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Title: Animal Adaptations using “Build Your Wild Self”!

Duration: Two class periods

Subject Area: Science

Grade Level: 4th Grade

Unit: Unit Eight: Survival and Extinction of Animals

Standards:

S4L2. Students will identify factors that affect the survival or extinction of organisms such as adaptation, variation of behaviors (hibernation), and external features (camouflage and protection).

- a. Identify external features of organisms that allow them to survive or reproduce better than organisms that do not have these features (for example: camouflage, use of hibernation, protection, etc.).
- b. Identify factors that may have led to the extinction of some organisms.

Opening: Place photos of various species on each table group (such as porcupine, octopus, rabbit, etc.) and ask students to discuss how these animals survive in the wild. Share observations and predictions through large group discussion. Focus discussion on the fact that different organisms have behaviors and external features that help them survive.

Work Period: Students will use the Build Your Wild Self! webpage at www.buildyourwildself.com to create their own imaginary creature. Students will record their choices in the “Body Part” column of the attached worksheet.

As they select each body part, students will make a prediction about how that body part would help this animal survive. Predictions will be recorded in the “Prediction” column of the attached worksheet.

Students will then print their completed Wild Self and conduct research about each species from which they “borrowed” a body part. Notes will be recorded in the “Research” column of the attached worksheet. Research will focus on determining how the adaptations provided by each body part would help the imaginary Wild Self creature survive.

After completing research, students will cut out their Wild Self and create a poster that shares information about their imaginary creature. Based on their research, posters should illustrate the imaginary creature within an appropriate ecosystem. Posters should also indicate how each adaptation would help this creature survive. In order to create their posters, students must first consider the following Higher Order Thinking questions: Based on these adaptations, in which environment would your creature be best suited to live? Why? Based on these adaptations, in which climate would your creature be best suited to live? Why? (Optional: Students can use www.iPiccy.com to create a digital poster that shares information about their imaginary creature.)

Closing: Students will share their completed posters with a small group of classmates, focusing on describing how adaptations help this creature survive and how they determined the best ecosystem for this creature.

Differentiation: Differentiate the research process as needed. Advanced students can compile information gathered from a variety of resources – textbooks, books, Encyclopedias, NetTrekker, etc.

The use of Fulton County's "One Search" search engine is highly recommended for advanced students. For students who need extra support, focus the research process on using the short paragraphs of information provided about each species through the www.buildyourwildself.com website and/or teacher-selected articles related to the species (Suggestion: articles found at The San Diego Zoo website – <http://animals.sandiegozoo.org>).

During creation of posters, ask Advanced students to consider additional Higher Order Thinking Questions related to their imaginary creature and address these questions in the information provided on their poster: Would your creature most likely be a carnivore, herbivore, or omnivore? How do you know? What external factors might lead to this creature becoming endangered or extinct? Why is this the case?

During the sharing of posters, Advanced students can be challenged to create a food web that includes the group member's imaginary creatures.

Differentiation

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| <input type="checkbox"/> Small group | <input type="checkbox"/> Product Matrix | <input type="checkbox"/> Choice of product |
| <input type="checkbox"/> Collaborative group | <input checked="" type="checkbox"/> Project based learning | <input checked="" type="checkbox"/> Time or method |
| <input type="checkbox"/> Flexible grouping | <input type="checkbox"/> Problem based learning | <input type="checkbox"/> Compacting |
| <input type="checkbox"/> Tiered instruction | <input type="checkbox"/> Level of text | <input type="checkbox"/> Other (see procedures) |

Body Part	Prediction	Research
<u>Head Gear</u>		
<u>Ears</u>		
<u>Face</u>		
<u>Arms</u>		
<u>Bottoms</u>		
<u>Backsides</u>		
<u>Tails</u>		