Purpose:
This lab will provide an opportunity to explore several types of ecosystems, the components within each ecosystem, the conditions required for the sustainability and the interconnections between the various chambers composing the column.

Materials:
- 2-liter plastic bottles with the labels removed completely and their caps
- Scissors
- Soil
- Clear packaging tape
- String
- Sand
- Gravel
- Rocks
- Seeds or Plants
- Leaves, grass clippings and/or fruit pieces
- Aquatic plants
- Worms
- Snails and/or small fish

Procedure:
Set up your Eco-Column according to the diagram.
Monitor the diagram over the next 5 weeks and record your observations.
Answer all questions found in the instructions.
Name: _________________________________________________________  Eco-column Lab

Data:
For each week, make sure you record the organisms in each chamber, the quality of the air and water, and any obvious changes. You may write your observations on lined paper or type them. You should have a full set of observations for each week. Attach the data sheets to this lab handout.

Questions:
Answer these questions using complete sentences or neat diagrams.

1. Describe at least three differences between the chambers.
2. Compare and contrast your simulated ecosystems with natural ecosystems outside the classroom.
3. Is your Eco-column an open or a closed system? How do you know?
4. What limiting factors exist?
5. Discuss the evidence of ecological succession taking place in your column.
6. Compare and contrast your lab group’s eco-column with others in the class.
7. Propose at least two possible reasons why there are differences between the Eco-columns in the lab.
8. Diagram and label two food chains or food webs in each of your chambers. Use arrows to illustrate these food chains and food webs.