

Making a Biosphere Assignment

Your group's task is to research, design, and build a self contained ecosystem. Ecosystems are composed of a variety of biotic and abiotic factors that function in an interrelated fashion. In this assignment you will demonstrate your understanding of the exchange of energy and matter within the biosphere.

Layers and suggested Materials

- Base layer (clean gravel, aquarium gravel)
- Filter (coffee filter, screen, activated charcoal)
- Soil
- Biotic elements
- Abiotic elements

| Assessment Criteria | Rubric | Score |
|---------------------------------|--|-----------------------|
| Biosphere Recipe | List of materials was provided along with accurate measurements. Recipe is typed and looks professional. Research is evident and provides accurate details to the ecosystem. | $\overline{10}$ |
| Appearance of Biosphere | The appearance of the biosphere shows extensive effort, is well designed, contains all necessary elements, and appropriate amounts of all elements | $\overline{10}$ |
| Video Presentation | Flipgrid video presentation is accurate, well organized, creative, and professional. Video enhances viewer's learning by explaining what, where, and why elements were chosen. | $\overline{10}$ |
| Peer and Self Evaluation | Mean of student evaluations | $\overline{10}$ |
| | | Total $\overline{40}$ |