

Physics II

Light Scattering

Problem 1.- Why is the sky blue?

- a) Because it reflects the color of the ocean.
- b) Because oxygen is blue.
- c) Blue light is scattered more than red light.
- d) Light is polarized by reflection.

Problem 2.- Why is water blue? Choose the best answer:

- a) Because it absorbs red light by excitation of the OH bond vibration.
- b) Impurities in water scatter blue light more than red light.
- c) Water has a very high index of refraction.
- d) Because the water molecule is polar.

Problem 3.- True (T) or False (F):

- () The moon looks red at moon-set because the atmosphere scatters blue light
- () Nearsightedness is corrected with positive power lenses

Problem 4.- Why does the sun look red at sunset?