

2. How long does it take for light to travel across the diameter of Earth's orbit around the sun? (27.2)

4. How long does light take to travel from the sun to Earth? From the star Alpha Centauri to Earth? (27.2)

11. Light incident upon a pane of glass slows down in passing through the glass. Does it emerge at a slower speed or at its initial speed? Explain. (27.4)

20. What is the difference between light that is polarized and light that is not? (27.7)

23. How do polarizing filters allow each eye to see separate images in the projection of three-dimensional slides or movies? (27.8)

24. What evidence can you cite to support the idea that light can travel through a vacuum?

32. Suppose that sunlight is incident upon both a pair of reading glasses and a pair of sunglasses. Which pair would you expect to be warmer, and why?