

Ecology Honour Booklet



Name: _____

Church: _____

Club: _____

Class _____

Due Date: _____

In order to successfully complete this honour, you must:

1. Satisfactorily complete this Booklet. The pass mark is 75%. The number of marks allocated for each question is given in [] – maximum 104 marks; **and**
2. Pass the Ecology Honour Exam. The pass mark is 60%.

Booklet Score _____

Exam Score _____

Honour Granted Yes No

Authorized Signature

1. Construct a diagram of a fresh-water pond ecosystem with drawings/pictures of animals. **[4]**

2. Describe the four distinct habitats in a fresh-water pond ecosystem: **[8]**

3. Pick one mammal, one bird, one reptile, and one amphibian from your home environment, and for each construct a diagram of its ecological pyramid. **[16]**

Mammal:

Bird:

Reptile:

Amphibian:

4. Define the following terms:

a) Ecology **[2]**

b) Community **[2]**

c) Food Chain **[2]**

d) Commensalism **[2]**

e) Ecological succession **[2]**

f) Plankton **[2]**

g) Conservation **[2]**

h) Climax community **[3]**

i) Eutrophication **[3]**

j) Biome **[3]**

5. Make detailed field observations and library book study of the habitat of some small animal in your own environment. Write a report (about 700 words) – one-half from your field observations and one-half from your book study. Additional pages may be attached to your Booklet. **[16]**

6. Define an ecosystem and state what the basic biological and physical factors are that keep it a balanced system.

[10]

7. Investigate the disposal of trash in your family and how it is collected in your community. How much is disposed per day? Per week? Per year? How better can it be taken care of? **[5]**

8. Gather daily information for a month on the air pollution levels for a major city in any country of your choice. Plot a curve or bar graph for these levels in the space below. Find out what caused the peaks in your curve/graph. Indicate the name of the city, country and the source of your data. **[5]**

9. List ten ways in which you might actively work to improve the environment in which you live. Put four of these into practice. Indicate which four you chose and describe how you put them into practice. **[14]**

10. Find a Spirit of Prophecy quotation and a Bible text pertinent to ecology and be able to explain their relevance and application to our day. **[6]**

ECOLOGY HONOUR REQUIREMENTS

Level 2 Year 1972 General Conference

1. Construct a diagram of a fresh-water pond ecosystem with pasted-on animal cutouts.
2. Pick one mammal, bird, reptile, and amphibian from your home environment, and for each construct a diagram of its ecological pyramid.
3. Know the meaning of the following terms: Ecology, Community, Food chain, Commensalism, Ecological succession, Plankton, Conservation, Climax Community, Eutrophication, Biome.
4. Make detailed field observations and a careful library book study of the habitat of some small animal in your own environment. Write a report of about 700 words, one-half from your field observations and one-half from your book study.
5. Define an ecosystem and state what the basic biological and physical factors are that keep it a balanced system.
6. Investigate the disposal of trash in your community. How much is disposed per family per day? per week? per year? How better can it be taken care of?
7. Check the daily paper for one month for the nearest large city for the air pollution level or air quality and plot on graph paper the results for the month. Find out what caused the peaks on your graph.
8. List ten ways in which you might actively work to improve the environment in which you live. Put four of these into practice.
9. Find a Spirit of Prophecy quotation and a Bible text pertinent to ecology, and be able to explain their relevance and application to our day.