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Owl Pellet Dissection Lab



Owl pellets

are the undigestible parts of an owl's diet (fur, bones, teeth, feathers, etc.) that are regurgitated, or spit up, by the owl.

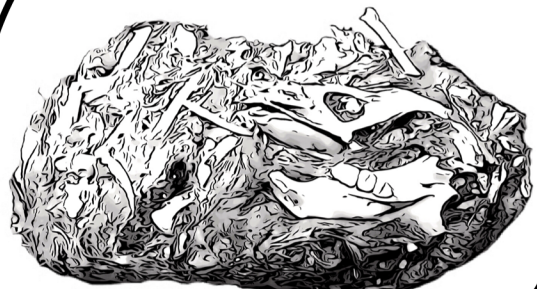
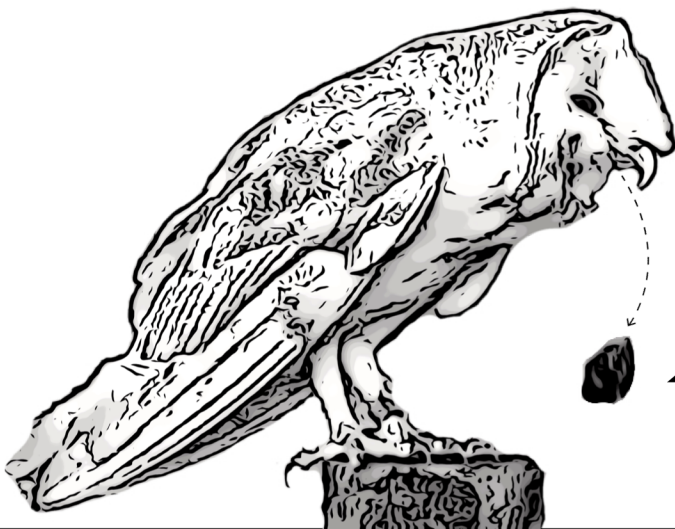
All types of owls produce pellets, and dissecting them is a fun way to discover what different owls eat.



Other raptors also produce pellets, but because owls swallow their food whole and their digestive juices are weaker and less acidic than diurnal raptors, owl pellets have more intact bones of the prey they've eaten. This is why owl pellets are more fun to dissect than hawk or falcon pellets.

Owls have two stomach chambers. Once they swallow their prey it travels down to the first chamber, called the proventriculus, where all the digestible parts are liquefied. Then it all passes to the second chamber, the gizzard, which acts like a filter. The gizzard allows the digested liquid to pass into the intestines but holds onto the undigestible remains for several hours as it packs them into a pellet.

Once the pellet is formed the owl cannot eat again until the pellet is regurgitated. Owls usually spit up one pellet a day, about twelve hours after eating their last meal.



