

Teacher's Guide

2021–2022



LIFE SCIENCE MUSEUM

BRIGHAM YOUNG UNIVERSITY

mlbean.byu.edu (801) 422-5050

Dear Educator,

We are excited for a new school year and hope you will utilize the resources available to you through the Life Science Museum at Brigham Young University. Last fall we redesigned all of our school programs to include more specimens from our collection. These programs also line up with the Utah Core science standards and will help solidify the important science concepts and skills you are already teaching in your classroom. This guide will outline these resources in detail so you can determine what will work best for you and your students. **Due to continued pandemic restrictions, our school programs will ONLY be offered virtually as webcasts. Additionally, our hours of operation will be from 2-9 PM Mondays through Fridays and from 10 AM - 5 PM on Saturdays.**

Sincerely,
Katy Knight
Education Administrator

SCHOOL PROGRAMS

We offer school programs in two formats: in-house and webcasts. Educators can choose from 8 different school programs based on grade level and the Utah Core science standards.

WEBCASTS (FREE): Webcasts are free and neither the museum educator nor the students have to invest in travel time or bus fees. This also allows us to reach schools that are more distant from the museum. Webcasts must be scheduled at least one week in advance and require the proper technology (webcam, internet, projector, sound system, etc.). Webcasts featuring the school programs are free, and the best option for school groups during the pandemic.

IN-HOUSE PROGRAMS (FREE): These private programs are held in the museum and are free. They must be scheduled at least one week in advance. We will not be offering school programs in this format during the pandemic.

RESERVE YOUR PROGRAM ONLINE:



Request a school program for your class on our website. Visit mlbean.byu.edu and fill out the request form as completely as possible. For questions, you can also call (801) 422-6698 or email: beanmuseum@gmail.com.

ADDITIONAL INFORMATION:

To help us improve our education programs, teachers are requested to fill out a feedback form. Each program will typically last between 30 and 45 minutes. In-house and webcast programs start 15 minutes after the hour.

School Programs Descriptions

Our school programs are interactive, make effective use of inquiry learning methods, and focus on the Utah Core science standards for students from kindergarten to sixth grade.

Preschool

Animal Discovery: A quick, age-appropriate glance at animals. Students will play a “game” to identify and discover new things about animals. This program is interactive and created specifically for kids under the age of six. While

we won't limit group size, this program works much better for groups of 15 or less.

Kindergarten

Needs of Living Things: Students will use specimens to play a matching game that compares the needs of living things, including plants, animals, and humans. They will also discuss where these plants and animals live in order to meet their needs. (Standard K.2.1, K.2.2)



First Grade

Family Patterns: Students will compare and contrast a variety of different animal parents and their offspring. They will also observe

patterns in animal behavior and identify relationships between the parents and the offspring. (Standard 1.2.3, 1.2.4)



Second Grade

Habitat Hunters: An opportunity for students to explore various life sustaining factors and decide which habitat a particular organism might best live and

survive in based on that organism's adaptations. (Standard 2.2.1, 2.2.2)

Third Grade

Physical Traits: Students will identify and analyze how various physical traits can affect the survival of an organism in certain environments. Includes a variety of hands-on specimens that students can use to make observations and enhance their learning. (Standard 3.2.3, 3.2.4)



Fourth Grade

Utah's Diversity: A discussion of several Utah ecosystems including the kinds of plants and animals that occupy each ecosystem. This program involves an interactive discussion about three Utah ecosystems: wetlands, forests, and deserts. Students will help analyze each specimen and learn why they are found more commonly in one habitat versus another. (Standard 4.1.1, 4.1.2)

Fifth Grade

Energy Matters: In this program students will analyze how plants, animals, and decomposers obtain and use matter and energy. Students will also track the flow of energy through a variety of ecosystems using food chains and specimens. (Standard 5.3.1, 5.3.2, and 5.3.3)

Sixth Grade

Interactions in Ecosystems:

Students will be presented with a variety of organisms and specimens, which they will use to identify and discuss the complex interactions between them,

including competition, mutualism, and predation. Students will then organize the plants and animals into a food web that tracks the flow of energy and matter in the ecosystem. (Standard 6.4.2, 6.4.3, and 6.4.4)

Biodiversity: This program is designed for all ages and covers learning standards from each grade K-6. Students will analyze an ecosystem and determine the needs of the organisms living there, the traits that allow them to survive, and the interactions between them.

WEBSITE RESOURCES – MLBEAN.BYU.EDU

We have many resources available for teachers on our website.

- School Programs Information – You can find information about each specific school program.
- Scavenger Hunts – Several scavenger hunts based on our exhibits are available online for teachers to print and distribute before coming to the museum.
- Audio Tour – Our audio tour can be accessed through our website and contains interesting information about 90 different animals. QR codes can also be scanned on-site with smartphones to access this resource.
- Exhibit Videos – We have over 25 exhibit videos (2–6 minutes in length) featuring Matt Meese (from Studio C) as our version of David Attenborough or the Crocodile Hunter. They are available on our website



(mlbean.byu.edu) and on YouTube. QR codes can also be scanned on-site with smartphones to access this resource.

- Identify “Me” (identifyme.byu.edu) This mobile website can be used in the museum with personal smartphones. Students answer a series of questions based on their observations while working through a dichotomous key. Eventually the student is able to identify the name of a specific animal.

OTHER EDUCATIONAL OPPORTUNITIES AT THE MUSEUM

The BYU Life Science Museum offers a number of other educational programs.

Nature Experienceships:

Students ages 12 and up (including adults) can spend time with an expert learning about various life science topics by participating in the museum’s “Nature Experienceship” activities. Topics include birds, lichens, trees and shrubs, insects, wildflowers, reptiles and amphibians, fish, mollusks, and mammals. Cost is \$12 per person. Our Nature Experienceships usually involve a local field trip.

Education Collection:

Specimens from the museum’s education collection can be loaned to teachers for two weeks free of charge. A maximum of 10 specimens can be checked out at a time with a \$5/day late fee per specimen. See our website for more information and to download the request form.



Bio-boxes:

Our Bio-boxes can bring the museum’s unique and valuable resources right into your classroom. Each Bio-box includes mounted specimens from the museum’s education collection as well as “biofacts.” Biofacts are biological artifacts, such as animal

skins, feathers, eggs, antlers, bones, fruits, seeds, etc. Where possible, the Bio-boxes also include additional resources, such as field guides or topic-related videos. Each Bio-box also contains a teacher’s guide, which provides teachers an overview of the subject, a description of the Bio-box’s connection to specific core curriculum concepts, and ideas as to how the contents of the Bio-box can be incorporated into lesson plans. The materials in each Bio-box can be used in a number of ways in support of a single lesson or as supplemental material for an entire unit. The teacher’s guide can also be downloaded from our website. Our Adaptations and Ecosystems Bio-box is designed for secondary-age students. We also have an Elementary Education Bio-box.

Bio-box Checkout Procedures:

You can check out a Bio-box by filling out the request form on our website. Bio-boxes may be kept for up to two weeks. Use of a Bio-box is free, but you will be required to enter a valid credit card at the time of your request. For each day the box is late, a \$5.00 late fee is assessed; if any items from the box have been damaged or are missing, your credit card will be charged. Delivery service is now available for schools in Utah County for a \$35 fee. Simply indicate that you would like this service when filling out the online request form. There will be an additional \$20 distance fee for every 20 miles (beyond the first 20 miles). The credit card you provided at the time of your registration will be charged after the delivery has occurred.

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