

CATEGORY C

SUBJECT:

ENVIRONMENTAL AWARENESS

OBJECTIVE(S)

To have basic knowledge of scientific study of nature in its many complexities and an understanding of the human relationship with the natural system.

PREREQUISITES

None.

INSTRUCTORS/EVALUATORS

- Science teachers
- Park Naturalists
- Wildlife Conservation Agents

REFERENCES AND MATERIALS

Volumes, documents, pamphlets may be obtained through:

- Local libraries
- Local Parks
- Ecological Societies
- Museums
- Universities
- Appropriate Federal, Provincial, Municipal Government agencies, ministries or departments dealing with Parks, Environment, or Nature
- Internet

CONTENT

1. *Rocks*
 - a) Know the differences between igneous, sedimentary and metamorphic rocks.
 - b) Know the way each type was formed.
 - c) Collect 20 different types of minerals.
2. *Fossils*
 - a) Explain what a fossil is, its origin and how it is formed.
 - b) Prepare a large chart using clear colours and labels to illustrate the development of various forms of life throughout the life of the Earth.
3. *Glaciers*
 - a) Explain the effects of glaciers on the Canadian land surface.
 - b) Give examples of two glacial formations in your area. Explain how each came about.

4. *Soils*
 - a) Explain what soil is and how it is formed.
 - b) Know the three (3) main layers of soil and how each is formed.
 - c) Explain the nature and causes of erosion (with examples).

5. *Water*
 - a) Demonstrate the stages in the typical “water cycle” using a chart, and explain its importance in nature.

6. *Weather*
 - a) Explain the meaning of the term weather.
 - b) Explain how rain (snow, hail) is formed.
 - c) What causes changes in air pressure.
 - d) Explain how the different types of clouds are formed and their influence on the weather.
 - e) Construct a rain gauge and prepare a chart of a month’s minimum and maximum temperatures, and rainfall.

7. *Plants*
 - a) Explain the main difference between spore and seed plants.
 - b) Differentiate algae, lichens, mosses, fungi, ferns.
 - c) Recognize, identify and name some plants, flowers, shrubs and trees in your area.
 - d) Describe both poison ivy and poison sumac and explain how the poison affects humans and the treatment.
 - e) Make a collection of your choice of (e.g. seeds, leaves, plants, twigs). Properly press, mount, label each item.

8. *Animals*
 - a) Explain the two main classifications of animals.
 - b) Name and identify one representative in each of the following classes: protozoan, worms, mollusks, crustaceans, centipedes, millipedes, spiders, insects, fishes, amphibians, reptiles, birds, mammals.
 - c) Name the type of habitat of each listed in b) above.
 - d) Explain in detail one simple food chain and explain how man fits into it.
 - e) Study and report on the cycle of an insect, or report on behaviour of one wildlife animal found in your area, or prepare and present a report on identification of animal tracks.

DURATION

As required (12 months average but no more than two years).

CERTIFICATION

The candidate must complete *five out of eight* subjects above. The level of expertise must correspond with the age and competence of the candidate.

CATEGORY C - OUTDOOR ACTIVITIES

CERTIFICATION OF SUCCESSFUL COMPLETION OF PROFICIENCY SUBJECT

ENVIRONMENTAL AWARENESS

Instructors/Evaluators should carefully consider the age, ability and accessibility to resource materials of each candidate.

The candidate has completed the above content and meets the requirements to the satisfaction of the Instructor/Evaluator.

Name of Instructor/Evaluator: _____

Agency: _____

Address: _____ Tel #: _____

Instructor qualifications: _____

I certify that

_____ of _____
(candidate's name) (Division #)

meets the criteria of this proficiency subject, as laid out on the previous page(s).

Instructor/Evaluator (signature) Date

Divisional Superintendent (signature) Date