

Student Teacher Candidate: Peyton Allen  
Lesson Subject(s)/Title: Tree Lifecycle  
Lesson Date(s): 20 September 2018  
Course & Grade(s): Science Grade 3

### INSTRUCTIONAL MATERIALS:

The book "Tree of Life: The World of the African Baobab"  
Materials for students to use to make lifecycles

### ESSENTIAL QUESTIONS/ SUBSIDIARY QUESTIONS:

Are trees alive?  
How are trees born?  
Do trees die?

### PURPOSE:

For students to discover that trees have a lifecycle that is similar to that of other things.

### SPECIFIC LEARNING OBJECTIVES: (clear, observable)

Students will diagram the lifecycle of a tree to show their understanding of that lifecycle and the tree's role in the ecosystem throughout its life.

### STANDARDS:

Subject Area: Environment and Ecology

Eligible Content: 4.1.3.E

Identify changes in the environment over time.

### DIFFERENTIATION STRATEGIES:

Instead of being in a group, the student can be with a student aid for more help on the creation of the lifecycle. The student can be given a role such as finding the resources or drawing/creating the lifecycle. On the trip, an aid should guide the student and help the student find the stages of tree life.

### ANTICIPATORY SET:

Ask students to discuss the idea of lifecycles by asking them to describe the lifecycle of a person. Ask the students to identify the different jobs or roles or things that person might do in each stage of the lifecycle. They will use childhood, teenage years, young adulthood, and so forth. These stages will be written on the board for everyone to see.

### INPUT/ ACQUIRE NEW KNOWLEDGE:

To get the students brains to better understand a lifecycle of a tree the teacher will do a "Read Aloud" with the students with the book called "Tree of Life: The World of the African Baobab". This story has text and pictures of the life cycle of this amazing tree of the Africa savannah, and portrays the animals and people it helps support.

Students will then be asked to work in small groups to research and create a picture of the lifecycle of a particular tree. Explain to the students that they should find information from researching materials on the internet or books in the library. They will be given a worksheet to help guide them throughout their research so they know what to look for. Students can either draw or use a graphic organizer, word processing, or presentation software to create their picture. At least six stages are to be included; seed, sprout, sapling, mature, dead, rotting. The lifecycle can be presented in a circle, or a line with illustrations and labels.

| Sensory Register                 | STM  | LTM                              |
|----------------------------------|--|----------------------------------|
| Attention Recognition Perception | Focus Organization Rehearsal Visualization | Connections Elaborations Meaning |

### Facets of Understanding

1. Explanation
2. Interpretation
3. Application
4. Perspective
5. Empathy
6. Self-Knowledge

### Multiple Intelligences

1. Linguistic [words]
2. Visual [pictures]
3. Mathematical [numbers & reasoning]
4. Kinesthetic [hands-on]
5. Musical [music]
6. Interpersonal [social]
7. Intrapersonal [self]
8. Naturalist [nature]

### Multiple Exposures [4 x 2]

1. Dramatization
2. Visualization
3. Verbal

### Complex Interactions

1. Discussion
2. Argumentation

### Bloom's Taxonomy

1. Knowledge [Verbatim]
2. Comprehension [Own Words]
3. Application [Problem-Solving]
4. Analysis [Identify components]
5. Synthesis [Combine information]
6. Evaluation [Decisions]

### Aspects of the Topic

1. Facts
2. Compare
3. Cause/Effect
4. Characteristics
5. Examples
6. Relationships

### 9 Effective Strategies

1. Similarities and Differences
2. Summarization and Note Taking
3. Reinforcing Effort and Providing Recognition
4. Homework and Practice
5. Nonlinguistic Representations
6. Cooperative Learning
7. Setting Objectives and Providing Feedback
8. Generating and Testing Hypotheses
9. Questions, Cues, and Advanced Organizers

and/or

**APPLY/ DEEPEN NEW KNOWLEDGE:**

Students will take a walk through the forest site that has various plant and trees of all ages. The students will be asked to look for trees at various stages of their lives and be able to identify at least two of the stages. Once a student finds a stage they will explain to the teacher why the tree is at the stage it is at.

**CLOSURE/ASSESSMENT:**

Students will be asked to do a "Ticket out the Door" and list the stages of the lifecycle of the particular tree they created before they head out for the day.

**HOMEWORK: (Purpose- Preparation, Practice, Expansion)**

Students will be asked to draw a picture of one of the stages on the lifecycle of the tree.

**EVALUATION/ASSESSMENT OF STUDENTS:**

Students will be evaluated/assessed through their creation of the lifecycle and their trip to the forest.

**INSTRUCTIONAL PROCEDURES:**

**Time:**

|  |   |
|--|---|
| <p>The teacher will:</p> <ol style="list-style-type: none"><li>1. Ask the students to discuss the lifecycle of a person.</li><li>2. Do a "Read Aloud" of the "Tree of Life: The World of the African Baobab".</li><li>3. Ask the students to research and create a lifecycle of a particular tree.</li><li>4. Take the students to a forest to look for the various stages of a trees life.</li><li>5. Have the students do a "Ticket out the Door" and list the stages of the lifecycle of the particular tree they created.</li><li>6. Have the students draw a picture of one of the stages of the lifecycle of a tree for homework.</li><li>7. Assess/evaluate through their creation of the lifecycle and their trip.</li></ol> | <p>The students will:</p> <ol style="list-style-type: none"><li>1. Discuss the lifecycle of a person to get their minds going about lifecycles.</li><li>2. Listen to the teacher "Read Aloud" "Tree of Life: The World of the African Baobab".</li><li>3. Research and create a lifecycle of a particular tree in groups.</li><li>4. Take a trip to a forest to look for various stages of a trees life.</li><li>5. Do a "Ticket out the Door" and list the stages of the lifecycle of the particular tree they created.</li><li>6. For homework, draw a picture of one of the stages of their creation of the lifecycle of their tree.</li><li>7. Be assessed/evaluated through their creation of their tree lifecycle and their trip to the forest.</li></ol> |
|--|---|