

### Connecting to the *Next Generation Science Standards* (NGSS Lead States 2013)

•The chart below makes one set of connections between the instruction outlined in this article and the *NGSS*. Other valid ELA or Math Common Core connections are possible depending on the culminating activity teachers choose to implement with their students. For example: lab report, mini-poster, Socratic seminar, or slide show.

<b>Standard</b> MS-LS2 Ecosystems: Interactions, Energy, and Dynamics <a href="https://www.nextgenscience.org/dci-arrangement/ms-ls2-ecosystems-interactions-energy-and-dynamics">https://www.nextgenscience.org/dci-arrangement/ms-ls2-ecosystems-interactions-energy-and-dynamics</a>	
<b>Performance Expectation</b> MS-LS2-4 Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations	
Dimension	Classroom Connection
<b>Science and Engineering Practice</b> Engaging in argument from evidence	Students collect temperature data and argue which populations of frogs might be affected by climate and disease based on these data and known performance data
Scientific knowledge is based on Empirical Evidence	Students learn about climate research and contribute to current research that is based on temperature trends in different habitats
<b>Disciplinary Core Idea</b> Ecosystem Dynamics, Functioning, and Resilience	Students analyze data and observe how changes in temperature can affect frog health, thus impacting the ecosystem. They also learn how slight changes in the environment can impact disease, which populations are resilient to disease, and how ectotherms are especially sensitive to changing climates
<b>Crosscutting Concept</b> Stability and Change	Students explore how small changes in temperature can impact entire frog populations

### Connections to the *Common Core State Standards* (NGAC and CCSSO 2010)

<b>ELA</b> RST.6-8.1: Cite specific textual evidence to support analysis of science and technical texts RI.8.8: Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims WHST.6-8.1: Write arguments to support claims with clear reasons and relevant evidence WHST.6-8.9: Draw evidence from literary or informational texts to support analysis reflection, and research
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<b>Mathematics</b>
6.SP.B.4: Summarize numerical data sets in relation to their context