

Oklahoma Alliance for Geographic Education

Teacher Training | Curriculum Development | Outreach Programs

"Sahara Some Places in Africa You Need to Know!" Africa's Major Physical Features



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Lesson Title: "Sahara Some Places in Africa You Need to Know!" Africa's Major Physical Features

Grade Level: 7th

Purpose/Overview:

Students will use the Giant Map of Africa to become familiar with locations and descriptions of the continent's major physical features.

Middle school is the first opportunity to examine the human and physical characteristics of Africa to any degree of detail. This lesson is designed to be used as an overview or introduction to the continent of Africa by examining the major physical features on or surrounding it while also examining students' preconceived ideas about the continent.

National Geography Standards from Geography for Life Geographic Elements & Standards:

The World in Spatial Terms Standard 1: The geographically informed person knows and understands how to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information.

Physical Systems Standard 7: The geographically informed person knows and understands the physical processes that shape the patterns of Earth's surface.

Physical Systems Standard 8: The geographically informed person knows and understands the characteristics and spatial distribution of ecosystems and biomes on Earth's surface.

https://education.nationalgeographic.org/resource/national-geography-standards-index/

Oklahoma Academic Standards for the 7th Grade Social Studies [Eastern Hemisphere]:

- 7.C.1 The student will analyze data from a geographic perspective using the skills and tools of geography
- 7.C.2 The student will analyze the physical systems of the major regions of the Eastern Hemisphere.
- 7.C.2.1 Identify on a physical map the major landforms and bodies of water of each region and compare climatic conditions, vegetation, and biomes using thematic maps and other geographic tools.

https://oklahoma.gov/content/dam/ok/en/osde/documents/services/standards-learning/social-studies/ SS%20OAS%20July%202025.pdf

Geographic Themes:

Location, Place, Region

Objectives:

- 1. Students will locate physical features on the Giant Map of Africa and learn basic information about each feature.
- 2. Students will use critical thinking skills to examine their preconceived ideas about the continent of Africa.
- 3. Students will use the information gained from the Giant Map of Africa to complete other assignments within the study of Africa based on Oklahoma Academic Standards for Social Studies.

Materials:

Giant Map of Africa, laminated physical feature markers (included), PowerPoint (included - optional), computer/LCD projector (optional), 3x3" sticky notes (not included), National Geographic color map key (included)

Time Frame:

1-2 class days

Procedures:

One day before using the Giant Map of Africa (or at the beginning of the Africa unit of study), introduce the Giant Map by asking students this anticipatory set/lesson hook: "What comes to your mind when someone says the word 'Africa'?" Give thinking time and ask students to answer the question on paper.

Use the following questions as a common formative assessment [CFA] for the Giant Map of Africa activities:

- 1. What do you already know about the continent of Africa?
- 2. If you were to describe Africa to someone, how would you describe the land?
- 3. Name any four physical features of Africa.
- 4. What is a question about Africa that the Giant Map might answer for you?

The teacher will retain these papers until the Giant Map activities are concluded. (NOTE: #1 below may be done before visiting the Giant Map of Africa to maximize time.)

1. The teacher will guide the students to the Giant Map and explain his/her procedures and expectations for its use, i.e., socks only, no shoes or bare feet; pencils and papers are kept off of the map; wait for instructions for walking on the map, etc.

The teacher may choose to seat students completely around the map or around the east, south, and west sides of the map so students will not be looking at the map upside-down. Divide the class into four color groups relating to the colored dots on the map corners and in proximity to where they are sitting.

Allow students 2-3 minutes to observe the map and offer comments/first impressions. Refer to questions #1-2 on the CFA above. Solicit comments and answers from students as to what they already know about the continent or what they believe Africa "looks like."

- 2. Refer to question #3 on the CFA: Who was able to name a physical feature of Africa? If time allows, the students may locate a physical feature they named and put a sticky note on it.
- 3. Using thinking skills: Point out the compass rose and map key. Locate important features as they are used on the map.
 - a. Note colors used. Ask students what they think the colors indicate.
- b. Ask each group to think of 1-2 physical features on the Giant Map that they think no other groups will name, like rivers, water features, physical landmarks which comprise international boundaries, etc. Each group will decide and write their answers on a sticky note. Allow each group time to offer their 1-2 answers to the class, and check to see if any other group named that feature.
- c. Ask students why they think SW Asia and parts of Europe have been included on the Giant Map of Africa. Ask students how they could use these additional map features to gain more information about Africa. Accept any reasonable answers.
- d. During the initial observation of the Giant Map, students may inquire about the very small countries. Most boundaries were drawn by European Colonizers at the Berlin Conference of 1884-1885.
- 4. Ask students what physical features may be easily seen on the Giant Map of Africa. Allow time for responses.
 - 5. Physical features on the Giant Map of Africa may be introduced in one of several ways:
- a. The teacher may use the laminated physical feature markers (included) for students to use to find and place on a landmark. Students in a color group or as a class may help each other locate the physical feature. The teacher may use the PowerPoint accompanying this lesson. If technology is not available where the Giant Map will be used, the teacher should print out the slides of the PowerPoint so students can see the pictures and read the information. The slide show is linked here:

