Name Kaylee Sheppard

Lesson Plan Template

Lesson Segment Focus <u>The Role of the Stoma</u>	Lesson _1of
Course & topic addressed <u>Photosynthesis</u> Grade <u>7</u>	Date

Student Outcomes

Specific learning objectives for	1. Students will understand the major role of the Stoma in Photosynthesis.
this lesson.	2. Students will understand the water and carbon cycles in relation to the Stoma.
Describe the connection to	Students will already have knowledge of photosynthesis and the role it plays in providing for humans.
previous lessons. (Prior knowledge	
of students this builds upon)	
Knowledge of students	
background (personal, cultural, or	
community assets)	

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	7-LS1-6 Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
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Academic Language Support

What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning? What will you do to provide varying supports for students at different levels of academic language development?	I will use cognates on the handout if needed. If at the end of the lesson, the student is still confused about the vocabulary, I would consider making a word wall, so they could review it more.
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Key Vocabulary

	Photosynthesis, Stoma, Water Cycle, and Carbon Cycle
terminology must be addressed for	
students to master the lesson?	

Materials

Materials needed by teacher for this lesson .	The teacher may need her own iPad to review the information on the app. She will also need a handout per student for them to complete.
Materials needed by students for this lesson .	Each student will need their iPad.

Lesson Timeline with Instructional Strategies & Learning Tasks (This should be VERY DETAILED)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
10 Minutes	Introduction : We will have a class discussion to review past knowledge on the topic of Photosynthesis.	We will begin class by having a quick discussion over the role of photosynthesis. I will write the following questions on the board: What does photosynthesis do? What main part of the flower or tree is responsible for photosynthesis? Does photosynthesis do more than just give the plant life and provide oxygen? I will give the students a few moments to think about these questions. Then I will ask if anyone thinks they have the answer to at least one of the questions. I will try to have the students give as much detail as they can in their answers. This will not only help them remember what they already know about this topic, but it may also help other students remember as well.
30 Minutes	Instruction: Students will read through the Global Change app on their iPads and fill out the worksheet.	I will ask students to take out their iPads and open up the Global Change app. If it has not already been downloaded I will use my iPad to show them what the app looks like. I will assist them if needed with getting to the app store and the downloading process. I will tell students that they are going to read through both "What are Stomata?" and "Carbon and Water Cycles." I will warn them that sometimes the "Climate Change Connections" tab gets hung up and does not work so they should save that until they are finished with everything else before they try to take a look at that. I will then hand out a worksheet that has questions on it that the app will answer, as well as places for them to be free with writing whatever notes they would like. I will ask them that they begin by watching the video. I will show

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
		them where the video is. Then I will have them go through the app. I will let them know that they can ask me if they need any help, or if the WIFI does not seem to be working well enough for the app to load.
5 minutes	<u>Closure:</u> I will ask students to revisit the questions that we discussed at the beginning of class.	Once all of the students have finished with their app exploration, I will ask them to take another look at the board with the questions on it that we had previously talked about. We will do a quick discussion about what they learned and if their answers changed from the beginning of class. I will ask them to put their iPads back in their designated area and turn in their handouts.

Accommodations/Modifications

How might I modify instruction for:	I could provide scaffolding while the students are using their apps. I could also give them partially filled out handouts.
Remediation?	
Intervention?	
IEP/504?	
LEP/ESL?	

Differentiation:		
How might you provide a variety of		
instructional methods/tasks/instructional		
strategies to ensure all student needs are		
met?		

Assessments: Formative and/or Summative

Describe the tools/procedures that will be	X Formative $/\Box$ Summative	The handout and discussion are formative assessment.
used in this lesson to monitor students'	\Box Formative / \Box Summative	
learning of the lesson objective/s (include type of assessment & what is assessed).	□ Formative /□ Summative	

Research/Theory

Identify theories or research that supports	
the approach you used.	

Lesson Reflection/Evaluation

What went well?	TO BE FILLED IN AFTER TEACHING
What changes should be made?	
How will I use assessment data for next	
steps?	

Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*adapted from: http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us; http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx; http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx;https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf; https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf; https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf; https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx; https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx; https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx



Global Change

1. What is the Stoma? Use the glossary if you need to.



- 2. What is the difference in water intake for the plant when the Stoma is closed versus when it is open?
- 3. What are the environmental influences on the Stomatal function? Be sure to list them all and explain each.

- 4. Choose three of the orange circles under the water cycle page and write a few facts that you learned about that aspect of the water cycle. If your circle has a video or web link attached be sure to incorporate that into your answer as well.
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- 5. What difference do you see between the preindustrial and present tabs for the carbon cycle?