

## **Deforestation in Africa**



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In this module, students investigate deforestation of Africa. The module is designed for a science, social studies, and language arts teacher to divide the reading materials and mini-tasks so that students are working on some tasks in science class, some in social studies, and the remaining in language arts. Each teacher can then have students discuss the content from each disciplinary perspective, enriching the content. A chart showing which mini-tasks were taught by each teacher is included. In this module, students write an essay, but the Teaching Task can be modified to have students write a newspaper article, PowerPoint, or speech. Lexile level of articles begin on 7th grade level and extend to above 8th grade level. In the instruction, differentiation is written so lower students can access this reading material. The articles are only suggestions and teachers using the module may wish to update articles each year.

**GRADES** 

6 - 8

DISCIPLINE

Other

COURSE

Language Arts, Science, and Social Studies PACING

② N/A

#### Section 1: What Task?

#### Teaching Task

#### Task Template IE6 - Informational or Explanatory

After researching selected articles on the causes of deforestation in specific regions of Africa, write an essay in which you examine cause/s of deforestation and explain the effect/s on these African environments. Support your discussion with evidence from the text/s. What solutions can you offer or conclusions can you draw about deforestation in these regions of Africa?

#### Standards

Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

#### RI.8.1

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

#### RI.8.2

Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

#### RI.8.4

Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

#### RI.8.6

Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

#### RI.8.10

By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6—8 text complexity band independently and proficiently.

W.8.2 Focus

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content

#### W.8.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

#### W.8.5

#### Deforestation in Africa

With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.

#### W.8.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

#### W.8.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

RI.8.3

Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

#### Georgia Science Performance Standards

#### S7CS1

Students will explore of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

#### **S7CS6**

Students will communicate scientific ideas and activities clearly.

S7L4 Focus

Students will examine the dependence of organisms on one another and their environments.

#### Performance Standards for Social Studies

SS7G2 Focus

The student will discuss the impact of government policies and individual behaviors on the African environment.

Explain the impact of deforestation and desertification on the environment in such countries as Cote d'Ivoire, Kenya, and Botswana.

#### **Texts**

- Up in Smoke Article 1320L
- Who's to Blame Article 1210L
- Missing the Forest for the Trees Article 1160L
- The Impact of Deforestation on Forest Livelihoods in Ghana

#### Student Work Rubric - Informational or Explanatory Task - Grades 6-8

	Emerging	Approaches Expectations	Meets Expectations	Advanced
	1	2	3	4
Controlling Idea	Presents an unclear or unfocused controlling idea.	Presents a <b>general</b> controlling idea that <b>addresses</b> the <b>prompt</b> , with an <b>uneven focus</b> .	Presents and maintains a clear controlling idea that addresses all aspects of the prompt.	Presents and maintains a clear and specific controlling idea that addresses all aspects of the prompt and takes into account the complexity of the topic.
Selection & Citation of Evidence	Includes minimal details from sources.  Sources are used without citation.	Includes details, examples, and/or quotations from sources that arerelevant to the controlling idea. Inconsistently cites sources.	Includes details, examples, and/or quotations from sources that are relevant to the controlling and supporting ideas.  Consistently cites sources with minor formatting errors.	Includes well-chosen details, examples, and/or quotations from sources that support the controlling and supporting ideas.  Consistently cites sources using appropriate format.
Development / Explanation of Sources	Explanation of ideas and source material is irrelevant, incomplete, or inaccurate.	Explanation of ideas and source material is <b>minimal</b> or <b>contains minor errors</b> .	Accurately explains ideas and source material and how they support the controlling idea.	Thoroughly and accurately explains ideas and source material, using reasoning to support and develop the controlling idea.
Organization	Lacks an evident structure. Makes unclear connections among ideas, concepts, and information.	Groups ideas and uses some transitions to connect ideas, with some lapses in coherence or organization.	Groups and sequences ideas to develop the controlling idea. Uses transitions to clarify the relationships among ideas, concepts, and information.	Groups and sequences ideas logically to develop the controlling idea and create cohesion. Uses varied transitions to clarify the relationships among ideas, concepts, and information.
Conventions	Major errors in standard English conventions interfere with the clarity of the writing. Language or tone is inappropriate.	Errors in standard English conventions sometimes interfere with the clarity of the writing.  Uses language and tone that are sometimes inappropriate to the audience and purpose.	Consistently applies standard English conventions; minor errors, while noticeable, do not interfere with the clarity of the writing.  Uses language and tone appropriate to the audience and purpose.	Consistently applies standard English conventions, with few errors. Demonstrates varied syntax and precise word choice.  Consistently uses language and tone appropriate to the audience and purpose.
Content Understanding (Generic)	Attempts to include disciplinary content in explanation or argument but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate.	Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation.	Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding.	Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding.

