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## Waves



## Across

4. light can't pass through it
5. the distance along the optical axis from the mirror to the focal point
6. transfer of energy by wave to the medium wave it travels
7. a mirror that curves inward
8. an optical device that produces
a narrow beam of coherent light
9. reflection of light from a smooth, shiny surface
10. electromagnetic radiation that you can see
11. a transparent object with at least one curved side that causes light to change directiom
12. a mirror that curves outward Down
13. a material that allows almost all light that strikes to pass through it
14. A wave that can travel through empty space and matter
15. an optical device that forms magnified images of small objects
16. any instrument or object used to produce or control light
17. the point where light rays parallel to the optical axis converge after being reflected by a mirror or refracted by a lens
18. A low frequency, low-energy electromagnetic wave that has a wavelength longer than about 30 cm 10. the change in direction of a wave as it changes speed while moving from one medium to another 11. a material that allows most of the light to pass through it 12. a 3D photograph of an object
19. one of the many cells in the retina that responds to color 20. one of the many cells in the retina that respond to low light
