

I. Landforms

A. Plateaus - Africa is sometimes called the “plateau” continent. What is a plateau? _____

1. Africa’s interior is dominated by series of plateaus and elevated basins such as the Congo River Basin
2. Much of southern Africa is rimmed by landform called _____
3. In Ethiopia, is the Ethiopian Plateau, which forms _____ of several key rivers.

B. Mountains & Valleys

1. The Atlas Mountains (_____) form a boundary between the milder climates along the Mediterranean Sea and the hot, arid Sahara Desert.
2. The Drakensburg Mountains form the highest point along the _____.
3. _____ — is the most mountainous region in Africa.
4. The African _____ includes a series of discontinuous volcanic mountains.
 - a. This valley is caused by _____ occurring in the African Plate.
5. Major Volcanos
 - a. Mt. Kilimanjaro is a dormant volcano and the _____ mountain in Africa.
 - b. Mt. Nyiragongo is considered one of the most dangerous _____ volcanoes in the world due to the number of people who live near its base.

C. Deserts

1. The _____, is the world’s largest desert.
 - a. It crosses the African continent from the Atlantic coast to the _____ coast.
 - b. It is a _____ desert mainly caused by a prevailing _____ zone that is constantly overhead. Air is _____ (falling) at this latitude.
 - c. The highest one day temperature range was measured in _____.
2. The _____ is not a true desert because it has a brief rainy season.
3. The _____ is a dry zone found in southwestern Africa along the Atlantic Coast. It is affected by a strong cold water current, the Benguela Current, off the coast.

II. Bodies of Water

A. Oceans & Seas

1. Oceans - the Atlantic & _____ Oceans bound the west and east coasts of Africa.
2. Seas – the Mediterranean & the Red Seas bound the north and northeast coasts of Africa
 - a. The Mediterranean and Red Seas are connected by the _____ a major construction venture by the occupying British Empire from 1859 – 1869.
 - (1)It is the 2nd most important canal in the world for trade. What is the first? _____
4. Other - Mozambique Channel & Gulf of Aden & oases

- a. An _____ (pl. oases) is an area found in deserts where the _____ comes close to the surface. These small areas are important to _____ across deserts like the Sahara.

B. Lakes & Rivers

1. Lakes — Victoria, Chad, Tanganyika, Turkana, Nassar, & Malawi
 - a. Lake Victoria is the _____ lake in Africa and the _____ of the Nile River
2. Rivers — Many rivers are fed from _____ at their sources in the mountains. Annual flooding in the spring is important for agriculture in the region. Some are fed from rain in the interior tropical regions.

- a. The _____ River provides water for drinking & agriculture for the 82 million people of Egypt. The _____ of Egypt is 3,053 people/square miles of arable (farmable) land.
 - (1) Almost all of Egypt's population lives along the Nile River.
- b. The _____ River is the _____ watershed both in terms of drainage area & volume of river flow
 - (1) It is second only to the Amazon in terms of annual flow.
 - (2) It is only partially navigable but remains a _____ within Republic of Congo and the Democratic Republic of the Congo
- c. b. The _____ River is critical source of water for much of West Africa and the Sahel
 - (1) At the end of the Niger River is the Niger Delta—a fertile region that is also home to _____ which has caused major ecological impact to the region
- c. The Zambezi River, which contains Victoria Falls, is a major supplier of _____ (hydroelectricity) in the _____ region

C. Water resources are scarce in North Africa

1. Underground _____ are the main source of water. Major issues:
 - a. Polluted agricultural chemical runoff (fertilizers & pesticides) contaminating the water.
 - b. Aquifers are replenished by rainfall that is _____ annually.
 - (1) Removal of groundwater by a growing population is _____ faster than it can be replenished.
 - c. The rock layers that hold the water are often contaminated by _____
 - d. Drilling wells is very expensive because the groundwater can be as far 6000 ft. below the surface.
2. _____ plants remove salt from water along the coasts.

III. Climate - Africa has the most _____ distribution of climate types in the world.

- A. The four main climate zones are tropical wet, tropical wet/dry (split into _____ and _____), semiarid, and arid. Other climate zones include marine west coast, humid subtropical, and highland, which _____.
1. The Sahara Desert is dominated by high pressure due to its latitude at about _____ of the equator.
2. The ITCZ produces heavy rainfall near the equator year round and causes seasonal _____ along the central east coast of a Africa.
 - a. The ITCZ brings the rainy season north of the equator in April & south of the equator in October making _____ the main rainy season in Africa.

IV. Natural Resources

- A. Tropical forests - the world's _____ expanse of human equatorial rainforest, the Ituri, lies in the Congo Basin of Africa
 1. conditions are constantly warm to hot—precipitation falls _____
 - a. _____ and agricultural clearing have degraded the western and southern fringes of the Ituri
 2. Savannas (tropical grasslands) - surround the Central African rain-forest belt in an arc of tropical wet and dry savannas
 - a. North of the equator rain generally falls from _____, with rainfall decreasing northward; climatic conditions south are reversed
 - b. Savannas are critical habitat for the region's large _____ (examples: elephants, rhinos, giraffes, lions, wildebeests)
 - c. The most famous savanna, is the _____

D. Soils - Africa lacks an abundance of wide alluvial river plains (the Nile). These _____ are very fertile. Africa's soils are not compared to other continents.

1. Most of Africa's soils are relatively _____, but some areas are noted for natural soil fertility—and these areas support denser settlement. Fertile regions include:
 - a. the Nile River valley - the only significant _____ flood plain
 - a. the Rift Valley—around _____ (volcanic soil)
 - b. the Ethiopian Highlands (volcanic soil)

V. Environmental Issues

A. The Sahel is a zone of _____ between Sahara to the north and the wetter savannas and forests to the south & is going through a process of _____
What is desertification? _____

1. Life in the Sahel depends on a balance of limited rain, drought-resistant plants and patterns of animal _____, or _____, which is the movement of animals between wet- and dry- season pastures.
 - a. This was the way of life for humans over 12,000 years ago before the Agricultural Revolution.
2. Disagreement exists over basic causes of desertification and _____ in the Sahel. However, some reasons are as follows:
 - a. _____ — too many people in the region possibly due to unsound settlement patterns by European colonists in the 1800s & 1900s.
 - b. _____ by cattle and other herbivores.
 - c. _____ by farmers (including being inefficient).

B. _____ — throughout history, local populations have relied on forests for daily needs such as wood to burn, wood is a type of _____, as is animal dung. Both are utilized in Africa.

1. It is a significant issue in many parts of Africa.
2. The destruction of tropical rain forests for _____ logging is most pronounced along _____ of the Ituri by way of slash-and-burn, some times called _____ agriculture, if the land is then used for farming or grazing.
 - a. Two smaller rain forests on the mainland have nearly disappeared.
3. It is also a problem in _____ which has caused almost all of its rainforest to disappear.
 - a. This has called vast _____, which in turn has caused _____ to occur during the rainy season.

C. Wildlife conservation — Africa is famous for its wildlife.

1. A number of _____ have been established, mostly in _____ (southeastern) Africa, these are vital for wildlife protection and _____.
 - a. _____ is a major problem; the Convention on International Trade in Endangered Species (CITES) was imposed in 1989 to ban ivory trade—this was lifted in late 1990s however
 - b. The _____ controversy shows how differences in animal distribution in the region, global markets, and international conservation policies are impacting long-term survival of elephants in the region.
 - c. Rhinos are being hunted to extinction for their horns. In _____ powdered rhino horn is considered medicinal.