

# Lesson Plan - Framework Plan Template

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| <b>Teacher (s):</b><br><b>Rebecca Carbin</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Subject/Grade</b><br><b>Ecology, 8<sup>th</sup> Grade</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Date</b><br><b>April 12, 2019</b> |
| <b>Title of Lesson: Endangered Species</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      |
| <b>Desired Results</b><br>Students will be able to explain what contributes to species becoming endangered. They will be able to explain the process behind categorizing an endangered species and the legislation behind protection of endangered species.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      |
| <b>Essential Question</b><br><br>Why are all individuals important to an ecosystem?<br>Why is it important that we preserve biodiversity within the ecosystems?<br>How can the loss of one individual affect the entire ecosystem?<br>Why is it important to study relationships between organisms within ecosystems?<br>How do protections for endangered species effect the economy and livelihoods of citizens?                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Concepts or Big Ideas</b><br><br>How all organisms are connected and interrelated in an ecosystem<br>The effects of the loss of an individual on the health of an ecosystem.<br>Why it is important that ecologists study the relationships between organisms within ecosystems<br>Why it is important to protect endangered species<br>Why and how laws are enacted to protect endangered species<br>Economic impacts of protecting endangered species<br>How human activities have led to species becoming endangered<br>Cultural impacts of protecting endangered species |                                      |
| <b>Relevance/Rationale:</b> <i>Consider how your outcomes and plan will engage students cognitively and <b>build understanding</b>. Why are the lesson outcomes important in the real world? How does the lesson relate to the larger unit? How is this lesson relevant to students in this class (interests, cultural heritages, needs)? Many times these are affective goals.</i><br><br>This lesson is part of a larger unit entitled "Biodiversity and Humans Unit". From this lesson students will be able to transfer their knowledge to understand the "big ideas" of the unit. Students will understand how human impacts affect ecosystems and why it is important to protect endangered species. They will understand how each organism is important to the health of an ecosystem and how the loss of one species can have negative impacts on the |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      |

ecosystem. As part of the lesson, students will also understand how to conduct an internet inquiry to research a particular topic. Students will be able to explain how and why there is legislation to protect endangered species and how the government enacts laws to protect them.

**Outcomes/Objectives:** *What will **students know and be able to do** as a result of this lesson? Outcomes should be written in the form of student learning and suggest viable methods of assessment.*

(1c: Setting Instructional Outcomes)

**Students will be able to (SWBAT)...**

- 1) State and explain why it is important to protect endangered species
- 2) Analyze the important role(s) that each organism plays in an ecosystem
- 3) Explain how legislation is enacted to protect endangered species
- 4) Conduct internet inquiries to find three viable sources to be used to conduct their research

**Content Standard(s) and/or Common Core Learning Standard(s) and/or PA standards:**  
*State which CSS or PA - ([www.pdesas.org](http://www.pdesas.org)) or NGSS(1c: Setting Instructional Outcomes)  
PA standards ([www.pdesas.org](http://www.pdesas.org))*

**BIO.B.4.2** Describe interactions and relationships in an ecosystem.

**Materials** (include technologies when appropriate) (1d Knowledge of resources)

Google Slides: ATB question  
Short Video: for the “Hook”  
*Endangered Species: Worth Saving From Extinction??*  
<https://www.youtube.com/watch?v=h5eTqjzOZDY>  
Question Sheet  
<https://www.worldwildlife.org/teaching-resources>  
[https://www.worldwildlife.org/species/directory?sort=extinction\\_status&direction=desc](https://www.worldwildlife.org/species/directory?sort=extinction_status&direction=desc)  
<https://www.nationalgeographic.com/animals/reference/endangered-species/>  
Press Conference Checklist

**Resources** (Any other websites, or digital collaborations to used to get your ideas): (1d

<https://www.nationalgeographic.com/animals/reference/endangered-species/>  
*Content Area Reading* by Maureen McLaughlin

|                         |  |
|-------------------------|--|
| Knowledge of resources) |  |
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| <b>Evidence (1f: Designing Student Assessments)</b>                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                     |
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| Think about the data will you collect to assess the extent to which the desired outcomes were achieved. Explicitly state how the collected data are linked to the big ideas and objectives identified above (e.g., "if students do x, then I will know that y.") when you answer the following questions. |                                                                                                                                                                                                                                                                                                                                     |
| Describe how will you monitor progress during the lesson.                                                                                                                                                                                                                                                 | I will circulate around the room from group to group in order to gauge student understanding and address misconceptions as they arise. I will check for understanding by asking questions that evoke cognitive thinking about their research.                                                                                       |
| During and after the lesson, how will you determine if the students have gained understanding about the big ideas/concepts?                                                                                                                                                                               | I will observe the students as I walk around the room while they are working in groups to conduct their research. I will engage in conversations with students and ask questions to engage cognitive thinking as they work to monitor their progress and understanding. The closing activity will allow me to assess understanding. |
| How will you know if they are able to perform the skills taught in your lesson?                                                                                                                                                                                                                           | The final project will be graded based on the Press Conference Checklist.                                                                                                                                                                                                                                                           |
| What are some of the indicators that let you know that these outcomes and the lesson activities represent the appropriate amount of cognitive challenge for all students?                                                                                                                                 | This can be determined by how much assistance the students need to complete the assignment and how quickly they complete it. I will also be watching to see if students are engaged or if they make mistakes that can help them to grow and learn during the assignment.                                                            |

| <b>Learning Plan</b><br>(1a: Demonstrating Knowledge of Content and Pedagogy; 1e: Designing Coherent Instruction) |
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| <b>What is the type of lesson?</b> Introductory<br><b>TIME NEEDED:</b> 180 minutes (three class periods)          |

