The Morian Hall of Paleontology
First Floor

Vocabulary:
- atmosphere
- biodiversity
- carnivore
- consumer
- deprived
- environment
- extinction
- fossils
- herbivore
- inherited trait
- mammoths
- mastodon
- migrated
- nutrients
- organism
- paleontology
- paleontologist
- predator
- prey
- producer
- species
- specimen

Precambrian

Examine these two stromatolites. Notice the absence of red colored rust in the first image. Now look at image two and notice the large amount of red rust. Keep in mind that most rocks contain iron, but the iron in the first specimens didn’t “rust” like the iron in the second specimen. What can we now assume was in the atmosphere that allowed the iron to rust and was necessary for more complex life forms to live on Earth?
Trilobites
Trilobites used to live on the ocean floor millions of years ago. Below are pictures of two different species of trilobites that can be found in our halls - compare and contrast the two different trilobites shown.
The Late Cretaceous

Look at the mural of the Late Cretaceous. What are some common elements in the environment that sustain the diversity of life during this time period? **Hint:** Think basic needs.

Complete the food chain using the options below:

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Sun       Triceratops       magnolia
decay/nutrients       Tyrannosaurus rex
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→  →  →  →
“Lane” the Triceratops vs. “Stan” the Tyrannasaurus rex

In this scene between Lane and Stan, which one is the predator? The prey? Explain how you came to your conclusions.

Predator:

Prey:

Explanation:
Fight or Flight

Compare the two scenes on display. One includes a *T. rex* and a *Denversaurus* and the other includes a *T. rex* and a set of two *Quetzalcoatlus*. Which scene shows a “fight” to survive and which scene shows a “flight” to survive?

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<tr>
<th>Action</th>
<th>Scene</th>
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<tr>
<td>Fight</td>
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<td>Flight</td>
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Look at the large pterosaur on display. Keeping in mind that these creatures can soar above the Earth’s surface, how might his bones differ from that of a *T. rex*? Explain your answer.
Why do you think the mastodons and the mammoths migrated to areas beyond where they originated? 

**Hint:** think basic needs.

By the end of the Ice Age, the mastodons and mammoth became extinct. List two reasons why you think this happened.

1. 

2. 