

CURRICULUM MAP

Science: Grade 5

FOURTH QUARTER

Performance Expectations	Disciplinary Core Ideas	Science and Engineering Practices	Crosscutting Concepts
<ul style="list-style-type: none"> ● 5-LS1-1: Support an argument that plants get the materials they need for growth chiefly from air and water. ● 5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. ● 5-PS1-1: Develop a model to describe that matter is made of particles too small to be seen. ● 5-PS3-1: Use models to describe that the energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. 	<p>LS1.C: Organization for Matter and Energy Flow in Organisms</p> <ul style="list-style-type: none"> ● Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion. (5-PS3-1) ● Plants acquire their material for growth chiefly from air and water. <p>LS2.A: Interdependent Relationships in Ecosystems</p> <ul style="list-style-type: none"> ● The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plant parts and animals) and therefore operate as “decomposers.” Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem. <p>LS2.B: Cycles of Matter and Energy Transfer in Ecosystems</p> <ul style="list-style-type: none"> ● Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gasses, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment. <p>PS1.A: Structure and Properties of Matter</p> <ul style="list-style-type: none"> ● Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gasses are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects. <p>PS3.D: Energy in Chemical Processes and Everyday Life</p> <ul style="list-style-type: none"> ● The energy released from food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water). 	<p>Focal:</p> <ul style="list-style-type: none"> ● Developing and using models ● Analyzing and interpreting data ● Constructing explanations ● Engaging in argument from evidence <p>Supporting:</p> <ul style="list-style-type: none"> ● Asking questions ● Planning and carrying out investigations ● Using mathematics and computational thinking ● Obtaining, evaluating, and communicating information ● 	<p>Focal:</p> <ul style="list-style-type: none"> ● Patterns ● Cause and effect ● Systems and system models ● Energy and matter <p>Supporting:</p> <ul style="list-style-type: none"> ● Scale, proportion, and quantity