#### **Background for Students**

Deforestation is an environmental issue in the world today. In this module, we will explore deforestation from a scientific and social studies approach. In Science, we will look at the causes and impacts on the earth, while in Social Studies we will look at the effects and impacts on people. In Language Arts, we will bring all of our knowledge together and write an essay that examines the causes and explains the effects on the African environment. You will work on the module in three classes to help you consider the topic from multiple perspectives.

#### Extension

Not provided

#### Section 2: What Skills?

#### Preparing for the Task

**BRIDGING CONVERSATION** > **TASK ENGAGEMENT**: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.

TASK AND RUBRIC ANALYSIS > TASK ANALYSIS: Ability to understand and explain the task's prompt and rubric.

#### Reading Process

**PRE-READING** > **ESSENTIAL VOCABULARY**: Ability to apply strategies for developing an understanding of text(s) by understanding words and phrases that identify key concepts and facts, or information.

**PRE-READING** > **ACADEMIC INTEGRITY**: Ability to use and credit sources appropriately.

ACTIVE READING > ANNOTATION: Ability to read purposefully and select relevant information

#### Transition to Writing

BRIDGING CONVERSATION > IDENTIFYING SIGNIFICANT ELEMENTS: Ability to make connections in reading

#### **Writing Process**

PLANNING > ESTABLISHING THE CONTROLLING IDEA AND OUTLINING THE WRITING: Ability to establish a claim and consolidate information relevant to task.

**DEVELOPMENT** > **ROUGH DRAFT**: Ability to develop a line of thought and text structure appropriate to an informational task. Ability to construct a rough draft.

**REVISION**, **EDITING**, **AND COMPLETION** > **REVISION AND EDITING**: Ability to refine text, including line of thought, language usage, and tone as appropriate to audience and purpose. Ability to proofread and format a piece to make it more effective.

**REVISION**, **EDITING**, **AND COMPLETION** > **FINAL DRAFT**: Ability to submit final piece that meets expectations.

## Section 3: What Instruction?

PACING	SKILL AND DEFINITION	PRODUCT AND PROMPT	SCORING GUIDE	INSTRUCTIONAL STRATEGIES	
Preparing for the Task					
2 hrs	BRIDGING CONVERSATION > TASK ENGAGEMENT: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.	TASK ENGAGEMENT As you watch the movie "The Lorax", make a list of environmental issues that appear in the movie.	Students have listed at least 5 environmental issues that appear in the movie (See Lorax Viewing Guide)	SS and Science Class: Students will watch half the movie in social students and the other half in science.  While watching the video, students will identify at least five environmental issues that can be witnessed in the world in which we are living in today and Provide one "real life" example of each issue identified.  In each class, the students will discuss responses and how the movie relates specifically to science and social students dealing with deforestation or environmental issues.	
	Additional Attachments:  The Lorax Movie Graphic Organizer				
50 mins	BRIDGING CONVERSATION > TASK ENGAGEMENT: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.	MAKING CONNECTIONS You will learn about how there is a real-life "Lorax".	Students will actively be engaged in learning about Michael Fay along with having a class discussion about how he is a real-life "Lorax".	Science: Students will review a video explaining what Michael Fay has accomplished and how he relates to deforestations. The teacher will also read and discuss an article about Michael Fay.  The students and teacher will discuss how Michael Fay is a real-world "Lorax".	
	Additional Attachments:    Video Clip and Article				
1 hr	TASK AND RUBRIC ANALYSIS > TASK ANALYSIS: Ability to understand and explain the task's prompt and rubric.	UNDERSTANDING EXPECTATIONS What is my prompt and the end product for this task?	Students are actively engaged in content related discussions as the teacher moves about the room.	ELA: The teacher will distribute folders that students will use to keep their work in for this module and carry from class to class.  Share the prompt and provide students with a copy of the task as well as the rubric that will be used to score the letter.  The teacher will read the prompt aloud and discuss the prompt with the students. The students will TAP out the topic. For the T-the students will record the topic, A-the audience, and P-the purpose of the writing (see teacher guide attached)  Review the rubric with the students, so they will understand what is expected for the final product. Students will read and restate Score Point 3 - Meets expectations on the rubric and relate vocabulary to	

state assessments for writing.

Differentiation: For the lower and average students, provide them with an outline that will provide them with guidance on the essay. For the lower students also, they will exclude one cause/effect and one solution. The average students will write 3 cause and effects and 3 solutions. The advanced students will not be given an outline. They will construct the essay on their own with guidance from the teacher when needed.

Additional Attachments:

- TAP Student Sample
- TAP Guide for Teachers
- Prompt and Rubric

#### Reading Process

50 mins

## PRE-READING > ESSENTIAL VOCABULARY:

Ability to apply strategies for developing an understanding of text(s) by understanding words and phrases that identify key concepts and facts, or information.

