

Physics 1214 - General Physics II

Quiz #20 - 2013.03.11

Solutions

1. How is light affected as it travels through a polarizer?

Light emerging from a polarizer is linearly polarized parallel to the polarizing axis, with the emitted light having half the intensity of the of the incident light.

2. Why is the sky blue?

The sky is blue due to scattering. Scattering of light by air molecules causes light to become polarized, with blue light scattered more than red light due to longer wavelengths in blue light. Thus, we see more blue light because it is scattered into view by the multitude of air molecules in our atmosphere.