PENANG SANGAM HIGH SCHOOL
P.O.BOX 44, RAKIRAKI
LESSON NOTES

Worksheet 7

School: PENANG SANGAM HIGH SCHOOL **Year/Level: 11**

Subject: GEOGRAPHY **WEEK 20**

Strand	Vegetation
Sub Strand	Vegetation – case study – New Zealand
Content Learning Outcome	Students should be able to identify the characteristics of the grassland (the tropical grassland), temperate grassland and desert vegetation.

v. **Grassland- The Tropical Grass Land**

- Location: 5 degrees to 15 degrees N and S of the equator.
- Areas: Brazil, Venezuela, Central Mexico, Northern Australia.

a.) Tropical Savannah Grass land.

- Scattered deciduous trees lose their leaves, grasses turn yellow and dry up.
- Trees shed their leaves or produce thin, waxy and even thorn like leaves to try to keep transpiration to a minimum.
- Trees are xerophytes (drought resistant).
- Grasses grow tall.
- Roots are long and extend to tap any underground water supplies or thick bark to store water in their trunks like the baobab tree.
- Their seeds may lie dormant on the ground for several months of drought.

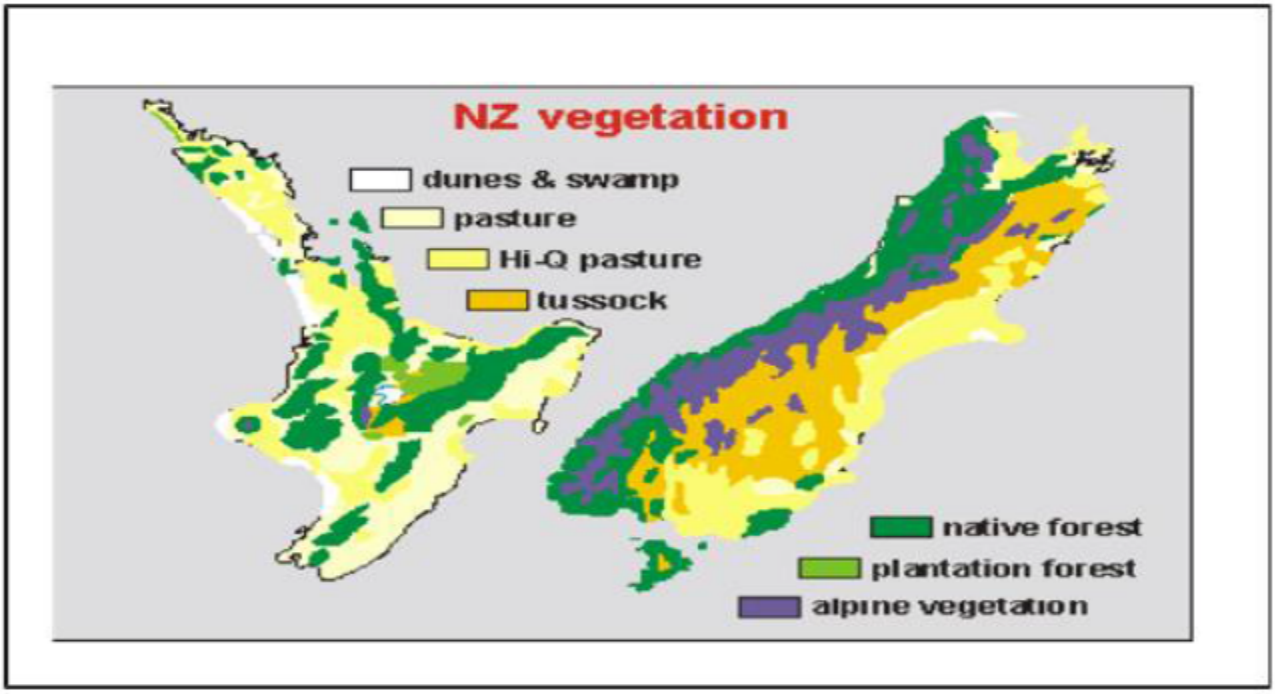
b.) Temperate Grass Land

- Location: Canterbury Plains in New Zealand.
- Grasses grow up to 50 cm.

Desert Vegetation

- Has the lowest productivity level.
- Plants are xerophytes because the lack of water hinders the ability of roots to absorb nutrients and of any green part of the plant to photosynthesis.
- Many plants are succulent plants meaning they can store water in tissues.
- Succulents have fleshy stems and shallow leaves; this is a plant that can live in desert places. E.g., cactus.
- Absorbs a large amount of water during a period of rainfall and later moisture is lost through transpiration.
- Cactus has small spiky waxy leaves to reduce transpiration and long roots to tap underground water supplies or near the surface to take maximum advantage of any rain or dew.
- Some plants are ephemerals which means plants that live for a very short time, can complete life cycle in 2- 3 weeks.

- Other plants are halophytic that can survive in salty waters.
- Desert vegetation has low capacity to sustain life.



Importance of Vegetation

Learning Outcome: By the end of the lesson, the students should be able to:

a. **Identify the importance of each of vegetation**

Economic Importance of Forest/ Vegetation

1. Forests provide timber for housing, biomass, wood, pulp for paper and medicine.
2. Main forests lands are used for mining, logging, grazing livestock and recreation.
3. 55% of timber is needed as fuel wood and charcoal or heating and cooking, mostly in developing countries.
4. Saw logs are used for building materials, lumber, plywood and chip board.

Ecological importance of forest/ vegetation

1. Forests slow down the sun- off and hold water that recharges springs, streams and ground water.
2. They regulate the flow of water from mountains, highlands to crop lands.
3. They reduce the amount of sediment washed in to streams, lakes and reservoirs by reducing erosion.
4. Forests also influence climate. E.g., 50 to 80 percent of moisture in the air above is produced by tropical rainforests through the process of evapotranspiration.
5. If large areas of forests are cleared, annual precipitation drops and become drier.

Short Answers

1. Identify some the characteristics of **tropical grassland?**

2. Identify some the characteristics of **tropical savannah?**

3. 3. Differentiate between temperate grassland and desert vegetation?