Fighting Disease

Seventh Grade – Geographic Understandings Seventh Grade – Economic Understandings

Elaborated Lesson Focus

This lesson is designed for students to gain knowledge of the impact positive medical intervention has in developing countries. Activities will focus on the physical geography of Africa and their health issues due to Guinea worm disease and river blindness. Students will use both primary and secondary resources. By the end of the lesson, students will demonstrate their knowledge by labeling a map of the African countries and locations where The Carter Center works to control incidences of Guinea worm disease and river blindness.

<u>Standards</u>

SS7E3 Describe factors that influence economic growth and examine their presence or absence in Nigeria, South Africa, and Kenya.

a. Evaluate how literacy rates affect the standard of living.

b. Explain the relationship between investment in human capital (education and training) and gross domestic product (GDP per capita).

c. Explain the relationship between investment in capital goods (factories, machinery, and technology) and gross domestic product (GDP per capita).

d. Explain how the distribution of natural resources affects the economic development of Africa.

e. Describe the role of entrepreneurship.

SS7G2 Explain environmental issues across the continent of Africa.

a. Explain how water pollution and unequal access to water impacts irrigation, trade, industry, and drinking water.

b. Explain the relationship between poor soil and deforestation in Sub-Saharan Africa.

c. Explain the impact of desertification on the environment of Africa.

SS7CG2 Analyze how government instability in Africa impacts standard of living

a. Describe the impact of government instability on access to education and the distribution of medicine and food to combat diseases and famine across Africa.

Enduring Understanding/Essential Ouestions

The student will understand that humans, their society, and the environment affect one another. (Georgia Department of Education EU www.georgiastandards.org)

Examining Carter Center programs that address health issues will provide insight for students into world issues.

- What are major physical features of African countries? Identify these countries on a map.
- What common factors (government, economy, education, and health issues) do African countries have?
- What African countries are participating in health programs with The Carter Center?

• How do the health programs of The Carter Center impact African countries? What diseases is The Carter Center helping to fight in Nigeria? What is unique about Nigeria's health programs?

Balanced Assessment Plan Description of assessment Students will work in pairs. Students will identify (label) the African countries listed in SS7G2a. Students will draw in and label the major physical features listed in SS7G2b.	<u>Type of assessment</u> Observation
Working in pairs, students will create a chart of the African countries listed in SS7G2a that The Carter Center is working with to eliminate human suffering. The chart will include government, economy, education, and health issues. Pairs will be placed in groups to compare their charts. Groups will share their charts. Students in pairs will use the following wel www.cartercenter.org. Click on "Health Programs Overview." Read it and discuss it with partner. Click on "Guinea Worm Eradication Program." Read it. Watch the video on Guinea worm located under "News and Publications" in the "Multimedia" section. Under "Health Topics" view "Guinea Worm (2006)." Click on "Activities by Countries." On the map, shade each country in blue which is participating the Guinea Worm Eradication Program. Click on the followin countries: South Africa, Tanzania, Rwanda, Mozambique, Democratic Republic of the Congo, Ghana, Mali, Mauritania,	g in ng
Sierra Leone, Sudan, Egypt, Ethiopia, Libya, Nigeria, Kenya, and Chad. Read the Nigeria Country page carefully to understand how Guinea worm disease affects communities Read about Nigeria's integrated disease approach.	
Students in pairs will use the following Web site: <u>www.cartercenter.org</u> . Click on "Health Programs" scroll to "Guinea Worm Eradication Program." Click on "Stories from the Field" (right). Read two or three stories. Click on "Health Programs" scroll to "River Blindness Program." Click on "Stories from the Field" Read two or three stories. Students will share the stories with the class.	Dialogue and Discussion Selected Responses
<u>Performance Task</u> Students will write an essay about the eradication of Guinea	Rubric

worm disease and its importance to Africa and the world.

Resources for the African Countries

Textbooks Atlas <u>www.cartercenter.org</u> The Carter Center Nigeria Country Page <u>http://cartercenter.org/countries/nigeria.html</u>

Videos on health issues and Waging Peace at www.cartercenter.org are:

Waging Peace

http://www.cartercenter.org/news/multimedia/GeneralTopics/WagingsPeace2006.html

Guinea Worm (2006)

http://www.cartercenter.org/news/multimedia/HealthPrograms/TamingtheFierySerpent.html

River Blindness (2006)

http://www.cartercenter.org/news/multimedia/HealthPrograms/PreservingVisionforFuture Generations.html

Lymphatic Filariasis (2006)_

http://www.cartercenter.org/news/multimedia/HealthPrograms/AlleviatingSufferingEndingShame.html

Rubric for Fighting Disease

Essay Rubric

Scale One: Use of Data:

- 6 Always uses accurate and relevant data.
- 5 Consistently uses accurate and relevant data.
- 4 Uses mostly accurate and relevant data.
- 3 Mixes mostly accurate and relevant data.
- 2 Uses mostly inaccurate and irrelevant data.
- 1 Uses almost no accurate or relevant data.

ScaleTwo: Plan of Organization

- 6 Always demonstrates a logical and coherent plan of organization.
- 5 Consistently demonstrates a logical and coherent plan of organization.
- 4 Develops the assigned topics using a general plan of organization.
- 3 Addresses the assigned topic, but demonstrates weakness in organize and include digression.
- 2 Attempts to develop the assigned topic, but demonstrates a profound weakness in organization and may include several digressions.
- 1 Minimally addresses the assigned topic but lacks a plan of organization.

Scale Three: Development of Ideas

- 6 Always develops ideas fully and clearly, using appropriate examples, reasons, details, explanations, and/or generalizations.
- 5 Consistently develops ideas fully, using appropriate examples, reasons, details, explanations, and/or organization.
- 4 Demonstrates satisfactory development and expression of ideas through the adequate use of support materials.
- **3** Demonstrates weakness in the development and expression of ideas with little use of support materials.
- 2 Demonstrates profound weakness in the development and expression of ideas, with little use of support materials.
- **1** Does not use support materials in the development and expression of ideas.

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