Owl Pellet Dissection

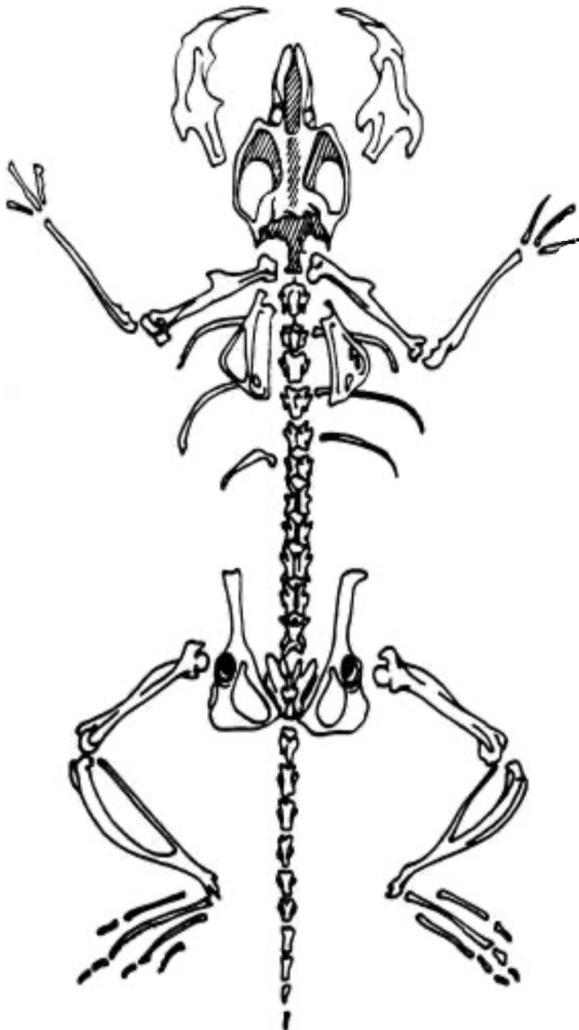
Supplies

1. Owl pellet
2. Newspaper or paper towel
3. Toothpicks
4. Bone sorting chart
5. Liquid glue



Instructions

1. Lay out your newspaper or paper towel.
Unwrap the pellet.
Examine and measure the exterior.
What color is it? What does it feel like?
Describe and draw what you see.
2. Carefully break apart the pellet and use the toothpicks to separate the bones from the fur.
3. Sort the bones into separate group types (page 4) using the bone sorting chart.
4. Arrange the bones you found onto page 6 to form a skeleton (like the picture to the left) as accurately as possible and glue them down.

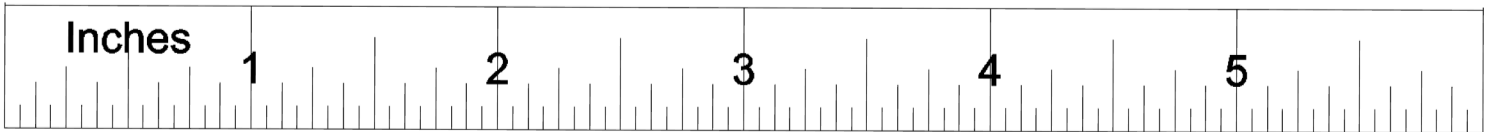


My Owl Pellet

Draw a picture of your pellet



My owl pellet measures: _____















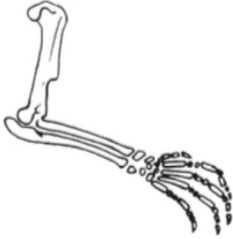




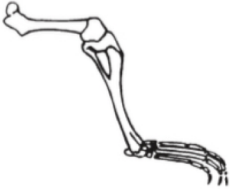

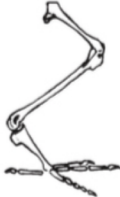








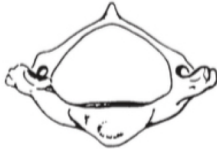



Observations: _____

Organize

your bones in the sorting chart below

| | |
|----------------------------|------------------------|
| Skulls | Lower Jaws |
| Shoulder Blades (Scapulas) | Front Legs (Forelimbs) |
| Vertebrae | Ribs |
| Hips (Pelvic Bones) | Hind Legs (Hindlimbs) |

Owl Pellet Bone Chart

| | Rodent | Shrew | Mole | Bird |
|-------------|---|---|--|---|
| Skull |  |  |  |  |
| Jaw |  |  |  |  |
| Scapula |  |  |  |  |
| Forelimb |  |  |  |  |
| Hindlimb |  |  |  |  |
| Pelvic Bone |  |  |  |  |
| Rib |  |  |  |  |
| Vertebrae |  |  |  |  |

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My Skeleton



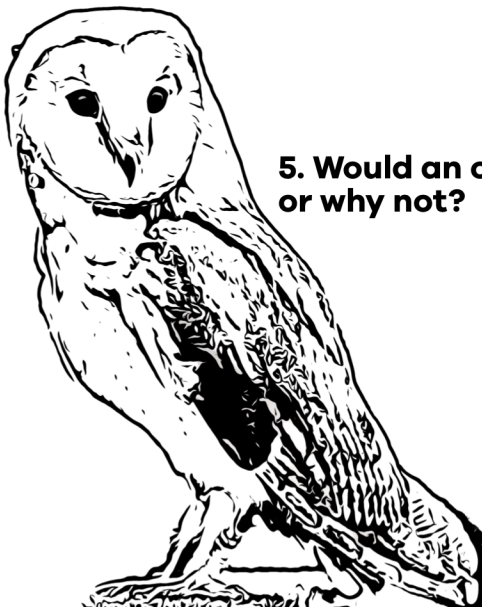
Assemble and glue your skeleton together here

