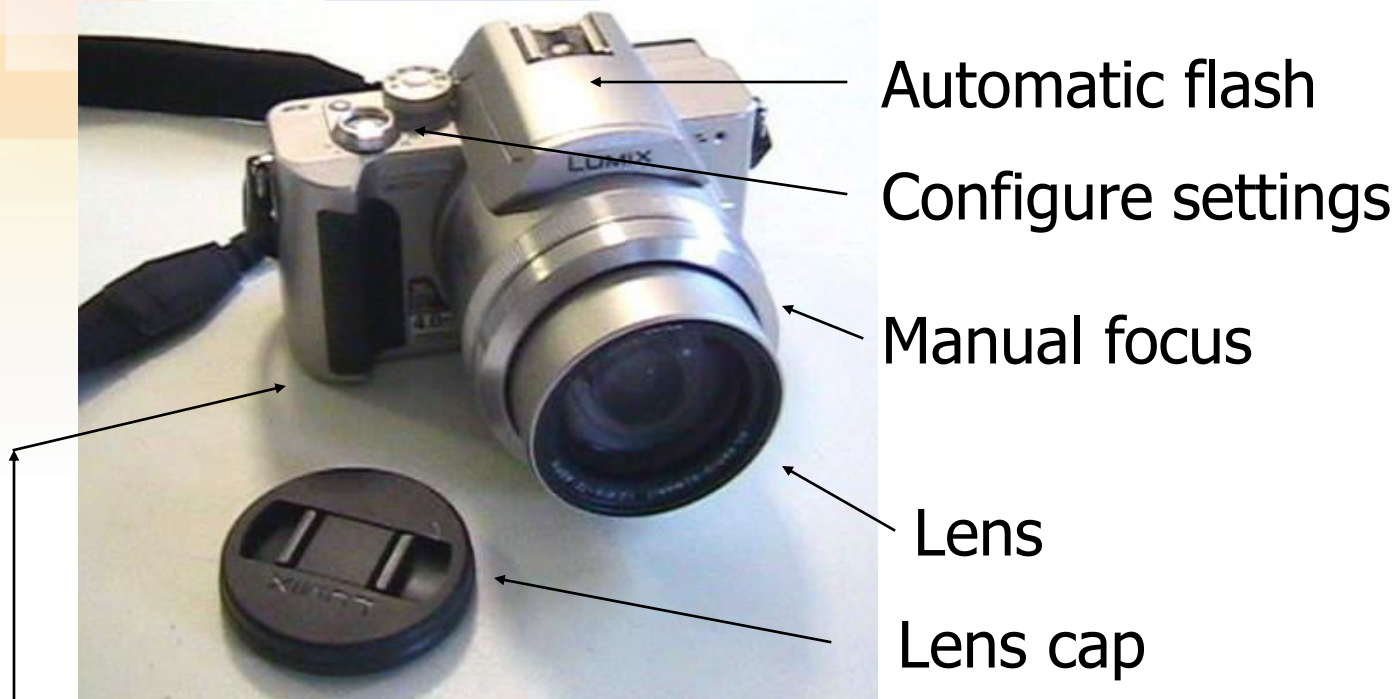# After completing this lesson, you will be able to:

- Identify and use automatic options on a digital camera.

- Learn how to properly frame a subject.

- Understand how lighting affects a picture, and when and when not to use a flash or backlighting.

- Avoid red-eye.

- Choose proper resolution and compression settings and understand the technical aspects of each.

Exploring Digital Cameras

Here's a digital camera with a 12x optical zoom lens.

Automatic flash

Configure settings

Manual focus

Lens

Lens cap

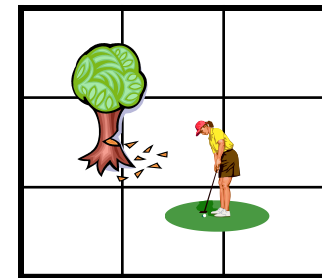The memory card and batteries are inserted underneath.

Appropriate Focal Length

Type of Photo or Use	Appropriate Focal Length
For special effects, fisheye, or 180-degree views	15 mm to 18 mm
For photos of large groups, seascapes, or landscapes	24 mm to 35 mm
For most "average" shots, including snapshots, photos of small groups, and most vacation and family pictures	35 mm to 55 mm
For moderate telephoto use, as in a closeup from a reasonable distance	70 mm to 100 mm
Telephoto, including sports events, wildlife, or surveillance	100 mm +

Using the Rule of Thirds

The Rule of Thirds offers an easy way to successfully frame a picture

- Compose the scene by breaking up the image into thirds. Think of the top third, the middle third, and the bottom third; and the left third, the middle third, and the right third.

- Place your subjects where two of these imaginary lines meet or on any dividing line.

(Continued on next slide.)

Using the Rule of Thirds (Continued)

- With the subject(s) not directly in the center of the image, the photograph can better grab the attention of the viewer.

- When taking pictures of the horizon, place the horizon across the bottom third of the image.

