Directions

Answer the guide as you travel through Exploring Michigan. This guide is meant to be completed while in the gallery with a chaperone.

1. Through the Layers
   Why is there a gap in information in Michigan layers?

   ______________________________________________________________
   ______________________________________________________________

   What have we lost from the gap?

   ______________________________________________________________

2. Fossils in Michigan
   What can plant fossils reveal about the past environment of Michigan?

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   ______________________________________________________________

   Give one example of a non-native species that is harmful. What are they called?

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   ______________________________________________________________
3. **Find the “Jack pine” diorama**
   Why is fire important for the growth of jack pines? How might other organisms prevent the cycling of matter for the jack pine?

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4. **Find the “Wetlands” diorama**
   There are three types of wetlands: marshes, bogs, and swamps. What are ways to tell the three types of wetlands apart?

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   ________________________________________________________________
   ________________________________________________________________

5. **Find the “Oak-hickory” diorama**
   In each ecosystem, there are producers and consumers. Producers make their own food (through photosynthesis). On the other hand, consumers need to eat to get their energy. Circle the producers and put a box around the consumers

<table>
<thead>
<tr>
<th>Poison ivy</th>
<th>Eastern screech owl</th>
</tr>
</thead>
<tbody>
<tr>
<td>White-tailed deer</td>
<td>Hickory sapling</td>
</tr>
<tr>
<td>Chipmunk</td>
<td>White-breasted nuthatch</td>
</tr>
</tbody>
</table>

   From the list above, draw an arrow from what eats what.

6. **Find the “River” diorama**
   The riparian zone is the part between river and land. Because of the water and nutrients, plant life thrives here! Circle the riparian zone in the picture below.

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