Owl Pellet Dissection Activity

Owls are nighttime hunters who will eat small animals, such as mice, moles, voles, and even other birds. After the owl's body has digested its food, it will spit up the undigestable parts, such as bones, fur, and feathers. This owl's undigested food is coughed up in the form of an owl pellet.

Inside your owl pellet, you will find the bones of one or more small animals. You may find ribs, leg bones, back bones, or even skulls.

You are going to dissect your pellet and pull out as many bones as possible. If you're lucky, you may have enough bones to put together a whole animal skeleton.



Work Slowly And Carefully

Safety First



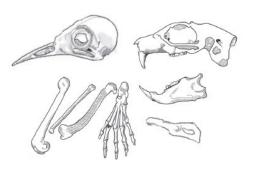
The bones in your owl pellet are very small. If you're not careful, you can lose or break them easily.

You will be given a pair of forceps and a probe. Use these tools to help you break apart your owl pellet and search for bones. Try to brush off as much of the hair, fur, and dirt as possible so you can see the shape of each bone.

Identifying the Bones

Look carefully at each bone. You may want to use a magnifying glass to see them more clearly. Try to match up the bones with the illustrations on the *Owl Pellet Bone Chart*. This will help to determine what type of animal skeleton you have found.

After you have recovered as many bones as possible, lay them out on a piece of paper. Try to build an entire animal skeleton. You may not have all of the necessary bones, but do the best you can.



The contents of each owl pellet will be different. Once in awhile an owl pellet may have more than one skeleton in it, or you may find only part of a skeleton. What types of bones will you find?



Owl Pellets: Teacher Notes

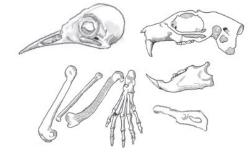
Recommended Materials:

- Paper plate, pan, or piece of foil

 to contain students' workspace
- Rubber gloves
 to keep students' hands clean
- Forceps and probe
 to help students break apart and explore the owl pellets
 - Owl pellet identification chart
 to help students identify bones; can be found on SuperTeacherWorksheets.com
- Animal skeleton worksheets
 - to help students assemble animal skeletons; available at SuperTeacherWorksheets.com
- Blank sheet of construction paper or sheet of foam (dark colors are best)
 - for students to assemble their animal skeleton
- Hand sanitizer
 - be sure you have everyone sanitize when they're done

Optional Materials:

- Magnifying Glass
 to see the bones more clearly
- Small brush
 - to clean the bones
- Hydrogen peroxide
 - to clean and whiten the bones; use only with adult supervision
- Small plastic containers or cups
 - If your activity will span more than one day, students can store bones in a container.
- Large plastic trays (lunch tray)
 - to keep student materials together



Owl Pellets: Teacher Notes

Appropriate Ages:

Students of all ages enjoy owl pellets, and you can customize your lesson accordingly. A third
or fourth grade teacher might choose to dissect owl pellets as part of a study of food chains
and ecosystems. High school science teachers also use owl pellets for more advanced lessons
on animal biology.

Purchasing Owl Pellets:

- Owl pellets can be ordered from educational supply stores. When you buy them in bulk, they may cost as little as \$2 or \$3 (USD) each.
- Larger pellets will cost more than small ones. Of course, large pellets usually contain more bones and bones from larger animals. Very small pellets sometimes do not contain a full animal skeleton.

Before the Dissection Activity:

- We recommend giving students some background on owls' hunting habits, and the owl digestive system. They should be aware that owls regurgitate undigestable animal matter in the form of an owl pellet.
- You may want to use the Owl Pellet Sequencing activity on SuperTeacherWorksheets.com.

Management Tips:

- It would be very difficult to complete an owl pellet lab in only one session. You may want to break up your owl pellet dissection lab into several class periods.
- Assembling animal skeletons can be difficult, especially if the pellet has skeletons from multiple animals in it. You may want to provide dark-colored construction paper for skeleton assembly. This will contrast against the white bones.
- When students have assembled a full skeleton, you may want to give them the option to glue it onto the paper with clear glue.
- Encourage students to work slowly and carefully. Rib bones break easily and can be difficult to dissect. Vertebrae are tiny and difficult to see, so students often overlook them.

More Fun Ideas:

- If you have a digital microscope attached to a classroom computer or interactive whiteboard with a document reader, you can allow students to examine the bones on a large screen.
- If you'd like the bones to be extra white, you may want to clean them and soak them in hydrogen peroxide. Of course, adult supervision is recommended.