



# LESSON PLAN

## BIODIVERSITY OF LIFE ON EARTH GRADES K-2

### SUMMARY

Students will work in groups to create posters depicting the diversity of life in a particular habitat. Duration: 45 minutes.



**2-LS4-1.** Make observations of plants and animals to compare the diversity of life in different habitats.

#### Science & Engineering Practices

##### Developing and Using Models

Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization or storyboard) that represent concrete events or design solutions.

Develop a simple model based on evidence to represent a proposed object or tool. (2-LS2-2)

#### Connections to Classroom Activity

- Students will use resources such as library books and websites to help them find out about the plant and animal diversity of a specific habitat.

#### Disciplinary Core Ideas

##### LS4.D: Biodiversity and Humans

There are many different kinds of living things in any area and they exist in different places on land and in water. (2-LS4-1)

#### Connections to Classroom Activity

- Students will create a poster showing the diversity of a specific habitat.

## Crosscutting Concepts

### Structure and Function

The shape and stability of structures of natural and designed objects are related to their function(s).  
(2-LS2-2)

## Connections to Classroom Activity

- Animals have adaptations that help them survive in their habitats.



## ENGAGE

Play a quick guessing game with students by showing the attached images of different animals and have them guess which habitat they might live in. Image 1 are giraffes who live on the Savannah, image 2 is a howler monkey who lives in the rainforest and image 3 is an Arctic fox who lives in the Arctic. Once they raise their hand and guess a particular habitat ask them what clues they used to help them. Segue to the exploration by telling students that they will be working in groups to make posters that show the variety of different animals that live in certain habitats.

## MATERIALS

- Library books or online access
- Paper bag
- Small pieces of paper with habitat names
- Poster paper
- Colored pencils or markers

### DIY Activity

- Clipboard
- 2 Pieces of paper
- Pencil
- Pack of colored pencils (optional)



## EXPLORE

Group students into teams of three or four. Put pieces of paper in a paper bag with names of different habitats (enough for each group to have one habitat). Some good ones that students might have some familiarity with are:

- Desert
- Forest
- Pond
- Savannah
- Arctic
- Ocean
- Backyard
- Rainforest

Once groups have their habitat, they will need time to gather information about the plants and animals found in their assigned habitat. You can use books from the library or websites, depending on your resources. For example, a Google image search for “desert animals” or “desert plants” shows many great pictures. Allow students to research for 10-15 minutes and then offer another 20-30 minutes for them to finish posters. Remind them to include both plants and animals in their posters.





## EXPLAIN

Once students complete the posters, have each group share their posters. Introduce the word *biodiversity* which is the measurement of the number of different kinds of plants and animals that live in a certain area. Ask each group if they think their habitat is diverse or not. Once everyone has shared, have students think about which habitat has the most and the least biodiversity. They should conclude that the desert and arctic are not as diverse as other habitats because their environments are very harsh (very cold or very hot) and animals and plants need special adaptations to survive there.



## ELABORATE



### WATCH THE GENERATION GENIUS BIODIVERSITY OF LIFE ON EARTH VIDEO AS A GROUP

Then facilitate using the Discussion Questions.



## EVALUATE

Students can also play the online Kahoot! quiz game located below the video which provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz or the exit ticket questions. All these resources are located below the video in the Assessment section.



## EXTENSION

For older or more advanced students extend the discussion of biodiversity to the adaptations the animals in each habitat has. In the desert for example, a fennec fox has big ears that act as air conditioners and furry feet to protect them from the hot sand. Have students identify other adaptations of living things in their assigned habitats that help them survive.



