

## Terrariums

Cindy White and Vicki Friedrich  
Moriarty Environmental Sciences Magnet School,  
Norwich, CT  
and the CT Green LEAF Team



**Overview:** Terrariums are mini ecosystems grown inside containers used to sustain life for small plants and animals. Through this activity, students can create and observe ecosystems to learn the water cycle, and about caring for the environment. This lesson can be adapted across multiple grade levels and integrate ELA, Math and Science standards.

**Targeted Grades: K-5**

**Materials needed:** recycled clear containers with lids, pebbles, charcoal, and plants donated by parents, soil, leaf litter, spray bottles.

**Standards:** *There are many potential connections, based on your grade-level and curricular goals. Check your grade-specific standards for others. Navigate the Next Generation Science Standards (<http://www.nextgenscience.org/search-standards>) and Common Core State Standards (<http://www.corestandards.org/>)*

NGSS Standard(s)	CT Social Studies Standards
<b>3-LS4-3</b> Survival of Organisms <b>5-LS1-1</b> Plants need air and water for growth	<b>HIST 5.6</b> Using historical sources <b>GEO 3.8 &amp; 5.3</b> Human Settlements impact

### Standards-Based Curricular Connections:

**Science** – Students could create an individual or small group terrarium with the materials provided (pebbles, leaf litter, soil, a variety of closed containers, plants). Students could draw, label, and write about their observations. They also could create a model demonstrating why the condensation forms on the inside of the terrarium. Water cycle and plant life cycles could be observed. Two particular standards:

- **3-LS4-3** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

- This standard might be investigated over time as students create terrariums and then make periodic observations about how the system is working in each container.
- **5-LS1-1** Support an argument that plants get the materials they need for growth chiefly from air and water.

**Math** – Students could measure the amount of materials used in their creation of the terrarium.

**ELA** – Students could read about ecosystems and write about related problems and solutions. They also could write a book on how to create a terrarium. Students could write a creative writing piece about being trapped inside a terrarium.

**Social studies**- Students could read or research about environmental issues that have impacted our environment. Students could study how human settlements and movement has impacted the environment using information found in different historical sources. (HIST 5.6, GEO 5.3, GEO 3.8)

**Environmental** – Students could identify that they are using recycled materials and identify how this helps the environment.

### **Additional Resources**

- Building a Terrarium-Kids Gardening: <http://www.kidsgardening.org/node/12931>
- A Terrarium For Kids: <http://www.stormthecastle.com/terrarium/terrariums-for-kids.htm>

*These suggestions are examples only, and may require adaptation. Check your grade-specific standards to determine whether or not the suggestions provided meet your individual curricular needs.*

*For more information, contact [ctgreenleaf@ctgreenschools.org](mailto:ctgreenleaf@ctgreenschools.org)*

*This document was developed as a collaborative effort of many teachers, through their participation in the Connecticut Green LEAF Professional Learning Communities Project. Funding was provided through a US Department of Education Teacher Quality Partnership (TQP) grant.*



CT Green LEAF Schools, 2016. This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.