

Title: Vertebrates: Common Traits Greeting

Objective: Compare animal characteristics

Time: 10 minutes

Materials Needed: Animal pictures (found at jeffersfoundation.org)

Greeting

Theme: Animals

Topic: Vertebrate classification

Suggested Grade Level: 2-5

Indoors or Outdoors: Either

Directions:

1. Give each child a picture of a different animal.
2. Students walk around and find another animal they have something in common with and greet that student. For example, a penguin and bald eagle might greet each other because they both have feathers. A snake and lizard might greet each other because they are both reptiles.
3. Students return to the circle and sit next to the person they greeted.
4. Go around the circle and ask students to share their animals and their reasoning for the characteristic their animals have in common.
5. If time permits have students find and greet another student who has a different animal picture that they have something in common with.

Discussion Questions:

1. What do all mammals have in common? Amphibians? Reptiles? Birds? Fish?
2. List other animals that fit into these classifications. How do you know?
3. Did you have a similarity with any other animals? Explain.

Science and Engineering Practices:

1. Asking questions (science); 6. Constructing explanations (science); 8. Obtaining, evaluating, and communicating information.

Cross Cutting Concepts:

6. Structure and function.

Disciplinary Core Idea:

Life Sciences: LS 3: Heredity: Inheritance and variation of traits.

Background Information:

- **Mammals:** are warm-blooded, they grow hair, give live birth to young, and use lungs to breathe. Examples include squirrel, fox, coyote, sheep, porcupine, polar bear, and camel.
- **Amphibians:** have soft moist skin, lead one life in water and one on land. Many begin life with gills and develop lungs. They are cold-blooded, the environment regulates their body temperature. Examples include frog, toad, salamander, and newt.
- **Reptiles:** are covered in dry scales. Most reptiles live on land and most lay eggs. They are cold-blooded. Examples include alligator, turtle, gecko, snake, crocodile, and lizard.
- **Birds:** are the only animals with feathers. All birds are warm-blooded, lay eggs and incubate their young. Birds also have wings which most use for flight. Examples include robin, bald eagle, blue jay, and flamingo.
- **Fish:** are covered with slime-coated scales to protect them in their aquatic environment. Most lay eggs but some give live birth. They breath with gills, taking in oxygen from the water. Examples include sharks and walleye.

Additional Resources:

- National Geographic: This site includes information about specific animals - <https://www.nationalgeographic.com/animals>
- MN DNR: *Super Squirrels, These Dogs are Wild* - <https://www.dnr.state.mn.us/mcvmagazine/young-naturalists.html>

Correlates with:

Activity - Join the Herd (p. 53)

Interdisciplinary Lesson - Know Your Vertebrates (p. 101)



