

# **After completing this lesson, you will be able to:**

---

- Comprehend the basics of Web graphics.
- View and manipulate Web graphics in a graphics program.
- Describe the different types of graphics file formats.
- Choose “safe” colors for the Web.
- Crop a graphics image.

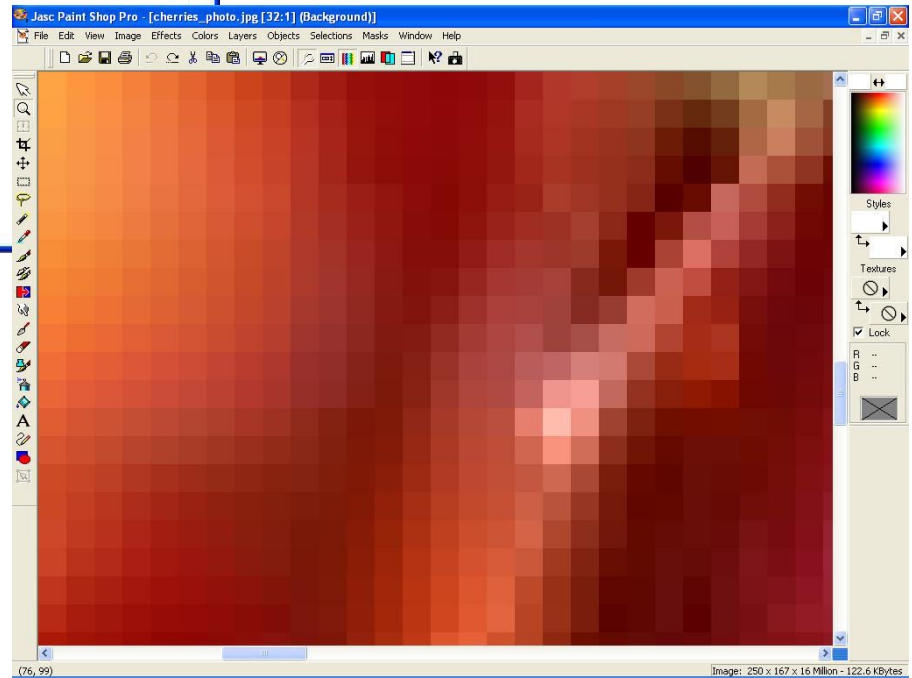
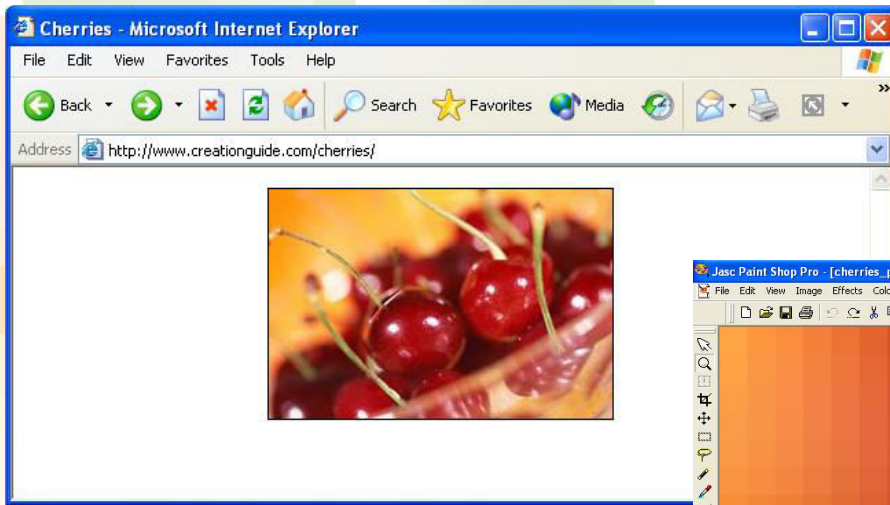
# Pointillism

---



**Georges Seurat. *The Siene at La Grande Jatte, Spring.***  
1888. Oil on wood.  
Musée Royaux des Beaux-Arts, Brussels, Belgium

