FACTivity

**Time Needed**
One class period

**Materials**
- Graph paper for each group of students (see graph paper provided on p. 20)
- Highlighters/colored pencils
- Pencils

In this FACTivity, you will become a park manager and examine where to place trails in a fictional park according to the location of eagles’ nests.

**Methods**

1. Your teacher will divide the class into small groups of three to four students. Your teacher will also provide each group with two pieces of graph paper. Use one piece of graph paper for your draft and one piece of graph paper for presenting your final product.

2. The graph represents the area in the park. First, plot and label these points on your graph:
   - Waterfall (7, 5)
   - Park Welcome Center (1, 1)
   - Mountain Peak (2, 8)

3. Next, plot two eagle territories. Place the territories wherever you choose; however, take into account the following things:
   - Each block represents 10 square miles.
   - Golden eagles maintain an area up to 60 square miles in size. Therefore, you should give each eagle 60 square miles. You may give the eagle the land any way you choose as long as you give the eagle 60 square miles total for each nesting site.
   - You will use highlighters or colored pencils to color in the 60 square miles allotted to each eagle.

4. Next, place the following items on your grid:
   - Potential scenic area 1: (9, 10)
   - Potential scenic area 2: (6, 3)
   - Potential scenic area 3: (1, 8)

   Decide whether to use these potential areas as scenic areas for hikers based on the needs of the visitors and the eagles.

5. Decide how you will place two trails through the park. The trails should not interfere with the eagles’ nests. Draw the trails on the map and then write a paragraph for each trail describing highlights of the trail and how the trail protects the eagles’ nesting sites. Use complete sentences, correct spelling, and proper punctuation.

6. After your student group and all the others present their trail maps to the class, hold a class discussion about challenges that were encountered creating the trails and how this activity is similar and different from what would happen in an actual park. The following list has some questions to help start the discussion. (Note: These questions could also be used as part of an assessment.)
   - How difficult did you find it to fit two eagle territories into the park?
   - In the real world, you would not be able to assign the territories because the eagles only choose a site they like. How would this difference make things more challenging for someone who is managing the park?
   - Were you able to make use of all possible scenic areas? Why or why not?
Each square in the grid is equal to 10 square miles.