Think about how you are selecting your tasks and developing ideas. Consider what theory is driving your instructional decisions. Be very specific about the details of the lesson plan, such that someone, in your absence, could use the plan to teach it the way you intended. For example, if you want to discuss something, how will you facilitate the discussion? What will you say? Make sure you ask students to explain their thinking and engage with the content on a higher level.

**“At the Bell”** - Something that will engage students to complete at soon as they enter your classroom.

I will have a Google Slide up on the board with the following question:  
Would you give up eating hamburgers to save the white cheeked monkey from becoming extinct?? Why or why not??

**Anticipatory Set** - “HOOK”  
This should be motivating. Use actions and statements to gain students’ attention and to create an organizing framework for the ideas, principles, or information that is to follow. Consider using short video clips, brief passages from a book, songs, games, intriguing discussion questions, and props (e.g., concrete visuals such as a hat or other real world item(s)).

I will show a short 6 minute video entitled *Endangered Species: Worth Saving From Extinction??*  
<https://www.youtube.com/watch?v=h5eTqjzQZDY>

**Teaching the Content**

Beginning:

ATB: I will have a Google Slide up with the following question:

Would you give up eating hamburgers to save the white cheeked monkey from becoming extinct??

Students will think about this prior to watching the video, they may have little prior knowledge or the white cheeked monkey. Then we will discuss as a class after watching the video to see what their thoughts are afterwards to see if their answers changed.

Time allotted: 4 minutes

Hook: I will show a short video entitled *Endangered Species: Worth Saving From Extinction??* This video gives an introduction about endangered species and the human activities that have caused some species to become extinct. It explains how species become extinct naturally but they are currently becoming extinct at an alarming rate due to human activities. It also explains how all organisms are important to an ecosystem and the extinction of one can have an effect on a whole ecosystem.

Time allotted: 6 minutes

Discussion: We will discuss the ATB question to see if students' answers changed after watching the movie or stayed the same.

Time allotted: 5 minutes

Middle:

I will explain the following Activity by reading the paragraph and then place the students in groups of 4.

Inquiry-based Activity: Internet Inquiry and Research: Students will be placed in teams of 4 and will choose an endangered species from the following websites:

<https://www.nationalgeographic.com/animals/reference/endangered-species/>

[https://www.worldwildlife.org/species/directory?sort=extinction\\_status&direction=desc](https://www.worldwildlife.org/species/directory?sort=extinction_status&direction=desc) that you want to know more about. I will have the link in a Google Doc. You will conduct an internet inquiry to find a minimum of three sources on the internet about a particular endangered species. You will research and find the answers to the following questions provided in a Google Doc.

What caused it to be endangered?

What is being done to protect it?

What can further be done to protect it?

What avenues need to be taken to enact legislation to protect it?

What push back do they expect to get from the general population, who does the protections affect directly (farmers, poachers, hunters, land developers, fur trade, fisherman).

You will also come up with two questions and answers that they want to know the answer to.

Time allotted: 80 minutes

End:

I will explain the final activity by reading the paragraph and hand out the Press Conference Checklist and have them put their name on the Checklist:

Press Conference: Students will then present a press conference to make “citizens” (aka classmates) aware of the endangered species issues. Each member of the team will present the answers to at least one to two of the research questions. Members of the audience (other groups) will represent the community (farmers, poachers, hunters, land developers, fur traders, fisherman) and will present push back to the legislation. They ask questions and present arguments as to why the species needs to be protected and how these protections are going to hurt their livelihood. The presenters will then have to argue their rationale for saving the species. Students will be assessed using the Press Conference Checklist.

Time allotted: 80 minutes

Practice out of class: Students will continue their research overnight for homework if they do not finish it during class. Groups can collaborate using Google Docs to work at home together if they need more time.

### **Press Conference Checklist**

The student:

\_\_\_\_\_ Chose a topic from a list

\_\_\_\_\_ Conducted viable research for three sources

\_\_\_\_\_ Used at least three quality sources

\_\_\_\_\_ Answered all research questions in paragraph form

\_\_\_\_\_ Developed two quality research question and answered in paragraph form

\_\_\_\_\_ Demonstrated knowledge of the topic

\_\_\_\_\_ Presented Press Conference effectively

Student's comments:

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Teacher's comments:

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Name: \_\_\_\_\_ Date: \_\_\_\_\_

| Reflections<br>(4a: Reflecting on Teaching)                                                               |
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| List at least three questions you will ask yourself after the lesson is taught.                           |
| Did the lesson go smoothly with the time allotted?<br>1 2 3 4 5 6 7 8 9 10                                |
| Were the students actively engaged and working collaboratively on the activities?<br>1 2 3 4 5 6 7 8 9 10 |
| What can I do differently the next time I use this lesson?                                                |