# Pixels



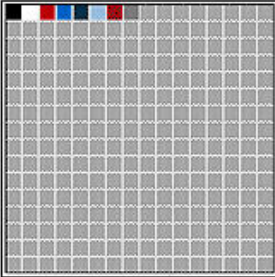
# Palettes

Palettes and gif colors - Microsoft Internet Explorer

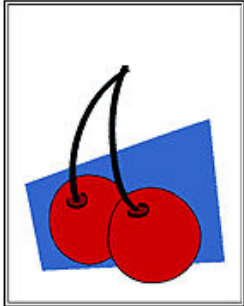
File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Print

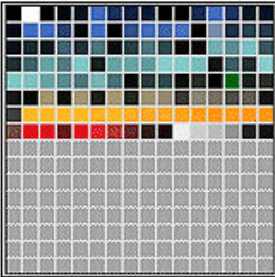
Address <http://www.creationguide.com/palettes/samples.html> Go




8-color palette used in GIF image



GIF (8 colors): 3 KB



128-color palette used in GIF image



GIF (128 colors): 7 KB

# Image Files on Web Pages

## Revisiting Figure 1-4:

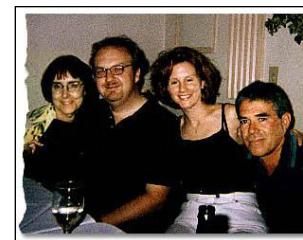
Index.html (Home Page)



afs\_title.gif



4members.jpg



# File Types

**Some sample file types (note the icons and extensions):**



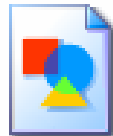
bills.xls  
Microsoft Excel Worksheet  
14 KB



holiday\_gift\_list.doc  
Microsoft Word Document  
24 KB



cat.gif  
362 x 45  
GIF Image



fish.png  
397 x 256  
PNG Image



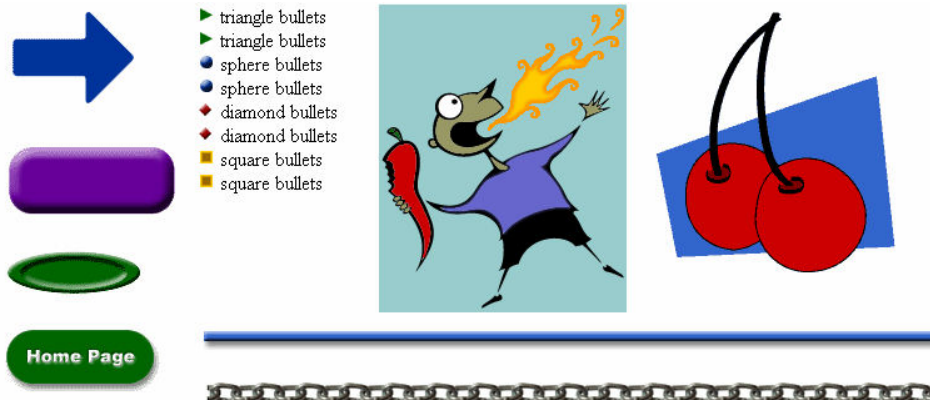
dog.jpg  
297 x 156  
JPEG Image



# GIFs

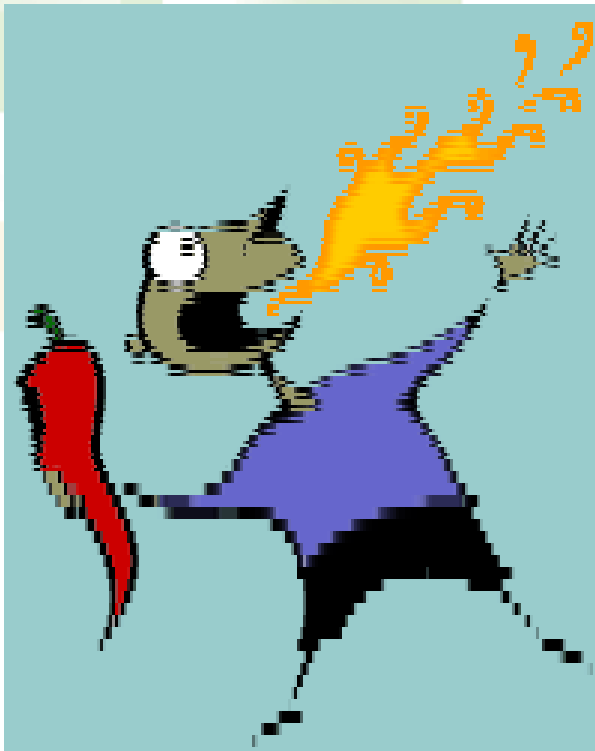
## GIFs:

