

## QFT-Primary Source Lesson Plan Template\*

*\*Feel free to edit, adapt, or amend this template as is most helpful to you.*

LESSON OVERVIEW			
<b>Name:</b> Allison Meyer	<b>Grade:</b> 7th	<b>Subject:</b> Science	<b>Location:</b> Pau-Wa-Lu Middle School
<p><b>Context &amp; Purpose:</b> <i>Share your content/topic and/or teaching and learning objectives for this lesson and where (beginning, middle, end) in the unit or learning cycle this lesson falls.</i></p> <p>Standard: S-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.</p> <p>This lesson will occur in the middle of a unit that is on ecosystem interactions. Students will already have the knowledge of food webs and the energy pyramid. The objective of this lesson is for students to explain two ways which the ecosystem interacts in Biosphere 2. This lesson is to encourage students to maintain curiosity about the ecosystem.</p>			
<p><b>Lesson Procedure:</b> <i>Share the sequence of learning activities before, during, and after the QFT</i></p> <ol style="list-style-type: none"> <li>Students will view the QFocus picture first. Then, the caption will be revealed and students will continue to write their questions on paper as a group.</li> <li>As a group, students will identify their questions as open ended and closed ended questions.</li> <li>The group will then identify 3 priority questions that they would like answered. Students will participate in a gallery walk to view other groups' priority questions.</li> <li>Students will then choose 1 question as a group to look further into and have the opportunity to conduct research and choose a question to answer through scientific inquiry.</li> <li>Students will share their findings with the class and individually reflect.</li> </ol>			
<p><b>Next Steps (i.e. how student questions will be used after the QFT):</b> <i>Share your tentative plans for using student questions to drive subsequent learning</i></p> <ul style="list-style-type: none"> <li>To maintain engagement in the ecosystem unit</li> <li>To lead into a research project about Biosphere 2 and the ecosystem interactions</li> <li>To launch a scientific inquiry lab where students have choice in the question they explore</li> <li>To spark class discussion</li> </ul>			
<p><b>Question Focus:</b> <i>Must include at least one primary source from loc.gov. Whenever possible, please embed the image/primary source here AND include the link. Include additional text or caption only if it is part of your QFocus.</i></p>		<p><b>Reflect on your QFocus:</b> <i>You might consider why you chose this image, alternative QFocus options, earlier QFocus drafts or process you went through to develop it, etc.</i></p> <p>I chose the image because the structure includes a standalone ecosystem inside of it. I believe that it has the power to pique students' curiosity about what exactly is inside and how it works. The caption was needed so that I could guide students towards the lesson objective. If I did not provide the caption, students may have been confused and the questions I received would have been off topic.</p> <p>Other QFocus options could be a picture of an ecosystem where water, many plants, and many animals are visible.</p> <p>I had difficulty coming to this QFocus, but when students see that eight humans lived inside of this structure for two years, I</p>	



*Caption: “Biosphere 2 is a 3 acre glass enclosure that 8 humans lived inside of for 2 years, unable to leave to the outside world. There were 3,000 species of plants and animals inside of the biosphere. The scientists lost weight quickly, and one scientist lost 46 pounds in the first 6 months.”*

**LINK:**

[Link to the Primary Source](#)

believe they will be very curious and want to know more about it.

**Tailoring Instructions:** Share any adaptations or tailoring to the standard QFT process or categorization, prioritization, or reflection instructions that you are planning.

- **Categorization Instructions:** I would make this process quicker than other parts of the QFT where students are diving more into the questions.
- **Prioritization Instructions:** I would spend more time here because students will be using their question to launch their own scientific inquiry exploration.
- **Reflection Questions:** No changes.

While you are not required to implement your lesson plan to complete the “Teaching Students to Ask Their Own Primary Source Questions” course, we hope that you do! If you do have a chance to implement your lesson plan prior to posting it in the TPS Teachers Network Question Formulation Technique for Primary Source Learning group [album](#), please consider adding and sharing some of the information below in addition to your plan above:

### LESSON OUTCOMES

**Student Questions:**

**Student Reflections:**

<b>TEACHER REFLECTIONS</b>
<b>Reflect on your lesson design and how well it achieved your objectives.</b>
<b>Which student questions stood out to you? Why?</b>
<b>Overall, what did you learn from this experience? What questions do you now have?</b>