Monte L. Bean
Life Science Museum
Scout Patch

The Monte L. Bean Life Science Museum supports the ideals and principles of both the Girls and Boy Scouts of America. We feel it is essential that people of all ages become aware of the living world around them and how it is important to them on a personal level. The museum is dedicated to educating people about the significance of our living world.

The Museum patch was designed to motivate scouts to gain a greater appreciation and knowledge of the life sciences. By completing the requirements for this patch, scouts can expand their minds, search their interests and gain a better understanding of the living world. As scouts experience the world around them, they will gain a greater appreciation for all forms of life, and they will make new and interesting discoveries about our living world.

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<tr>
<th>Museum Hours</th>
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<tr>
<td>Monday - Friday</td>
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<tr>
<td>10:00 a.m. - 9:00 p.m.</td>
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<tr>
<td>Saturday</td>
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<td>10:00 a.m. - 5:00 p.m.</td>
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<td>Admission is free.</td>
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<tr>
<th>Contact Information</th>
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<tr>
<td>Monte L. Bean Life Science Museum</td>
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<tr>
<td>Brigham Young University</td>
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<tr>
<td>2103 MLBM</td>
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<tr>
<td>P.O. Box 20200</td>
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<tr>
<td>Provo, UT 84602-0200</td>
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<td>(801) 422-5050</td>
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Live animal shows are offered to the public every evening at 7:30 PM, Mondays at 6:30 and 7:30 PM, and Saturdays at 1:00 and 3:00 PM. Shows for private groups can be requested on our website at mlbean.byu.edu

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<th>Location</th>
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<td>The Monte L. Bean Museum is located on the campus of Brigham Young University. It is directly north of the Bell Tower and east of the Marriott Center on 1430 North.</td>
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Enjoy your visit to the Museum!
In Search of Life

Take a personal “safari” around the museum and learn about our relationship with living things. Use what you learn to answer this worksheet. You should be able to find all the answers in the museum. If you need assistance, please ask for help at the information desk or visit with a museum educator.

General Questions

1. The study of Life Science is known as ____________________.

2. In what ways does the museum provide an opportunity to study about the living world?

3. The museum allows us to learn about animals and plants from different parts of the world.
   Name three kinds of animals and/or plants for each of the following regions:
   - The Ocean –
   - Africa –
   - The Arctic –

4. Explore the exhibit found in the east center atrium (at the main entrance of the museum).
   What conditions allow the earth to support life?

Principles of Evolution

5. Evolution is the change in inherited traits from one generation to the next.
   List three mechanisms for evolution. You can find this information on the largest wall of the evolution exhibit.
   a.
   b.
   c.

6. How does the fossil record teach us about evolution?
7. What is the difference between natural selection and artificial selection?

8. Adaptation is an example of microevolution. Overtime, plants and animals adapt by developing characteristics that help them to survive changing conditions. One example is thick fur that helps animals survive cold winter weather. Can you think of four other examples of animal or plant adaptations?
   a. 
   b. 
   c. 
   d. 

9. How would the adaptations you listed above help the animals and plants survive?
   a. 
   b. 
   c. 
   d. 

Because of Plants...

10. Name four ways that humans use plants.
    a. 
    b. 
    c. 
    d. 

11. Give three examples of how you use plants every day.
    a. 
    b. 
    c.
Animal Classes

12. Vertebrates are animals with a backbone. Insects and mollusks are examples of invertebrates (no backbone). Name the five classes of Utah vertebrates. You can find this answer in the basement of the museum (west side by the small elevator).
   a.
   b.
   c.
   d.
   e.

13. The class of animals that is most abundant on earth is not a vertebrate.
   a. Can you guess what it is?
   b. Why do you think they are the most abundant?

14. Find an animal in the museum with the following characteristics:
   ○ Has a beak
   ○ Lays eggs
   ○ Has scales
   ○ Has part of its skeleton on the outside of its body
   ○ Can live up to 100 years
   ○ Can live in water or on land
   ○ Different species can range in size from a few inches to eight feet in length

   a. Which animal are we referring to?
   b. Which class of animals does it belong to?

Why Insects?

15. Name three ways insects are beneficial to humans.
   a.
   b.
   c.

Apex Predators

16. Name an example of a predator/prey relationship.

   a. In this relationship, what behaviors and characteristics help the predator to obtain their prey?

   b. What behaviors and characteristics help the prey to avoid capture?
Conservation

17. Name four reasons animals might become endangered.
   a.
   b.
   c.
   d.

18. One reason plants and animals are endangered is because their habitats are shrinking. Name one thing that would cause habitats to shrink.

19. List three plants or animals that are threatened or endangered, and why.
   a.
   b.
   c.

20. What are some things that you could do to help protect these plants or animals and their habitats?

21. Name three animals that are extinct and why.
   a.
   b.
   c.

Mind Expansion

22. Name one thing you learned from your visit to the museum today.

23. What are some things you can learn from studying the life sciences?

Name ________________________________  Completion Date ________________________________

Unit # ____________________  Leader ________________________________

Sponsor (e.g. school, church group) ________________________________

Museum employee signature: ________________________________
Scout Patch Requirements

To earn the museum scout patch, visit the museum a minimum of two times, fill out the worksheet, watch the stewardship video, and attend an in-house show.

Requirements:

1. First Museum visit: ________________________________ Date

2. Second Museum visit: ________________________________ Date

3. Stewardship video (26 minutes):
   (Can also be accessed on the museum’s website mlbean.byu.edu) ________________________________ Date

4. Worksheet: ______________________________________ Date completed

5. Live Animal show: ________________________________ Date
   a. Educator ______________________________________
   b. Show ______________________________________

Get a stamp at the information desk after the completion of each requirement.