

Needs of Plants and Animals in Different Environments

SCIENCE



Overview

Students explore how living things adapt to their environments by creating videos about specific habitats and the organisms that live there.

Steps for Teachers

1. Introduce different environments (desert, rainforest, ocean, arctic, etc.)
2. Students choose or are assigned an environment to study
3. Students research 2-3 plants and animals that live there
4. Students identify how each organism meets its needs (food, water, shelter)
5. Students create characters representing their organisms
6. Students record a 'habitat tour' explaining adaptations
7. Create a class 'World of Habitats' compilation

Example

A student presents the desert habitat. A cactus character says: 'I store water in my thick stem and have spines instead of leaves so I don't lose moisture.' A roadrunner appears: 'I get most of my water from the lizards I eat—yum! My long legs keep me off the hot sand.' A rattlesnake joins: 'I hunt at night when it's cool and hide under rocks during the day.'

Grading Rubric

Criteria	Excellent	Proficient	Developing
Adaptation Knowledge	Accurately explains multiple adaptations for each organism	Explains main adaptations correctly	Adaptations are incorrect or missing
Environment Understanding	Shows clear understanding of the environment's challenges	Shows basic understanding of the environment	Doesn't convey what makes this environment unique
Organism Selection	Diverse, interesting organisms that represent the habitat well	Appropriate organisms for the habitat	Organisms don't fit the habitat or lack diversity
Connection to Needs	Clearly connects adaptations to basic needs	Some connection to basic needs shown	Doesn't explain how adaptations help survival