

How Animals Survive!

Teacher Facilitation Notes

In General . . .

- Project the slide deck in edit mode—do not show it as a slideshow.
- Hide the speaker notes before projecting. (View/Show Speaker Notes)
- Hide the toolbar. (Click on the up arrow at the right end of the tool bar.)
- Call on students to read the various content shown on slides.
- For each investigation, assemble the needed materials for each group and place in a central location for ease of distribution.
- Duplicate copies of the data sheets for each student.

Materials Needed Per Group:

Explore/Explain: Virtual Field Trip

Student Data Sheet

Pencils

Elaborate: Four Corners

Structures Posters

Animal Cards

Card Stock

Scissors

Tape or ticky-tack

Chart paper, optional

Sharpie, optional

Sandwich baggie

Evaluation: Quiz

Student Quiz

Pencils

Engage: Structures and Functions

- Watch the video. Discuss what the students saw in the video and what they already know about life the external (outside) parts of animals that help them survive in their environments..
- Have students look at the four animals pictured on the slide. Call on volunteers to name body parts (structures) that the animals have that help them live in their environments. Ask them to explain how that body part helps the animal (function).
- Tell the students they are going on a virtual field trip to learn more about the structures and their functions of animals' body parts.

How Animals Survive!

Teacher Facilitation Notes, p. 2

Explore/Explain: Virtual Field Trip

- Read through the introductory slide with the students. Be sure that they understand the directions for completing the data sheet as they work through the slides.
- Go through each slide, observing, reading, and discussing thoroughly. Call on volunteers to identify the functions of each animal structure. Monitor to make sure students are recording at least one function of each structure on their data sheets. If desired, use the semi-transparent rectangle on each page to highlight the functions. Resize, copy, and paste the rectangles as needed.

Elaborate: Four Corners

- Prior to the lesson, duplicate the structures posters and animal cards on cardstock. Duplicate in color, if at all possible.
- Cut the animal cards apart and place in a sandwich baggie.
- Read the introductory slide about *Four Corners*.
- Show students the *Structures Poster #1* using a document camera. Read over and discuss the information on the poster. Take the poster and hang it in one corner of the classroom.
- Do the same for the other three structures posters.
- NOTE: Some of the animals can belong to more than one poster. For example, an egret could be with the beak poster or the feet poster.
- Choose one of the following options to play the game *Four Corners*.
 - Option 1: Give each student an animal card. Tell them to study the card carefully. Then, tell them to walk to the structures poster that best matches one of the structures on their pictured animal. After all of the students have moved to a poster, facilitate a class discussion about why the animals belong to that poster. Make sure students can justify their selections.
 - Option 2: Pair up the students and have them play as detailed above.
 - Option 3: Attach each structures poster to a sheet of chart paper. Place in four corners of the room. Use a document camera to show one animal picture. Call on a volunteer to identify the structures poster where the animal best fits. If the class agrees, let the student use a Sharpie™ to write the name of the animal on the sheet of chart paper. Continue with the remainder of the animals cards.
- Discuss as desired.

How Animals Survive!

Teacher Facilitation Notes, p. 3

Evaluate

- Let students complete the quiz independently.
- Discuss evaluation as desired.

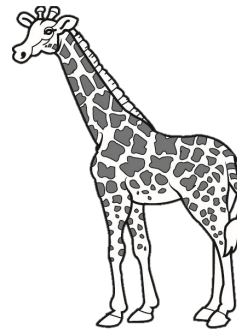
How Animals Survive!

Name: Key

Evaluation

1. A long neck helps a giraffe to—

- A hide from predators
- B stay warm in winter
- C catch fast-moving prey
- D eat leaves at the top of trees



2. Nocturnal animals sleep during the day and come out at night to eat and hunt for prey. Which of the following external structures would most help an animal that is nocturnal?

- F Large eyes
- G A strong jaw
- H Sharp claws
- J A long neck

3. Mark all answers that apply. A lion's sharp teeth help it—

- A attack its prey
- B chew leaves and grass
- C eat small insects
- D tear apart animal flesh
- E roar very loudly



4. Which of the following structures would most help an animal that lived near a pond survive?

- F A long, pointed beak
- G Sharp pointed spikes
- H Webbed feet
- J Thick fur

How Animals Survive!

