Design Challenge: Helping Our Friends, the Bats

Overview

Bats are valuable members of our communities. They are good neighbours because they can consume their body weight in mosquitos! They are natural predators of many of the night flying insects that bite us and carry disease. They also help to maintain the balance of nature because they consume many lawn and garden pests.

Bats need our help. They are losing their natural habitats. Many of the pesticides we have used on our crops and gardens have threatened the lives of bats.

Design Rationale

Bat houses can be constructed to support and encourage bats in our neighbourhoods. Bats choose to live within proximity to water. They prefer streams, rivers or lakes. Bat houses can be installed any time of the year but late spring or early summer is best. While there is no perfect design for a bat house, it should be painted. The colour you pick should be based on temperature in July in your area. Can you think of why this time of year is a critical factor?

For suggestions on the actual sizing of the optimal bat house, please check out A Guide for Bat Houses in BC (http://www.bcbats.ca/attachments/Bat_houses_in_ BC_2015.pdf) or Build a Bat House prepared by the US National Wildlife Federation - Grade Level 2 to 8 (https://www.nwf.org/~/media/PDFs/Be%20Out%20There/ Schoolyard%20Habitats/buildbathouse.pdf).

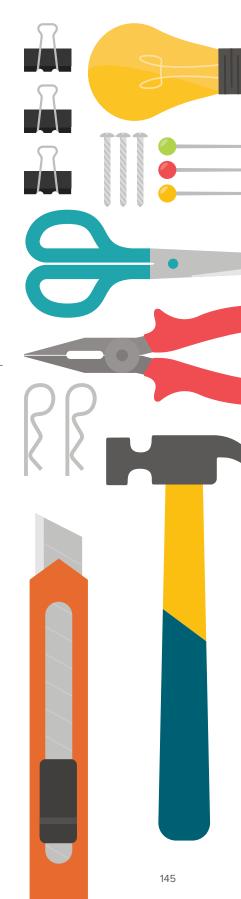
Problem Scenario

Your team has been selected to design an attractive bat house that will attract bats to our neighbourhood. Your bat house design should reflect our community and environment. It should meet and / or exceed the key criteria for successful bat houses. Your team will build a prototype from your final bat house design sketch using cardboard and the materials provided by your teacher. Successful prototypes will be selected for construction using durable materials.

Success Determinants

Success will be determined by:

- ☐ Meets the key criteria for a successful bat house
- Is attractive
- □ Reflects our community
- ☐ Can ultimately be built using more durable materials (i.e., wood)





Parameters

- ☐ Use items and materials found in your Participant Group Kits and the *Shared Pantry*.
- ☐ Use the tools that have been provided at the *Shared Tool Station*.

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