

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 connections are likely; however, space restrictions prevent us from listing all possibilities. The materials, lessons, and activities outlined in the article are just one step toward reaching the performance expectation listed below.

5-ESS3 Earth Systems

<https://www.nextgenscience.org/dci-arrangement/5-ess3-earth-and-human-activity>

| Performance Expectation | Connections to Classroom Activity |
|---|--|
| 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment. | Students brainstorm and identify specific local environmental issues and take action to care for the environment. |
| Science and Engineering Practices | |
| Planning and Carrying Out Investigations Analyzing and Interpreting Data Constructing Explanations and Designing Solutions Obtaining, Evaluating, and Communicating Information | Students <ul style="list-style-type: none"> • create a plan and then investigate selected issue • collect data and make observations about phenomenon • construct explanations and possible solutions from collected data • read about their issue and write informational pieces and persuasive posters |
| Disciplinary Core Idea | |
| ESS3.C: Human Impacts on Earth Systems <ul style="list-style-type: none"> • Societal activities have had major effects on land, ocean, atmosphere, and even outer space. Societal activities can also help protect Earth’s resources and environments. | Students ask themselves what are the causes of human impacts on their school and/or community environment and what solutions are available Students take action to care for their local environment |
| Crosscutting Concepts | |

Systems and System Models

Cause and Effect

Students learn about the interdependence of human action and resulting effects on their local environment
Students identify and explain cause and effect relationships in the context of their local environment

Common Core State Standards Connections:

ELA/Literacy -

RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-ESS3-1)

RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-ESS3-1)

Mathematics -

MP.2 Reason abstractly and quantitatively. (5-ESS3-1)