Name: Key

Evaluation

5. Study the picture of the bird. Based on the shape of its beak and the length of its legs, this bird most likely eats—

- A nuts from trees and bushes
- B nectar from large flowers
- C small fish in water that is not deep
- D mice and other small land animals

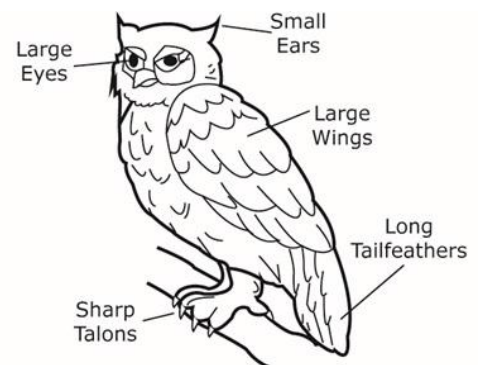


6. The feet of four different animals are shown below. Which foot most likely belongs to an animal that digs burrows to make its shelter underground?



7. Which two structures would best help an owl find and catch its prey at night? (Mark two answers.)

- A Large eyes
- B Small ears
- C Large wings
- D Sharp talons
- E Long tailfeathers

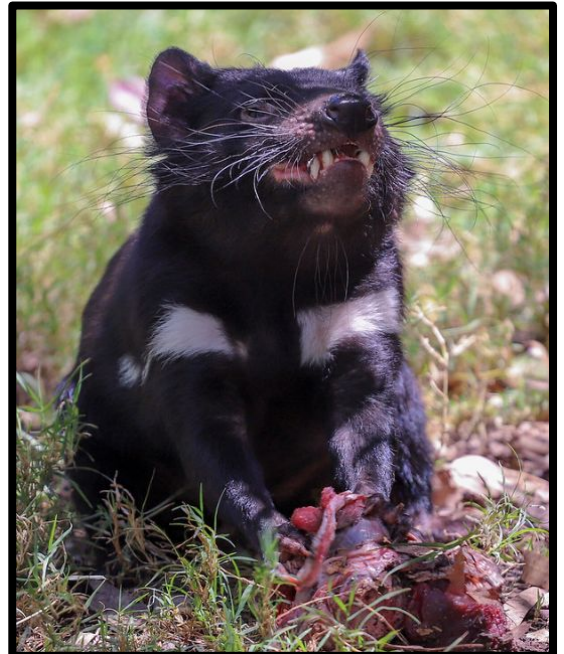


How Animals Survive!
Structures Poster #1

Mouths, Teeth, and Claws

Mouths and Teeth

Some animals, like frogs, have very long and sticky tongues to help them catch insects or pluck leaves to eat. Some animals have big mouths, while others have small mouths. Different animals have different types of teeth depending on what they eat.



Claws (Talons)

These animals have sharp claws and talons for capturing and eating prey.



How Animals Survive!
Structures Poster #2

Paws, Hands, and Feet



Paws

These animals have paws. The paws help the animals jump and land quietly as they search for prey. Their paws also help them to walk and run without slipping.



Hands

These animals have paws. They use their fingers and paws much like humans.

Feet

Some animals have feet with toes. Birds have different types of toes for holding on to tree branches, for digging in the dirt, and for catching and tearing apart their prey. Some animals have webbed feet for swimming. Other animals have hooves that help them stand, walk, and run on hard ground.



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Structures Poster #3

Hair, Spikes, and Armor



Arctic Hare in July



Arctic Hare in January

Hair

These animals have coats of hair or fur. The hair helps keep them warm, hide from predators, and protect them from certain light rays in sunlight.

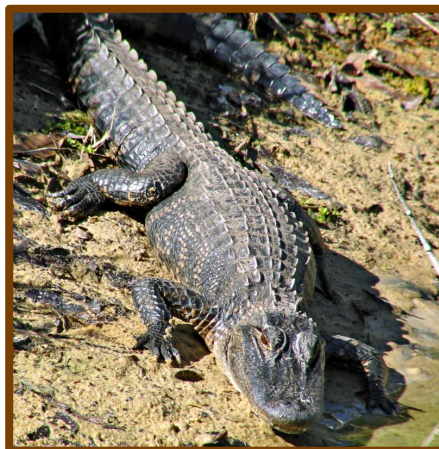
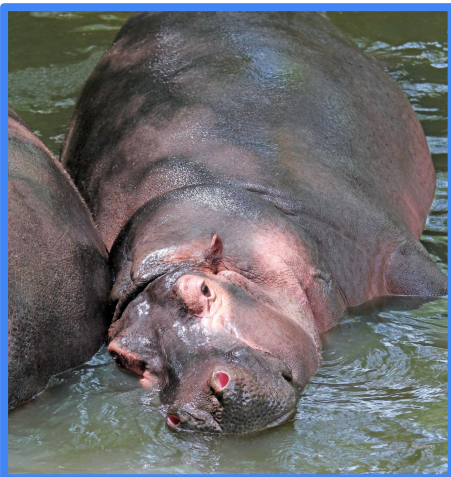
Spikes

