



A LEGEND-ARY EXPLORATION: AFRICA'S CLIMATE REGIONS

Objectives:

- Students will examine the primary climate regions of Africa.
- Students will utilize a map legend/key to identify colors and symbols on the map.

Recommended Grades: 4-8

Materials (all included in the trunk):

- Four (4) map legends/keys
- Four (4) sets of photographs
- Metal photo holders
- Teacher photo key

Preparation: 20 minutes

- Read over the activity and map legend/key.
- Review photos and teacher photo key.
- Place photos in photo holders.

Rules:



Shoes are not allowed on the map. Please have students remove shoes before walking on the map.



No writing utensils on the map.

Introduction

Divide the class into four evenly numbered teams—Red, Yellow, Green, Blue—and direct the teams to meet around their “Base Camps” (the colored circles in the corners of the map).

Without assistance, ask one student (an “explorer”) from each team to stand on a **tropical rain forest**. Then, direct the next explorer to stand on a **desert**. Have a third explorer from each team stand on an **urban area** (city). Finally, have a fourth explorer stand on a savanna. Encourage teammates to help their explorers by shouting ideas from the Base Camp.

Direct the rest of the students to observe where their teammates are standing. If necessary, have all the explorers sit down, then ask all explorers on rain forests to stand up then sit down, then the explorers on deserts stand up, etc...

Direct all the explorers to return to their Base Camp. Repeat the same process with four new explorers. Again, encourage teammates to help their explorers by shouting ideas from the Base Camp.

All explorers return to their Base Camps.

Pose these questions to the class:

*The places we just tried to find are known as **regions**. How do we know how to find these types of places on a map? What guides us? Are their ways to do this to make it easy?*

[Discuss colors, symbols, and numbers they see on the map and what they might mean, soliciting guesses from the students.]

Take out the **legend** (sometimes called a key) and explain that this is a key to understanding how to read a map. With a legend what they just tried to do will be much easier.

Using the Legend

Give each team a legend and have them read it and discuss its use. Be sure they know how to use it to understand the places on the map. [5 minutes]

Distribute each team's set of color-coded photographs (in metal holders). Tell each team that each of their photos represents one of the following areas: **tropical rain forest, desert, urban area, or savanna**. If necessary, help them by discussing characteristics and clues inside the photos.

Direct each team to now place all their photos on the map in places that they correctly represent. After all the photos are placed, the students return to their Base Camp.

Stand on the Sahara desert and ask one explorer from each team who placed a photo there to come join you. Hold up the photos one by one and discuss the subject and other content of the photos to determine if the Sahara is a correct placement. Refer to the language in the legend. Finally, ask the explorers if there are other deserts on the map where photos have been placed or could be placed. [Kalahari Desert, Kenya-Somali Desert]

With a new set of four explorers, repeat the process for **tropical rain forests** by standing in central Africa along the [Also see if there are any photos placed in West Africa rain forests or on the island of Madagascar.]

Repeat this process for **urban areas**. It is not important that students have identified the correct city, but address any clues in the photos that may help determine the urban area pictured. Distinguish between the symbols for **cities** and **towns**.

Repeat the process for **savanna**. (This will be the most difficult one.) If necessary, help the students by telling them that savannahs are located above and below the rain forest belt. Savannahs are the most varied climate region in Africa. Use the language on the legend to help them understand this.

Closing

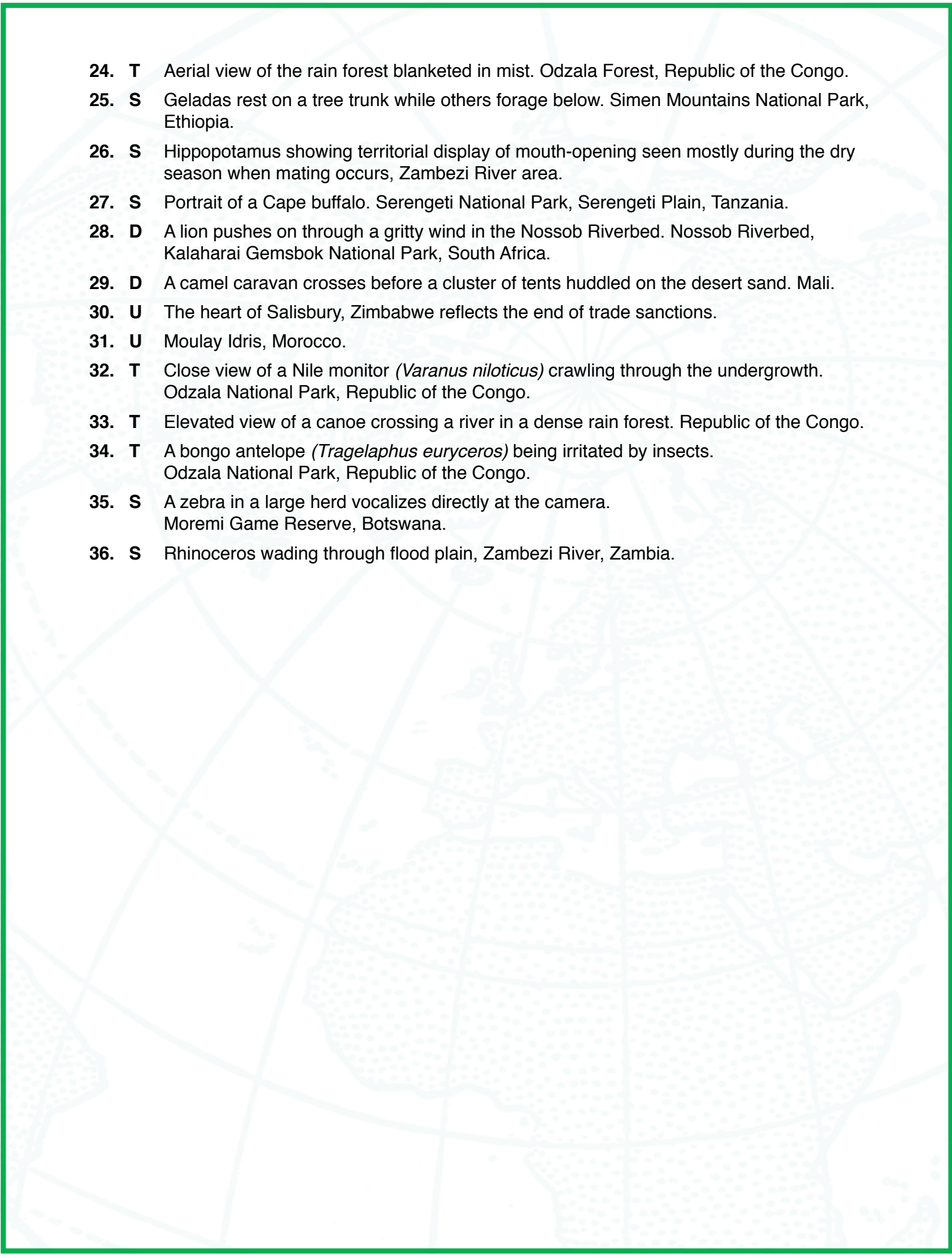
Take all photos off the map and ask all students to simultaneously stand on a desert. Repeat for tropical rain forests, urban areas, and savannas.



