



This work by the National Information Security and Geospatial Technologies Consortium (NISGTC), and except where otherwise noted, is licensed under the [Creative Commons Attribution 3.0 Unported License](https://creativecommons.org/licenses/by/3.0/).

Authoring Organization: Del Mar College

Written by: Nate Jennings

Copyright: © National Information Security, Geospatial Technologies Consortium (NISGTC)

Development was funded by the Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant No. TC-22525-11-60-A-48; The National Information Security, Geospatial Technologies Consortium (NISGTC) is an entity of Collin College of Texas, Bellevue College of Washington, Bunker Hill Community College of Massachusetts, Del Mar College of Texas, Moraine Valley Community College of Illinois, Rio Salado College of Arizona, and Salt Lake Community College of Utah.

This workforce solution was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties or assurances of any kind, express or implied, with respect to such information, including any information on linked sites, and including, but not limited to accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability or ownership.

Unit 3 Quiz

1. Name at least 3 types of remote sensors that can be used on both aerial and satellite systems.
2. What is the difference between an “ortho photo” and a “true ortho photo”?
3. How is an image formed by a RADAR system and what are some uses of RADAR imagery?
4. How is an image formed by a LiDAR system and what are some uses of LiDAR imagery?
5. What is the major difference between hyperspectral image data and multi-spectral image data?
6. Name and describe the major parts of a digital image.
7. What does 8-bit data mean?
8. Why does healthy green vegetation tend to reflect higher in the infrared part of the electromagnetic spectrum than the green wavelength?
9. Why does water tend to not reflect much in the infrared part of the electromagnetic spectrum?
10. Briefly explain how different remote sensor bands can be viewed on a color display.
11. What are some of the important characteristics when ordering and acquiring imagery from the following:
 - a. Aerial Systems
 - b. Satellite Systems
12. Name and describe 3 pre-processing routines that can be used in ArcGIS.
13. What is a histogram and what does it show?



14. What can band ratios be used for?
15. Briefly describe the NDVI ratio and what is it typically used for.
16. Briefly describe the tasseled cap transformation and what it is typically used for.

