



Connection to the Museum: Our Smithsonian Habitat exhibit introduces students to the wildlife of the Texas Panhandle and the habitats that support animals like owls.

Grade level targeted: PK/Kindergarten

Connected learning targets:

Science: Observe and identify animals and their basic needs.

ELAR: Ask questions and describe observations.

Art: Draw and describe animals.

Objective of lesson:

Students will identify owls as birds of prey and explain what owls need to survive.

Summary of lesson:

Read a picture book such as *Owl Babies* by Martin Waddell or *Little Owl's Night* by Divya Srinivasan.

Students observe pictures of owls and discuss:

What makes an owl different from other birds?

What do owls eat?

Where do owls live?

Students visit the Habitat exhibit and learn how owls fit into the local ecosystem.

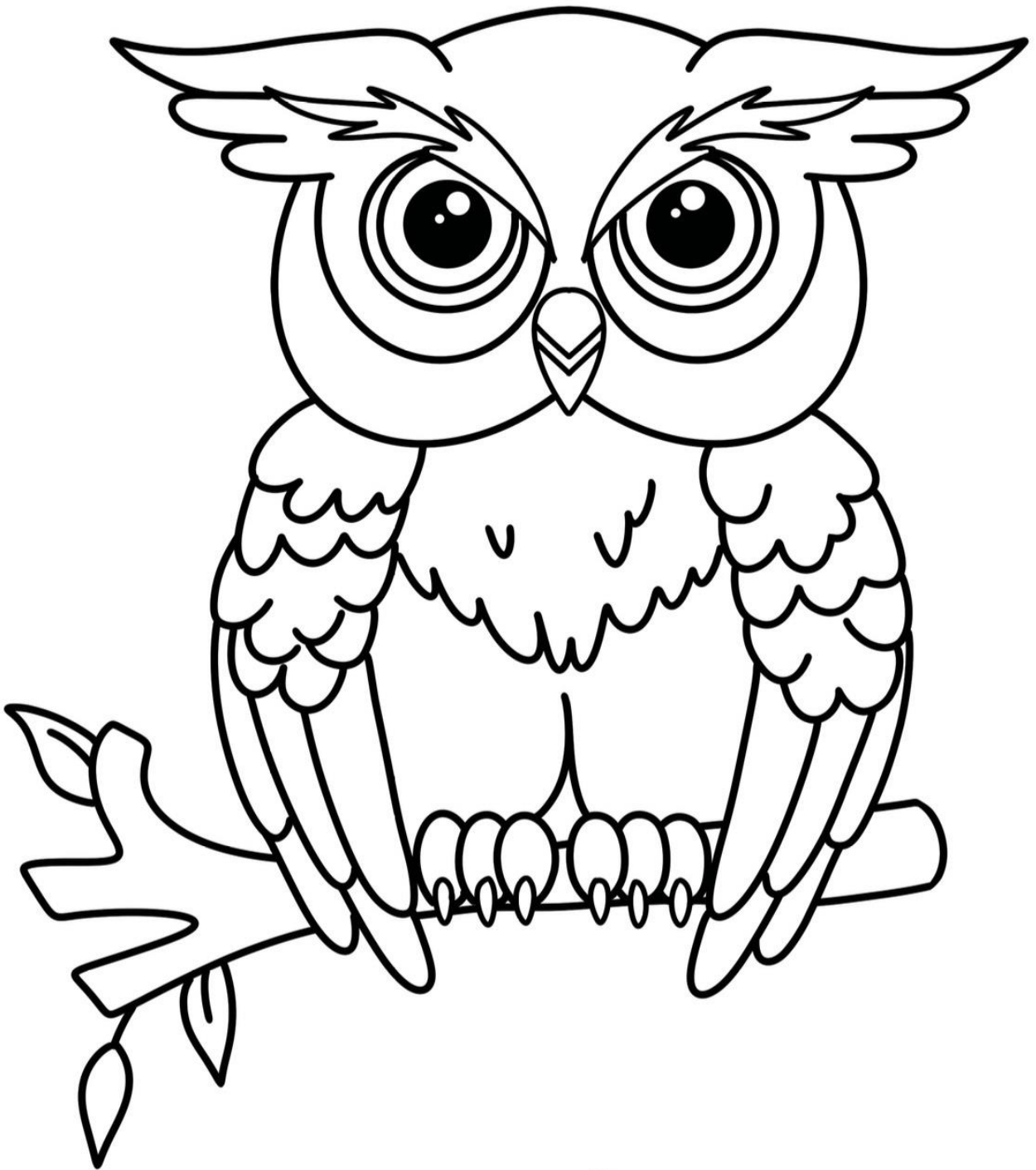
Student Activity:

Color an owl and draw what it likes to eat.

Assessment:

Students name one thing an owl needs to survive.

Name: _____



Owl

What does an owl need to survive?



Connection to the Museum: Our Smithsonian Habitat exhibit helps students understand how every animal plays an important role in the ecosystem.

Grade level targeted: 1st – 2nd

Connected learning targets:

Science: Identify how animals obtain food and shelter.

