



Animal Shelter Challenge

Ready to have some fun with TGR Foundation's Design Challenges?! In this week's challenge families will use a simple design process to build an animal shelter. This family-friendly activity will unlock your creativity to imagine, plan, create and test a solution. Look around your house or even outside for items that can be used to design your animal's home.

DAY 1	DAY 2	DAY 3
<p>Imagine</p> <p>What animals are around your backyard or neighborhood? Where do they live? What do these animals use for shelter?</p> <p>Go for a walk and list animals you see or hear and identify what they use for shelter.</p> <p>Select an animal to build a shelter for. First, investigate through observations and internet research the best type of shelter for the animal. Learn about its natural habitat, physical and behavioral characteristics and needs and diet.</p> <p>Things to Consider:</p> <ul style="list-style-type: none"> • What do you notice about the animal? • Are there animals that come out at night versus the day? • What do you notice about its shelter? • What do you know about its physical and behavioral characteristics? • What do you know about its needs and diet? <p>Reflection Questions:</p> <p>Why do we want certain animals to live near our homes? What can be done to attract them?</p> <p>Why do we not want certain animals to live near our homes? What can be done to deter them?</p>	<p>Plan</p> <p>Time to plan it out! From what you learned, make a shelter for your animal. Design a shelter that meets the animal's needs for safety/protection, sleep/rest, food and enrichment.</p> <p>When planning the shelter, make sure you:</p> <ul style="list-style-type: none"> • Make a sketch of the animal and your shelter • List household or outside materials that can be used to build a safe and sturdy shelter • Consider its needs in the design • Gather the items/materials you will need to create your animal's shelter <p>Things to Consider:</p> <ul style="list-style-type: none"> • What does the animal need for shelter? • How is your shelter designed to meet the animal's need for protection/safety, food, sleep and enrichment? • What part of your design will attract the animal to the shelter? • What items can you use that are safe for your animal? <p>Reflection Questions:</p> <p>Why did you select the items that you did?</p> <p>Are the items you have selected safe for your animal? If not, why is the item not safe? Is there another item you can use instead?</p>	<p>Create</p> <p>Now it's time to create your animal's shelter. Using the items/materials you gathered and your sketch, construct a shelter for your animal.</p> <p>Things to Consider:</p> <ul style="list-style-type: none"> • Is the shelter big enough to hold your animal? • Is your shelter for one animal only or can more than one live in it? • Do you need an adult/older sibling to help you? <p>Reflection Questions:</p> <p>Did you have enough items/materials to build your shelter? If not, what did you do?</p> <p>Which items were closer to what the animal's natural shelter is made of?</p>
DAY 4	DAY 5	
<p>Test & Improve</p> <p>Time to test out how sturdy and safe your animal shelter is without the animal.</p> <p>Things to Consider:</p> <ul style="list-style-type: none"> • Is it waterproof? • Does it blow over easily in the wind? • Is it out of reach of predators? • Can other animals take over the shelter? <p>Reflection Questions:</p> <p>Did the animal shelter work out as you had expected? Why or why not?</p> <p>Did any damage occur (due to weathering, other animals, etc.)? If so, what modifications did you make? Are there any items/materials you would change?</p>	<p>Observe</p> <p>Now it is time for you to place your shelter in an area for the animal and observe the animal's interaction with it. This may not occur within a day. So, you may need to continue to observe for a few days to see how the animal interacts with the environment.</p> <p>You may need to place an item on your shelter to attract your animal to it.</p> <p>Things to Consider:</p> <ul style="list-style-type: none"> • Is the animal attracted to it? • How long did it use the shelter? • If the shelter is not being used, what might be some reasons why? What can you do to modify it? <p>Reflection Questions:</p> <p>Why do we want to provide shelter for certain animals to live near our homes?</p> <p>What was the hardest part in building a shelter for an animal?</p>	<p>Overall Design Reflection Questions:</p> <ul style="list-style-type: none"> • What were some interesting discoveries you made while working on the Design Challenge? <ul style="list-style-type: none"> • About the problems? About yourself? • What were some of the difficulties of the Design Challenge? <ul style="list-style-type: none"> • What made them difficult? • What were some learning moments? <ul style="list-style-type: none"> • What made them so? • How can you use what you have learned in the future? <p>Quote:</p> <p>Explain the quote listed in your own words, and then describe how it applies to the design challenge.</p> <p>"Some people talk to animals. Not many listen though. That's the problem."</p> <p style="text-align: right;">-A.A. Milne</p>

If you are interested learning how insect diversity is an important indicator to our ecosystem health, then check out, our Entomology Exploration lesson on TGR EDU: Explore <https://tgreduexplore.org/curriculum>