

K-LS1 From Molecules to Organisms: Structures and Processes

K-LS1 From Molecules to Organisms: Structures and Processes		
Students who demonstrate understanding can:		
K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive. [Clarification Statement: Examples of patterns could include that animals need to take in food but plants do not; the different kinds of food needed by different types of animals; the requirement of plants to have light; and, that all living things need water.]		
The performance expectations above were developed using the following elements from the NRC document <i>A Framework for K-12 Science Education</i> .		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p>Analyzing and Interpreting Data Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <ul style="list-style-type: none"> ▪ Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (K-LS1-1) <p style="text-align: center; border-top: 1px dashed black; margin-top: 10px;"><i>Connections to Nature of Science</i></p> <p>Scientific Knowledge is Based on Empirical Evidence</p> <ul style="list-style-type: none"> ▪ Scientists look for patterns and order when making observations about the world. (K-LS1-1) 	<p>LS1.C: Organization for Matter and Energy Flow in Organisms</p> <ul style="list-style-type: none"> ▪ All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1) 	<p>Patterns</p> <ul style="list-style-type: none"> ▪ Patterns in the natural and human designed world can be observed and used as evidence. (K-LS1-1)
<i>Connections to other DCIs in kindergarten:</i> N/A		
<i>Articulation of DCIs across grade-levels:</i> 1.LS1.A (K-LS1-1); 2.LS2.A (K-LS1-1); 3.LS2.C (K-LS1-1); 3.LS4.B (K-LS1-1); 5.LS1.C (K-LS1-1); 5.LS2.A (K-LS1-1)		
<i>Common Core State Standards Connections:</i>		
<i>ELA/Literacy –</i>		
W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K-LS1-1)		
<i>Mathematics –</i>		
K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. (K-LS1-1)		

*The performance expectations marked with an asterisk integrate traditional science content with engineering through a Practice or Disciplinary Core Idea.

The section entitled “Disciplinary Core Ideas” is reproduced verbatim from *A Framework for K-12 Science Education: Practices, Cross-Cutting Concepts, and Core Ideas*. Integrated and reprinted with permission from the National Academy of Sciences.