

Elements of Physics – Properties of Light

- 1) Light is a very small part of ...
- 2) A longer wavelength corresponds to ...
- 3) From lowest to highest frequency, what are the different types of electromagnetic waves ?
- 4) Electromagnetic waves are a result of ?
- 5) The higher the frequency, the more _____ in the wave.
- 6) What did the work of Christian Huygens and James Clark Maxwell prove about the movement of electromagnetic waves ?
- 7) Which does light travel fastest in... water, glass, or diamond ?
- 8) What is the distance light can travel in a vacuum over the course of a year called ?
- 9) What is meant when it is said that light bulbs and stars are “luminescent” ?

10) What do we call the study of how light behaves ?

11) When does reflection occur ?

12) In reflection, the angle of incidence is always equal to ...

13) What property of convex and concave mirrors affects the angle at which light reflects (thereby distorting reflected images) ?

14) Why does a red bird feeder look red ?

15) When does refraction occur ?

16) How does a prism split colors of light ?

17) How does a converging lens affect light passing through it ?

18) Who was the first person to explain how a prism works ?

19) How are radio waves used ?

20) How are microwaves used ?

21) What is one common application of the infrared spectrum ?

22) What may be caused by higher frequencies of UVB and UVC rays ?

23) How are x-rays used ?

24) What are gamma rays emitted as ?