These animals have a thick layer of sharp, pointed spikes that protect them from predators.



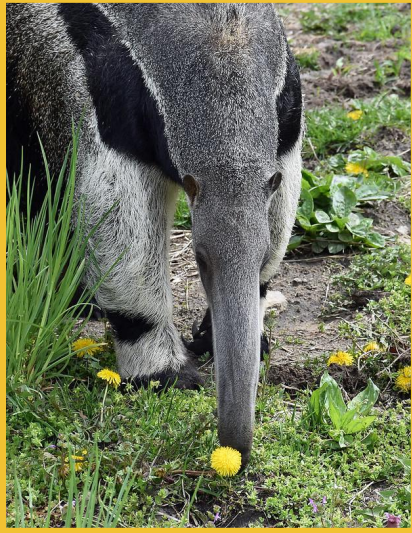
Armor

Some animals have tough, thick skin mostly to protect themselves in their environments. Some animals have scales while animals have shells. Both scales and shells protect the animals from predators and help them survive in their environments.



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Structures Poster #4

Trunks, Tusks, and Beaks



Trunks

These animals have trunks that start with their mouth or nose. Trunks can bend easily and are used for eating or drinking water. The most common animal that has a trunk is an elephant, but giant anteaters also have trunks!

Tusks

These animals have long, constantly growing front teeth that stick out from their mouth. Tusks are used to fight off predators or dig for food.

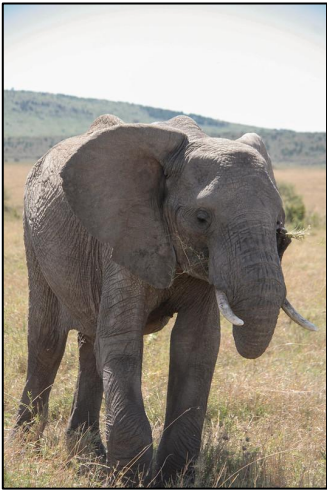


Beaks

All birds and turtles have beaks. Some other animals, like the cuttlefish and the duckbill platypus also have beaks. Animals use their beaks for getting food and holding on to food or other objects.

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Animal Cards



Elephant



Snail



Arctic fox



Armadillo



Beaver



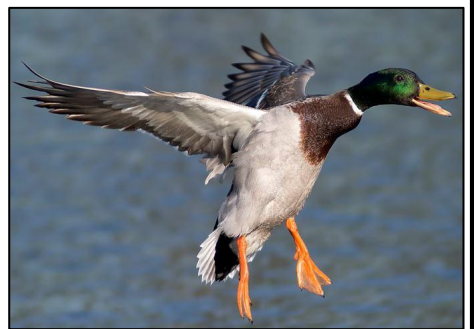
Bluebird



Butterfly



Egret



Duck

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Animal Cards



Flamingo



Gerenuk



Thorny devil



Tiger



Tarsier



Rhinoceros



Eagle



Hummingbird



Mohair sheep

How Animals Survive!

Animal Cards



Porcupine



Gorilla



Lion



Weasel



**Eastern
snake-necked turtle**



Pangolin



Dromedary camel



Musk ox



Pink fairy armadillo

How Animals Survive!

Name: _____

Explore/Explain: Virtual Field Trip

1. Mouths _____

2. Teeth _____

3. Claws _____

4. Paws _____

5. Hands _____

6. Feet _____

7. Hair _____

8. Spikes _____

9. Armor _____

10. Trunks _____

11. Tusks _____

12. Beaks _____

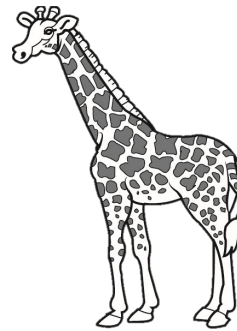
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