

# IT'S ALL ABOUT BIRDS

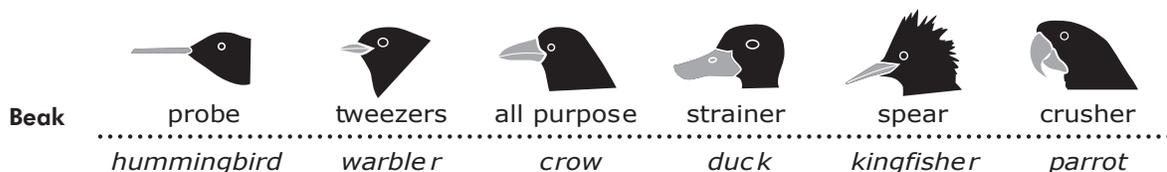
## Background Information for Activity Leaders

### Overview

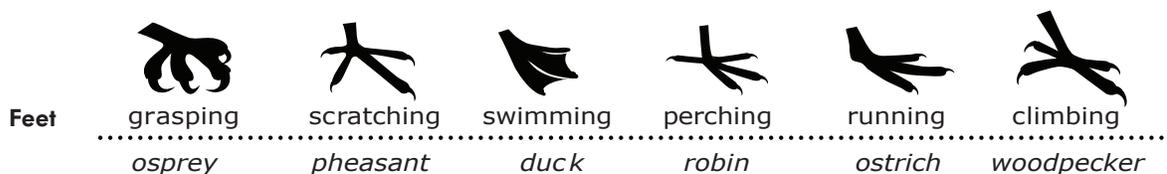
Children will use the various types of bird beaks, body types, feet, and their imaginations to create their own bird species.

### Key Concepts

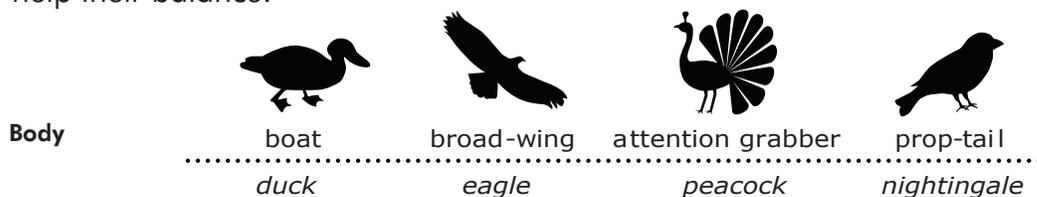
- There are over 10,000 species of birds in the world. Different species of birds have different types of beaks, wings, tails and feet, allowing them to live in different habitats.
- An **adaptation** is a trait that increases an animal's chance of survival. It does not develop overnight, but rather develops over many generations. Physical adaptations are special body parts of an organism that help it to survive in its natural habitat. An organism's skin color, shape and body covering are examples of physical adaptations.
- The structure of a **bird's beak** determines the type of food it is able to eat. Birds live in habitats where they can find the food their beak allows them to eat.



- The structure of **birds' feet** determines their function. Birds' feet have claws that grow continuously and are worn away through daily activity. Claws are usually called talons when referring to birds of prey such as owls, eagles and hawks. Ducks have webs between the front three toes, for paddling water. Woodpeckers cling to the sides of trees and thus need a very powerful grip; their feet are equipped with two toes up front and two in the back. Ground-living birds like pheasants and chickens have well-developed nails that act like rakes, perfect for scratching the ground for food.



- The structure of a **bird's body** determines what type of habitat it is adapted to live in. Different species have certain adaptations to better survive in their habitat, such as bodies that float, large wings that help them fly, colorful plumage that attracts attention, or tails that help their balance.



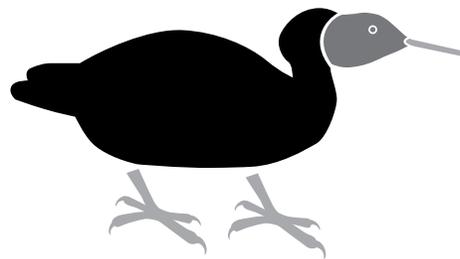
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### What to Expect

- A sample bird created by a child might look like the “Humming Wood Duck” and be described as follows:

*“It has the beak of a hummingbird, which helps it drink nectar from flowers. It has a body shaped like a boat so it is great at floating. It has feet that are great at climbing trees. Unfortunately, my ‘Humming Wood Duck’ may not survive because even though it is a great floater, it cannot use its feet to paddle through the water.”*



### Common Misconception

- Children may think: “An individual animal can choose to ‘adapt’ to its environment.”

An individual animal cannot “adapt” to its environment on purpose. Some adaptations help organisms survive better than others in the species. Imagine an adaptation that produces a hummingbird with a slightly longer beak. This bird can reach nectar farther down in the flowers. It eats more, becomes stronger, and produces more offspring. After many generations all the hummingbirds have the longer beak trait.