

Activity 7 A

Resolution and Pixel Zoom

**FOR YOU TO DO**

1. Resolution: For each group assemble a collection of items like the following: a black-and-white photograph, a piece of fabric with a geometrical design, a photocopy of a photograph, a magnified photocopy of a newspaper photograph, a photocopy of a pointillist painting (such as one by Seurat). Have the students look at each item from different distances and with a magnifier. Ask the students what is similar about the experience of viewing these items. (All these images are made of small units. In most, the units are arranged in a grid. The photograph is composed of grains in a random orientation. The pointillist painting is made up of tiny dabs of paint applied in many different directions.)

2. Pixel Zoom: Obtain a copy of the freeware called NIH Image from the Internet at the National Institutes of Health site. Have the students load a PICT image into the program and use the “magnify” tool to expand the image until the pixels are large. Either print the picture or keep it on the screen. Have the students walk away from the image as they view it. Have them explain how the image changes.