 

 Lesson plan

# Title

 Climate Change Effects on Animals

# Author

Özlem KAYA

# Abstract

This lesson plan uses geoparks as educational tool to show the climate change effects on animals

# Keywords

UNESCO Geoparks, Animals, Fauna, Climate change

# Licenses

* **Attribution CC BY.**This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered. Recommended for maximum dissemination and use of licensed materials.

# Summary table

|  |  |
| --- | --- |
| *Subject* | Geography((Landforms,extinct animals), Biology (Fauna,flora,fossils) |
| *Topic(s) within the subject* | 1-Climate Change2-Geoparks |
| *Key real-life topic* | Threats to wildlife throughout Geoparks  |
| *Age of students* | *14-15 years old* |
| *Preparation time* | *60 minutes* |
| *Teaching time* | *1 class hour (40 minute)* |
|  | *List here all the links of online tools, applications and support documents that you will use during the lesson, such as: Padlet, Kahoot, Canva, etc.*<https://www.youtube.com/watch?v=9h7P8gWpolQ><https://onekindplanet.org/top-10/top-10-worlds-extinct-animals/><https://www.popularmechanics.com/science/animals/g201/recently-extinct-animals-list/><https://en.wikipedia.org/wiki/Extinction> |
| *Offline teaching material* | ● Computer and Projector● Regular paper and pens ,scissors,crayons● Blackboard ●Printed images(minerals,flora,fauna,) |

# Integration into the curriculum

The teacher combines two or three subjects ( in social sciences, geography, biology) to teach students climate changes effects on animals (Geoparks)

# Aim of the lesson

At the end of the lesson students will learn they will understand the climate change effects on animals

# Outcome of the lesson

The students will work in groups to prepare a list about extinct animals at their local area as groups

# Trends

Lifelong Learning: The awareness of climate change and animals,geoparks sustainability will last lifelong

# 21st century skills

This lesson plan comprises several activities that help to achieve the skills defined as 21st century skills:

●● **Collaboration:** they will work in groups to prepare lists.

● **Critical thinking** skills: they will explain why Geoparks have to be sustained and understand the role of climate to live in peace with our nature

● The lesson will also enhance their **communication** skills because they will

Search the animals at their locals

# Activities

|  |  |  |
| --- | --- | --- |
| Name of activity | Procedure | Time |
| Introduction | The students will learn about climate change and harms on animals.The activities in the lesson will promote awareness of climate change effects. Students will learn about fauna, flora of each geoparks and will make comparisons on extinct animals.They will think about sustainability of geoparks to protect animals |  |
| Activity 1: | A survey of readiness at the beginning of the lesson will be conducted to asses their knowledge about animals and fauna.Here is the questions in the following link:[**https://drive.google.com/file/d/1jjvC638poKQqksDuGEAxPZ4p6XV56RcO/view?usp=sharing**](https://drive.google.com/file/d/1jjvC638poKQqksDuGEAxPZ4p6XV56RcO/view?usp=sharing)Brainstorming: A question about climate change: What are the effects of climate change on animals | 10min |
| Activity 2: | Students review the printed papers (Prepared by teacher) about \*flora\*animals\*extinct animals. After the review they think about the animals and they categorize them.Power Point presentations about fauna in UNESCO KULA GEOPARK to see the closest real life places as protected areas to observe climate changes Then students will find the pictures of animals, fauna by making comparisons on extinct animals, decreasement water levels of lakes and rivers. | 10min |
| Activity 3 | Students watch to the 5 min video of “Climate Change Effects on Animals”After the video students discuss on the needs of a legal regulation for protecting animals and endengared animals in 4 groups.  | 10 min |
| Assessment | **PEER ASSESSMENT and TEAM WORK:** Preparing Extict Animals ListStudents will work in groups and each group will have necessary materials (i.e Pen, Paper, crayons )and they will create their list. Then lists will be evaluated by their peers. **TEACHER ASSESMENT**: A quiz prepared in quizlet:At the end of the team work the quiz will be conducted to students.(see also below )<https://quizlet.com/_8t2hea?x=1qqt&i=35vep0>The questions are :1-Which one is not an extinct animal?a)Dodo b) Great Auk c)Tasmanian Tiger d) Pardus2-Please find the on which one is not in fauna of KULA Geopark? a)Alburnus battalgilae b) Patridge c)Manisa Hünkarı d)Çepni Koyunu3- Which one is an endengared animal in Kula geopark? 1. Bittern Bird b)Sparrows c) Finches d) Herons

4-Please write a short paragraph about how we can decrease the effects of climate changes on animals?**HOMEWORK:** Identified at student feedback section(See also below) | 10min |
| Feedback | Teacher will ask the students to write a short abstract to explain their list as well as.Homework contains the following questions in the section “Student feedback” |  |

# Assessment

A survey of readiness at the beginning of the lesson will be conducted to asses their knowledge about geoparks,geology.Here is the questions in the following link:

**https://docs.google.com/document/d/1j7\_2h0IOyvtmZuHDKBaGEU0Wb2f-HA\_z/edit?usp=sharing&ouid=116260694356476019791&rtpof=true&sd=true**

**%50 TEACHER ASSESSMENT** by a quiz (Prepared on quizlet)will be conducted at the end of the lesson. The comparison of the learning will be base for the assessment.

**%30 PEER ASSESSMENT** by the LIST: the poster will be assessed via peer assessment

**%20 HOMEWORK** (explained in the section “Students feedback”)

# Student feedback

After the lesson, the teacher will ask the students to write a short abstract to explain their poster as well as what were the strengths and weaknesses of their own poster.

As homework, teacher asks the students to answer the following questions via a Google Form:

1. A. The activities of today's lesson were interesting and engaging 1 2 3 4 5
2. B. I think working with a team was useful 1 2 3 4 5
3. C. Communicating and collaborating in the team was easy 1 2 3 4 5
4. D. The instructions I received to carry out my task were easily understandable and clear
5. E. I now have a better understanding of the climate change effects 1 2 3 4 5
6. F. I am planning a trip to UNESCO KULA GEOPARK with my family 1 2 3 4 5
7. 1 2 3 4 5

1 - I strongly disagree;

2 - I disagree;

3 - I neither agree nor disagree;

4 - I agree;

5 - I strongly agree.

# About

This Lesson plan is prepared for VR@Geoparks project.