1-1** - Support an argument that plants get the materials they need for growth chiefly from air and water. • **LS2-1** - Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. • **PS3-1** - Use models to describe that energy in animals' food was once energy from the sun. Examples of models could include diagrams, and flow-charts	This unit organizes performance expectations with a focus on helping students build an understanding of the flow and cycles of matter and energy. Students will understand that all energy in food chains can be traced back to the sun as the origin and that an ecosystem is a group of living organisms interacting with their environment.
Earth and Space **Trimester 3** ***~ 6 weeks***	• **5-ESS2-1** - Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. • **5-ESS2-2** - Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth. • **5-ESS3-1 -** Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. • **PS2-1** - Support an argument that the gravitational force exerted by Earth on objects is directed down. • **ESS1-1** - Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth. • **ESS1-2** - Represent data in graphical displays to reveal patterns of daily changes in the length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.	This unit organizes performance expectations with a focus on helping students build understanding of Earth's major systems and how they interact. Students will be able to explain how the relative distance of the sun and stars affect the apparent brightness and patterns of daily changes in the sky. Students will also collect information on how communities protect the Earth's resources.