School Scavenger Hunt III

Name _________________________
Grade _________________________

FIRST FLOOR

Wetland Dioramas:
S5-6:39 Evolution and Natural Selection
These dioramas show birds likely to be nesting in or migrating through the Lake Champlain Basin. The larger scene includes waterfowl, shorebirds, and marshland species in spring plumage while the smaller display depicts wetland species in fall plumage.

1. a) Name two birds that swim on or under the water (waterfowl):
   i) 
   ii) 

   b) Name two birds that generally walk about on the land (shore, marsh birds):
   i) 
   ii) 

2. Complete the chart below comparing and contrasting three physical features (bills, legs, and feet) as well as food sources for the two different types of birds identified in 1a and 1b.

<table>
<thead>
<tr>
<th>Describe:</th>
<th>Water fowl</th>
<th>Shore/marsh birds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td></td>
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</tbody>
</table>

3. Describe how each type of bird might use its bill, legs, or feet to obtain food.
Thought Question:
How might a bird’s ability to adapt to its environment be related to the variety of birds shown in these dioramas?

Tropical Birds:
Spend a minute or two examining the diversity of birds in this display.

4. Describe one feature these tropical birds have in common.

5. Explain why this might be an advantageous characteristic for tropical species.

Endangered and Extinct Birds of North America:
S5-6:36 Equilibrium in an Ecosystem; S5-6:39 Evolution and Natural Selection
Carefully read the information for at least three species regarding the consequences of human activity on bird populations past and present.

6. What is the difference between endangered and extinct?

7. Identify two endangered species:
   i) 
   ii) 

8. Identify two extinct species:
   i) 
   ii)
9. List two reasons for the significant loss of bird species such as those displayed here, and birds in general.
   i) 
   ii) 

10. How are people helping some species, such as the California Condor and the Whooping Crane, make a comeback?

_S5-6:36 Equilibrium in an Ecosystem_

_Thought Question:_
Suggest two ways people can take preventive steps to avoid these outcomes in the future.

_Viewing Window:_
With a partner, observe the activity at the bird feeders. Use the various resources provided (books, posters) to identify the individuals and pairs of birds present.

_S5-6:2 Predicting and Hypothesizing; S5-6:5 Represent Data_

11. Predict which birds you might expect to see this time of year at the feeders:

12 a. For a period of two minutes, count and record the number of birds for each of _three to five different bird species_ on, under, or near the feeders. (Recording the number of individuals from mammalian species is optional)

<table>
<thead>
<tr>
<th>Species (write name if known)</th>
<th>a.</th>
<th>b.</th>
<th>c.</th>
<th>d.</th>
<th>e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number seen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12.b. Complete the *bar graph* showing your data from the table above. Include a title and correct labels.

14. What can you and your partner conclude from your data and graph?

**SECOND FLOOR**

*Raptor Balcony:*

*S5-6:39 Evolution and Natural Selection*

Observe these carvings closely.

15. List three physical features that distinguish raptors from other birds.

   i) 

   ii) 

   iii) 

16. Based on a raptor’s adaptations for obtaining and consuming food, what is your definition of a raptor?
17. Create a food web which includes a producer, a primary consumer, a secondary consumer, and one of the raptors you have seen in this gallery. What is the source of energy for your producer? (include this also in your web). Where would a turkey vulture belong in your food web? (include the turkey vulture in your web).

**Main Gallery: Nesting Birds and Winter Diorama:**

18. How might the color of the birds’ plumage (feathers) in the winter display give these birds an advantage for survival?

Look through the showcases depicting nesting birds in their preferred habitat settings.

19. Draw arrows to match the four habitat descriptions with the species likely to be living there:

- **Coniferous Forest**
  - Blue-winged Warbler (C10)
- **Wooded Swamp/Wooded Marsh/Pond**
  - Golden Crowned Kinglet (D10)
- **Deciduous Forest**
  - Wood Duck (A1)
- **Grassland/Old Fields/Edges**
  - Cerulean Warbler (C5)

20. How might bird nests give clues to the habitat they are found in?

21. a) Might nesting birds’ habitats overlap (share the same location)? Explain.

   b) Give examples to support your response.
**Thought Question:**
Think about the conditions necessary for breeding and nesting birds to survive and thrive in Vermont in spring and summer as well as the environmental challenges to birds living in Vermont year-round. Share your thoughts in two well-written paragraphs.