



Wade Institute for Science Education

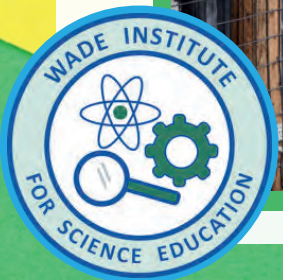
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Extreme Zoo Makeover: A STEM Approach to Habitat Design

2024 Massachusetts STEM Design Challenge

Massachusetts STEM Week
October 21-25, 2024



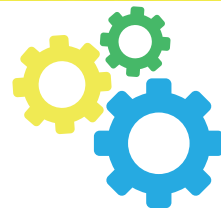
Join the **Wade Institute for Science Education** and our partners for a fun Pre-Challenge Workshop and bring a materials kit back to your classroom!

Pre-Challenge Workshops will be held on September 28th, 2024 at Buttonwood Park Zoo in New Bedford, MA

Register Today!
wadeinstitutema.org



Extreme Zoo Makeover: A STEM Approach to Habitat Design



2024 Massachusetts STEM Design Challenge

As part of Massachusetts' 2024 STEM Week, the Wade Institute for Science Education is pleased to partner with the Lloyd Center for the Environment and Buttonwood Park Zoo to present an exciting STEM Design Challenge. This year, we're offering a dynamic two-tiered engineering design challenge.

Join us for *Extreme Zoo Makeover: A STEM Approach to Habitat Design*! This Design Challenge will engage students in grades 5-8 in a unique experience that integrates science and engineering concepts in a series of inquiry-based investigations that lead up to a student-driven design challenge. The challenge is designed for middle school students but is easily adaptable to elementary or high school level.



Design Challenge: *Your local Zoo wants a makeover! As we learn more about animals' needs, we've realized the Zoo's old habitats are no longer adequate and it's up to you and your engineering team to redesign them. You must find a way to 1) design habitats that meet the specific needs of the animals for which you are designing them, 2) engineer an enrichment item for your animal species that will stimulate natural behaviors, and 3) create an interpretive sign and interactive features that will engage the public in your animal habitat.*

For teachers who have already participated in an *Extreme Zoo Makeover* challenge, we've added a new, second tier to the challenge that incorporates Arduino sensor technology. This tier will guide students to integrate this cutting-edge tech into their habitat designs.

Anyone who registers for the Challenge will receive a curriculum packet that includes both pre-challenge investigations and the Design Challenge itself. Any Massachusetts educator who registers for the Challenge is eligible to receive both a curriculum packet and a materials kits for classroom use.

Pre-Challenge Professional Learning Workshops will be offered on Saturday, September 28th, 2024 at Buttonwood Park Zoo. During the workshop, you'll participate in elements of the challenge and have the opportunity to try out your enrichment toys with animals at Buttonwood Park Zoo.

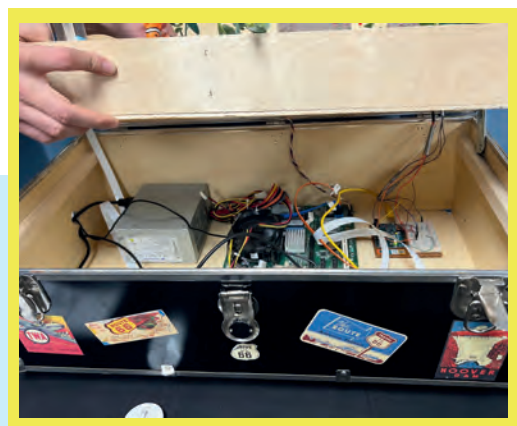
For those interested in the new technology component of the Design Challenge, we will include a session during the workshop on the technology-based component of the challenge.

Registration Info:

Pre-Challenge Workshops: Saturday, September 28th, 2024
(8:30 AM - 3:30 PM ET) at Buttonwood Park Zoo, New Bedford, MA

Cost: *FREE!* Massachusetts educators who sign up for the Challenge are eligible for a classroom materials kit and a curriculum guide. Out-of-state participants will receive a curriculum guide.

Collaborative Partners: Lloyd Center for the Environment; Buttonwood Park Zoo



To register, visit www.wadeinstitutema.org.

Questions? Contact wadeinstitute@wadeinstitutema.org.