

Build an Animal

Grade Level: K, 1, 2, 3, 4

Duration: 30-60 minutes

Classification: Classroom, STEM Spark

Subject(s): Biology, Environmental Science, Ecology

Categories (STEM): Science

Keywords: Design, Habitat, Adaptation, Evolution

Introduction

- Summary: Choose a specific habitat and then design a new animal that will be well-suited for the chosen environment.
- Description: Students will be challenged to design a new animal that will have the characteristics and behavior necessary to survive and thrive in a specific environment

Online Resource:

https://www.canr.msu.edu/ipm/uploads/files/Community_and_Schools_PDFs/lesson2.pdf

Materials

Materials	Quantity	Reusable?
Habitat Sheet	1 sheet per 2 student	Yes
Pipecleaners*	1 package per class	No
Craft Sticks*	1 package per class	No
Colored Paper (Try to include earth tones to match habitats)	1 sheet per class	No
Feathers*	1 package per class	No
Clear Gift Wrap Tape	2 rolls per class	No
Colored Pencils	2 packages per class	Yes
Copy Paper	1 sheet per student	No

**Materials are optional, can be substituted for other craft supplies*

Directions

- Talk about how each animal has certain adaptations in terms of anatomy and behavior that are suited to the environment.
- Put students into groups of three or four and give them a random habitat.
- Have each group discuss adaptations animals need to survive in the habitat they received.
- Individually, decide what the animal would look like and sketch a picture of it.
- Label different characteristics of the animal and explain why they chose that characteristic.

- (For older students) Describe the animal's behavior, including the way it obtains food, the kind of dwelling it lives in, its defensive behavior, and how it moves and gets oxygen.
- Create a model of your animal on the colored paper with materials provided.

Activity Extension

- Have groups look at each other's animals and have them guess what environment they had.
- Say a description of an animal and have the students guess which one it is.
- Have them write a story about an adventure or typical day for their animal.

Discussion Questions

- Describe your animal's habitat.
- Describe your animal's characteristics that makes it well suited for their habitat.
- Does the habitat impact the color of your animal?
- (For older students) What are the predators and prey in your habitat?
- (For older students) What are the predators and prey for your animal?

What is happening?

- Based on the environment, animals will need different adaptations to survive

Applications

- Majors
 - Environmental Engineering
 - Environmental Science
 - Biology
 - Animal Science
 - Ecology
- Jobs
 - Ecologist
 - Biologist
 - Zoologist
 - Conservationist & Preservationist
- Hobbies
 - Owning a pet, you have to have the right tank or equipment for it
- Real world applications
 - Zoos
 - Evolution
 - Gene flow (gene flow changes in populations based on favorable characteristics)



This activity was last updated in fall 2020 by Student Role Models.