

Lesson 8 – Structure and Function in all organisms

Activity 8.1 – Structures and functions for meeting survival needs

What will we do?

We will observe a variety of organisms to determine how they use structures to carry out specific functions.

Procedure

- ☐ Use your observational skills to determine if other organisms have structures that help them perform functions they need to survive.
- ☐ Read the facts about each of the organisms in the first column.
- ☐ Examine the pictures of the organisms in the second column.
- ☐ In the third column, name the structure, the function, and tell how the structure is used to perform the function.
- ☐ After working on the tables, come back and answer the conclusion question.





Analysis and Interpretation




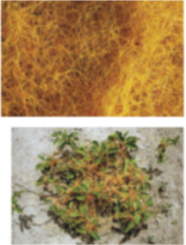
Choose one function (movement, eating, or reproduction) and then choose two different organisms from the pictures and compare the structure that they have to perform that function. Be specific in describing the difference in the structures that affects how the organism performs that function.

1. Function: Circle one (Movement/Eating/Reproduction)

Organism	Structure

2. Compare how these two different organisms achieve the same function.

Information	Picture	Structure and Function
<p>1 You certainly would not want to meet up with the Great White Shark on your next swim. Its meals consist of fish, sea lions, seals, and small toothed whales like beluga whales, and more. It has also attacked more humans than any other shark.</p>		<p>Structure:</p> <p>Function:</p> <p>How the structure is used:</p>
<p>2 Whale sharks, the largest fish, are filter feeders. Little sea organisms like plankton and other small sea animals that are in its path are gathered in its mouth with water. When the shark's mouth closes, the animals are trapped and filtered out from the water so the shark can swallow them.</p>		<p>Structure:</p> <p>Function:</p> <p>How the structure is used:</p>
<p>3 If you have ever tried to catch a grasshopper, you know that it is likely that it will hop before you can get it. No predator is going to have an easy time catching this hopper who can hop up to 20 times its length in one hop.</p>		<p>Structure:</p> <p>Function:</p> <p>How the structure is used:</p>
<p>4 The mole cricket lives most of its life underground. It tunnels under the earth to make passageways and cavities for females to lay eggs. It needs to have spaces ready for the cold weather because it is dormant, or inactive, then.</p>		<p>Structure:</p> <p>Function:</p> <p>How the structure is used:</p>

Continued		
	Information	Picture
5	Seeds have to move away from the adult plant so they will be able to have enough light, water, nutrients, and space to grow. Some seeds are picked up by a wind current, float down a waterway, attach to an animal, or explode, in order to live and grow into a healthy plant.	
		Structures: Function: How the structures are used:
6	Elephants like to eat anything green, from grass down low to the buds of trees up high. Elephants can eat around 500 pounds of plants in a day. Elephants in the wild are very destructive. They often uproot and scatter as much as they eat. You would not want to be in their way when they are grabbing food with their very strong trunk.	
		Structure: Function: How the structure is used:
7	A giraffe is the tallest land animal. It can have its pick of the nice green vegetation high above the ground or bend down and take a little morsel of shrubbery. The giraffe is a vegetarian. It does not eat meat.	
		Structure: Function: How the structure is used:
8	The dodder plant is an unusual plant. As you can see, it is not a green plant. It is orange or yellow. It does not make enough food for it to survive. Soon after it begins to grow, this plant must attach itself to a food-producing green plant in order to survive. It is a parasite like the sea lamprey. It gets its food by living on another living thing. It wraps its root-like branches around the green plant's stem and stays attached to it. Dodder grows into a large covering around the other plant as it gets the food it needs.	
		Structure: Function: How the structure is used: