



LESSON PLAN

HABITATS GRADES K-2

SUMMARY

Students will design a zoo enclosure suited to meet the needs of a specific animal. Duration: 45 minutes.



K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

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, storyboard) that represent concrete events or design solutions.

Use a model to represent relationships in the natural world. (K-ESS3-1)

Connections to Classroom Activity

- Students will create a poster to reflect a specific habitat that best meets the needs of a specific animal.

Disciplinary Core Ideas

ESS3.A: Natural Resources

Living things need water, air and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

Connections to Classroom Activity

- Students will learn about the needs of a specific animal based on information from books and other available resources. They will then use this information to create a suitable habitat for their animal.

Crosscutting Concepts

Systems and System Models

Systems in the natural and designed world have parts that work together. (K-ESS3-1)

Connections to Classroom Activity

- Students will design a habitat that includes all the necessary components that an animal needs to survive.



ENGAGE

Show students pictures of the zoo enclosures attached. Ask the students, “Have any of you ever been to the zoo?” After students share out loud, ask them what they notice about the picture you are sharing. After students discuss what they notice, mention that when zoos design enclosures for their animal guests, they keep in mind the natural habitat of the animal. A habitat is the place an animal naturally lives and grows. Habitats provide animals with the food, water and shelter they need to survive. Segue to the lesson by telling students that today they are going to design a new zoo for the town. In small groups, they will design an enclosure for a specific animal.

MATERIALS

- Animal books
- Poster paper
- Coloring materials

DIY Activity

- Shoebox
- Glue stick
- Scissors
- Plastic animal
- Supplies and decorations suitable for your animal's habitat



EXPLORE

For this activity, you can have your students work in pairs or small groups. You can allow groups to choose their animal or you can assign one. This may be dependent on what resources you have available for students to use. Hopefully you have access to a library at your school and can check out books on different animals. If not, it's easy to find short videos on specific animals online. Even if you have non-readers, your students should be able to learn a lot about animal habitats just by looking at pictures.

Encourage your students to gather information about their animal before beginning their posters. Questions they should consider:

- What does your animal eat?
- Where does it get water?
- Where does your animal make its home?

With these things in mind, the students can begin to design a zoo enclosure that meets the needs of their animal. Allow students 20-30 minutes to create their posters.



EXPLAIN

Invite student groups to share their posters. As they do be sure to ask, “How is this enclosure meeting the needs of your animal?” To learn more about habitats...



WATCH THE GENERATION GENIUS HABITATS VIDEO AS A GROUP

Then facilitate using the Discussion Questions.



ELABORATE

After watching the video, ask students to consider what adaptations (features) their chosen animals have that help them to survive in their habitat. Allow each group a few minutes to discuss, and then bring the whole class back together to discuss adaptations of each group’s animal.

- **Desert:** Some animals have light fur coloration to help them keep cool. Others have extra protection such as fur on their feet to prevent them from being burned.
- **Arctic:** Animals in the Arctic have thick fur and extra fat to keep them warm.
- **Rainforest:** Many birds living in the rainforest have feathers that repel water because it rains there almost every day.
- **Water Habitats:** Many animals living in water habitats have webbed feet to help them swim.



EVALUATE

Students can 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 discuss what a zoologist is and what a zoologist does. Zoologists are specialized scientists that study wildlife. They study how animals interact with their environments as well as animal characteristics and behaviors. Many zoologists work in zoos, but other zoologists work in the natural habitats of the animals they are studying.



EXAMPLE ZOO HABITATS

