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| Create-a-Critter  Animal Adaptations | | |
| **Grade Level**  Preschool/  Elementary  **Lesson Length**  30 min. – 1 hours (depending on activity choice)  **STEM Careers**   * Animal Scientist * Veterinarian * Zoologist   **Life Skills**   * Decision Making * Wise Use of Resources * Sharing   C:\Users\kblack6\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\3.jpg  <https://www.nationalgeographic.org/encyclopedia/adaptation/>  <http://kids.sandiegozoo.org/animals>  <http://www.animalplanet.com/wild-animals/animal-adaptations/> |  | http://www.broadcomfoundation.org/img/about/STEMgraphic.png*.*  Learning Objectives  By the end of the lesson, students should be able to:   * List the things that all animals need to survive * Recognize different types of animals based on physical appearance (ie. Birds, mammals, reptiles, etc.)   Educational Standards Supported (Nebraska Early Learning Guidelines)   * Child uses materials to build and create a three-dimensional structure to represent another item (Creative Arts) * Child uses senses, materials, tools, technology, events in nature, and the environment to investigate and expand knowledge (Science)   Materials List   * Water bottles (empty and dry) * Cardboard Tubes (paper towel, toilet paper, etc.) * Variety of tape * Packing Supplies (foam, bubble wrap, etc.) * Rubber Bands * Plastic Cups * Craft Supplies (ribbon, fabric swatches, pipe cleaners, etc.)   Possible Misconceptions   * Animals that eat other animals are mean or ferocious. * People are not animals. * Anything that moves is alive. |

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| C:\Users\kblack6\AppData\Local\Temp\STEM Careers Icons.png5 E Lesson  Introduction  Both plants and animals are living things. This means they need certain things to stay alive. All living things need food, water, air and shelter. Along with these important items, many animals have special adaptations that help them survive in a variety of habitats. Some have fur, scales, feathers, and skin. These are considered physical adaptations.  Opening Questions   * *What kinds of things help animals survive in the wild?* * *What is the difference between a pet (domestic) and a wild animal?*   Engage:   * *Play animal trivia or animal bingo to warm-up and identify how much children already know about animals.* * *Bring out live examples of animals or show real pictures of different animals.* * Read one of the suggested resource books (or non-fiction animal book of your choice). Ask questions as you read to help children think about what animals need to survive.   Explore:   * Discuss the animals in the story and/or the pictures you have to determine similar and different physical features of animals and what they are for (ie. Fur helps keep animals warm, etc.). Ask questions about what animals eat and where they live. * Use resource Create-A-Critter page to guide children in designing their animal. After completed, use recycled and/or craft materials to build 3-D version of animal. Have animal picture books available for references. | **Glossary words:**    **Domestic –** bred or trained to need or accept human care; living with people  **Shelter** – a place to live; somethings that provides protection  **Similar** – almost the same as something else  **Survive** – to stay alive |
| Explain:  *Allow time for children to share what they created and why.* ***Questions to ask:*** *What are some features you chose for your animal? Why? What would you change or add to improve your animal?* | |
| C:\Users\kblack6\AppData\Local\Temp\STEM Careers Icons.pngElaborate/Extend  *Observe everyone’s creation. Is anyone’s animal similar? Could anyone’s animal live in the same place?* | |
| C:\Users\kblack6\AppData\Local\Temp\STEM Careers Icons.pngEvaluate/Reflect   * *What kinds of things do animals need to survive? (food, water, air, shelter)* * *Are we animals? (Yes)* * *What is the difference between a domestic animal and a wild animal?* | |
| **We want to hear from you!**  C:\Users\kblack6\AppData\Local\Temp\Connect..jpg  Let us know what you thought of the lesson or send us a picture of youth participating in the lesson.  #NE4HSTEM | |
| **References/Resources:**   * Drolshagen, K., Grimm, M., & Schroeder, M. (2010). *University of Wisconsin Extension 4-H Cloverbud Activity Book A.* Retrieved from <https://www.ag.ndsu.edu/burleighcountyextension/pdfs/committee-minutes/CloverbudCombinedActivityBooks.pdf>   **Suggested Children’s Books:**   * Fielding, B. (2011). *Animal eyes.* Waynesville, NC: EarlyLight Books, Inc. * Cusick, D. (2009).  *Animal tongues.* Waynesville, NC: EarlyLight Books, Inc. * Jenkins, S. (2014). *Eye to eye: How animals see the world.* New York, NY: Houghton Mifflin Harcourt. * Markle, S. (2015). *What if you had animal feet?* New York, NY: Scholastic Inc. * Markle, S. (2014). *What if you had animal hair?* New York, NY: Scholastic Inc. * Markle, S. (2013). *What if you had animal teeth?* New York, NY: Scholastic Inc.   **Author:** Sarah Roberts  Nebraska Extension in Dixon County  sarah.roberts@unl.edu  *Last Updated on September 11, 2020* | |

**Create-a-Critter**

Design your animal! You can draw a picture or write a few words to help you. Complete the sentences below your drawing.

My critter’s name is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

My critter lives \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

My critter is cool because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.