8. **Find the “Great Lakes coastal dunes” diorama**
   What are perched dunes? How were they affected by glaciers?

   ________________________________________________________________

9. **Can you spot the difference between soils?**
   Typical soils have 5 layers. Each diorama has layers of soil. Choose one of the dioramas, find the soil profile, label the drawing, and draw how many layers of soil there are.

   Typical Soil Profile
   ________________________________________________________________

   Do you see any differences between a typical soil profile and the soil profile you chose? Write some of the differences here.

   ________________________________________________________________

   ________________________________________________________________

   ________________________________________________________________

1. **Fossilization**
   Find a fossil that lived in Michigan and sketch it below.

   When was it found? ____________________________________________

   What does the fossil you chose reveal about Michigan’s past?

   ________________________________________________________________

   ________________________________________________________________

   ________________________________________________________________

2. **Michigan’s Fossils**
   Why don’t we have dinosaur bones?

   ________________________________________________________________

   ________________________________________________________________

   ________________________________________________________________

   UM Museum of Natural History

   ummnh.org
3. **Find the “Jack pine” diorama**
   How are forest fires important to both the trees and the animals?
   ________________________________________________________________
   ________________________________________________________________
   Why is it important to protect the Jack pine ecosystem?
   ________________________________________________________________

4. **Find the “Wetlands” diorama**
   How have humans affected the preservation of wetlands? What can we do to help?
   ________________________________________________________________
   ________________________________________________________________

5. **Find the “Oak-hickory” diorama**
   From the list, find each in the oak-hickory ecosystem, and organize them into the living vs. nonliving table.
   - Honey mushroom
   - Hickory saplings
   - Eastern screech owl
   - White-tailed deer
   - Fallen tree trunk
   - Snack wrappers

<table>
<thead>
<tr>
<th>Living</th>
<th>Non-living</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

   Give an example of how one of the non-living things might affect the living things in the ecosystem.
   ________________________________________________________________
   ________________________________________________________________

6. **Types of Leaves**
   There are two basic types of leaves: simple and compound. A simple leaf is a single undivided leaf and a compound leaf is divided into multiple leaflets all connected at the stem.

   **Simple Leaf**
   **Compound Leaf**

   Find an example of each type in the oak-hickory diorama and sketch it below (remember to add the name too)!

7. **Find the “River” diorama**
   Michigan’s ________ miles of rivers drain ________ major watersheds into the ________ Great Lakes around Michigan.