**How Are Birds Adapted To Their Habitat?**

**I. Introduction**

An adaptation is any characteristic of an organism that makes it better able to survive in its environment. Adaptations are inherited. They are not merely responses the organism makes to an immediate need. For example, a hawk's strong feet and sharp claws are adaptations that enable a hawk to hunt and capture mice.

Adaptations may be structural, internal, or behavioral features that help an organism survive in its environment. When examining an organism's adaptations to its environment, it is important to consider the organism's habitat. The habitat is the physical location where an organism lives. It is where an organism most likely obtains food, rests, and moves about. Over time, organisms that live in a certain habitat adapt structural, internal, or behavioral features that facilitate their living habitat.

In this Virtual Lab you will examine different habitats. You will design a bird that is well-adapted to each habitat.

**II. Procedure**

1. Start the activity by going to the following website :

<http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS16/LS16.html> .

NOTE : Birds are not to scale in comparison to each other.

2. Click the Video button. Watch the video to learn about how birds are adapted to their

environments.

3. Chose a habitat by clicking the arrow at the bottom of the Habitat slide. Select

wetland, temperate deciduous forest, or open-ocean habitat.

4. Click the Bird Habitat Guide button to access information about each habitat and the

activities of birds in each habitat.

5. Design a bird that is well-adapted to the habitat. Click the arrow under the Wings,

Beaks, or Legs/Feet slide and select the type of wings, beak, or legs/feet that would

enable a bird to thrive in the selected habitat. Repeat this step until you have finished

designing a bird by making a selection for each body part.

6. Click the Check button. If the bird that you designed is not well-adapted to the

habitat, examine the Bird Habitat Guide and try again. If the bird that you designed is

well-adapted to the habitat, observe how the bird behaves in the habitat. To repeat the

animation, click the bird.

7. Repeat the Virtual Lab and design another bird in another habitat.

**III. Data**

1. Imbed a “screen-shot” of the habitat you chose to study in the space below.

**IV. Analysis & Conclusions**

**1. Describe the habitat you chose in the Virtual Lab.**

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**2. Describe some adaptations a bird might need to survive in each habitat.**

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**3. Why do you think each bird part you selected is best suited to its habitat?**

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**4. Did you change any of your bird-part selections? If so, why?**

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**5. Compare two of the birds you built. Explain how they are alike and how they are**

**different in regard to their adaptations and their habitats.**

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