

Coughing up Clues — Owl Pellet Story: Student Sheet D1

Purpose: Feeding relationships in ecosystems are very complex and are best represented by webs, rather than simple chains.

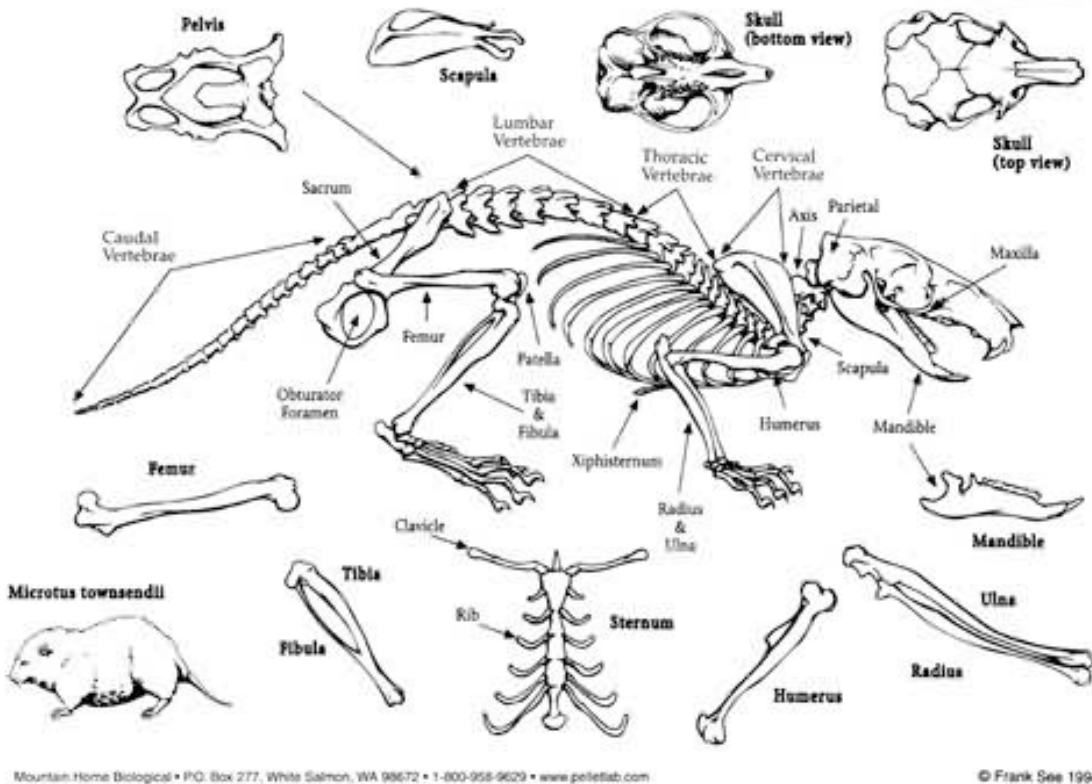
Owl Pellet Lab investigation:

- Dissect the Owl Pellet by removing the fuzz from the bones.
- Place the bones that you find on the diagram below — *Bones will be available after school **IF** you want them!*
- Count the number of each type of bone that you find; *use the chart at right*
- During** the dissection think about answers to these questions:
 - o Which bones are the most intact?
 - o How do the bones fit together?
 - o What did your owl eat? What is the prey?
 - o What parts of the prey are missing? What happened to the these parts? Why?

How many of each bone?

Jaw = _____
 Skull = _____
 Arm = _____
 Rib = _____
 Vertebrae = _____
 Other = _____

VOLE



1. What did your owl eat? What is the prey?

2. What parts of the prey are missing? What happened to the these parts? Why?

Name: _____ Period: _____ Date: _____

Coughing up Clues — Owl Pellet Story: Student Sheet D2

Purpose: Food webs model the complex movement of energy in an ecosystem and how organisms interact to transfer the energy.

Reflection Questions: (Answer with a Partner)

1. What did you discover about owls ***BY*** dissecting the owl pellet? Explain your reasoning.

2. What percentage do you think, of the consumed prey, transforms into energy for the Owl? Explain your reasoning.

3. **What did you learn about the diet of owls from investigating an owl pellet?**

(Include information about the type and number of organisms in an owl's diet — remember that an owl ejects a pellet within 12 to 24 hours after eating!)

What evidence do you have from your lab to support your claim?

4. ***Use the following information on Owl diet to develop a Food Web:***

The Owl eats voles, mice, small mammals, shrews, and insects.

Voles eat mostly plant material such as grass, seeds, roots, and bark. Shrews eat insects. Add these to your food web.

The great horned owl sometimes eats other owls. It also eats mammals like voles. Add the great horned owl to your food web.

Make sure that your food web includes direction of energy transformation.

Draw three (3) additional organisms in the food web.

5. **Identify the coolest thing that you found in your Owl Pellet:** _____

6. **Explain how the energy flow occurs from sunlight to the owl.**