- Usually small files that download quickly
- Limited to 256 colors
- Display logos, bullets, icons, and other small graphics
- Support transparency
- Support interlacing
- Can show simple animation



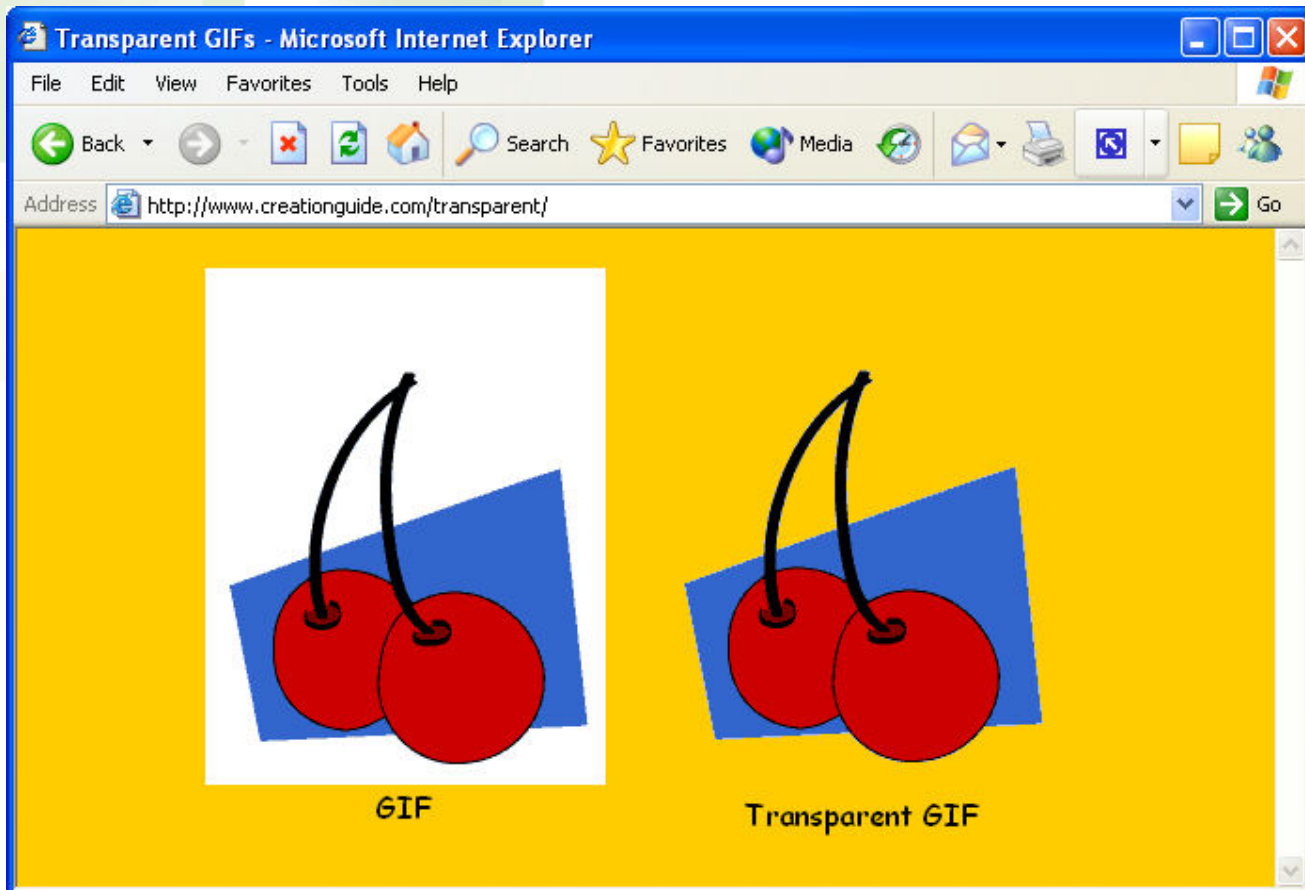
# Interlacing

---

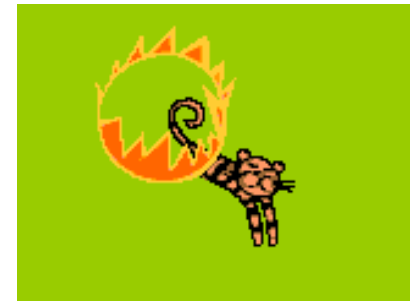
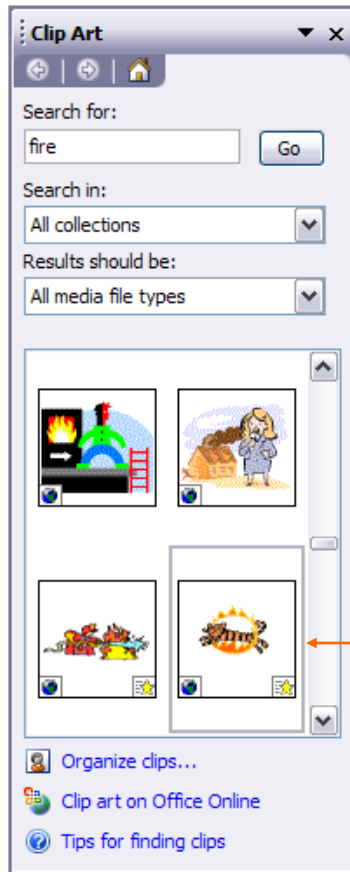




