

**Discovering GIS and ArcGIS**  
**Chapter 13**

**Name:** \_\_\_\_\_

**Question 13.1:** What features around the Cleveland waterfront can you visibly determine from the 30-m resolution of the Landsat image?

**Question 13.2:** What kinds of features around the Cleveland waterfront can you not determine from the 30-m resolution of the Landsat image?

**Question 13.3:** Why does the deep water of Lake Erie appear black in this false color composite image? (*Hint:* Water strongly absorbs all types of energy except for blue light.)

**Question 13.4:** Why do all of the urban areas appear in a cyan color in this false color composite image?

**Question 13.5:** What does the appearance of this area in the false color composite image say regarding the relative health of the trees and greenery at the Cleveland Lakefront Nature Preserve? Explain your answer.

**Question 13.6:** What are these circled areas on the landscape and how can you tell? (*Hint:* Look at the size and pattern of the areas and think about what kinds of energy reflectance you're examining with this Landsat image service.)

**Question 13.7:** What is this orthoimage showing?

**Question 13.8:** Even at 0.3 meter spatial resolution, what kinds of features or details of the city cannot be clearly resolved? (Be specific, using examples from this particular image.)

**Question 13.9:** Is the field of the Cleveland Browns' stadium real grass or artificial turf? How can you tell from using the orthoimage and the Landsat image?

**Question 13.10:** How many airplanes are on the tarmac in the September 2009 orthoimages? How many airplanes are present in the 2013 NAIP images?