## Images, Clip Art and Color CS-150L Computing for Business Students

## Instructor:

Matthew Barrick
e-mail: barrick@cs.unm.edu www.cs.unm.edu/~barrick
Office: Farris Engineering
Center (FEC) room 106


## Why do I need 16,777,216 colors?

My Crayola color pencil box has only 64 colors and it does pretty well.

RGB color is usually 24 bits: 8 bits for red, 8 bits for green and 8 bits for blue.

- This gives $256 \times 256 \times 256=$ 16,777,216 colors


More Colors...

## We See Many Tones



## Clip Art

- Free to use without citation
- Can not be used in a published document that is for sale.



## Clip Art: First Search Your Collection



## Clip Art: Word 2003

## Insert $\rightarrow$ Picture $\rightarrow$ Clip Art...



## Clip Art: Search Microsoft Online

## http://office.microsoft.com/en-us/clipart/default.aspx

## Csoff <br> 53.Office Online

Home Products

Help and How-to
Downloads
Clip Art
Templates
Microsoft Office Live
Select and

Home Products
左


- Check out the Clip Art and Media blog
- Read our Newsgroup

Search

Search 0
Search 0

Online community

RSCior training and mor

Clip Art

* Clip Art \& Media Home

| Filter by Type |
| :--- |
| All Media Types |

All Media Types $\quad \bullet$
Filter by Category
All Categories $\rightarrow$
Partner sites
*Fotolia
wiStockphoto images
\#Stockxpert images
*PhotosToGo
\# PresentationPro
\# More partners


# Clip Art: Import into Clip Organizer 

## 던. Ocffice Online

Home Products Help and How-to Downloads Clip Art Templates Microsoft Office Live

## Clip Art

* Clip Art \& Media Home

Partner sites
*Fotolia
\# iStockphoto images
*Stockxpert images
\% PhotosToGo
*PresentationPro
*More partners

## Selection Basket

Selected items: 1
Download size: 95 KB
( $<1 \mathrm{~min}$ @ 56 Kbps )

Other CAM Users
Clip Collections

## Home > Clip Art

Download

## Selection Basket Details

Selected items: 1
Download size: 95 KB ( $<1$ min @ 56 Kbps )
Review basket

## Media Application

Please select the application you want to use.
( Import into Clip Organizer version 2002 or newer
 Media files will be stored in your My Pictures\Microsoft Clip Organizer folder.

C Import into Clip Gallery version 5.0 or older Media files will be stored in your Application DatalMicrosoftMedia Catalog\Downloaded Clips folder.

Download Now

## Images form The Web - Easy But Low Quality

1. Right-click on image in Firefox or Internet Explorer, and select "Copy Image".
2. Paste Image into MS-Word: "Edit" $\boldsymbol{\rightarrow}$ "Paste".
3. Be sure to site your source and include any copyright notices.



This image is from "The Mineral and Gemstone Kingdom", a free, interactive, educational guide to rocks, minerals and gemstones:
http://www.minerals.net/

## GIF \& Animated GIF

- Graphics Interchange Format (GIF) is a bitmap image format that was introduced by CompuServe in 1987.
- GIF has widespread usage on the World Wide Web due to its wide support and portability.
- The file extension for GIF documents is: .gif.
- A GIF file uses lossless image compression
- Often about 3:1 for photographic data
- Often about 10:1 for charts, sketches and cartoons.
- A GIF file can have no more than 256 different colors:
- Not good for photos.
- Excellent for drawings, sketches, and charts.
- A single GIF file can contain a series of images 695/2010 creating an animation.

