Which Way is Up? The Tree of Life in Africa

<table>
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<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Grade Level</td>
<td>2</td>
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<tr>
<td>Duration</td>
<td>2 class periods</td>
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<tr>
<td>ELL Adaptation</td>
<td>Marjorie Wieweck</td>
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### National Standards

**GEOGRAPHY**

- **Element 2 Places and Regions**
  - 4. The physical and human characteristics of places

- **Element 5 Environment and Society**
  - 16. The changes that occur in the meaning, use, distribution, and importance of resources

### AZ Standards

**ELA**

- **Reading**
  - **Key Ideas and Details**
    - 2.RL.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
    - 2.RL.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
  - **Integration of Knowledge and Ideas**
    - 2.RL.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

- **Writing**
  - **Text Types and Purposes**
    - 2.W.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.

- **Language**
  - **Conventions of Standard English**
    - 2.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
      - a. Capitalize holidays, product names, and geographic names.
      - d. Generalize learned spelling patterns when writing words.

### Arizona Social Science Standards

**GEOGRAPHY**

- Human-environment interactions are essential aspects of human life in all societies.
  - 2.G2.1 Explain how weather, climate, and other environmental characteristics affect people’s lives in a place or region being studied.
  - 2.G2.2 Describe how human activities affect the communities and the environment of places or regions.
  - 2.G2.3 Describe the positive and negative effects of using natural resources.

- Global interconnections and spatial patterns are a necessary part of geographic reasoning.
  - 2.G4.1 Identify different physical and cultural regions in the world.

### SIOP Elements

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<th>Preparation</th>
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Overview

This is the Tree by Miriam Moss is a story about how the wildlife of Africa depend on the ancient baobab tree. Virtually every part of the baobab tree is important to animals, birds, insects, or humans. This unique tree provides shelter, food, and medicine, and many other things.

Purpose

In this lesson, students will learn about the interdependency between plants and animals. This understanding of the importance of natural resources is a valuable lesson in conservation. This lesson contains adaptations for diverse learners (ELLs).

Key Vocabulary

volcano- a cone-shaped mountain formed by lava and cinders that erupted through a crater
chameleon- a lizard that changes skin color to fit its surroundings
baobab tree- a broad-trunked African timber tree
conservation- to preserve the animals and their surroundings

African plain- an area of nearly flat land
mushroom- a plant having a dome-shaped cap

Materials

- This is the Tree by Miriam Ross
- Chart paper
- Story paper or drawing and writing paper
- Construction paper
- Scissors
- Continents of the World map [https://geoalliance.asu.edu/sites/default/files/maps/World_Continents.pdf]
- Africa map [https://geoalliance.asu.edu/sites/default/files/maps/AFRICA2.PDF]

Materials for use in Extension Activities:
- Brown butcher paper cut into the rough shape of a baobab tree (approximately six feet high) to affix to a bulletin board or wall
- Outline of parts of baobab tree

Objectives

The student will be able to:
- Write a paragraph explaining a choice.
Which Way is Up? The Tree of Life in Africa

- Recall facts about at least one part of the baobab tree.

Procedures

SESSION ONE

1. Begin the lesson by asking students to name the animals on the cover and where they are in the tree. (Scaffolding: Comprehensible Input) (Grouping: Whole Class)
2. Use the back of the book to over the parts of the tree. (Scaffolding: Comprehensible Input)
3. Project the Continents of the World map. https://geoalliance.asu.edu/sites/default/files/maps/World_Continents.pdf Ask students where they think the story takes place. Point out Africa on the map. (Scaffolding: Comprehensible Input)
4. Ask students if they have ever seen a tree like the one on the cover. Project the Vocabulary Card of a baobab tree. Put card on Word Wall. (Scaffolding: Comprehensible Input)
5. Ask for descriptive words to describe what the tree looks like. (Scaffolding: Comprehensible Input)
6. Project and read the book slowly going over each page with its pictures. Project the Vocabulary Cards for words used in the book. Put Vocabulary Cards on the Word Wall after they are explained. (Scaffolding: Comprehensible Input)
7. Review the parts of the tree. Use chart paper or the whiteboard and write the name of the part of the tree (leaves, flowers, fruit, trunks, roots, bark, wood). Have students then tell the uses for each part and record each use. (Scaffolding: Guided Practice, Application: Promotes engagement) Remember the back of the book can help you with this.

SESSION TWO

1. Review chart/whiteboard items. (Scaffolding: Comprehensible Input)
2. Have students choose one part of the baobab tree that they feel is the most important. (Grouping: Independent)
3. Tell students to pretend that they are in Africa to study the baobab tree and help in its conservation. Discuss the definition of conservation (to preserve the animals and their surroundings). They are each going to draw a picture to aid in this attempt to conserve the baobab tree. Each picture must illustrate what he/she considers to be the most important part of the tree. (Application: Meaningful, Linked to objectives, Promotes engagement) They must also write a paragraph explaining why they feel that this is the most important part. (Assessment: Written, Individual)

4. Model an example using a tool in the classroom (ex: scissors) by drawing the tool and then writing about it. (Scaffolding: Modeling)

Big Book Version

Instead of 8.5 by 11 inch paper, have the students draw and write on poster boards cut in half. Take these large sheets and bind them together so the book will stand on its own using duct tape for the binding.

5. If time, have students share their paragraphs with the class. (Grouping: Whole Class)

Assessment

ELA and Geography

The writing assignment can be graded using the following scoring guide:

Did the student:
- Draw a picture depicting his or her choice of the most important part of the baobab tree? (3 points)
- Write a paragraph about the drawing explaining why he or she feels that it is the most important part of the tree? It should include an introductory statement, two descriptive statements, and a concluding statement. (12 points - 4 for each part)
- Write in complete sentences using proper punctuation, capitalization, spelling, and good penmanship? (6 points)
- Describe the uses of the illustrated part of the tree? (4 points)

Mastery will be considered a score of 20 or more out of the 25 points possible.

Extensions

Create a large baobab tree out of brown paper prior to doing these activities.

Divide students into teams with each team (secretly) given one part of the baobab tree. Have each team act out the use of the tree. The class should try to guess which part of the tree each group is acting out. Each group could also draw and cut out an outline shape of their part of the tree, describe its uses, and then affix it to the large tree.

Using string, children could measure the baobab tree.

List all of the creatures that make the baobab tree its home. Students could use drawing paper to illustrate the tree with its inhabitants. Then conduct research about the creature.

Sources