



BETHANY

LUTHERAN COLLEGE

Instructor's Name: Trevor Larson

Subject : Science

Grade: 5th

Title of Lesson: *Adaptation and Survival for plants for Friday and Monday*

Standard(s) the Lesson will Address: Type out the source, number, and the text of the [standard \(s\)](#) addressed in this lesson

Science- 5.4.1.1.1- Describe how plant and animal structures and their functions provide an advantage for survival in a given natural system.

Objective: explain structural and behavioral adaptations. Describe plant and animal adaptations including camouflage and mimicry

DIFFERENTIATION (if applicable) and ACCOMMODATIONS:

Differentiating **FOR:** readiness

Differentiating **IN:** content

Materials Needed:

- Chromebooks

Vocabulary:

Content: adaptation- any characteristic that helps an organism survive in its environment

Habitat-physical place where an organism lives and hunts for food.

Soma's class needs to still do everything

Shoemaker's class is done

Anticipatory Set:

Yesterday we talked about animals and some of their adaptations. Are animals alone in having adaptations?

Pre-Assessment Plan (if any):

None

Input: (SCRIPTED)

Open to page 170-171

Open to page 176 and read to page 177

What are three challenges that the Sabal palm must adapt to in the tropical forest?
(rain, drought, hurricane winds)

Transition to habitat game

Part 1: Play plant habitat game 5-10 minutes long
(short running game)

What is a habitat? (physical place where an organism lives and hunts for food.)

What are the four essential parts of a habitat that a plant or animal needs in order to survive?

This game teaches the four essentials of habitats: food (nutrients and sunlight)
, water, shelter and space.

Introduce these four distinct hand motions: 1) food (hand over belly), 2) water (hand to mouth, as if drinking), 3) shelter (hands over head, making a tent), and 4) space (arms outstretched to the side).

Divide the class into two groups: plants and habitat. Make two parallel lines in the sand(no sand just somewhere with room) , 10 feet apart.

Have the *plant* students stand with their toes touching one line, facing the *habitat* students, who are doing the same on the other line. The plant students get together as a group and decide what one habitat component they will all go after. Then they face away from the habitat students (you can ask them to put their heels on the line instead of their toes).

The habitat students then *individually* choose what habitat component to be and then make the appropriate hand motion: food (hands on belly), water (hands as if drinking from a cup), shelter (hands on top of head like a tent), or space (arms outstretched to the side).

When the habitat students have assumed their positions, the leader(myself) makes a signal for the plants to turn around and run to the students displaying the habitat component that the group decided on (all the plants should be running after the same thing).

If a plant reaches the right kind of habitat first, that habitat student is turned into a plant and goes back to the other line.

If a plant student doesn't make it to the right kind of habitat, the plant dies and becomes habitat. (This activity can also be played with animals instead of plants.)

Continue for several more rounds. Discuss what happens when there is not enough of certain habitat components to go around.

Good ending point for the day

Guided Practice (Formative Assessment):

5-10 minutes

Not every plant or animal will have the same adaptations as the other. At each table I will assign an ecosystem. With that ecosystem, each table must list at the minimum of three plants, and two animals and their adaptations. At the end of the class each table will present their findings to the class of how these adaptations help the animals and plants survive in their ecosystem.

Ecosystems- Tropical forest, desert, tundra, great plains

Closure: (SCRIPTED)

SOMA Needs to present tomorrow

Group presentation of their findings. Bring it all together to talk about how each ecosystem is different so therefor each adaptation will most likely be different.

If there is enough time remaining in the class, share the slideshow to confirm some of the students research

<http://www.slideshare.net/mrimbiology/adaptations-in-different-biomes-notes>

Independent Practice/Summative Assessment: (How will students extend or apply their learning OR demonstrate mastery? If demonstrating mastery, include criteria for evaluation (checklist, rubric, sample, etc).

Reflection

1. As I reflect on the lesson, to what extent were students productively engaged?

They were chatty at times, but overall, they were talking about the task at hand. I did have to remind the students a few times that they needed to lower their voices so that other groups would have a chance to talk amongst each other.

2. To what extent did the students learn what I intended? Were instructional objectives met?

Some students struggled to follow directions as intended. $\frac{3}{4}$ of the students fully understood the first time, the other students had to ask a few different times. At the end of the lesson the students did meet my instructional objectives. I set the expectations that I would only explain things once, some students took to it, others didn't. The students who didn't had to ask their peers what to do.

3. To what extent did I alter my objectives or instructional plan as I taught the lesson? Why?

I did change some planning as the lesson went along. For instance, some ecosystems didn't have more than three animals with key adaptations. I then lessened the number to accommodate those students ecosystems. It would have been unrealistic for students to achieve the number when it is not even possible.

4. To what extent did I practice effective classroom management strategies? What issues do I need to address when I teach again?

I made the mistake of not telling the students exactly how I wanted them to record their findings. I left it very open ended thinking that they would come up with their own way to record their findings. Next time I teach I should not settle for having the majority of the students listening. I need 100% every time.

5. To what extent did I provide closure to the lesson?

I brought the students back together at the end of the class and went over what we covered today. I also gave them a short lecture on why it is important to listen the first time. Myself and Mrs. Shoemaker should not have to go over instructions multiple times.

6. If I had the opportunity to teach this lesson again to the same group of students, what would I do differently? Why? How would this affect the outcome of this and future instruction?

I would demand the attention of the whole class. It was a big waste of my time and other students time to have to go over instructions more than once. This would give the students extra time to work and explore. I also would have given better directions when it comes down to how I wanted them to record their findings. Leaving it open for them to decide did not work and just caused confusion. This would give students more time for exploration, and also more time for questions or comments at the end. I will take this into account for my future lessons, to be clear about everything. Even things that I already think are clear enough.