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

School: PENANG SANGAM HIGH SCHOOL **Year/Level: 10**
Subject: SOCIAL SCIENCE **WEEK 18**

Strand	**STRAND III PLACE AND ENVIRONMENT**
Sub Strand	**3.1 Develop an understanding recognize, demonstrate and critically examine the interdependent relationship of people with different places and environments and explain how people utilize and adapt this relationship for their survival and for sustainable development**
Content Learning Outcome	**Investigate the main features of physical geography and illustrate how they determine land use to maximize productivity.**

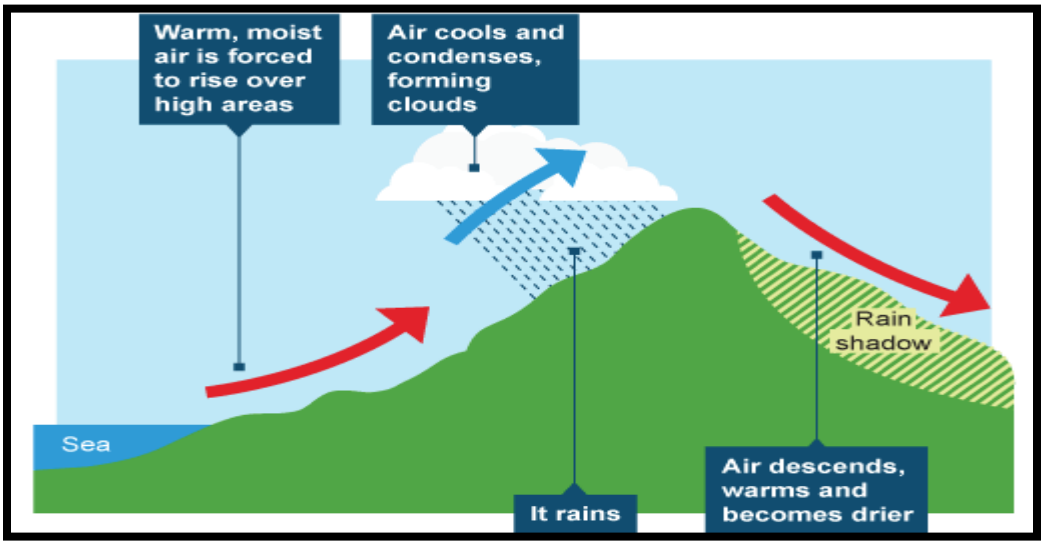
Types of Rainfall
There are 3 types of rainfall:

i. Orographic or relief rainfall

ii. Convectional Rainfall

iii. Frontal or Cyclonic rainfall

i. Relief or Orographic rainfall:



a. As the South East Trade Winds blow across the ocean, they are warmed.

b. As they move across, they pick up and carry an increasing amount of water vapor.

c. When they reach land, they are forced upwards over the mountains.

d. As they are cooled the moisture forms clouds.

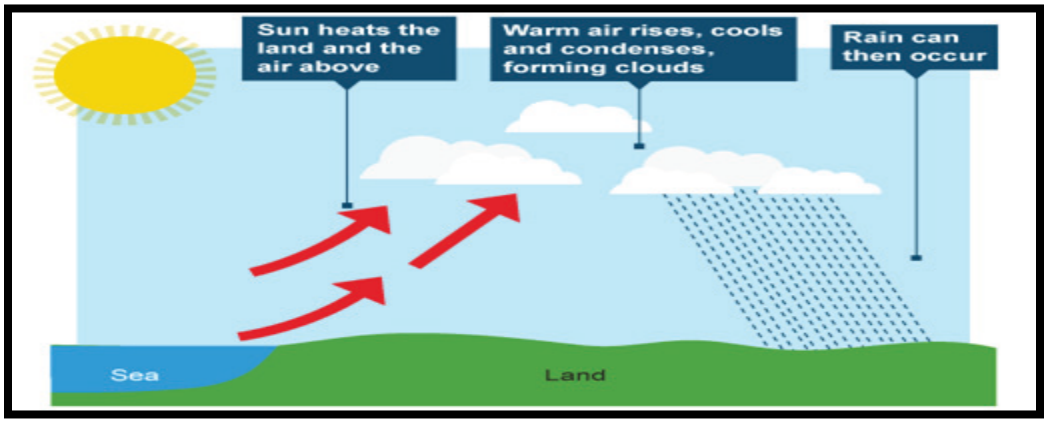
e. The clouds become heavy and much of the moisture is drier because much of the moisture has been lost.Instead of dropping, the winds pick up moisture.

ii. Convectional Rainfall

a. The earth's hot surface heats the air above it. The heated air becomes lighter, as it expands and begins to rise.

b. The rising air expands and cools. Condensation takes place and clouds form.

c. Further ascent causes more cooling with expansion. Rain begins to fall.



