

Owl Pellets

30 dissection trays
35 tweezers
35 magnifiers
35 envelopes
19 bone charts
1 key to skulls
1 barn owl information sheet
1 food web sheet
1 Barn Owl Discovery Guide

Owl Pellets

Guiding Questions

Begin by asking what kinds of birds students know about. How are birds different from one another? How are owls different from other birds? Lead a discussion to bring out some details of owls and their unique adaptations.

Introduce the steps

1. Draw out the talons of an owl or facial disc and explain the adaptations that allow the owl to be an efficient hunter.
2. Have students chart a simple food chain that includes the owl and list some of the things it may capture as prey.
3. Tell students that they are going to find out more about what owls eat by dissecting an owl pellet.
4. Before passing out pellets, show students a sterilized owl pellet and explain how it is formed and treated for scientific study.
5. Demonstrate how to unwrap and study the outside of the pellet to look for clues, and review how the pellet is formed inside the owl's body. Explain how to dissect slowly and gently so evidence of the owl's diet stays intact. Show students how to match one bone to the owl pellet chart and how to compare other bones of similar shape.
6. Pass out materials, key, and pellet to each student and have students record as they find each bone. Point out that each pellet may have different types of bones and after the dissection the whole group will tally up a total for the kinds of bones found. As students begin the dissection on their own, encourage students to take their time and be careful as they open up the pellet. If students are reluctant to begin, they can watch a partner and help to key out what kinds of bones he/she finds. Give students plenty of time and help to key out what kinds of bones and materials they find.

Model the steps

7. Once students begin finding bones, have them identify the kind of animal they are from by using the key.
8. List all the kinds of bones found by the entire class and tally the numbers of each kind.
9. Have students make a detailed sketch of a favorite bone, labeling observations on color and texture, shape and measurements.

Share observations

- Have students share with other teams their results and drawings
- Have group tally results of dissection: the total number of pellets dissected and types of animals, bones and insect pieces.
- Brainstorm with group the importance of predator prey relationships in balancing energy flow in a community.

Scientific explanations

- Share diagrams of owl anatomy, form and function with students. Have students practice creating scientific drawings and detailing information on a drawing.
- Show students keys to owl pellets and pellet contents, and have the class practice with sample bones to figure out how to match bones to bodies to animal species.
- Share diagrams of food chains and food webs that include owls and birds of prey.

Journal reflection

Now that students have completed their dissection, have students continue to draw what bones they have found. Examine and respond to the following bullets for journaling:

- Ask students to draw and label two to three bones that belong to the same animal.
- Have students draw a food web that includes the owl, the prey, and other living things in a particular habitat.
- Have students list important adaptations of predators and prey in a particular habitat.
- Have students make a list of the many different kinds of birds found near their homes. Have students create a food web that shows at least three kinds of birds, what they eat, and who preys upon them. Have students complete the food web with plants and humans connecting to the energy flow