### VOCABULARY ILLUSTRATION

You are going to be assigned three words from the articles that we will are reading. Using the tablets (or dictionaries), you are going to look up the definition to the words. The words, definition, and a picture that illustrates the meaning of the word needs to go on the piece of paper.

Student has word, definition, and a picture that illustrates the meaning to each of the words. **Social Studies**: Prior to this lesson, pull unknown vocabulary from the articles.

Students will be assigned 3 words and will use the dictionary.com app on a tablet or can look up the words in a dictionary or on Google to find the definitions. After looking up the definitions, the students will draw a picture that illustrates the meaning of the word.

The students will display their words in the hall for student use when needed while reading the articles.

Differentiation: The lower students will receive words that are less difficult to understand. For the average students, give them words that are a little more difficult, and then for the advanced students, give them the more complex vocabulary.

Additional Attachments:

Voc. Student Sample 4

Voc. Student Sample 3

Voc. Student Sample 2

Voc. Student Sample 1

Teacher Guide for Vocabulary Activity

30 mins

## PRE-READING > ACADEMIC INTEGRITY: Ability to use and credit sources

appropriately.

Look at the top of your article. What are the important features you see in the bibliography entry? How can a reader use the In-Text Citation to determine which article

information comes from?

**CITING SOURCES** 

Students note author, title, date, and publication in bibliographic entry; students note how the In-Text citation refers to a specific article. ELA: Pass out all the articles.

Discuss the importance of citing sources and information from the text and providing credit to the original authors. For one article, model for the students how to write and find the information needed for the information in the bibliography.

Explain that students will need to present the bibliographic information alphabetically to properly create a Works Cited page. Have students organize bibliographic information accordingly.

Also, model the correct way of doing an in-text citation.

Additional Attachments:

#### Student Sample-Sources

4 hrs

# ACTIVE READING > ANNOTATION: Ability to read purposefully and select relevant information

#### **ANNOLIGHTING**

As you read the selected articles, look for causes and effects of deforestation in Africa. Highlight the causes of deforestation in one color and the effects of deforestation in another. Once you have found the causes and effects, read for the solutions on how to fix deforestation. These should be highlighted in another color.

Students have highlighted their articles using three colors of highlighters. **ELA Class**: Provide students with the selected article:"Up in Smoke" 1320L (This article was chosen to model because of the Lexile score. It is above the reading level of most of the students.)

The teacher will model how to utilize annolighting - highlighting causes of deforestation in one color and effects in another. Teacher will also model how to jot notes and ideas about what they are thinking will reading. Students will then partner up and discuss what they have highlighted.

The next day, students will use this process on the next 3 articles following the annolighting technique that was modeled in all **three classes: ELA, science, and social studies**.

The other three article include: Science Class: "Who's to Blame" 1210L, Social Studies Class: "Missing the Forest for the Trees" 1160L, and ELA class: "The Impact of Deforestation on Forest Livelihoods in Ghana" Unknown

Differentiation: For lower ability students, grouping in pairs on one or two of the other articles, then working on them individually is a strategy. You might see that the advanced would not need more modeling, but the lower students might.

#### Additional Attachments:

- Sample of article modeling on Smartboard
- Student Sample-highlighting
- Who's to Blame?
- Up in Smoke
- Missing the Forest for the Trees
- The Impact of Deforestation on Forest Livelihoods in Ghana
- Annolighting A Text

#### Transition to Writing

**BRIDGING** 

1 hr

# CONVERSATION > IDENTIFYING SIGNIFICANT ELEMENTS: Ability to make connections in reading

#### DEBATE

What have I learned about the cause/effects and solutions of deforestation?

Students are actively engaged in discussion/debate.

Science:Before filling in the outline for the graphic organizer, the students will have an open discussion about the causes and effects of deforestation. This will allow the students to be able to discuss what that have highlighted and to be able to think about what deforestation is.

The students will partner up and find the most important cause and effect of deforestation. Next, the students will present their most important cause to the class. This will allow the students to agree or disagree that it was the most important fact or an student might say another cause is important, and they can have a small debate about it.