☐ Africa Physical Features

- b. 1-2 days before visiting the Giant Map of Africa, students may choose from the list of physical features or from the physical feature markers, use technology to locate the physical feature, then be ready to mark it and present information about it.
- c. The student may research a physical feature after using the Giant Map of Africa and give additional information about the physical feature.

(Note: 39 physical feature markers are included. Reg and Erg Desert features are not on a marker as this is an informational slide in the PowerPoint. The teacher may choose to use as many as needed based on class size.)

6. Guide students back to their answers to the teacher's first question: "What comes to mind when someone says the word 'Africa'?" Allow students time to share their preconceived ideas about the continent to see how these ideas have changed during the lesson.

Assessment Options: The teacher may use the CFA 1-4 above for a summative assessment of the lesson. (Note the wording changes and probing questions below which may be used to provide additional data. The teacher may use the CFA as stated or modify the questions to fit his/her needs.)

- 1. What do you already know about the continent of Africa? In what ways did your knowledge about Africa change? What were some reasons why your knowledge changed?
- 2. If you were to describe Africa to someone, how would you describe the land now that you have used the Giant Map of Africa? How has your description changed and why?
- 3. Name any four physical features of Africa. Name any four physical features of Africa that you did not know about previously and tell something you learned about them. Why do you think these physical features are important to understand about Africa? Choose one physical feature you learned about. In what ways might this physical feature affect human populations living near it?
- 4. Was the question you wrote on the formative assessment #4 answered through the use of the Giant Map? If so, how was it answered? If not, why not? What is another question about Africa that the Giant Map answered for you? What further research could you do to find out more about your questions?

The teacher may use the Anticipatory Set/Lesson Hook question above as an assessment by asking students to compose a short essay about what they have learned or by making a before/after T-chart of what they have learned. Students should be able to analyze why their thinking has changed.

The teacher may provide a blank physical map of Africa (not included) for students to use to locate and label the features they can recall plus any others of the teacher's choice. Students may use an atlas or the Giant Map of Africa at the teacher's discretion.

The teacher may assign students one or more of the physical features for further investigation, including conservation efforts, impact on human populations, or by focusing on any of the Five Themes of Geography.

Resources:

National Geographic Education Resources: https://education.nationalgeographic.org/ Encyclopedia Britannica https://www.britannica.com Images in the PowerPoint are cited with the websites used.

Extension and Enrichment/Simplification:

The study of Africa is part of Oklahoma grade 7 curriculum and Oklahoma Academic Standards for Social Studies, and as such is primarily intended for this grade level. In a middle school setting, grade 6 classes could use the map as a review of landforms and biomes.

Gifted students may choose to research specific physical features or conservation efforts, effects on human populations including migration patterns, human-environment interactions, political issues surrounding certain physical features, African wildlife issues, available resources, political conflicts affecting physical features and landmarks, and other topics that will enhance later topics in the Africa

unit of study. These topics may also be used with individual students or with small groups in the regular classroom as the class moves through the unit study of Africa.

Special needs students may use the cards or pictures printed from the PowerPoint to help with their understanding or work with a student or small group to find the physical features or to research/present information.

Horn of Africa

Madagascar

Cape of Good Hope

Cape Agulhas

Sahara Desert

Kalahari Desert

Namib Desert

Sahel

Savanna

Rain forest

Mediterranean Sea

Red Sea

Atlantic Ocean

Indian Ocean

Lake Victoria

Lake Tanganyika

Lake Malawi

Victoria Falls

Atlas Mountains

Ethiopian Highlands

Great Rift Valley

Mt. Kenya

Mt. Kilimanjaro

Nile River

White Nile River

Blue Nile River

Zambezi River

Mozambique Channel

Seychelles Archipelago

Congo River

Niger River

Canary Islands

Gulf of Aden

Gulf of Suez

Strait of Gibraltar

Equator

Prime Meridian

Tropic of Cancer

Tropic of Capricorn

2019 Standards this lesson covers:

- 7.1 The student will analyze data from a geographic perspective using the skills and tools of geography.
- 7.2 The student will analyze the physical systems of the major regions of the Eastern Hemisphere.
- 7.2.1 Identify on a physical map the major landforms and bodies of water of each region.