ELAR: Make observations and communicate ideas.

Science: Describe simple food chains.

Objective of lesson:

Students will explain that owls are predators and identify animals they may eat.

Summary of lesson:

Students learn:

What is a predator?

What is prey?

Why don't owls chew their food?

Discussion:

What animals live in the Texas Panhandle?

What might an owl hunt?

Why are owls important?

Student Activity:

Create a simple food chain showing an owl and its prey.

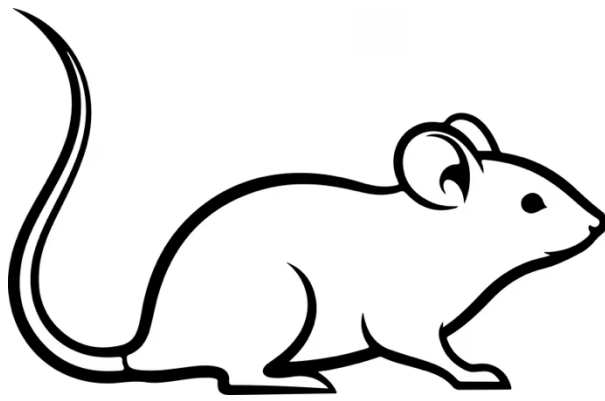
Example:

Grass → Mouse → Owl

Assessment:

Complete the sentence:

"Owls help nature by _____."



Mouse



Grass



Owl



Connection to the Museum: Our Smithsonian Habitat exhibit demonstrates how predators like owls help maintain healthy ecosystems throughout the Texas Panhandle.

Grade level targeted: 3rd – 5th

Connected learning targets:

Science: Investigate ecosystems and food webs.

ELAR: Draw conclusions using evidence.

Scientific Investigation: Record observations.

Objective of lesson:

Students will investigate owl pellets to determine what owls eat and explain how predators fit into an ecosystem.

Essential Question:

What can owl pellets teach us about ecosystems?

Summary of lesson:

Owl Pellet Investigation

Students learn:

How owl pellets form

Why scientists study them

What information bones provide

Students carefully dissect an owl pellet and identify:

Skull, Jaw, Teeth, Ribs, Leg bones

Discussion Questions:

What animals did the owl eat?

Why do owls produce pellets?

What can we learn from bones?

Student Activity:

Dissect an owl pellet and identify as many bones as possible using an identification chart.

Assessment:

Students write a paragraph explaining what their owl pellet revealed about the owl's diet.

Name: _____

Write a paragraph explaining what the owl pellet revealed about the owl's diet.

Name: _____

Write a paragraph explaining what the owl pellet revealed about the owl's diet.



Connection to the Museum: Our Smithsonian Habitat exhibit helps students understand the relationships among predators, prey, and healthy ecosystems.

Grade level targeted: 6th – 8th

Connected learning targets:

Science: Analyze food webs and energy flow.

Scientific Investigation: Collect and interpret data.

ELAR: Support claims using evidence.

Objective of lesson:

Students will analyze owl pellets as scientific evidence to understand predator-prey relationships and ecosystem health.

Essential Question:

How can scientists learn about ecosystems by studying owl pellets?

Summary of lesson:

Scientific Investigation

Students dissect owl pellets and record:

Number of prey animals

Species identified

Bone types recovered

Students compare results with classmates to identify patterns.

Discussion Questions:

What does the owl's diet tell us about its habitat?

Why are owls considered indicator species?

How can scientists use owl pellets to study ecosystems?

Student Activity:

Dissect an owl pellet, identify prey species, and complete a data table and create a food web based on the organisms identified.

Assessment:

Claim: The owl's habitat likely contained _____.

Evidence: _____.

Name: _____

Create a data table or food web based on the organisms identified.

Claim: The owl's habitat likely contained _____.
Evidence: _____.



Connection to the Museum: Our Smithsonian Habitat exhibit highlights the importance of conserving habitats that support healthy predator and prey populations throughout the Texas Panhandle.

Grade level targeted: High School (9th – 12th)

Connected learning:

Biology
Environmental Science
Ecology
Scientific Research

Objective of lesson:

Students will evaluate owl pellets as biological evidence and analyze how predator diets reflect ecosystem health and biodiversity.

Essential Question:

How can owl pellets serve as primary scientific evidence for studying ecosystems?

Summary of lesson:

Students investigate: Predator-prey relationships, Biodiversity, Population dynamics, Energy transfer, Ecosystem health

Students analyze: Species diversity, Habitat quality, Ecological interactions

Discussion:

Why do ecologists study owl pellets?
How can pellet analysis reveal environmental changes?
What limitations exist when interpreting scientific evidence?

Student Activity:

Dissect an owl pellet, identify prey species, and compare findings with class data to evaluate biodiversity.

Assessment:

Write a scientific summary explaining what the owl pellet reveals about the ecosystem and support conclusions with evidence collected during the investigation.

Name: _____

Write a scientific summary explaining what the owl pellet reveals about the ecosystem and support conclusions with evidence collected during the investigation.

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