# Transparency



# Clip Art GIFs



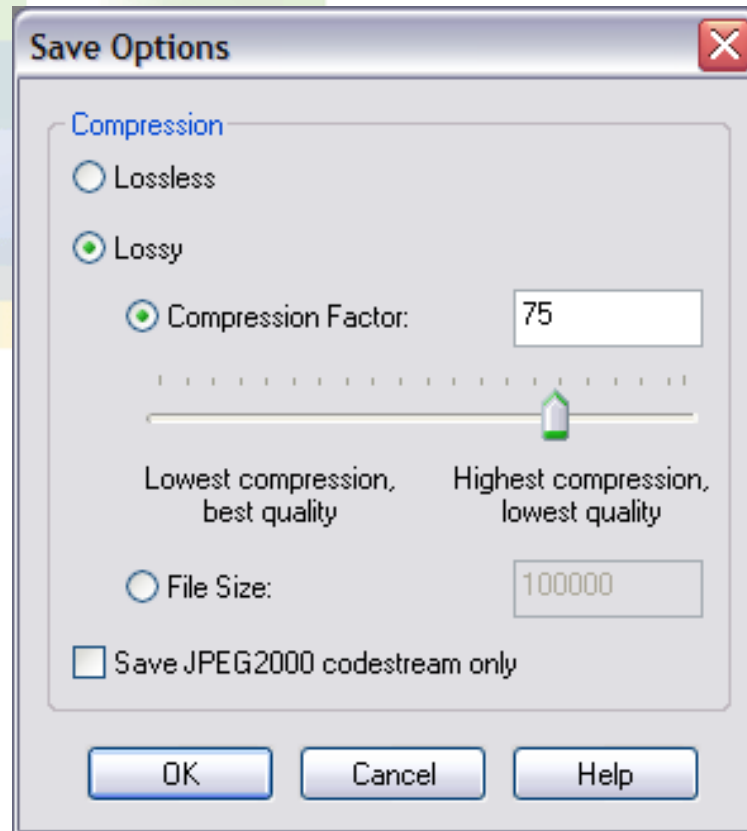
The tiger clip art image is transparent and animated (the tiger jumps back and forth through the ring of fire).

# JPEGs

JPEGs are used to display pictures and other images that contain millions (or at least lots!) of colors.

