

Outdoor Science! Week 1

Day 2: What's Your Function?

Teacher/Parent Background:

 In this activity, students will make connections to various internal and external structures of flora and fauna and how these structures aid in carrying out necessary life functions. Through digital resources, students will closely observe crucial structures of the flora and fauna of their very own urban/desert habitat!

Related Standards:

- Develop and use models to explain that plants and animals (including humans) have internal and external structures that serve various functions that aid in growth, survival, behavior, and reproduction.
- Plan and carry out investigations to demonstrate ways plants and animals react to stimuli.

Key Terms:

Structure - something that is made up of parts that are connected in a certain way

Function - a purpose for a specific need/job Internal structure - structures found on the inside of living things External structure - structures found on the outside of living things

Materials List:

- Internet access
- Urban/Desert Flora & Fauna Pictures & Videos included in the Activity Description section
- Computer/phone with audio
- Journal
- Pen/pencil
- Colored pencils/crayons



Activity Description:

- Ask students to review the flora and fauna observations in their journals from Day 1: Flora & Fauna All Around Me!. Briefly recap the main ideas from Day 1's activity:
 - What flora and fauna did we observe on our tour? What did they look/act like?
 - What was their habitat like? How did their habitat support their needs?
- As we have seen, different habitats support the needs of certain types of flora and fauna. But, how do these flora and fauna survive in their habitats? What about them/what do they do that helps them survive?
 - Living things have certain structures, or body parts that serve a purpose/help accomplish a "job", or function.
 - These structures can either be found inside the bodies of living things, called <u>in</u>ternal structures, or found outside the bodies of living things, called <u>ex</u>ternal structures.
- What kind of basic life functions (breathing, moving, growing, etc.) need to be carried out by the flora and fauna we observed? What kinds of internal and external structures do they have that help them carry out these functions?
 - Ask students to discuss and share their initial ideas, referencing their recorded observations from Day 1's activity in journals.
- To best help us identify the types of structures and functions of our habitat's flora and fauna, let's take a closer look!
 - Show students the Urban/Desert Flora & Fauna Pictures & Videos below.
 - Ask students to discuss and record in journals the structures and functions they can observe in each picture and/or video. Picture and video examples are as follows:
 - Dog uses legs to move/run, uses strong teeth to chew hard food, uses lungs to breath, etc.





■ Rose - moves/bends towards sunlight to grow/make food, uses stem to transport water, uses roots to soak up water, etc.



- Parts of a Plant
 - BrainPOP jr Resource: Request free access during the school closure period using this <u>link</u>.
- GPhase Plant Time-Lapse Bending Towards Light
- GPhase Bean Roots Time-Lapse Soil Cross Section
- **Pigeon** uses wings to move/fly, uses beak to pick up small pieces of food, uses lungs to breath, etc.



Cactus - uses long roots to soak up water, uses its stem to store water and grow/make food using sunlight, uses prickly spines to protect itself from predators, etc.



- Planet Earth Cactus Stem Structure & Function
- **Grasshopper** uses legs to move/jump, uses tong-like mouthpart to chew food like leaves, uses wings to move/fly, etc.





Closure:

- Based on our observations and picture/video evidence, it seems as though these flora and fauna have internal and external structures that help them carry out basic life functions, like moving, growing, etc.! Let's continue these conversations by considering the following:
 - Do any of the flora and fauna have similar structures? If so, what are the structures?
 - Do these similar structures serve similar functions? If so, what are the functions?
 - What would happen if these flora and fauna did not have the structures they needed to carry out basic life functions or if these structures were damaged?

Extensions:

- Watch!
 - o National Geographic Kids Pigeon Genius
 - o National Geographic Kids Dog Genius
 - National Geographic Kids <u>Goofy Growers Gallery/Slideshow</u> & Twisting Trees