- Here, the image's subject is positioned where the top right lines meet.
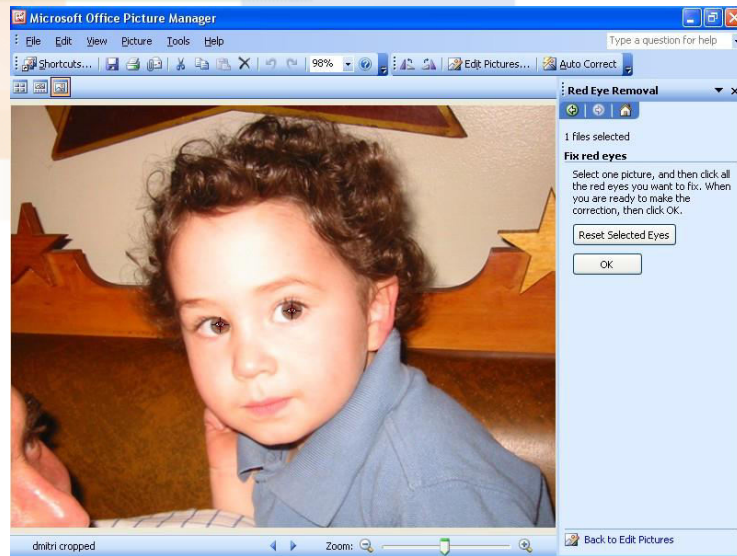
Removing Red-Eye

Basic steps for removing red-eye using Microsoft Office Picture Manager:

1. Click **Tools**, point to **All Programs**, point to **Microsoft Office**, point to **Microsoft Office Tools**, and select **Microsoft Office Picture Manager**.
2. Open the image, and from the Picture menu, select **Red Eye Removal**.
3. Use the mouse to click and select the red eyes in the picture.

(Continued on next slide.)

Removing Red Eye (Continued)

4. Once the eyes are selected, click OK to correct.

Correcting in Microsoft Office

Picture Manager

Image repaired

Taking Macro Pictures

When taking a macro picture:

- Use the LCD viewer.

- Be careful not to let the camera cast a shadow on the image or block the flash.

- Use a tripod or other steadying device.

- If any options are available, choose wide angle.

Selecting a Compression Value

Compression Setting (JPEG)	Sample File Size	Uses (depending on the Resolution as defined later)	Do not use for:
None	1.7 MB	Printing high-quality prints such as 5 x 7s and 8 x 10s.	E-mailing or storing on the Web.
Low to Medium	367 KB to 221 KB	E-mailing, the Web, wallet size prints, and occasionally 4 x 6 inch prints.	Printing high-quality prints.
High to Highest	142 KB to 102	E-mailing and the Web	Printing.

Changing Monitor Resolution

To see how resolution works to create more or fewer pixels in an image, change your monitor's resolution:
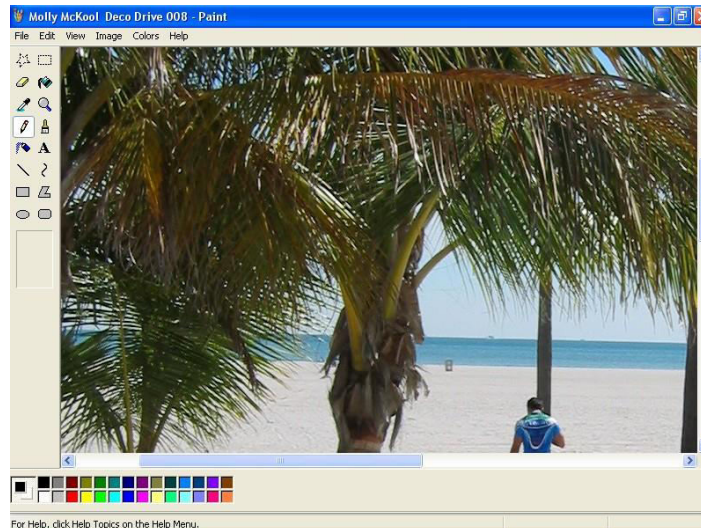
1. Right-click an empty area of the desktop and select **Properties**.

2. From the Settings tab, set the Screen Resolution 800 x 600. Click **Apply**.

3. Set the Screen Resolution to 1024 x 768 and click **Apply**.

4. Continue experimenting with settings. When finished, select 1024 x 768 and click **OK**.

Viewing High-Resolution Images

When viewing an image whose resolution is higher than the computers', the image cannot be seen in its entirety without scrolling.

Original 1536 x 2048 resolution image

As seen in Paint on a computer with 800 x 600 resolution

Ordering Online

When ordering online, most retailers suggest which print sizes make good choices for your specific images.

As shown here, the first image, at 320 x 240, is not suitable for any sized print.

The second print, at 1536 x 2048, is suitable for any sized print.

Sharing Pictures

There are lots of ways to share pictures:

- View as a slide show
- Order prints online
- Print pictures
- Copy pictures to a CD
- Share on the Web
- E-mail

Viewing Options For Sharing