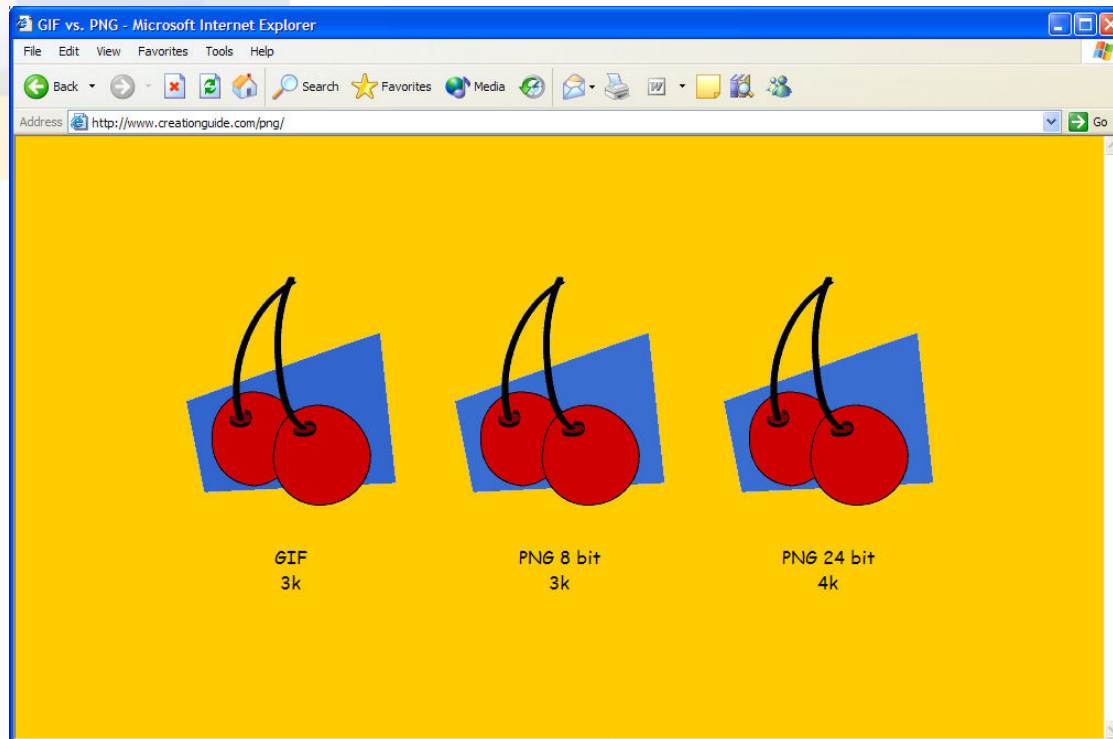


# JPEG Save Options



# PNG vs. GIF

- Overall, PNGs serve the same purpose as GIFs.
- Main Difference: PNGs support transparency in 8-bit (256 colors) and 24-bit (millions of colors) images.



# Optimizing Images

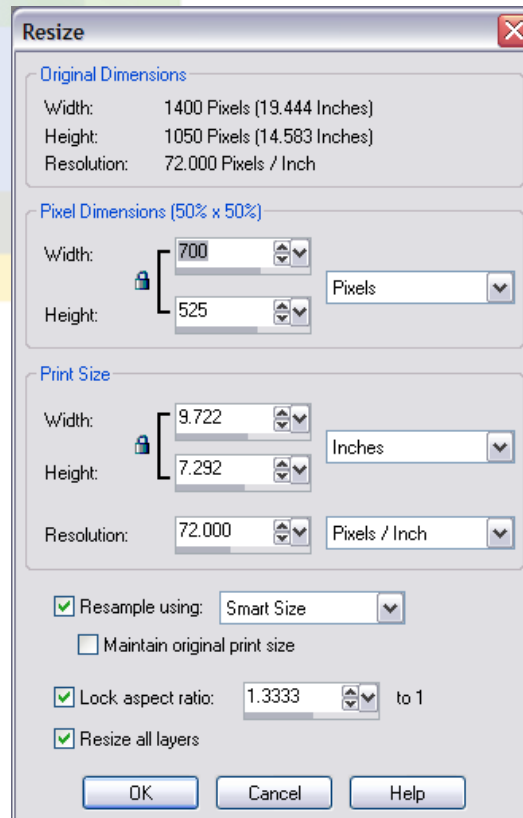
---

## Ways to optimize images for the Web:

- Use Web-safe colors to avoid dither in GIFs and PNGs
- Configure JPEGs to render progressively
- Compress JPEGs
- Resize images
- Crop images
- Use thumbnails when possible

