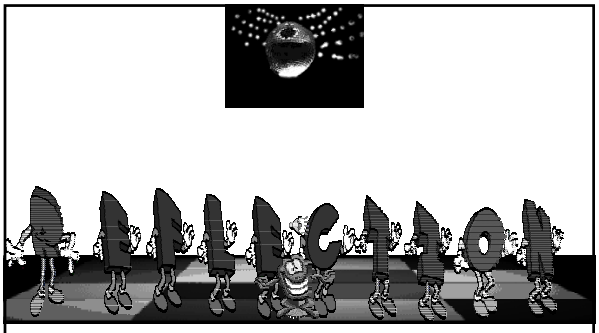
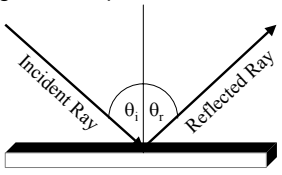


Reflectance

- The ratio of reflected light to the total amount of light falling on the surface.
- Examples
  - Magnesium Oxide 98%
  - Silver 95%
  - Black < 5%

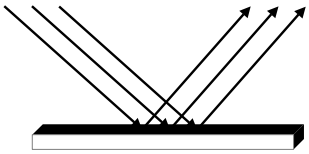
Laws of Reflection

- 1st Law
  - The angle of incidence is equal to the angle of reflection
- 2nd Law
  - The incident and reflected ray lie in the same geometric plane.



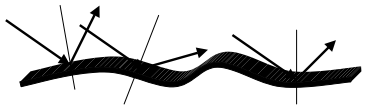
Regular Reflection

- A narrow beam of light reflects without loss of definition or intensity.
- Reflected rays are parallel to each other
- Caused by specular (polished) surfaces



Diffuse Reflection

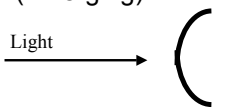
- Law of reflection still holds, but the normals at the points of intersection are not parallel.
- Reflected rays are not parallel to each other
- Caused by “rough” surfaces



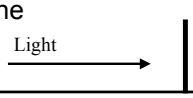
Mirrors

- Concave (Converging)

- Convex (Diverging)



- Plane



Images

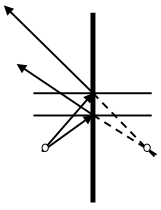
- The “picture” of the object seen in the mirror.
- Types
  - Real
    - Rays of light are reflected and actually pass through the point where the image is located.
  - Virtual
    - Rays of light appear to come from the point where the image is located, but actually do not

Describing Images

- Type: Real or virtual
- Orientation: Upright or inverted
- Size: Larger, smaller, or same
- Distance: Farther, closer, or same

Plane Mirrors

- Create virtual, upright, same size images that appear the same distance behind the mirror as the object is in front.



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