1. What was the most unusual thing you found in your owl pellet? Why is it unusual?

2. What was the most common item you found in your owl pellet? Why do you think there were so many of this item?

3. Which type of animal(s) and bones did you find in your owl pellet?

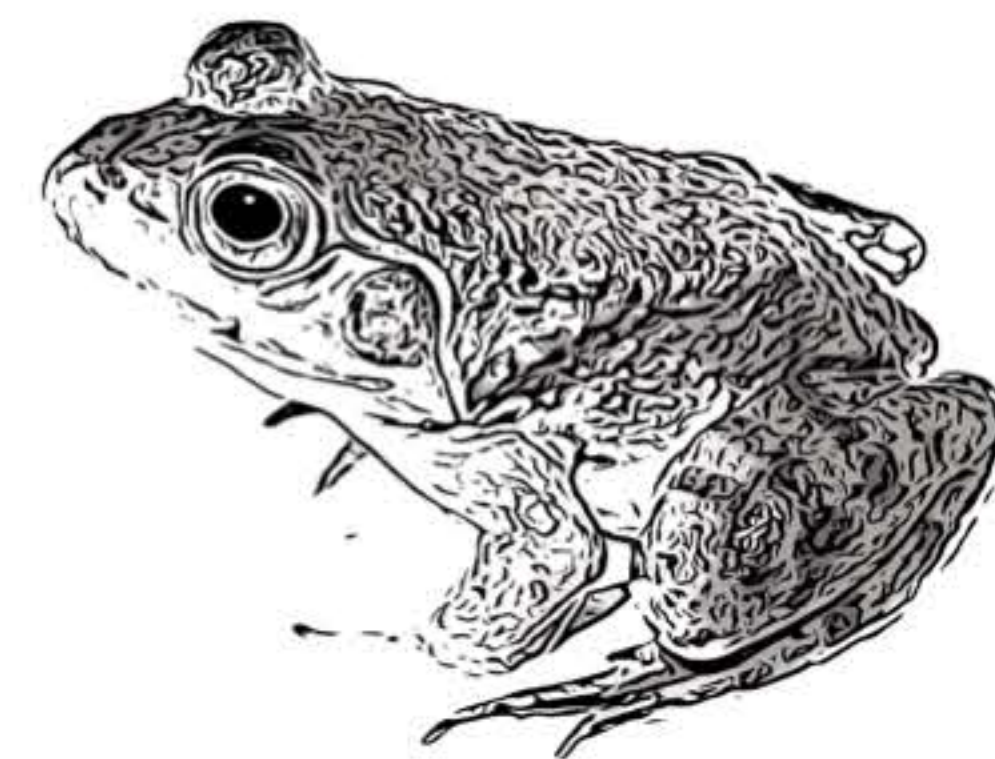
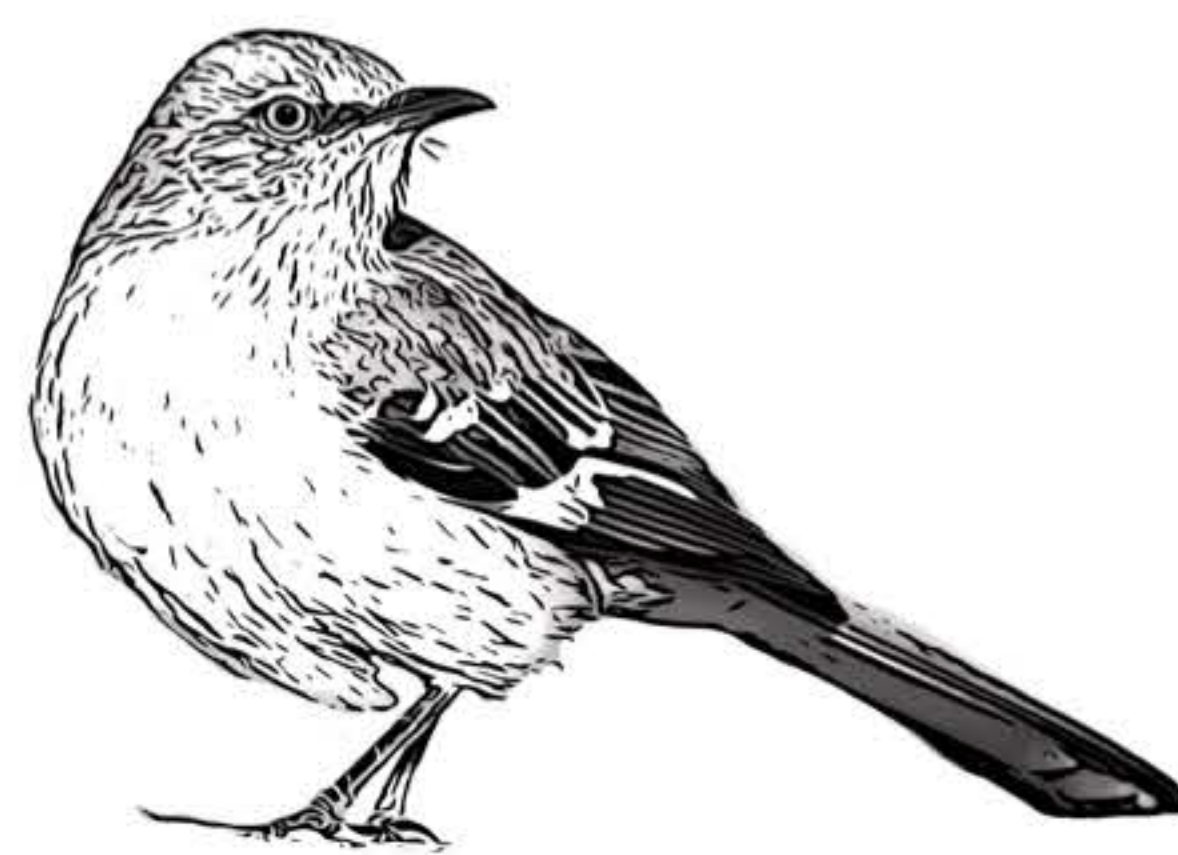
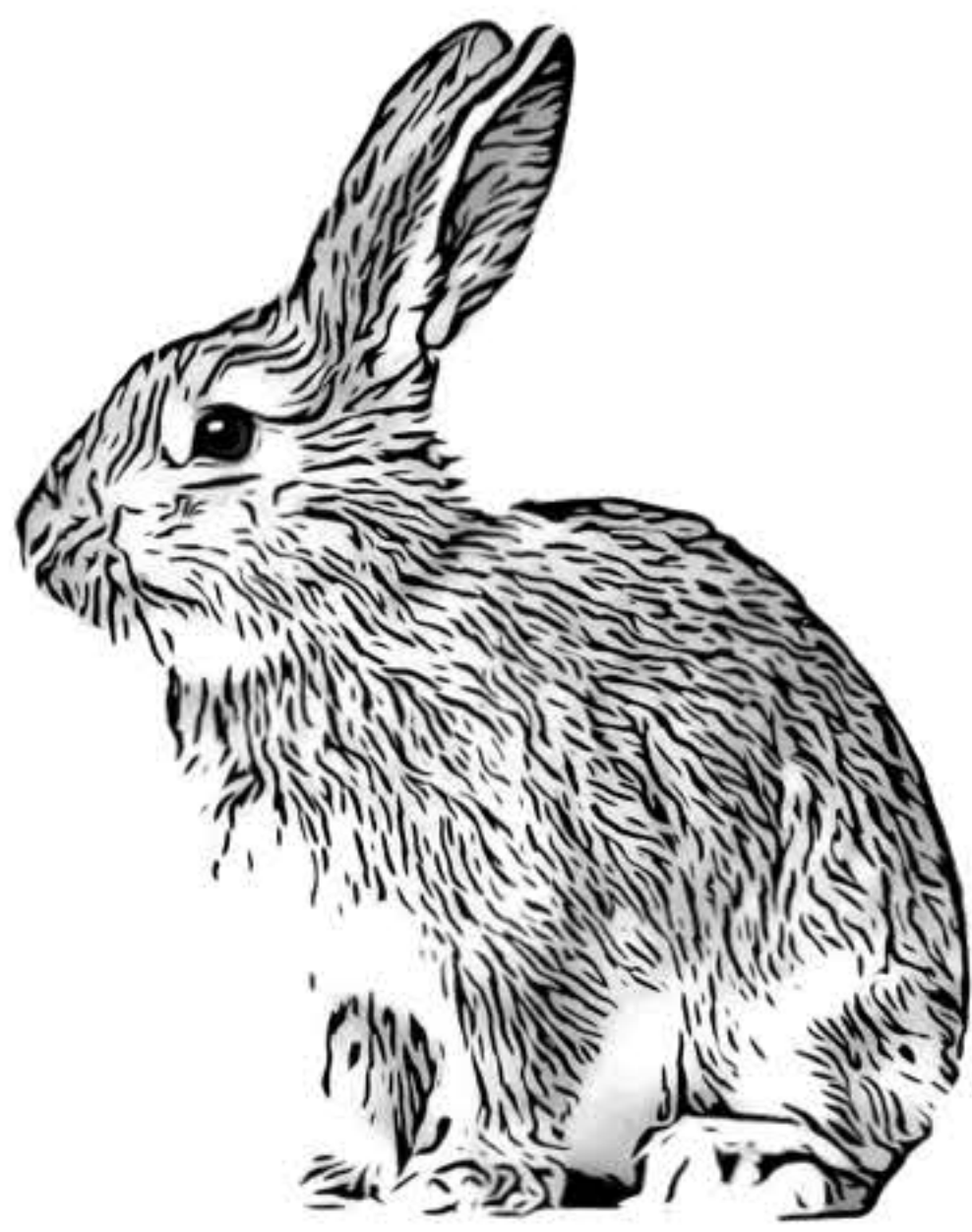
4. Why are owls considered to be top consumers?



