

# i3 STC Kit Extension Activities

## North Carolina

Grade: 4th	
<b>Kit Name: Animal Studies</b>	
Essential Standard(s): (List number, standard, clarifying objectives where appropriate)	
<p>Extension: 4.L.1.3</p> <p>Explain how humans can adapt their behavior to live in changing habitats (e.g., recycling wastes, establishing rain gardens, planting trees and shrubs to prevent flooding and erosion).</p> <p>Also meets W.4.7: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.</p> <p><b>CCSS.ELA-Literacy.RI.4.2</b> Determine the main idea of a text and explain how it is supported by key details; summarize the text.</p>	
Unpack the Standard (What does it mean? What is the “Big Idea?”):	
<p>Adapting Environment (adaptive behaviors): Students know that humans can adapt their behavior in order to preserve the systems that they depend on for their survival. (e.g., recycling wastes, establishing rain gardens, planting trees and shrubs to prevent flooding and erosion). A habitat is where an animal finds food, water, shelter, and space-the things it needs to grow and reproduce. Each animal has specific needs.</p> <p>Subconcept 4: A combination of behaviors and structures, rather than any single characteristic enables an animal to survive in a particular habitat.</p>	
What is the Engaging (will get the student interesting) Essential Question that the students will be trying to answer as a result of this Extension?	
How do humans change their surroundings (environment) to meet their basic needs for survival?	
Which activities in the kit touch on the Standard(s) and how can they be adjusted to better address the Standard(s)?	
<p>Lesson 13 introduces adaptation</p> <p>Lesson 14 goes into adaptive structures. (Adaptive behaviors can be placed here.)</p>	
Kit Activity	Extension Suggestions
<b>Lesson 14 What Makes and Animal Special? Part 2</b>	By this point in the kit, the students will have already developed the understanding of the basic needs of animals and that they all have the same needs.
	Have students create a graphic organizer, using prior knowledge of human needs to compare and contrast basic needs of animals and humans.
	Then break up class into “expert” groups to research each topic of need (food, water, shelter, space) as it relates to humans. Research will be focused on how humans have adapted (modified or changed) their environments to meet their needs. On day 2 (or for advanced students), give them different regions of the world or countries (ie: the arctic and a rainforest; Egypt and Russia) to compare how people meet their needs. Students will record and report out their findings. May take 2 class periods.
	If you can, read a book or story set in Alaska (such as <i>Akiak</i> by Robert J. Blake). Discuss what students would need to do to adapt from traveling from somewhere southern (like NC) to somewhere northern (like Alaska).
	Read <i>Grandfather’s Journey</i> by Allen Say. How does Grandfather adapt to the different places he lives?
	Begin, assist with, or maintain a school recycling program.

	Discuss rain gardens. (See links below.) Establish and care for one at school if possible.
	Talk to administration to see if there are any places on campus that are suffering from erosion. If so, take a quick field trip to see the erosion. If possible, plant small shrubs or trees to halt the erosion. Tell students that the roots of the plants hold the soil in place to prevent erosion.

Additional Suggestions (Literature connections; online resources):

The websites below provides helpful hints on building a rain garden:

<http://www.raingardennetwork.com/schollgardens.htm>

[http://www.kinniriver.org/wp-content/uploads/2008/04/krlt\\_schoolraingarden-brochure.pdf](http://www.kinniriver.org/wp-content/uploads/2008/04/krlt_schoolraingarden-brochure.pdf)

Recycling:

<http://www.kidsrecyclingzone.com/index.html>

What does it mean to be human?: Smithsonian website featuring human characteristics and fossil specimens in 3-D; Climate effects on human evolution and survival of the adaptable.

[Humanorigins.si.edu/evidence/human-fossils/fossils](http://Humanorigins.si.edu/evidence/human-fossils/fossils)

Akiak by Robert Blake

Grandfather's Journey by Allen Say

Recycle!: A Handbook for Kids by Gail Gibbons

A River Ran Wild by Lynne Cherry – Students can summarize the main ideas of the text and explain supporting details about this true story of the history, the polluting and the cean-up of the Nashua River.