Each of the photographs have a number on the lower right corner. Below is more information about each photo.

T = Tropical rain forest
D = Desert
U = Urban area
S = Savanna

1. **D** The wind sculpts the dunes of the Sahara in the Erg Bourarhet. Algeria.
2. **D** The pyramids dominate the desert at sunset as Bedouin travel by camel. Giza, Egypt.
3. **T** Once wary elephants, protected here since 1991, are increasingly trusting of humans. Outside Bomassa, Republic of the Congo.
4. **T** A close view of a snake moving through foliage. Petit-Loango Reserve, Gabon Republic.
5. **T** A mustached monkey (*Cercopithecus cephus*) with fruit in its mouth. Republic of the Congo.
6. **U** A view of the *ksar* of Maadid. The walls are covered with carpets in anticipation of a visit by Morocco's Minister of Culture. Maadid, Morocco.
7. **S** A portrait of a female African lion (*Panthera leo*) standing in tall grass at twilight. Africa.
8. **S** Wildebeest running over grasslands, Zambezi River area.
9. **S** An African cheetah (*Acinonyx jubatus jubatus*) cools off in a grassy swamp. Namibia, Africa.
10. **S** Group of wildebeests running in the dusk, Zambezi River area, Zambia.
11. **S** Lioness (*Panthera leo*) resting in crotch of tree. Zambezi River area.
12. **D** An aerial view of the Niger's desert sand dunes. Southwest of Fachi, Niger.
13. **D** A Tuareg camel caravan carrying flat salt slabs arrives from the Taoudenni salt works in the Sahara. Timbuktu, Mali.
14. **U** Night view of Cairo, Egypt.
15. **U** Friday worshippers at the Mosque. Kano, Nigeria.
16. **T** A forest buffalo (*Syncerus caffer nanus*) wading in a stream. Republic of the Congo.
17. **T** A gorilla walking past a gnarled tree. Odzala National Park, Republic of the Congo.
18. **S** A giraffe stands in the early morning mist. Ndumu Game Reserve, South Africa.
19. **D** "Arbre du Tenere" or Tenere Tree, a natural phenomenon seeming growing without water and by itself in the desert. Niger.
20. **U** Chechaouene street scene. Chechaouene, Morocco.
21. **U** A pagan village on the Jos Plateau. Richi, Nigeria.
22. **T** A chimpanzee and her baby perched in a tree. Goualougo Triangle, Republic of the Congo.
23. **T** A monkey perched on a tree branch. Republic of the Congo.

- 
24. **T** Aerial view of the rain forest blanketed in mist. Odzala Forest, Republic of the Congo.
 25. **S** Geladas rest on a tree trunk while others forage below. Simen Mountains National Park, Ethiopia.
 26. **S** Hippopotamus showing territorial display of mouth-opening seen mostly during the dry season when mating occurs, Zambezi River area.
 27. **S** Portrait of a Cape buffalo. Serengeti National Park, Serengeti Plain, Tanzania.
 28. **D** A lion pushes on through a gritty wind in the Nossob Riverbed. Nossob Riverbed, Kalaharai Gemsbok National Park, South Africa.
 29. **D** A camel caravan crosses before a cluster of tents huddled on the desert sand. Mali.
 30. **U** The heart of Salisbury, Zimbabwe reflects the end of trade sanctions.
 31. **U** Moulay Idris, Morocco.
 32. **T** Close view of a Nile monitor (*Varanus niloticus*) crawling through the undergrowth. Odzala National Park, Republic of the Congo.
 33. **T** Elevated view of a canoe crossing a river in a dense rain forest. Republic of the Congo.
 34. **T** A bongo antelope (*Tragelaphus euryceros*) being irritated by insects. Odzala National Park, Republic of the Congo.
 35. **S** A zebra in a large herd vocalizes directly at the camera. Moremi Game Reserve, Botswana.
 36. **S** Rhinoceros wading through flood plain, Zambezi River, Zambia.