# Resize Dialog Box

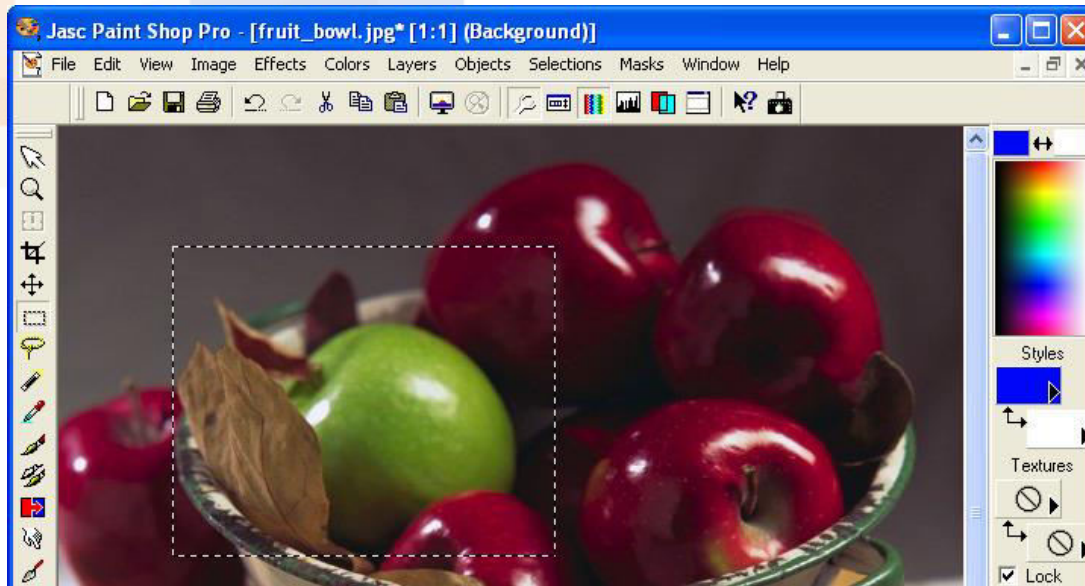
## The Resize dialog box in Paint Shop Pro 8:





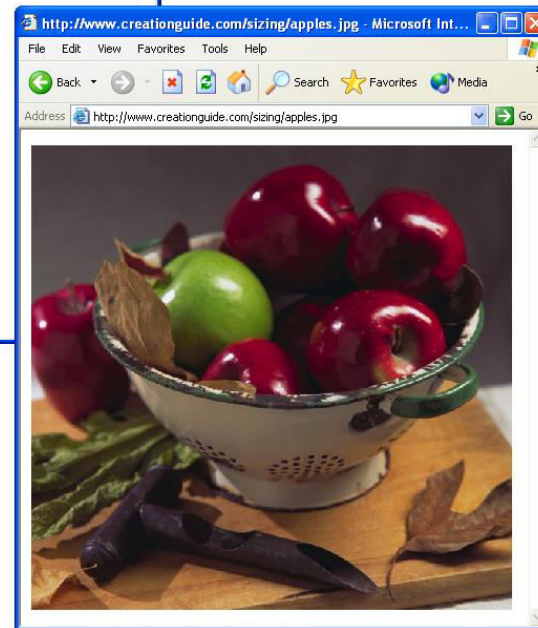
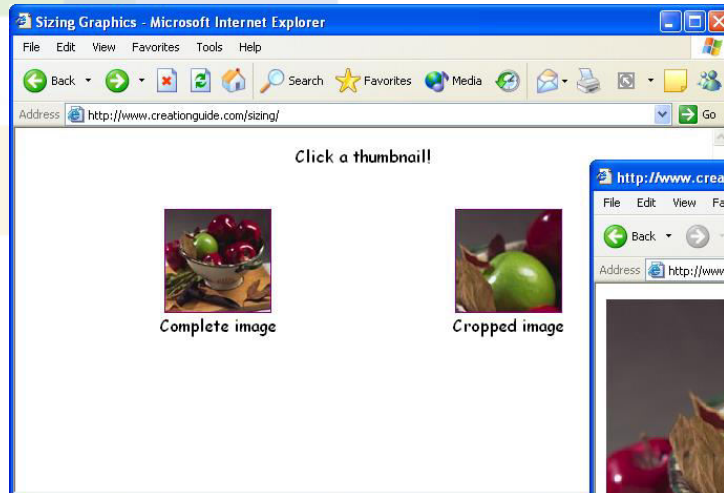
# Cropping

Cropping means to cut away part of a picture to make the image smaller.



# Thumbnails

You can use small images or cropped images to create thumbnail pictures.



# Photographs

---

## Ways to digitize pictures:

- Scanners
- Film developers
- Digital cameras and camera phones