

Build an Animal

Directions: Students work in cooperative groups or individually to build their animal. Each student or group will need information from each of the following 'Feature Card' categories: a. teeth or beak; b. feet or no feet; c. coloration; and d. habitat. The following facts can be put onto index cards so that the students can choose one from each category.

Feature Cards

A. Teeth or Beak

Beak: pouch-like (can hold fish)	Teeth: sharp canines (good for tearing meat)	Beak: curved (can tear meat)	Teeth: flat molars (good for grinding plants)	Beak: long, thin (can probe shallow water)
Teeth: sharp canines and flat molars	Beak: short and pointed	Beak: slender and long (can probe flowers)		

B. Feet or No Feet

Long toes on feet	Webbed feet	Webbed feet with claws	Four, large, padded feet	Talons
No feet, no legs	Small feet	Strong, powerful back feet and legs	Flippers	

C. Coloration

Bright colors	Dark browns, grays and blacks	Bright green	Change of color with seasons	Dark green, yellow, orange
Stripes	Spots	Stripes and spots	One solid color	

D. Habitat

Desert	Grasslands	Rainforest	Polar regions	Oceans
Fresh Water (rivers, lakes, etc.)	Woodlands	Savannahs	Outback	Jungle

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Main Points/Rationale

During this lesson, students will create an imaginary animal using their knowledge of animal features, characteristics and adaptations along with the provided information.

Objectives

1. Students will be able to design an animal based upon four characteristics provided by the teacher.
2. Students will be able to build and construct an animal using materials provided in order to fulfill the requirements set forth in the first objective.
3. Students will be able to explain and display their animals to their class.

Standards

PA Standards

3.2 Inquiry and Design; 3.3 Biological Sciences; 4.6 Ecosystems; 4.7 Adaptations, Endangered Species

NJCCCS

5.5 Life Science

Prior Knowledge

- definition of adaptation

Materials & Equipment

- Teacher Worksheet, Student Worksheet (enough for each student or group)
- variety of the following materials: clay, pencils, pens, construction paper, paper towel rolls, wooden beads, string, yarn, magnets, glue, scissors, tape, paper clips, feathers, fake fur, bubble wrap, cardboard, etc.

Warm-Up - 3-5 minutes

- Prior to beginning the lesson, decide if you want the students to work individually or in cooperative groups when they are creating their animal.
- Review with the students the definition of adaptation and other key words from the vocabulary list.
- Set the theme of the lesson by going over the Teacher Worksheet (see directions) and reviewing with the entire class the Student Worksheet.

Transition

- After the students are divided into groups or seated individually, distribute a feature card from each category to each group or each student.

Activity One - Designing the Animals - 10-15 minutes

- Allow the students time to read through their worksheet and make preliminary sketches of their animals. They should answer the seven questions to the best of their ability in their notebook or on a separate piece of paper to aid them in the creation process.
- Remind them they must include the characteristics from their feature cards.
- If the students are working in cooperative groups, they must reach a consensus in order to create their animal.
- Monitor groups for progress.

Transition

- After the groups have completed the design process, distribute building materials.

Activity Two - Building the Animals - 15-20 minutes

- The students should take time to actually construct their animals out of whatever materials are available (clay, feathers, construction paper, etc.).
- Remind them to pay attention to their feature cards. When building their animals, they must include those characteristics.

Transition

- Once the students are finished building their animals, have them prepare to present their animals and its name to the class.

Activity Three - Presenting the Animals - 5-10 minutes

- The students can take turns presenting their animals to the class. They can use the seven questions on the Student Worksheet to help them decide what to say to the class.

Transition

- To conclude, place the animals in a prominent location in the classroom or for school display.

Closing - 2-3 minutes

- Lead a closing discussion using the following questions:
 - How would an animal with short fur survive in the Polar Regions? What other adaptations might it need to help it stay warm or hunt?
 - What habitats suit brightly colored animals?
 - How does an animal's teeth, or lack of, determine what it eats and where it lives?

Additional Activities

Philadelphia Zoo

Habitats and Adaptations

Classroom Activity Teacher Worksheet

G 2-6

- Have the students prepare reports on their imaginary animals as if they were researching real animals.
- Have the students create stories about their imaginary animals.

Assessment of Student Performance

- Students will work in cooperative groups or individually to create imaginary animals.

References

- Philadelphia Zoo, Animal Antics, Post-Visit Material Activity Sheet # 6
- New York Zoological Society, Student Worksheet, Build-A-Critter
- South Dakota Prairie Ecosystems, Adaptation Artistry, Activity Two
- Animal Characteristics, <http://www.curriculum.edu.au/download/lesspln/animal.htm>