Built to Survive!

Examining how animals' structures help them survive using your classroom pet!

Lessons for 3-6 Grade
Created by Stephanie Madison
Built to Survive!
Examining How Animals’ Structures Help Them Survive Using Your Classroom Pet
Lessons for 3-6th Grade Created by Stephanie Madison for Pets in the Classroom

Overview

Part 1- Examining Your Class Pet- Have students take a close look at your classroom pet with magnifying glasses and discuss what they see. If possible, have them touch the animal and describe what they observe. Highlight the external body parts of the pet that help it survive (on a bearded dragon, it uses its claws for digging for shelter, its ears for hearing predators and prey, its eyes to track movements, etc.).

Part 2- Watch a Video/Look at Pictures of Internal Structures- Since we can’t look inside our class pets without hurting them, watch a brief video on YouTube or look at some pictures of the internal structures that are inside your class pet to help students understand what’s in the animal. Talk about how these parts of the animal help it survive (on a bearded dragon, the heart pumps blood to its body, its tongue helps nab food and move it down the lizard’s throat, its cloaca expels waste/eggs, etc.).

Part 3- Write about How It Survives- Use the included worksheet for students to complete individually or in small groups, or create a diagram of your own class pet to label the structures and how they help the organism survive. Next, have students write about what they learned, using the sentence frames below or your own.

Science & Literacy Standards Met
This particular lesson is linked to fourth grade standards, but it meets literacy and English Language Development standards for many grades, particularly 2-6th.

NCSS 4.LS1.1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
CCSS- 4.W.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
4.W.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
4.W.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

Extensions & Adaptations
*ELD Extensions- For English Language Learners, front load the vocabulary pertaining to your particular class pet (scales, lungs, heart, eyes, cloaca, etc.) and the lesson (structures, organism, survival, reproduction, etc.). Write them on a paper or board as you introduce them so they can use them in their writing later on in the lesson. Use additional sentence frames at their ELD level to help them expand their explanation.
*Talented & Gifted* - Have your TAG students do an independent study on an online encyclopedia/web data base on a different plant or animal. Help them record their findings and present to the class about another organism’s adaptations. If possible, have them compare and contrast the structures and their functions on multiple organisms.

*Bodily Kinesthetic Learners* - Emphasize the touching, listening, and observing of the organisms, have them make a model of the class pet & label its structures, or create a costume with the adaptations of the animal.

*Musical/Verbal Linguistic Learners* - Have students create a rap, poem, or song about the structures on the animal and how they help the organism survive. Next have them present it to the class and/or your class pet.

*Visual/Spatial* - Encourage students to create their own diagrams/detailed drawings of different organisms with their internal/external structures labeled. Have the students give them to your class pet and post them around the animal’s cage/terrarium.

*Whole Class* - Create a Venn Diagram on the board/butcher paper/beneath the document camera. Place two different organisms on each side, and first compare their external structures and how they help the organisms survive. Next, compare and contrast how the internal structures on two different living things are the same and how they’re different on a second Venn Diagram. Then, take it to writing; as a class, write 1-3 paragraphs comparing and contrasting the two organisms, or have students write about it independently.
1. Examine our class pet bearded dragon, watch a video about bearded dragons, and/or examine the illustrations on this page. Label external structures on the photograph of the bearded dragon that might help the animal survive, grow, or reproduce.

2. Label internal structures on the diagram of the bearded dragon below that might help it survive, grow, or reproduce.

3. Discuss how internal and external structures on a bearded dragon help it survive with your class. You can use the following sentence frames to write a paragraph on the back of your paper.

*The (organism) has the external structure the (structure), which helps it survive by _________________________________.

*An internal structure in the (organism) is the (structure), which helps it survive by _________________________________.

*The (organism) has the external structure the (structure), which helps it survive by _________________________________.

*An internal structure in the (organism) is the (structure), which helps it survive by _________________________________.

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