# Improving Your Presentation Graphics

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## Today's Objectives - Default

- Presentation graphics
  - Selective
  - Intentional
- Fonts, Colors, Backgrounds, Bullets
- Initial learner comprehension
- Retention of concepts
- Reinforce relatedness
- Visual literacy
- Information literacy

# Improving Your Presentation Graphics

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## Today's Objectives

- **Graphics**
  - –Selective
  - **–Intentional**
- **Fonts,** Colors, Backgrounds, **BULLETS** and Graphics

## Design for Learners

- Initial learner comprehension
- Retention of concepts
- Reinforce relatedness

## Literacy

- Visual literacy
- Information literacy

# Fonts

- Face and Type
  - Serif vs San serif
  - **Serif vs San serif**
- Size
  - Point size 24, 36, 44, 54, 60
- Color
  - Contrast Yellow vs Black

# Colors

- Contrast
- Provoke emotions
  - Background
  - Text
  - Graphics

•Orange on Blue

•Blue on Orange

•Red on Blue

•Red on Green

•Orange on Green

•White on Black

•Black on White

•Yellow on Blue

•Blue on Blue

•Peach on Orange

•Ivory on Blue

# Backgrounds

- **Content**
  - Don't compete with content!
- **Readability**
  - Color
  - Contrast
  - Empty space
- **Visual anchors**

Poor Contrast

- Solid
- Gradient
- Photograph
- **Graphic**

- Solid
- Gradient
- Photograph
- **Graphic**

- Solid
- Gradient
- Photograph
- Graphic

# Layout

- Location
- Margins and "white space"
- One concept per slide
- Bullets
  - Order
  - Number of lines
  - Number of words
  - Parallel construction

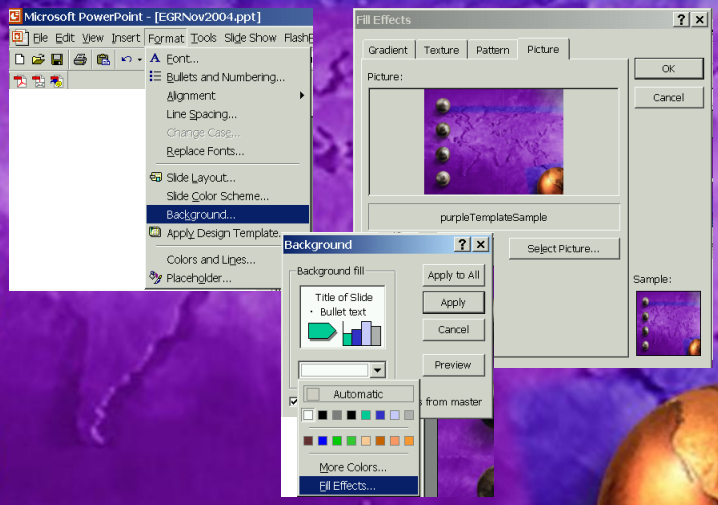
# Bullets

- Order implies emphasis
- Use 5x5 or 7x7 rule
- Omit periods & commas
- Keep grammar parallel
- Run spell check
- AVOID all capitals
- Say more than you show

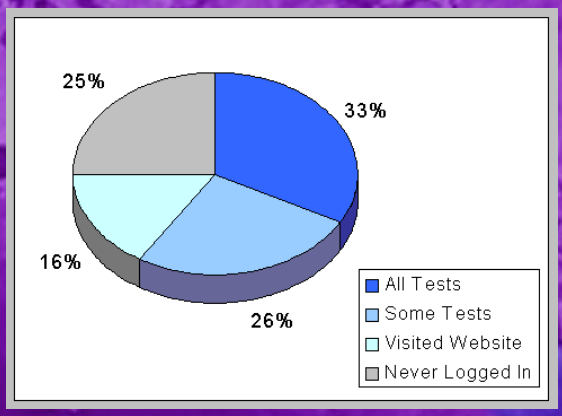
# Background Images

- Is it a background?
- Know file location
- Alignment & color

# Image Import

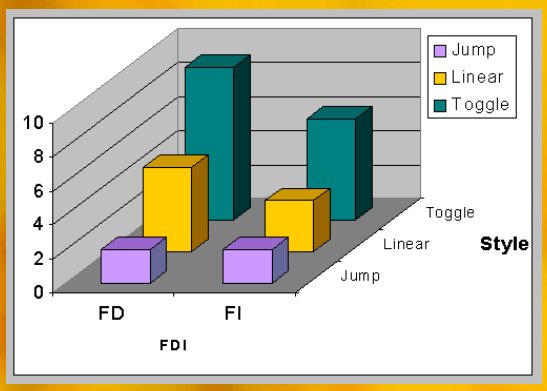


# Pie Chart




# Text and Bar Chart

- $x^2$ (2,26) = 0.178, p = 0.9148

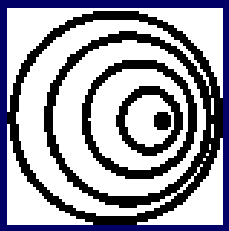


## Design for Learners

- **Initial learner comprehension**
- **Retention of concepts**
- **Reinforce relatedness**

