The Computer Graphics Process and the Graphics Pipeline

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The Graphics Process: Surface Information

- Alpha-Blended Transparency
- Refractive Transparency
- Reflectivity
- Subsurface Scattering

The Graphics Process: Lighting

- Lighting Types
  - (point, directional, spot, ...)
- Light Positions
- Light Colors
- Light Intensities

The Graphics Process: Rendering

- 3D Geometric Models
- Lighting Information
- Surface Information
- Texture Information

The Graphics Process: Image Storage and Display

- Hardware Framebuffer
- Disk File
- Rendering
- Recording
- Editing
- Compositing

The Screen Display Consists of Pixels
The Basic Computer Graphics Pipeline

MC = Model Coordinates
WC = World Coordinates
EC = Eye Coordinates
CC = Clip Coordinates
NDC = Normalized Device Coordinates
SC = Screen Coordinates