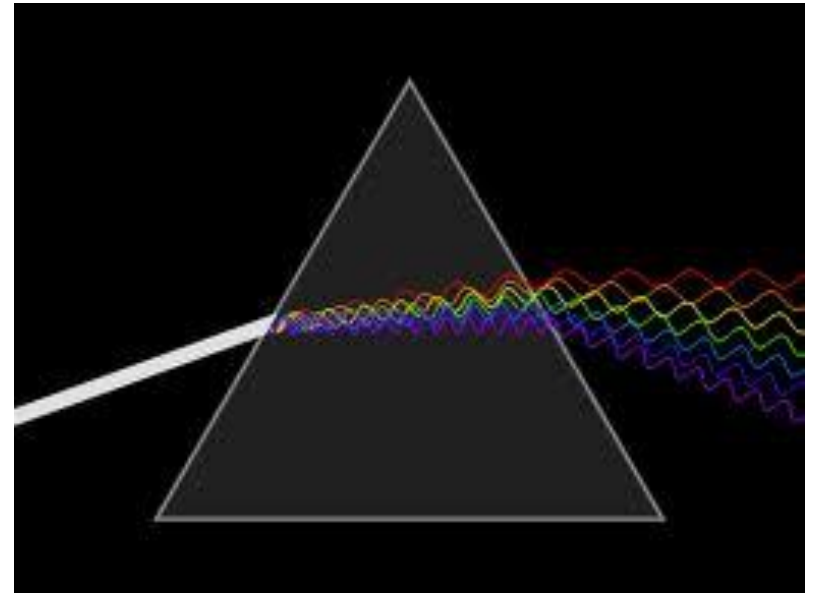




Light



Luminous

- When an object gives off its own light
- Examples of luminous objects
 - The Sun
 - Light bulbs
 - Wood burning



Illuminated

- When light shines on an object and is reflected
- Examples:
 - The moon
 - Almost everything you can see



Light

- Travels in a straight line
- Super fast! 300,000 km/s
- Does not need a medium
 - Vacuum - no matter – empty space



What happens to light
when it strikes an
object?

- When light strikes matter 3 things can happen:

1) It can be absorbed

2) It can be reflected

3) It can be refracted



Absorbed Light

- Light that is taken in by the matter it strikes
- Some objects absorb light better than others.
 - Black objects absorb all the light that strikes them



Reflected Light

- Bounces off the substances it strikes
- A mirror works by reflection
 - Light reflects off it and into your eyes



Refraction

- When a wave bends as it enters a new medium
 - Like light thru glass
- The change in density causes a change in wave speed

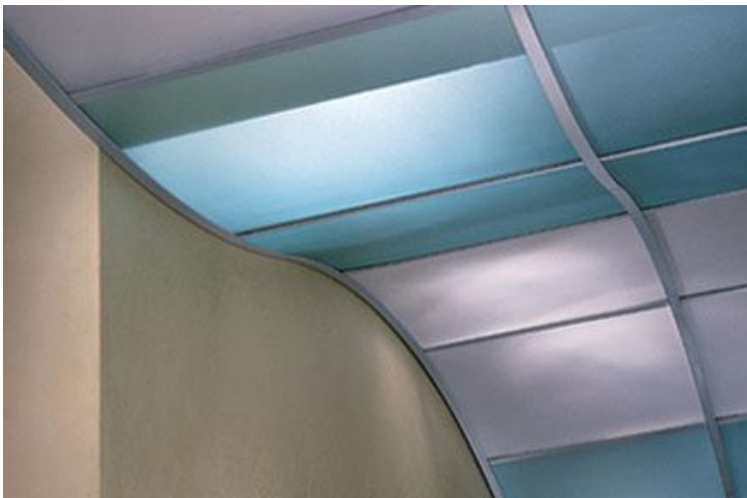


Transmitted Light

- Light that passes through the matter it strikes
- Substances that transmit light are called “transparent”
 - Window glass
 - Water
 - Air
- We can see through them clearly



- We can see through some substances but we cannot make out details or see clearly
- These are called **TRANSLUCENT**
 - Light passes through but also scatters
 - wax paper
 - Frosted glass



Opaque Substances

- Substances that do not transmit light
- We cannot see through them at all
 - Metal
 - Wood