#### Writing Process

30 mins	PLANNING > ESTABLISHING THE CONTROLLING IDEA AND OUTLINING THE WRITING: Ability to establish a claim and consolidate information relevant to task.	CONTROLLING IDEA AND WRITING AN OUTLINE What have I learned about the cause/effects and solutions of deforestation?	Students are actively engaged in preparing a controlling idea (thesis) for the essay along with filling out the outline.	Start in <b>ELA class</b> : After annolighting and citing the information, the students are to start formatting the essay.  Discuss with the students what the controlling idea is for the task. Refer back to the task and the tapping out activity. Explain that the purpose can be reworded as the thesis or controlling idea. Teacher will model the first cause and effect and the solution for that cause and effect. This will help guide them though the rest of the outline. (The advance students will not receive this help unless teacher sees it is needed individually.)  Differentiation: For the lower ability students, an outline template is provided to help guide on the essay. For the lower students also, they will exclude one cause/effect and one solution. The average students will write 3 cause and effects and 3 solutions. The advanced students will not be given an outline. They will construct the essay on their own with guidance from the teacher when needed.  Science and Social Studies class (same day):Now, the students are to use their annolighting and article complete the outline of essay.
	Additional Attachments:  Outline for Essay Student Sample of Outline 2 Student Sample of Outline 1			
2 hrs	DEVELOPMENT > ROUGH DRAFT: Ability to develop a line of thought and text structure appropriate to an informational task. Ability to construct a rough draft.	WRITING A ROUGH DRAFT Using your cause/effect graphic organizer and the provided newspaper template, create a rough draft making sure to address all parts of the teaching task.	Teacher checks off that the student has all of the required components in the rough draft (introduction, cause/effects, solutions, and conclusion).	ELA, Science, and Social Studies: Monitor and provide constructive feedback as necessary.
30 mins	REVISION, EDITING, AND COMPLETION > REVISION AND EDITING: Ability to refine text, including line of thought, language usage, and tone as appropriate to audience and purpose. Ability to proofread and format a piece to make it more effective.	REVISING AND EDITING Have two students peeredit your paper using the peer-editing checklist. After you receive their comments, write final draft of your newspaper article.	Provides complete draft with all parts.  Provides completed checklists.	ELA: Monitor and provide constructive feedback as necessary.
	Additional Attachments:  Proofreading Essay			

	2 hrs	REVISION, EDITING, AND COMPLETION > FINAL DRAFT: Ability to submit final piece that meets expectations.	FINAL PRODUCT Create a newspaper article using Cloud Publisher on the tablet, Word document, or newspaper template.	Provide rubric for necessary requirements for newspaper article.	ELA: Teacher needs to be walking around making sure students are on task and help when needed on final product and any technological problem.  For differentiation: The advanced students will have a choice to use a newspaper article template, create a newspaper article with Word, or just type the essay in essay format. The regular ed. students will have a choice to create a newspaper article with Word or just type the essay in essay format. The lower students will have a choice to create just type the essay in essay format or create a PowerPoint wit the causes, effects, and solutions.
		Additional Attachments:  Student Working on Final Product Final Products			

#### Instructional Resources

#### Teacher Resource

- **Deforestation in Africa**
- **Annolighting a Text**
- Tapping out the prompt
- Teacher Guide for Voc. activity
- Pacing Guide for Unit with Lexiles
- Michael Fay Article and Movie

#### Student Handout

- **Outline for Essay**
- Prompt and Rubric
- Proofreading Essay graphic organizer
- Lorax Graphic Organizer

## Section 4: What Results?

#### Student Work Samples

**Meets Expectations** 



**Teacher Reflection** 

Not provided

#### All Attachments

- Up in Smoke Article 1320L: https://s.ldc.org/u/6issgot4z27u21e4heiyaj1re
- Who's to Blame Article 1210L: https://s.ldc.org/u/1wiys8e7zr4pv7dx8nzcpuy4v
- Missing the Forest for the Trees Article 1160L: https://s.ldc.org/u/5kc120ccjk43ob1pq3qe675iw
- The Impact of Deforestation on Forest Livelihoods in Ghana: https://s.ldc.org/u/6xuk6zy1zva2s1qm2v77d8dxh
- Student Samples of Final Products: https://s.ldc.org/u/cvevdsg9lmwgzmcgyttmvz554
- Deforestation in Africa: https://s.ldc.org/u/3mutly5b48f8kfaf4iqdu653a
- Annolighting a Text: https://s.ldc.org/u/70w80snwe5xr5fskwv6jkumr1
- Outline for Essay: https://s.ldc.org/u/ddyoe3twezrxhymilp4dgod7g
- Prompt and Rubric: https://s.ldc.org/u/7805ttb1gulma0r4euf6k907d
- Proofreading Essay graphic organizer: https://s.ldc.org/u/3k6yxvfp73vb85261vrn5ov37
- Tapping out the prompt: https://s.ldc.org/u/9cemzt2i6qvgqfhazac7cioaa
- Teacher Guide for Voc. activity: https://s.ldc.org/u/1dzs7haos805v84ywo7doxdh5
- Lorax Graphic Organizer : https://s.ldc.org/u/5n6icsxch29p1mr6dglxojxar
- Pacing Guide for Unit with Lexiles: https://s.ldc.org/u/2p2pe928b7zdgrex9qyuhtnl5
- Michael Fay Article and Movie: https://s.ldc.org/u/bhuzwps21rbk4jx2eo5qn4kt0