

Problem-Based Learning Unit Template

Topic

Living Systems

Goals/Objectives

SW investigate that organisms are made of one or more cells and have distinguishing characteristics that play a vital role in the organism's ability to survive and thrive in its environment to include:

- *basic cell structures and functions of plants and animals**
- *classification of organisms using physical characteristics, body structures, and behavior of the organism**
- *traits of organisms that allow them to survive in their environment**

SW investigate how plants and animals, including humans, in an ecosystem interact with one another and with the nonliving components in an ecosystem to include:

- *plant and animal adaptations**
- *organization of populations, communities, and ecosystems and how they interrelate**
- *flow of energy through food webs**
- *habitats and niches**
- *changes in an organism's niche at various stages in its life cycle**
- *influence of human activity on ecosystems**

Theme
The role of worms in a school garden
Scenario
I asked the Chesterfield County Master Gardeners for advice on keeping a school garden healthy and received this box labeled “Living Organisms.” This note was included with it-- “Use me in a school garden.” There were no other directions included. It is your job to determine what this organism is and what its role in a school garden would be.
Culminating Activity
Create a presentation for the other Gates students on using earthworm composting in a garden.
Problem Question
What is the role of this mystery organism in the school garden?
Student Role
Expert Worm Composters (Undercover name: Garden Execs [Expert Worm Composters])

