Let's look at the Landsat scene of central Illinois to see how an image captures reflected light by waveband and what the data look like.

Start Imagine and display the image p23_32.img from Lab2 folder.
Urban areas are mottled blue
vegetation is reddish
water is bluish/black
bare soils are light blue
Zoom into the area surrounding Champaign Urbana - What do we see?
Zoom into area surrounding Lake Peoria - what do we see?
False Color Composite

Landsat bands:
1 blue light
2 green light
3 red light
4 NIR light
5 MIR light
6 MIR light
Landsat bands:
1 blue light
2 green light
3 red light
4 NIR light
5 MiR light
6 MiR light
Associated with each image is a file header which contains information about the image and the data.
Blue waveband

Which spectral bands appear to contain the most information about this landscape?
Green waveband
Red waveband
Near Infrared (NIR)
Middle Infrared (MIR)
Middle Infrared (MIR)
Pan the image to the upper left corner of the scene
You can copy and paste the File Pixel values into Excel

Move Inquire Cursor to select File Pixel values for

Forest
Water
Bare soil

Copy and paste them into excel

Make scatter plot of bands 3 and 4