

# 5<sup>th</sup> Grade

## Terrariums

### NYS Standard 4 (Science): Living Environment

- ✓ **Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.**
- ✓ **Key Idea 6: Plants and animals depend on each other and their physical environment.**
- ✓ **Key Idea 7: Human decisions and activities have had a profound impact on the physical and living environment.**

Major Understandings	Learning Experience/Objectives	Supporting Terms
<p><b>6.2c Green plants are the producers of food which is used directly or indirectly by consumers.</b></p> <p><b>7.1a A population consists of all individuals of a species that occur together at a given place and time. Populations living in one place form a community. The community and the physical factors with which it interacts compose an ecosystem.</b></p>	<p><b>Planning Terraria:</b> Students will draw a diagram of one of the three terrarium habitats, labeling materials they would put in the terrarium.</p> <p><b>Setting up the Terraria:</b> Students will draw a schematic of the interdependence of the plants and animals in the terrarium.</p> <p><b>Populating the Terraria:</b> Students will place plants and animals in their terrarium in an appropriate manner, and will add base materials and arrange them in a suitable way for each habitat to be ready to receive organisms.</p> <p><b>Constructing Small Terraria and Populating Them:</b> Students will construct the terrarium and populate it.</p>	<p>diagram, habitat, terraria, populate, community, ecosystem</p>
<p><b>5.1e Herbivores obtain energy from plants. Carnivores obtain energy from animals. Omnivores obtain energy from both plants and animals. Decomposers, such as bacteria and fungi, obtain energy by consuming wastes and/or dead organisms.</b></p> <p><b>5.2e In order to maintain a balanced state, all organisms have a minimum daily intake of each type of nutrient based on species, size, age, sex, activity etc. An imbalance in any of the nutrients can result in weight gain, weight loss, or a diseased state.</b></p> <p><b>7.1c In all environments, organisms interact with one another in many ways. Relationships among organisms may be competitive, harmful, or beneficial. Some species have adapted to be dependent upon each other with the result that neither could survive without the other.</b></p>	<p><b>Studying Plant Growth:</b> Students will graph growth change in plants.</p> <p><b>Measure Preferences of Isopods:</b> Students will complete charts for their tests, and should be able to explain why isopods live where they do.</p> <p><b>What Crickets and Isopods Eat:</b> Students will isolate crickets with food and observe whether any specific samples have been eaten. Students will determine what food isopods eat.</p> <p><b>Animal Eater in the Terrarium:</b> Students will draw the food chain they have observed.</p> <p><b>A Closer Look – the Isopod:</b> Students will be able to sketch the likeness of an isopod.</p> <p><b>A Closer Look – the Earthworm:</b> Students will look at the earthworm closely and describe the parts and their function in the survival of the species.</p> <p><b>A Closer Look – Roots:</b> Students will draw a simple diagram of the appearance of root parts under microscope magnification and tests the root part for starch.</p> <p><b>Lichens – the Soil Builder:</b> Students will observe differences between the organisms found in a lichen.</p> <p><b>Death in the Terrarium:</b> Students will draw a food chain including at least one plant, two animals, bacteria or mold, showing that these items can form a complete cycle.</p>	<p>isopods, crickets, isolate, sketch, magnification, starch, root, lichen, food chain, bacteria, mold, cycle, adapt, nutrient, herbivores, carnivores, omnivores</p>

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