In this field trip-based exercise you will work independently to create a field trip guide of geological features of Central Park and how they record a history of change on multiple time scales: millions of years, millennia, and decades. The document that you create should allow a colleague to learn about the geological aspects of southern Central Park by retracing your steps, seeing what you have seen, being led to learn what you have learned.

For this report you will have to include the following:

- Provide a street/trail map of your walking route with marked and labeled locations of all key outcrops, buildings, monuments, etc (those which you describe). The map must have a graphical scale bar and a north arrow.
- A thorough description of the geological features present at each site, with emphasis on the time at which they formed. Descriptions for each interpretive site must include:
  1) A headline which includes the name of the site (e.g., Umpire Rock, Monument to the Maine) and date of construction if it is a constructed feature.
  2) Written descriptions of the rocks and stones present (color, grain size, fabrics, fossils, identifiable minerals).
  3) Identification, description and interpretation of geological structures in the rocks and stones (e.g., bedding, foliation, folding, stylolites, striations, roches moutonnees). Cite all research sources used.
  4) A geological history of each site deduced from the geological rocks and structures that are present. Be sure to include history at each of three time scales (millions of years, millennia, and decades) wherever possible. Cite all research sources used.
  5) Photos illustrating representative images of station and its key features, with figure titles and numbers, and reference to the figure numbers in the text. Photos from classmates may be used, and in fact, the sharing of such photos is encouraged in order to improve the quality of the guidebook. Attribution must be given to each non-original image.

**Learning Objectives**

Students will be able to:
- Navigate using a trail map
- Describe the visual properties of rocks
- Describe structures preserved in rock
- Interpret structures preserved in rock
- Correlate rock types, rock properties, and preservation/deterioration aspects of rocks
- Deduce geological history based on features of rocks
- Design a guidebook that will allow others to follow a self-guided tour route
- Cite resources accurately and completely
# Grading Rubric for the Central Park Guide

<table>
<thead>
<tr>
<th>Aspect of the Report</th>
<th>Grade Point</th>
<th>%</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness and accuracy of location and route map, including the location of all stations described in the report. Scale bar and north arrow must be included.</td>
<td>4</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Completeness and accuracy of descriptions of rocks and structures, and their general interpretation.</td>
<td>4</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Quality and completeness of geological histories deduced from the geological evidence at each site. (Lack of citations will result in a 0.)</td>
<td>4</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Quality of supporting illustrations and photos, and their appropriate integration into the text. Citations are provided for all non-original images. (Lack of citations will result in a 0.)</td>
<td>4</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Overall quality of writing in standard English syntax</td>
<td>4</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

TOTAL out of 4 =