

Color Separation

White light is separated into different colors during refraction

Different colors have different wavelengths that can be bent.

Water droplets refract sunlight to create rainbows.



Separating Wavelengths

Procedure

1. Place a **prism** in sunlight. Adjust its position until a color spectrum is produced.
2. Place the prism on a desktop. Dim the lights and shine a **flashlight** on the prism. Record your observations.
3. Shine a **laser pointer** toward the prism. Record your observations.

WARNING: Do not shine the laser pointer into anyone's eyes

Observations

Observations	
Flashlight on Prism	Laser Pointer Toward Prism

Analysis

1. Determine whether sunlight and the light emitted from the flashlight contain light waves of more than one wavelength.

2. Determine whether the light emitted from the laser pointer contains light waves of more than one wavelength.
