**Optional** Animal Adaptation Science Challenge

**Background:** As you have been learning in school, animals are suited, or adapted, to live in one habitat.  For example, by looking at a deer, you can tell they need to live in a forest where there is grass and other plants.  Their coloring helps them to camouflage into the trees. If they were to live in a grassland, they would have nowhere to blend in and would be seen, and eaten easily, by predators.  Also, by looking at their flat teeth, you can tell that they eat plants and need to live in an area with a lot of plants.

**Directions:**In this science challenge, you will be assigned a habitat.  Your goal is to create your assigned habitat in 3-D. Then, you will design and build an animal that can survive in that habitat.  You can think of an animal that already exists in that habitat, but you are encouraged to create your own animal! Think about what adaptations the animal needs to survive in that habitat.  Do they need to camouflage? How will they find food or shelter? Should they be large or small? Do they have feet, wings, flippers, fur, sharp teeth, flat teeth, etc. When designing your animal, you are encouraged to discuss different ideas and designs with family members.

**STEM Skills Presented in this Lesson:**

* Science: Students will use the engineering design process and will observe, communicate, and compare while completing this project.
* Engineering: Students will engineer an animal that can fit into a specific habitat.
* Math: Students will explore area, shapes, patterns, and mathematical relationships as they work to plan and engineer their animal.

**Materials included:**

* Cardboard, play dough

You are encouraged to use other materials.  Please come to the science room before or after school on Tuesdays, Wednesdays, or Fridays if you need supplies!

**Suggestions:**

* Conversations with family members are encouraged!
* When designing your animal, think of what they eat, what eats it, how it moves, and where it would live.  Give your animal species a name.
* Fill out the worksheet once you’ve created your animal.

**Due date:** January 4, 2019

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal Adaptation Science Challenge

 My animal is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  It lives in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_habitat. The adaptations that this species has to help it live in this habitat are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  This animal eats \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This animal is eaten by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Some interesting facts about my animal are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The person (or people) that helped me with this project is/are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We discussed \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.