squirrel



fox



coyote



sheep



porcupine



chipmunk



polar bear



camel



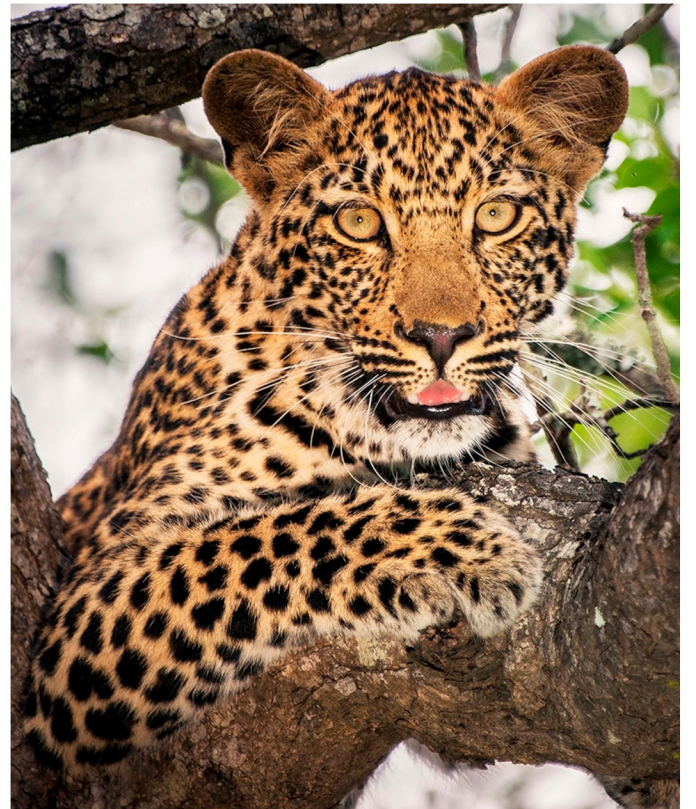
elephant



beaver



gorilla



leopard



frog



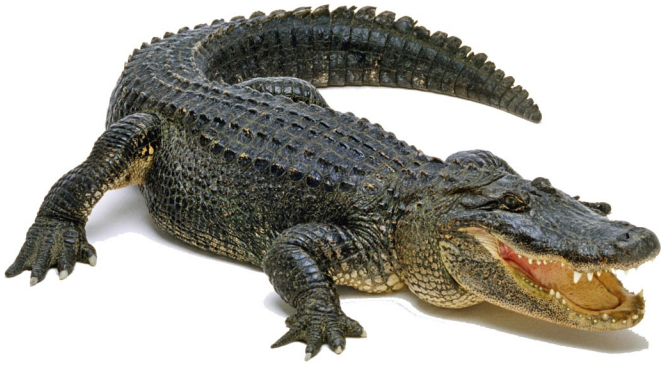
toad



salamander



newt



alligator



turtle



gecko



snake



crocodile



lizard



robin



bald eagle



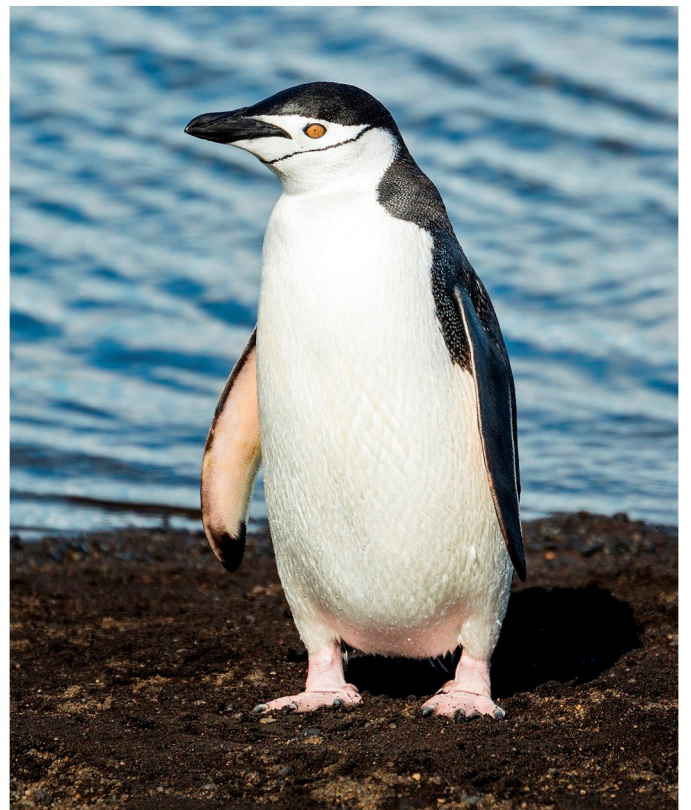
blue jay



hawk



flamingo



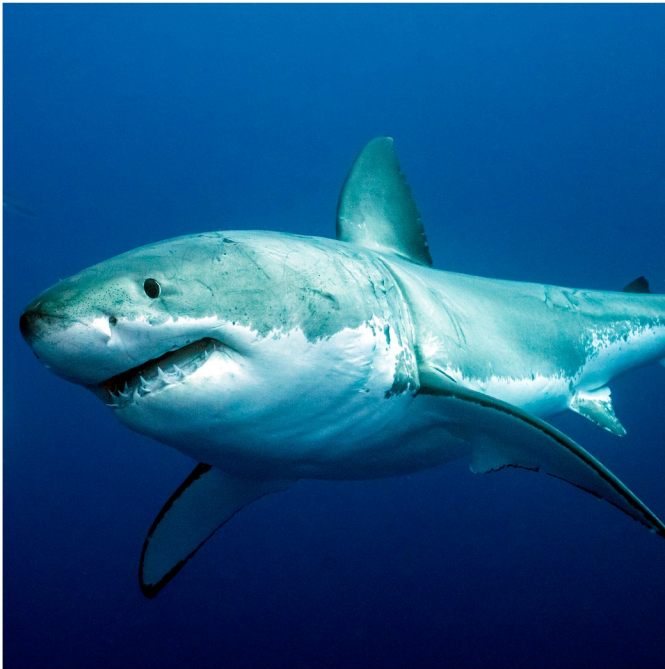
penguin



owl

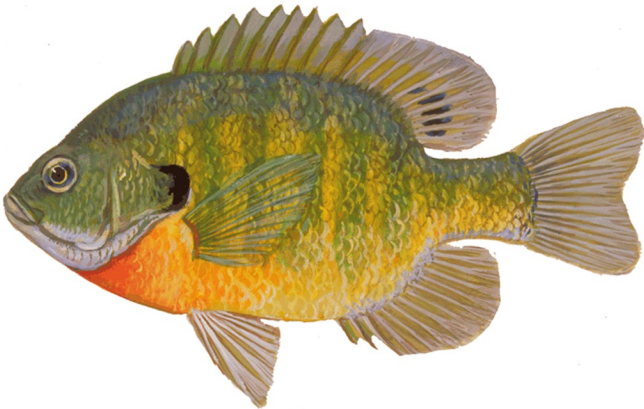


skink



Rainbow Trout

Shark



Sunfish

Walleye