

OWL PELLET DISSECTION UNIT - Grades 2 - 5

Stage 1: Desired Results

U Enduring understandings:

Students will understand *that*:

- natural artifacts such as owl pellets tell a significant story about the organism that created it
- knowing what an animal eats provides us with valuable information relevant to other issues such as urban planning, extinction, habitat, pollution
- predators and prey play an important role in providing balance in an ecosystem

Q Essential Questions:

Overarching:

What are the roles of predators and prey in an ecosystem?

What behaviors can be inferred from (an owl pellet as) an artifact?

Why is it important to know what an organism eats?

Topical:

What can we learn from dissecting an owl pellet?

Where do owl pellets come from? (misconception: they are “poop”)

Can prey be predators and predators prey? (misconception: they are mutually exclusive)

K Skills:

Students will know that:

- an owl pellet is the indigestible regurgitated parts of what the owl ate
- a natural artifact is something an organism left in a specific place (e.g., an owl pellet), or the consequence of an organism being / doing something in a specific place (e.g., a deer track)
- owls are birds of prey
- mice are common prey of barn owls
- predators can be the prey of other animals; prey can be predators of other animals
- bones of more than one animal can be found in a single owl pellet

Students will be able to:

- make accurate observation
- dissect an owl pellet
- identify bones (such as hip bone, skull) using an anatomy poster
- distinguish (classify, compare and contrast) bones between different prey of barn owls (such as hip bone, skull)
- deduct / infer information about an owl’s diet (make a conclusion)
- justify their conclusions using factual information

Stage 2: Assessment Evidence

T Performance Task(s):

Explanation

Illustrate the scene you imagine when the predator and prey encountered each other.

Using the anatomy posters, identify important bones found in the pellet. What does that tell you about the owl's diet?

Interpretation & Application

Choose one of the specific artifacts provided by the teacher. What can you know from this artifact? What can you infer from this artifact?

Create a folk tale about what would happen if owls stopped eating mice.

Perspective & Empathy & Self-knowledge

Write and illustrate a story from two perspectives: Imagine that the owl has a family to provide for. What are the consequences of eating the mouse? Imagine that the mouse (prey) has a family to provide for. What are the consequences of being eaten by the owl?

OE Other Evidence:

Teacher observations and annotated notes

Stage 3: Learning Activities

L Learning Activities:

Students are presented with an owl pellet without being told what it is. They are asked to imagine what it could be and record their predictions individually. Students then share their predictions with the group. Each offers a justification as to why she or he made that prediction and what evidence she or he used to make it. (The teacher will use this to gather student prior knowledge.)

Students are told that this item is a natural artifact. They are shown other examples of natural artifacts. As a whole group, the class creates a definition for "natural artifact."

Owl Pellet Unit, Grade 2
Sarah Fagnan

Students are told the context from which this artifact came. The teacher leads a class discussion on how a scientist might go about learning more about this artifact.

Students are told safety precaution to follow during their dissection of the owl pellet.

In groups of two, second graders dissect their owl pellet. They classify the items into categories they determine as helpful.

Students share what they think the natural artifact is. They tell the group what made them come to that conclusion. Students are told that the natural artifact is an owl pellet.

Students write in their science notebooks, where they think owl pellets come from and why. They share their ideas.

Students are taught how an owl pellet is made.

Students illustrate the scene they imagine when the predator and prey encountered each other.

Students are prompted to consider how they could find out what animal the owl ate.

Using the anatomy posters, identify important bones found in the pellet. What do they tell you about the owl's diet?

Students transfer their understanding of what can be learned from an owl pellet to another natural artifact. What can you know from this artifact? What can you infer from this artifact?

Based on the normal diet of a New England barn owl, students and teacher calculate how many rodents the average barn owl eats in a year. With this information they calculate how many rodents would survive without that owl. They contemplate this in a group discussion. What are the implications on a bigger scale?

Students create a Native American-style folk tale to explain why owls eat mice.

Students write and illustrate a story from two perspectives: Imagine that the owl has a family to provide for. What are the consequences of eating the prey? Imagine that the prey has a family to provide for. What are the consequences of being eaten by the owl?