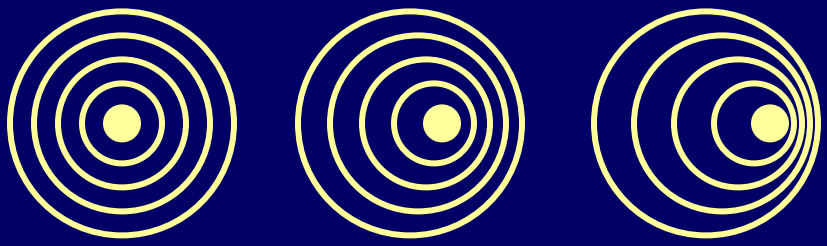
## Initial

- Doppler concept
- Existing illustration
- Simple diagram



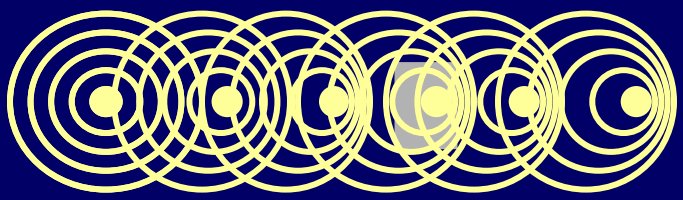
## Doppler Effect

- Relative motion (source & receiver)
- Change in wavelength
- Change in perceived frequency



## Doppler Effect

- Relative motion (source & receiver)
- Change in pitch (ie. music note)
- Change in wavelength and frequency



## Why does the Doppler Effect occur?

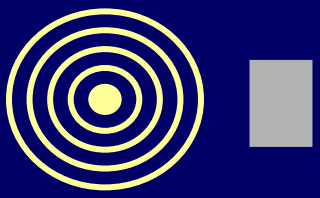
- As a sound source moves, the wavefronts in the forward direction get closer together, while the wavefronts on the far side get farther apart.
- Therefore a receiver on the forward side of the source will perceive the sound as having a shorter wavelength and higher frequency (pitch) than a stationary sound source.
- A receiver on the far side of the source will perceive the sound as having a longer wavelength and lower frequency (pitch) than a stationary sound source.

# Retention

- Informal Quiz
- Diagram for reference

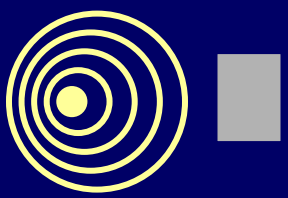
## Retention

- Add Audio



## Retention

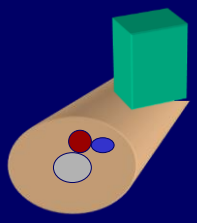
- Practice at website

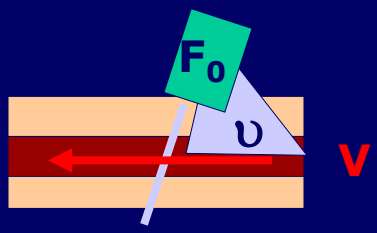


http://hyperphysics.phy-astr.gsu.edu/hbase/hph.html

## Reinforcement

- Doppler of blood vessel

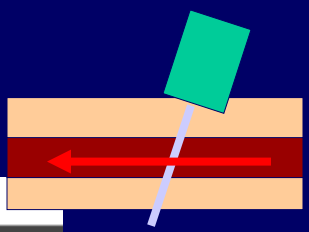





C = speed of sound

$$V\,(m/sec) = \frac{c * \Delta f\,(Hz)}{2 * f_o\,(Hz) * \cos\theta}$$

## Reinforcement

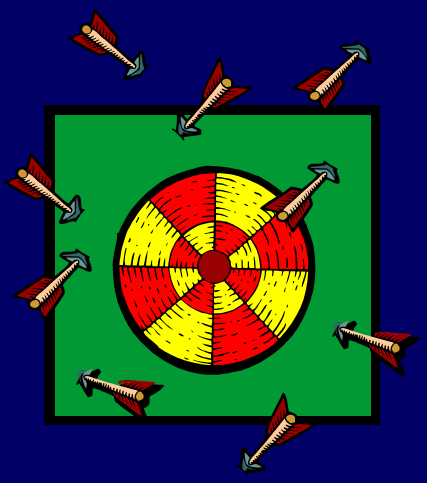


$$V\,(m/sec) = \frac{c * \Delta f\,(Hz)}{2 * f_o\,(Hz) * \cos\theta}$$

- Doppler of blood vessel
- http://hyperphysics.phy-astr.gsu.edu/hbase/sound/usound2.html#c1

# Animation

- Find graphic
- Ungroup
- Assemble parts
- Group to move
- Animate components
- Add audio
- Save and Test



**Not reliable**

**Not valid**

**Both are reliable**

**But which is valid?**

**To understand**
**use**
**and create images**
**to intentionally**
**communicate with others**

# Visual Literacy

– From H Napierkowski, Fostering Verbal and Visual Literacy in E-Learning, WCET Conference, November 2002

## Visual Literacy

**to think**
**and learn**
**in terms of images**

- From H Napierkowski, Fostering Verbal and Visual Literacy in E-Learning, WCET Conference, November 2002

## Visual Literacy

"We are coming to depend on visualization as a vital tool for conceptual thought in ways that were simply impossible before the digitization of information. If we want to prepare our students for the world out there, it must be a new kind of preparation for a transformed world."

- From R Lanham, The Electronic Word, 1993

## Information Literacy

"… the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand."

- From National Forum on Information Literacy, http://www.infolit.org/, 2004

## Consider…

- **Legible text**
- **Meaningful symbols**
- **Reinforcing repetition**
- **Pause for processing**
- **Summary for self-assessment**

- Make intentional choices
- Design for learners
- Enjoy connecting

## EGR Resources

http://ouhsc.edu/academicaffairs/education/

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