

## **Feather Dissection**

30+ feather samples

spray water bottle

30+ magnifiers

feather diagrams

toothpicks

bird pictures

spray bottles

classification chart

## Dissect A Feather

### Guiding Questions

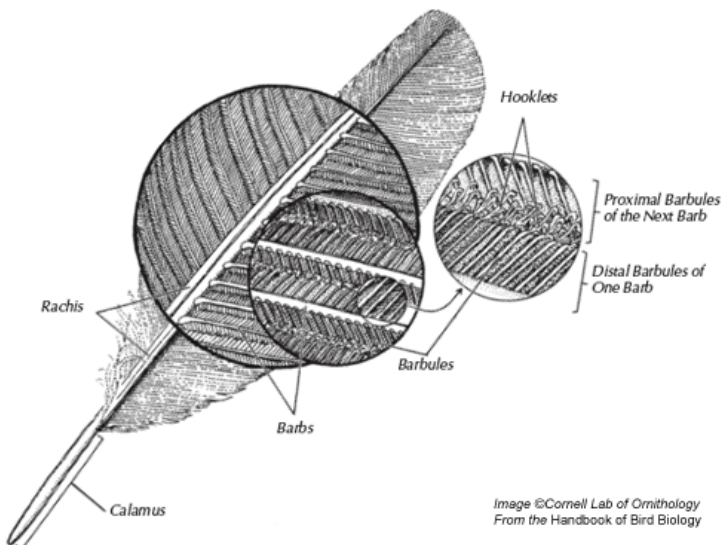
Ask students to provide an explanation as to how birds can fly. Have them draw diagrams to support their explanation. See if students can explain similarities between birds and other flying objects- like an airplane or a hang glider.

Have student teams research information on different types of birds and how they are adapted to particular behaviors- especially how they fly. Give students the chance to present the information to the class, sharing information on different birds, special adaptations, and how each bird is suited to fly, swim, or catch prey. As students learn more about adaptations of birds- they can apply this knowledge to other living things as well. Diversity of species is essential for every community to balance resources and successfully flourish. The unique form and function of each living thing is key to this balance.

The form and function of a birds feather is an amazing exploration. Enjoy!

### Content

The thing that makes all birds unique in the animal kingdom is that all birds grow **feathers**. Birds also have different kinds of feathers that serve different functions. Stiff **contour** feathers help to keep their wings strong in flight. Fluffy **down** feathers help to insulate their bodies. The structure of a feather is such that they can perform the needed function as well as keep the bird lightweight.



## Dissect A Feather

**Every bird has feathers and everything that has feathers is a bird.**

- 1) Pass out materials to each student.
- 2) Have students explore the structure of their feathers and draw details of the feather using magnifiers. What happens when a feather gets wet? How does it stay smooth?
- 3) Have students share what they observed and write a list of questions about feather structure on the front board.
- 4) Present to the class diagrams and information on the form and function of feathers.
- 5) Have students draw and label a feather diagram as you explain the terms and function.
- 6) Allow time for students to return to their feather exploration, adding more details and written explanations.
- 7) Have students explore one or two other kinds of feathers. Draw and add details and explanations.

### **Challenge**

Have students explore their bird knowledge further by researching unique birds and their adaptations to particular environments. Plan a bird walk around the school yard to see if you can create a bird guide for your school!