Grade 2 Science
Make a Pattern

Students will examine animal patterns and explain how certain patterns are well-suited for different habitats.

Next Generation Science Standards:
2-LS4-1: Make observations of plants and animals to compare the diversity of life in different habitats.

Common Core Standards:
CCSS.ELA-LITERACY.RI.2.1: Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
CCSS.ELA-LITERACY.RI.2.3: Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
CSSS. ELA-LITERACY.W.2.2: Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
CSSS. ELA-LITERACY.SL.2.1: Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.

Materials:
Where Do I Live? book
Pictures/examples of animal skin/patterns
Access to computers or a variety of animal books
Large paper roll
Art supplies

Procedure: 1. The teacher reads *Where Do I Live?* and asks students how the book's animals are well-suited to their environments. 2. The teacher has students look at different animal skin/patterns (can be in the form of pictures, stuffed animals, printed clothing, etc.) and asks students to predict the kind of biomes these animals might live in 4. Students are broken into five groups, one for each habitat in the book. Groups are given a list of animals found in their assigned biome. 5. Students use computers/books to research the animals and draw an example of each animal, showing its pattern. 6. Each group uses a large sheet of paper to draw their biome background 7. Each group presents their animals to the class and explains how each animal's pattern helps it live in its biome. 8. Students write a paragraph or short essay about the use of patterns in the wild. Why might patterns be helpful?

Assessment: Can the students explain what it is about the pattern that makes it appropriate for the biome?

*note: the animals mentioned below have examples of camouflage patterns, but patterns can also be used as a warning to predators or to attract a mate. Teachers have the option

to find other animals if they want to extend the lesson into the different purposes of patterns. Alternately, the purposes of patterns can be used as an additional lesson or as a research topic for students who need an extra challenge.

forest: boreal owl, white-tail deer, raccoon, pheasant, chipmunk
tundra: snowy owl, polar bear, arctic fox, rock ptarmigan
desert: sidewinder rattlesnake, horned lizard, roadrunner, cactus wren, Arizona bark scorpion
grassland: zebra, elephant, black rhino, giraffe, hyena
aquatic: sea turtle, stingray, sea dragon, stonefish, whale shark

Standards obtained from:

NGSS Lead States. 2013. *Next Generation Science Standards: For States, By State*s. Washington, DC: The National Academies Press.

Common Core State Standards: National Governors Association Center for Best Practices, Council of Chief State School Officers Title: Common Core State Standards (insert specific content area if you are using only one) Publisher: National Governors Association Center for Best Practices, Council of Chief State School Officers, Washington D.C. Copyright Date: 2010