

Appendix - L

Lesson Plan - Traditional Plus Morphological Analysis

VIII Std

Topic: North America:
Natural Resources.

Geography

Date and Time : 5-9-75 second period

Problem: How does the utility of forests differ in North America? Why and why not?

T. What is the name of the central plains of North America?

S. Prairies.

T. Good. What is the prairie land famous for?

S. It is famous for wheat cultivation.

T. How cultivation is successful in the prairies?

S. Prairie soil is fine, deep and fertile and well watered.
Hence cultivation is successful in the prairies.

T. Yes. So you know how North America is rich in agricultural resources. Now let us learn something about the forest wealth of North America. Do you know the name of any of the forests?

S. Equatorial forests, or Monsoon forests.

T. Fine. In North America, three types of forests are mainly found. They are coniferous forests, deciduous forests and the tropical forests. (To write the names on the black board) What type of climate is found in the arctic region?

S. It is very cold. Winters are longer and severe and summers are short and cool.

T. Yes. The coniferous forest are found in the Arctic region. The trees of this region look like cones. (To draw a diagram on the board) Douglas Fir, Spruce, White pine, etc., are the trees of this coniferous forest. They are soft wood trees. Do you know the use of these soft wood trees?

S. They are used to produce papers.

T. Yes. Besides papers, wood pulp, cellulose, resin turpentine etc., are produced out of it. Some of them are used to make doors, window frames etc. What is the second type of forests found in North America?

S. Deciduous forests.

T. Right. In the South of Arctic region, (in cool temperate region) this type of forests are found. These trees shed thier leaves during cold season of the year. Woods from trees like oak, beech willow, etc. are used for making furniture. The sap of the maple tree yields sugar. Do you know some of the tropical trees?

S. Mahogani, cedar, teak, etc.

T. Good. These type of tropical forests are found near Mexico, Central America, and West Indies. They are hard wood trees. They are useful for railway sleepers. Chickie trees are found in Honduras. Chickie gum is gathered out of it. It is used in chewing gum, which is very popular in North America. What type of human activities will be going on in the forests?

S. Lumbering may be going on.

T. Yes. Lumbering includes, felling of trees, logging, splitting and hauling of the lumber, etc. The men working in the forests are known as lumber jacks. Now let us discuss about how does the utility of forests differ in North America? (Morphological analysis). The teacher elicits the main and sub parameters of the problem by putting suitable questions:-

<u>Type of forests</u>	<u>Raw material</u>	<u>Uses</u>
Coniferous forests	soft wood	for making wood pulp, cellulose etc.
Deciduous forests	hard wood	
Tropical forests	fur	for making door, window frames etc.
	leather	
	gum	for preparing chewing gums.
	honey	
		wood used as fuel.
		forests may be tourists attraction
		for making leather goods.

The students may be asked to combine the variables to have the maximum possibilities, like the following:

1. In tropical forests hard wood trees are available which may be used for furniture.
2. In tropical forests big animals like bison etc. may be living. Their skins are used for making various leather goods.
3. In the tropical forests gum extraction is possible, which is again used in the preparation of chewing gum sweets and many other ways.
4. Deciduous forests are having light wood trees, which provide the necessary wood pulp for paper industry.
5. The wood pulp may be useful in the production of plastics and so many modern equipments.
6. The wood pulp may be used in the manufacturing of different variety of papers.
7. In deciduous forests, medium variety trees are available, which are utilised for cabinet work.
8. Coniferous trees are light wood trees. It can also be used for paper industry.

In this way, by combining the variables, many relevant utilities will be noted. The students will discuss the unrelated ones with reasons in the class, orally and discard them.