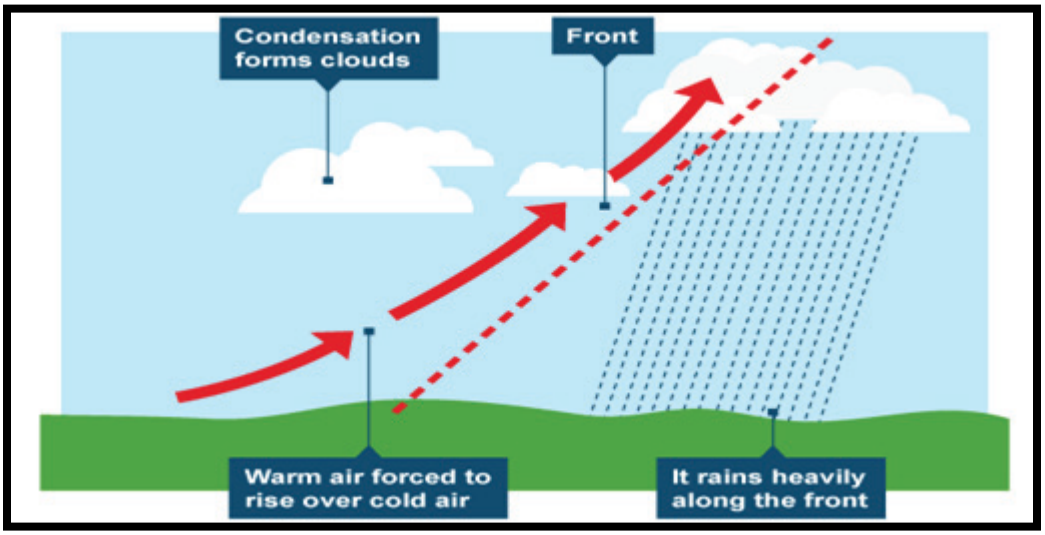
iii. Cyclonic/Frontal Rainfall

a. Occurs when warm moist air comes into contact with cool air during a passage of depression.

This is most common during tropical cyclones and hurricanes.

Solar radiation is sunshine, which brings light, heat and many other electromagnetic rays that are essential to life on earth. The amount of radiation received in Fiji depends on:

i. The time of the day
ii. The time of the year
iii. The atmospheric condition-cloud or pollution cover.



