

Lesson 2

Make sure you do activity 2

South Africa's climate

Factors that influence South Africa's temperature and rainfall are:

- Distance from the equator (latitude)
- Distance from the sea
- Altitude
- Ocean currents
- Mountains (relief)

The temperature and rainfall of every place in South Africa is influenced by more than one of the five factors.

- The influence of distance from the equator

Latitude is the one of the main factors that affects rainfall. The southern Cape is the only part of South Africa that receives rain from the westerly winds in winter.

- The influence of distance from the sea

The land heats up to a higher temperature than the sea in summer. The land cools to lower temperature in winter. Inland places that are far from the sea have more extreme temperatures than places near the sea. The difference between high and low temperatures is called temperature range. Places that are located inland tend to have higher temperature ranges than places by the sea.

- The influence of ocean currents

Warm and cold ocean currents influence the temperature of South Africa's east and west coasts. On the eastern side of the country we have the warm Mozambique current and on the western side of the country we have the cold Benguela current. The cooling effect of the Benguela current lowers the temperature of places on the west coast.

- The influence of mountains (relief)

The side of the mountain that is facing the sun will have higher temperatures. Warm air is forced to rise over the mountain on the windward side. As it rises it cools and condenses thus forming clouds and rain will occur only on the windward side of the mountain. The type of rainfall is called relief rain or orographic rain. The dry side of the mountain is called the rain-shadow zone.

You will have to send your answers via email nxaba@alexhigh.org.za

The activity will be part of your formal assessment for the term.

Activity 2

Choose THREE places in your province and do a research into the amount of rain they receive. Consider ways that mountains may influence the amount of rain that falls in certain areas. (not more than 20 lines)