

ANIMALS UP CLOSE

- 2nd grade students
- 45 - 60 minutes
- Park recommended area using park-supplied items

OVERVIEW

What secrets can I learn by closely observing an animal's characteristics?

In this experience, Students will participate in the "I Notice, I Wonder, It Reminds Me of..." activity using any found item. Students repeat the activity using animal-related items provided by the park. Students will end by grouping like animals.

SAFETY + SETTING

- Handle all items with care
- Observe with clean hands
- Use park recommended area for observation



ACADEMIC STANDARDS

- 2.LS1.2** Obtain and communicate information to classify animals (vertebrates vs. invertebrates; mammals, birds, amphibians, reptiles, fish, insects) based on their physical characteristics.
- 2.ETS2.1** Use appropriate tools to make observations, record data, and refine design ideas.

ANIMALS UP CLOSE

STEPS

1. Introduce location + goal

- "We are in ___ State Park. In this area of the park, what do you notice about the nature you see?"
- "In the next 45 minutes we will be detectives and use our observation skills to investigate the characteristics of native Tennessee animals. By the end of our investigation, you will group animals based on their characteristics."



2. Observation

Whole Group Questions

- What does a detective do?
- What skills might a detective need?

Turn & Talk Questions

- What does it mean to observe?
- Is observing ONLY seeing?



Observe: to see, hear, smell, feel, sometimes taste to better understand

Observing is NOT identifying or stating an opinion or explanation.

"I notice it is a leaf." = **Identifying**

"I notice it is gross." = **Opinion**

"I notice the leaf has been eaten by bugs." = **Explanation**

"I notice the leaf is rough and has holes in it." = **Observation**

ANIMALS UP CLOSE

STEPS, continued

3. Activity

- Model "observing," showing the difference between observing, identifying, opinionating, and explaining
- Explain the "I Notice, I Wonder, It Reminds Me of..." activity
 - Each pair of students get a park-supplied item related to an animal
 - Students follow guided teacher prompts

Example of a Round

- "Complete this sentence out loud **to yourself**: 'I notice _____'"
- 30 seconds - Students take turns saying to themselves as many new "I notice ____" observations as possible
- 60 seconds - Students share their "I notice ____" observations **with partner**
- 2 - 4 minutes - Students share their "I notice ____" observations with the whole group
- **Play 3 rounds of the activity**

Pro Tip:

Continually guide students away from identifications, opinions, and explanations



Play 3 Rounds

- **"I notice..."**
"I notice the animal nose is long and pointy"
- **"I wonder..."**
"I wonder why the tail is so fluffy?"
- **"It reminds me of..."**
"It reminds me of my dog's face."

ANIMALS UP CLOSE

STEPS, continued



4. Characteristics

- In the group sharing rounds introduce “characteristic” and facilitate discussion connecting observation and characteristic
- Point out similar observations: "I noticed you both said ___ about your objects"
 - What secrets might that tell you about your objects?" (where it lives, what it eats, how it stays warm/cool, how it moves, how its avoids predators)
- As time allows, rotate objects between pairs & repeat "I Notice, I Wonder, It Reminds Me of..." until each pair has observed with at least 3 animal objects
- Review similarities/differences as you go
- Introduce the named animal classifications - mammals, birds, amphibians, reptiles, fish, insects (**use vocab sheet as needed**)
- Ask students what they know about these classifications
- Direct students to verbally or physically group the animals into classifications based on the characteristics they observed
- Ask why or what characteristics make you put _____ in that group

ANIMALS UP CLOSE

STEPS, continued

5. Review + Reinforce

- Conclude by reviewing and reinforcing what you learned
- Facilitate a question and answer session - whole group and/or turn and talk

Suggested Questions

- Think about one of your animals.
 - What characteristics did you notice about that animal?
 - What secrets did you learn about that animal?
 - Where it lives
 - What it eats
 - How it stays warm/cool
 - How it moves
 - How it avoids predators
- What are 5 characteristics you observed today?
 - Those characteristics tell us a lot about the animals.
 - What did the characteristics tell you about the animals?
 - Tell me an example & characteristic of a: mammal, bird, amphibian, reptile, fish, insect



RETURN MATERIALS

After you have finished your teacher-led experience, return all materials to the park office.

VERTEBRATE

animals with a backbone

INVERTEBRATE

animals with NO backbone

MAMMAL

a warm-blooded vertebrate animal of a class that is distinguished by the possession of hair or fur, the secretion of milk by females for the nourishment of the young, and (typically) the birth of live young.

**human, cat, dog,
bat, deer**

BIRD

a warm-blooded egg-laying vertebrate distinguished by the possession of feathers, wings, and a beak and (typically) by being able to fly

**mockingbird,
cardinal, blue jay**

AMPHIBIAN

a cold-blooded vertebrate distinguished by having an aquatic gill-breathing larval stage followed (typically) by a terrestrial lung-breathing adult stage

**frog, toad, newt,
salamanders**

REPTILE

a vertebrate animal distinguished by having a dry scaly skin and typically laying soft-shelled eggs on land

**turtle, snake, lizard,
alligator**

INSECT

a small arthropod animal that has six legs and generally one or two pairs of wings

**ant, beetle, bee,
mosquito, fly**

FISH

a limbless cold-blooded vertebrate animal with gills and fins and living wholly in water

**catfish, bass, trout,
bluegill**