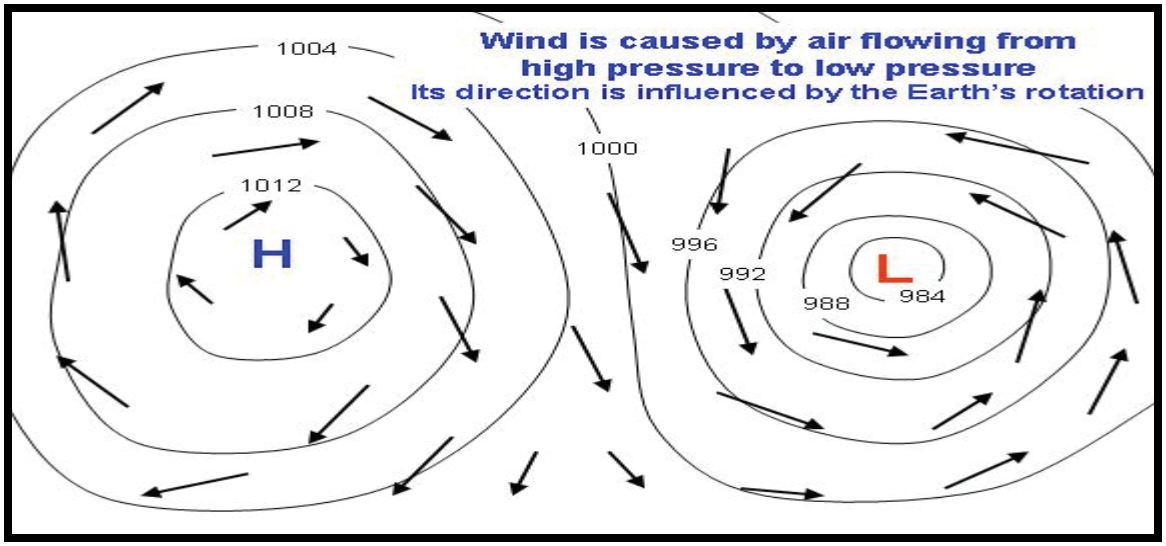
WIND

Wind is moving air. It is expressed in kilometers per hour and measured with an anemometer. Wind direction is expressed as the compass point from where the wind is blowing. The main Wind Systems reaching Fiji and influencing the climate of Fiji is the South East Trade Winds and the North West Trade Winds.

WEATHER MAPS.

Anticyclones-Large areas of high pressure shown on weather maps as H. Anticyclones usually bring fine, settled weather. The isobars are far apart.

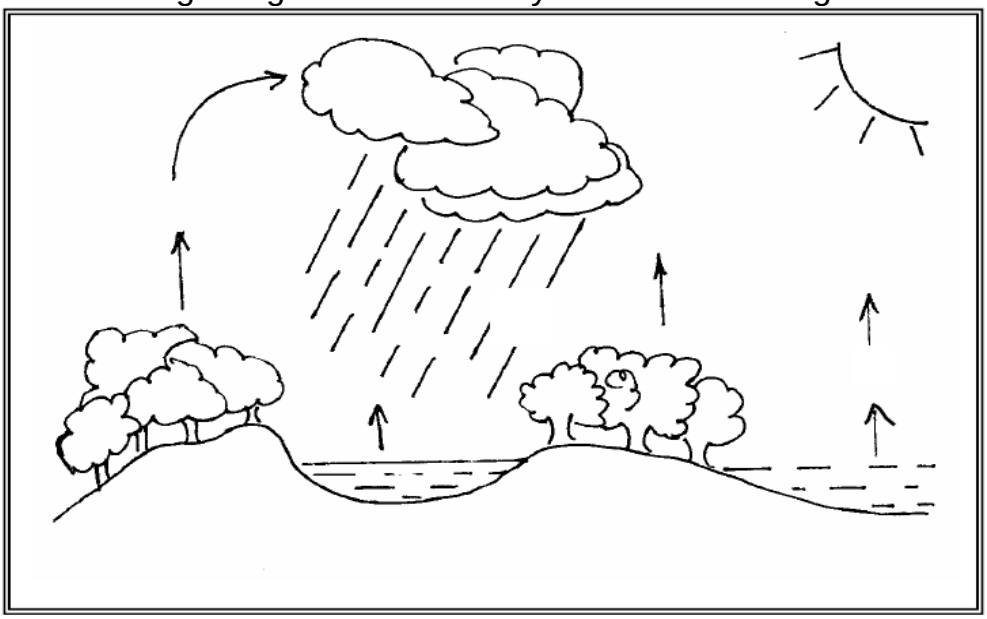
Depressions-areas of low pressure shown weather maps as L. Depressions usually bring wet, windy weather. The deeper the depression, the more wind and rain it brings. The isobars are closer to each other.



ACTIVITY

Circle the letter of the best answer.

Use the diagram given below and your own knowledge to answer **Questions 1 and 2.**



1. Which of the following types of rainfall is illustrated in the diagram above?

   A. frontal
   B. cyclonic
   C. orographic
   D. convectional

2. The type of rainfall shown in the diagram above is caused by

   A. high temperatures.
   B. the mountain barriers.
   C. the South-East trade winds.
   D. cold air blowing onto hot air.

3. Explain why the windward side of Fiji often experiences high rainfall.

   _____
   _____
   _____

4. Describe the formation of the orographic rainfall.

   _____
   _____
   _____