A picture containing food

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**SwampScapes**

**Connecting to the Next Generation Science Standards**

* The chart below makes on set of connections between the instruction outlines on our website [www.tieseducation.org](http://www.tieseducation.org) and the NGSS. Other valid connections are likely.
* The materials, lessons, and activities outlines on our TIES website are just one step toward reaching the performance expectation listed below.

**Standard**

**Interdependent Relationships in Ecosystems**

**Performance Expectation**

|  |  |
| --- | --- |
| **MS-LS2-2.**  **MS-ESS3-3.** | **Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.**  **Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.** |

|  |  |
| --- | --- |
| Dimensions | Classroom Connections |
| **Science and Engineering Practice** | |
| Constructing Explanations and Designing Solutions | Construct an explanation that includes qualitative or quantitative relationships between variables that predict phenomena. |
|  | Constructing explanations and designing solutions in 6–8 builds on K–5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. |
| **Disciplinary Core Idea** | |
| LS2.A: Interdependent Relationships in Ecosystems | Similarly, predatory interactions may reduce the number of organisms or eliminate whole populations of organisms. Mutually beneficial interactions, in contrast, may become so interdependent that each organism requires the other for survival. Although the species involved in these competitive, predatory, and mutually beneficial interactions vary across ecosystems, the patterns of interactions of organisms with their environments, both living and nonliving, are shared. (MS-LS2-2) |
| ESS3.C: Human Impacts on Earth Systems | Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth’s environments can have different impacts (negative and positive) for different living things. (MS-ESS3-3) |
| **Crosscutting Concepts** | |
| Patterns | Patterns can be used to identify cause and effect relationships. |
|  | Graphs, charts, and images can be used to identify patterns in data. (MS-ESS3-2) |
| Stability and Change | Small changes in one part of a system might cause large changes in another part. |
| Influence of Science, Engineering, and Technology on Society and the Natural World | All human activity draws on natural resources and has both short and long-term consequences, positive as well as negative, for the health of people and the natural environment. (MS-ESS3-4) |

**Connections to the Common Core State Standards**

|  |  |
| --- | --- |
| [**RST.6-8.1**](http://www.corestandards.org/ELA-Literacy/RST/6-8) | [Cite specific textual evidence to support analysis of science and technical texts.](http://www.corestandards.org/ELA-Literacy/RST/6-8) (MS-LS2-2) |
| [**WHST.6-8.2**](http://www.corestandards.org/ELA-Literacy/WHST/6-8) | [Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.](http://www.corestandards.org/ELA-Literacy/WHST/6-8) (MS-LS2-2) |
| [**WHST.6-8.9**](http://www.corestandards.org/ELA-Literacy/WHST/6-8) | [Draw evidence from literary or informational texts to support analysis, reflection, and research.](http://www.corestandards.org/ELA-Literacy/WHST/6-8) (MS-LS2-2) |
| [**SL.8.1**](http://www.corestandards.org/ELA-Literacy/SL/8) | [Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly.](http://www.corestandards.org/ELA-Literacy/SL/8) (MS-LS2-2) |
| [**SL.8.4**](http://www.corestandards.org/ELA-Literacy/SL/8) | [Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.](http://www.corestandards.org/ELA-Literacy/SL/8) (MS-LS2-2) |
| *Mathematics -* | |
| [**6.SP.B.5**](http://www.corestandards.org/Math/Content/6/SP) | [Summarize numerical data sets in relation to their context.](http://www.corestandards.org/Math/Content/6/SP) (MS-LS2-2) |
| [**RST.6-8.1**](http://www.corestandards.org/ELA-Literacy/RST/6-8) | [Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.](http://www.corestandards.org/ELA-Literacy/RST/6-8) |
| [**WHST.6-8.2**](http://www.corestandards.org/ELA-Literacy/WHST/6-8) | [Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.](http://www.corestandards.org/ELA-Literacy/WHST/6-8) |
| [**WHST.6-8.9**](http://www.corestandards.org/ELA-Literacy/WHST/6-8) | [Draw evidence from informational texts to support analysis, reflection, and research.](http://www.corestandards.org/ELA-Literacy/WHST/6-8) |
| [**SL.8.1**](http://www.corestandards.org/ELA-Literacy/SL/8) | [Engage effectively in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly.](http://www.corestandards.org/ELA-Literacy/SL/8) |
| [**SL.8.4**](http://www.corestandards.org/ELA-Literacy/SL/8) | [Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.](http://www.corestandards.org/ELA-Literacy/SL/8) |