**PREDICTIONS:**
You will observe at least three different habitats around your schoolyard (e.g. garden, concrete sidewalk, grove of trees, lawn, hedge, playground, etc.). Identify each habitat below and write predictions to compare with your results later.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th># of different animal species</th>
<th># of different plant species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat 1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habitat 2:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habitat 3:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DATA COLLECTION:** *(NGSS, MS.LS.2.1)*
Choose a habitat around your schoolyard. Measure a 1 x 1 square meter plot. Spend ten minutes observing this habitat and recording the data in the table below.

Name of Habitat #1:

Organism observed with brief descriptions:

Total number of organisms: 

General Habitat (outside of the square meter space): Organisms observed with brief description:

Total number of organisms: 

**Count the total number of different plant species found in this habitat:**

**Count the total number of different animal species found in this habitat:**
Choose a different habitat around your schoolyard. Measure a 1x1 square meter plot. Spend 10 minutes observing this habitat and recording the data in the table below.

<table>
<thead>
<tr>
<th>Name of Habitat #2:</th>
<th>Organism observed with brief descriptions:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total number of organisms: __________**

General Habitat (outside of the square meter space): Organisms observed with brief description:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total number of organisms: __________**

Count the total number of different plant species found in this habitat:

Count the total number of different animal species found in this habitat:
Choose a different habitat around your schoolyard. Measure a 1x1 square meter plot. Spend 10 minutes observing this habitat and recording the data in the table below.

<table>
<thead>
<tr>
<th>Name of Habitat #3:</th>
<th>Organism observed with brief descriptions:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total number of organisms:** __________

<table>
<thead>
<tr>
<th>General Habitat (outside of the square meter space): Organisms observed with brief description:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Total number of organisms:** __________

Count the total number of different plant species found in this habitat:

Count the total number of different animal species found in this habitat:

**ANALYZING DATA**: *(NGSS. ELA.6-8.4, CCSS.W.2, CCSS.ELA.L2)*

Use the following words to help you answer the following questions in complete sentences.

<table>
<thead>
<tr>
<th>ABiotic Adaptation</th>
<th>Biodiversity</th>
<th>Biotic Diversity</th>
<th>Commensalism</th>
<th>Competition</th>
<th>Ecosystem</th>
<th>Habitat</th>
<th>Hypothesis</th>
<th>Invertebrate</th>
<th>Interdependence</th>
<th>Mutualism</th>
<th>Observation</th>
<th>Organism</th>
<th>Predation</th>
<th>Species</th>
</tr>
</thead>
</table>

1. What is a habitat?

_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________

_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
Eco-Comparisons: Habitat Observations
Post Field Trip Assessment

2. What is biodiversity and why is it important in a habitat?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

3. After you analyze your data from your three different habitats, what can you conclude?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

4. What are some ways the organisms in your habitats interacted with one another or with plants?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

5. How did the abiotic factors in your habitats connect to their biotic factors?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
COMMUNICATING YOUR DATA:
Use the data you gathered and analyzed from your three habitats to make a graph that communicates your findings. Be sure to include labels, titles, and appropriate intervals. Below are some examples.

OPTIONAL CCSS MATHMETICS ASSESSMENT:
6th grade: Box Plots: CCSS. SP.B.4
7th grade: Mean Absolute Deviation: CCSS. SP.B.3
8th grade: Frequency Charts: CCSS. SP.A.4
# Eco-Comparisons: Habitat Observations

## Post Field Trip Assessment

### DATA ANALYZATION & COMMUNICATION RUBRIC

**Middle School – grades 6-8**

<table>
<thead>
<tr>
<th>Standard</th>
<th>10</th>
<th>8</th>
<th>6</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CCSS-ELA</strong>&lt;br&gt;RST.6-8.4&lt;br&gt;Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context.</td>
<td>The student effectively and correctly used the terms from the word bank in their short answers. The student used at least 8 of these terms.</td>
<td>The student used the terms from the word bank in their short answers, but the meanings are vague or incorrect. The student is progressing using these terms effectively.</td>
<td>The student did not use the terms from the word bank in their short answers. The student struggles understanding the terms and using them effectively.</td>
<td></td>
</tr>
<tr>
<td><strong>CCSS-ELA</strong>&lt;br&gt;W.2&lt;br&gt;Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</td>
<td>The student exceeds in writing informative or explanatory text that is clear and relevant to the question posed.</td>
<td>The student is progressing in writing an informative or explanatory text. Their points are present, but parts may be weak or unclear to the question posed.</td>
<td>The student struggles in writing an informative or explanatory text that introduced a topic relevant to the question posed. They provided a text but it might be irrelevant to the question posed, or consistently incorrect. They student is missing several key points when answering the question posed.</td>
<td></td>
</tr>
<tr>
<td><strong>CCSS-ELA</strong>&lt;br&gt;L.2&lt;br&gt;Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</td>
<td>The student exceeds in conventions with no errors in capitalization, punctuation, or spelling.</td>
<td>The student is progressing in conventions with 1-5 errors in capitalization, punctuation, or spelling.</td>
<td>The student is struggling in conventions with more than 5 errors in capitalization, punctuation, or spelling.</td>
<td></td>
</tr>
<tr>
<td><strong>NGSS</strong>&lt;br&gt;MS.LS.2.1&lt;br&gt;Analyze and interpret data to provide evidence of resource availability on organisms and populations in an ecosystem.</td>
<td>The student recorded data accurately and neatly in order to analyze and interpret. The student provided evidence and examples explaining biodiversity, interdependence, and the relationship between resources and organisms.</td>
<td>The student is progressing in analyzing and interpreting data by communicating observations, but may have had weak or unclear explanations regarding biodiversity, interdependence, and the relationship between resources and organisms.</td>
<td>The student is struggling with analyzing and interpreting data. Their communication of observations may be inconsistent, incorrect, or lacking an understanding of biodiversity, interdependence, and the relationship between resources and organisms.</td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:**