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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 2. A wave that can travel through empty space and matter
14. an optical device that forms magnified images of small objects
15. any instrument or object used to produce or control light
16. the point where light rays parallel to the optical axis converge after being reflected by a mirror or refracted by a lens
17. 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
18. a material that allows most of the light to pass through it
19. a 3D photograph of an object
20. one of the many cells in the retina that responds to color
21. one of the many cells in the retina that respond to low light
