



# Oklahoma Alliance for Geographic Education

Teacher Training | Curriculum Development | Outreach Programs | and More!

## **A THREAT TO NORTHERN AFRICA: DESERTIFICATION**

Denise Aguilar  
OKAGE Teacher Consultant, Norman, Oklahoma

**World Geography Academy – Session 2**  
**Wednesday, November 7, 2012**  
**University of Oklahoma, Norman**

Materials may only be reproduced for the classroom and presentations  
when proper acknowledgement is given to the author and  
the Oklahoma Alliance for Geographic Education.

# **A THREAT TO NORTHERN AFRICA: DESERTIFICATION**

Denise Aguilar, OKAGE TC  
Central Middle School  
1201 NW Fort Sill Blvd  
Lawton, OK 73507  
[daguilar@lawtonps.org](mailto:daguilar@lawtonps.org)

**Grade Level:** 6<sup>th</sup> – 8<sup>th</sup> Grade

## **Purpose/Overview:**

Students will examine the process of desertification by identifying important terms relevant to this process.

Students will analyze the cause and effects of desertification in Northern Africa by studying a regions map of Africa.

Students will brainstorm possible solutions to this problem of desertification in Africa so future generations will not be affected.

## **National Geography Standards from Geography for Life**

### **Geographic Elements & Standards:**

The World in Spatial Terms

- 1: How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

Environment and Society

- 14: How human actions modify the physical environment
- 15: How physical systems affect human systems

The Use of Geography

- 18: How to apply geography to interpret the present and plan for the future

## **Oklahoma C3 Standards:**

### **Grade 7 World Geography: Eastern Hemisphere**

#### **Literacy Skills Standard 2: The student will develop and demonstrate Common Core Social Studies writing literacy skills.**

2. Write informative/explanatory texts, including the narration of historic events, scientific procedures/ experiments, or technical processes.
  - f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

#### **Content Standard 3: The student will examine the interactions of physical systems that shape the patterns of Earth's surface in the Eastern Hemisphere.**

2. Analyze from multiple perspectives the impact of natural disasters on human populations resulting in forced migration, scarcity of consumer goods, and loss of employment including
  - B. Frequent drought of northern Africa and Southwest Asia that creates stress on humans and wildlife

**Geographic Themes:** Location, Movement, Place, and Human-Environment Interaction

**Objectives:**

Students will:

1. Define vocabulary terms relevant to desertification.
2. Locate and label the different regions and specific physical features in Africa.
3. Analyze the causes and effects of desertification in Africa.
4. Examine possible solutions to the desertification problem in Africa.
5. Create an editorial article for the front page of the "Africa Today" newspaper regarding the possible solution or solutions to removing desertification from Africa.

**Materials:**

Glencoe – *The World and its People* Textbook

Desertification Vocabulary page

Desertification Vocabulary Web

Outline Map of Africa with regions labeled

Outline Map of Africa without regions labeled (a copy for each student)

"Understanding the Process of Desertification" Cause/Effect page

"Deserts and Desertification" PowerPoint from Slideshare

Gray Construction Paper

Nystrom Classroom Atlas

Colored Pencils

Pencil

**Time Frame:** 3 class periods

**Procedures:**

*Day 1*

1. Display the Desertification Vocabulary terms for the lesson on the board.
2. Divide students into groups of 2 and hand each group a slip with one of the definitions.
3. Ask each group to choose the word off the board that goes with the definition they have. Discuss their choices.
4. Break out of groups and hand out the Desertification Vocabulary Web. Have students identify the vocabulary using their textbooks. Allow 15 minutes then discuss the meanings in class orally.
5. Distribute the "Understanding the Process of Desertification" Cause/Effect page.
6. Show the "Deserts and Desertification" PowerPoint by Slideshare.
7. Instruct students to complete the Causes side of the page while watching the PowerPoint.

*Day 2*

1. Review the Desertification Vocabulary terms from Day 1 aloud.
2. Discuss the causes of desertification observed yesterday while viewing the PowerPoint.

3. Show the remainder of the PowerPoint, and have students complete the Effects side of the "Understanding the Process of Desertification" Cause/Effect page. Discuss their findings.
4. Distribute the Outline Map of Africa without regions labeled. Analyze the map with students orally and examine students' prior knowledge by asking them to identify any physical features on the map.
5. Use the Nystrom Atlases to label the requested physical features on the Africa regions map. Allow 10-15 minutes to complete.
6. Distribute the Outline Map of Africa with regions labeled, so students may check and correct their maps if necessary. Discuss the features on the map.

### **Day 3**

1. Review the causes/effects of desertification. Then examine the Outline Map of Africa with regions labeled and identify where desertification is occurring on this continent.
2. Investigate why desertification is occurring in Africa and color the area on the map where this occurring in BROWN.
3. Probe possible solutions on how to stop or at least slow this process in a class discussion. List student ideas on the board.

### **Assessment Options:**

Tell students they are reporters for the "African Times" Newspaper. Have them write a front page story on the problem of desertification in Africa and possible solutions to this problem. Provide students with a piece of gray construction paper and demonstrate the design of a front page of a newspaper. Have them write their "stories" on the front side only.

### **Extension and Enrichment:**

Design a map of Africa out of modeling clay displaying the physical regions discussed in class and where the problem of desertification is occurring.

**Connections:** Science, History

### **Resources:**

Glencoe – *The World and Its People* Textbook (glossary)

### Websites

Some definitions for the Desertification Vocabulary can be found here:

[http://geography.about.com/od/geographyglossary/Geography\\_Glossary.htm](http://geography.about.com/od/geographyglossary/Geography_Glossary.htm)

Some definitions for the Desertification Vocabulary can be found here:

<http://www.physicalgeography.net/glossary.html>

"Deserts and Desertification" PowerPoint [Note: there are other similar PowerPoints here.]

<http://www.slideshare.net/lab82/deserts-and-desertification-powerpoint>

Maps for this lesson plan and many more are available to download/print from the Arizona Geographic Alliance web site (click on the "open all" to see the complete listing):

<http://alliance.la.asu.edu/maps/maps.htm>

## **Desertification Vocabulary**

1. Crop Rotation
2. Desert
3. Desertification
4. Drought
5. Erosion
6. Irrigation
7. Overgrazing
8. Topsoil

## **Understanding the Process of Desertification**

**CAUSES**

**EFFECTS**