Before your students visit the Museum, be sure to prepare them with the proper vocabulary and understandings necessary to complete this activity.

**ESSENTIAL UNDERSTANDING:**

All the components of an ecosystem, both living and non-living, are interconnected.

**ESSENTIAL QUESTIONS:**

> What is an adaptation?
> How does energy move through an ecosystem?
> How do the components of an ecosystem depend on each other?
> What is a classification system?
> How do classification systems help us better understand the relationships between living and non-living things?

**VOCABULARY TO KNOW:**

Observation, Inference, Adaptation, Classification, Symbiosis, Biotic, Abiotic, Ecosystem, Food Web, Food Chain, Predator, Prey, Environment, Mutualism, Parasitism, Competition, Producer, Consumer, Organism
Choose 1 of the biome/habitat dioramas in the Life Gallery (Level 4) for your research.

Record observations about your habitat below. Be sure to include:

- Living things
- Non-living things
- Climate
- Anything else you think is important

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<thead>
<tr>
<th>Biome/Habitat Name:</th>
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Choose 3 organisms in your biome/habitat. What adaptations do you observe that these organisms have that make them successful at living in their biome/habitat?

Create a food web for the items you identified in your biome/habitat. Some questions to consider:

- What is the energy flow in your habitat?
- Which organisms are producers or consumers? Label them.
- What are the biotic and abiotic components? Label them.
Make an inference: what would happen if one of the organisms in your biome/habitat went extinct? How do you think this would impact other life in your biome/habitat?

Scientists know Earth’s climate is getting warmer, storms are getting stronger, and snow and ice are melting faster. What effect do you think global climate change will have on your habitat/biome? Explain your thinking.