After completing this lesson, you will be able to:

- Identify what a photo editor is and where to get one.
- Identify the differences between vector and bitmap graphics.
- Understand how (and when) to rotate and crop images.
- Understand how (and when) to resize your images.
- Define technical terms such as sampling and resampling.

Exploring Photo Editors

There are lots of photo editors

- Microsoft Office Picture Manager (part of the Microsoft Office 2003 suite)
- Picture It! Photo Premium 9
- Adobe Photoshop Elements (1.0, 2.0, and 3.0)
- Adobe Photoshop CS
- Corel Photobook
- Jasc Paint Shop Power Suite 8 Photo Edition You probably have Microsoft Office Picture Manager on your classroom computer.

Viewing Image Bits

Notice the individual squares of data.



Actual size vs. the zoomed-in version.



Rotating Images

To rotate an image in Microsoft Office Picture Manager:

H	Microsoft Office Picture Manager
۲	Microsoft Photo Editor
0	Adobe Photoshop
8	Internet Explorer
¥	Paint
	Windows Picture and Fax Viewer
3	creation

Choose Program...

- **Right-click** the practice file 04a-b Rotate Image in the folder Lesson04a-b, point to **Open With**, and select Microsoft Office Picture Manager.
 You will likely see additional choices.
- 2. From the Picture menu, select Rotate and Flip.
- 3. In the Task pane, select **Rotate Left**. The picture will automatically be rotated left 90 degrees.
- 4. Do not close the program.

Cropping Images

With the image rotated, crop the image:

- 5. Continuing with the image from the previous slide, from the Picture menu, select **Crop**.
- 6. Drag from the top-left corner to remove some of the leaves (which are blurry), and then drag from the bottom right to remove some of the red shirt.
- 7. Click **OK** when finished.



Learning When and Why to Crop

There are many reasons to crop:

- To move the subject to a more interesting position rather than dead center.
- To apply the Rule of Thirds after the fact.
- To remove unnecessary components (excess sky, shadows, backgrounds, walls, unwanted people or objects, or something that is blurry).

Finding the Resize Commands

Where are they?

- In Microsoft Office Picture Manager, from the Picture menu, choose **Resize**.
- In Microsoft Paint, from the Image menu, select Stretch/Skew to resize the image.
- In Microsoft Photo Editor, from the Image menu, choose **Resize**.
- In Adobe Photoshop, from the Image menu, select **Image Size**.

Selecting Image Size

Select the actual image size when possible

• In Microsoft Office Picture Manager, you can define the size of the image.



Getting Rid of Pixilation

This image was shot from far away, cropped and enlarged, and later optimized for viewing on the computer.



