



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
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## **Biosphere Ii**

Guide for Curriculum Unit 92.05.05  
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The purpose of this unit on Biosphere 2 is to contribute to our understanding of life on planet Earth and the potential for life beyond it. This unit will look at Earth, “Our Water Planet” and see what roles the water cycle and biogeochemical cycles play in maintaining balance on the planet. It will also examine a closed system, such as Biosphere 2, to facilitate our understanding of how these cycles work.

The unit is designed to be taught to students in grades five through eight. It will contain subject contents, lesson plans, resource lists, field trips, teacher and student reading lists and a bibliography. After studying this unit, it is my desire that teachers and students will have a better understanding of the planet and our roles as caretakers and as inhabitants of the planet Earth.

The study of Biosphere 2 will help students understand the integration of many disciplines, such as science, engineering, business, art, agriculture and much more. Students will also get the opportunity to observe and do several hands-on activities. Some of these activities will be bottle biology projects. This will give students new insights about the planet and their relationship to it.

Biosphere 2 will be used as a tie-in to the curriculum to help students, as well as teachers, understand more about life on Earth and to better manage Earth’s resources. Students will learn how human, plant and animal life is effected by environmental problems. They will discover that the formation of the Earth is a unique suitable home for life compared to other planets.

The unit will raise the level of awareness to recognize that natural and human events will impact the health of the planet and that various remedies are available. The students will become aware of environmental impacts of technology and technological aids to environmental clean up. They will explore the relationship between technology and cultural change, the impact of people working in groups to effect change and that interdependence of economic growth and environmental preservation is a natural phenomenon.

(Recommended for Earth Science, grade 8)

### **Key Words**

*Ecosystems Ecology Environmental Science*

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