

Answers to selected questions

Chapter 16

- Q6** Your eye-brain combination will interpret this wavelength to be blue.
- Q12** Water droplets are usually larger than the wavelengths of visible light, so that the amount of scattering is independent of the wavelength of light. Thus, all wavelengths are scattered equally, and the resulting color is the same as the incoming sunlight, only less intense.
- Q18** The thin film is the air gap between the plates.
- Q24** A diffraction grating is a series of closely spaced parallel rulings that cause efficient diffraction of light into well-defined directions. It is typically used to spread the light into a spectrum for viewing or analysis.
- Q30** The axis of transmission should be vertical since glare from horizontal surfaces has strong polarization in the horizontal direction.