<table>
<thead>
<tr>
<th>Title: Turning waste into treasure! How could the environment benefit by one family composting?</th>
<th>Grade: 9th-12th Grades</th>
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<tbody>
<tr>
<td><strong>Content:</strong> Literacy, English Language Arts (ELA), Social Studies (HGSS), Science (HS-Sci), Communication (Comm), Environmental Health</td>
<td><strong>Duration:</strong> 5 days This multidisciplinary unit is designed for a week. It is estimated a total of 10-15 student work hours per week would be needed to complete this unit.</td>
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**Standards:**

- **RI.9-10.13 / RI.11-12.13:** Read and comprehend high quality informational text of appropriate quality for grade-level.
- **W.9-10.9 / W.11-12.9:** Draw evidence from a grade appropriate text to support analysis, reflection, and research.
- **HGSS.1:** Choices have consequences.
- **HGSS.3:** Societies are shaped by identities, beliefs, and practices of individuals and groups.
- **HS-Sci:** Interdependent Relationships in Ecosystem.
- **HS-Sci:** Human Sustainability.
- **Comm 0.2.2:** Communicate effectively with others to foster positive relationships.
- **Comm 0.2.5:** Deliver an oral presentation to provide information for specific purposes and audiences.
- **Environmental Health12.2:** Reduce, reuse, recycle and alternatives.

**Objective:** Using ELA and communication skills, student will identify and analyze environmental problems and offer solutions.

**Resources / Materials Needed:**

Text(s) on various types of composting

- [4 Types of Composting (Article)](#)
- [Types of Composting (Website)](#)
- [On-site Composting (Article)](#)
- [Vermicomposting (Article)](#)
- [Wind-row Composting (Article)](#)
- [In-vessel composting (Website)](#)
**Handouts**

- Vision Board (Handout)
- Argumentative Writing (Handout)
- T-Chart (Handout)
- Summary (Handout)
- Proposal (Handout)
- Speech / Pitch (Handout)
- Citing Evidence (Handout)
- Annotation / Note-taking (Handout)

*Student(s) are encouraged to research other sources online if technology is available.*

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<th>Description:</th>
<th>Students will research, select, and justify a compost option conducive to his/her/they family.</th>
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<tbody>
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<td>Introduction/Description:</td>
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<td><strong>Parent/guardian/teacher:</strong></td>
<td>“We keep throwing away all of this food. What could we be doing about it right now to help the environment? I would like you to research compost options and come back to me with a possible solution to our food waste?”</td>
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Key vocabulary: compost, aerated, vermicomposting, in-vessel composting, wind-row composting

- Day 1 and Day 2: Research at least 2 different types of composting using note-taking and/or annotating.
- Day 3: Identify and create a list of steps for constructing 2 compost options.
- Day 4: Create an argument for the best compost option for your family by designing a visual display.
- Day 5: Justify and present which option is the better option. Summarize and provide an overview of the full project.

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<th>Accommodations:</th>
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<td>- This project could be extended or shortened for project length limitations. For example, this project could be extended to be 10 days or shortened to 2.5 days depending on the needs of the student(s).</td>
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<tr>
<td>- Student(s) could create an argumentative essay instead of a visual.</td>
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<td>- Student(s) could implement the project to extend learning.</td>
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<tr>
<td>- Project can be altered to fit additional grade levels.</td>
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<td>- Project could be conducted with a partner(s) or as a family.</td>
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**Finished Product:** Student(s) will present a visual display justifying optimal solution for family
to compost. Provide project summary/overview.