5. Would an owl always be a top consumer in a food chain or web? Why or why not?

Owl Food Web

Draw arrows to show the food web. The arrows should point to where the energy is transferred.



1. What was the most unusual thing you found in your owl pellet? Why is it unusual?

No wrong answers here!

2. What was the most common item you found in your owl pellet? Why do you think there were so many of this item?

There are more ribs in the skeleton than other parts. If dissecting multiple pellets and you're discovering many of the same prey item, that kind of animal is abundant in the habitat where the owl lives

3. Which type of animal(s) and bones did you find in your owl pellet?

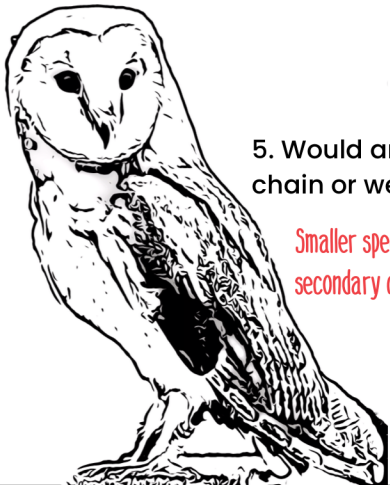
Most likely rodents; mice, rats and...? Vole? Mole? Birds?

4. Why are owls considered to be top consumers?

Because they are predators and eat other consumers

5. Would an owl always be a top consumer in a food chain or web? Why or why not?

Smaller species of owls are both predator and prey making them secondary consumers



ANSWER

Owl Food Web

Draw arrows to show the food web. The arrows should point to where the energy is transferred

