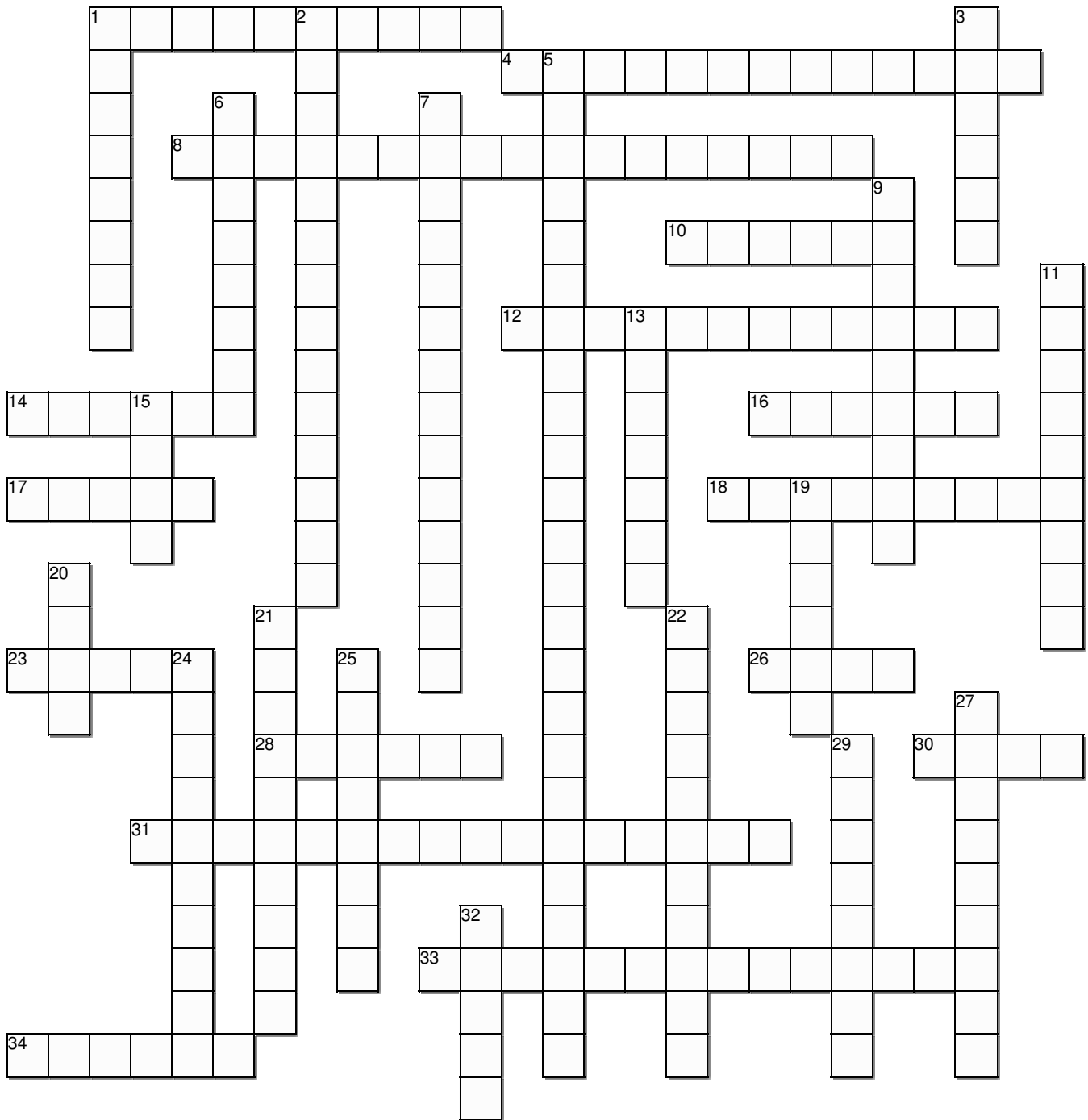


Name: _____

Light, Energy, Eyes, and the Pinhole Camera

Complete the crossword below



Horizontal

1. a device on a camera, consisting of a lens system and sometimes a ground-glass screen, enabling the user to see what will be included in his photograph
4. the process whereby heat moves from one body or substance to another by radiation, conduction, convection
8. ultraviolet light noun radiation lying in the ultraviolet range; wave lengths shorter than light but longer than X rays
10. a dense, white, fibrous membrane that, with the cornea, forms the external covering of the eyeball.
12. the preservation of a physical quantity during transformations or reactions
14. The act or process of changing position or place.
16. The quantum of electromagnetic energy, generally regarded as a discrete particle having zero mass, no electric charge, and an indefinitely long lifetime.
17. The apparently black circular opening in the center of the iris of the eye, through which light passes to the retina
18. An electromagnetic wave with a frequency in the range of 100 megahertz to 30 gigahertz
23. A method of detecting distant objects and determining their position, speed, material composition, or other characteristics by causing radio waves to be reflected from them and analyzing the reflected
26. body of the eye between the iris and the vitreous humor that focuses light rays entering through the pupil
28. the capacity for vigorous activity; available power
30. A disturbance traveling through a medium by which energy is transferred from one particle of the medium to another
31. The energy that exists in a body as a result of its position or condition rather than of its motion
33. the transparent gelatinous substance filling the eyeball behind the crystalline lens.
34. the substance or substances of which any physical object consists or is composed

Vertical

1. speed of motion; specifically, the distance traveled per unit time.
2. electromagnetic radiation with wavelengths longer than visible light but shorter than radio waves
3. membrane lining the inner posterior chamber of the eyeball containing the rods and cones and connected by the optic nerve to the brain
5. the entire spectrum, considered as a continuum, of all kinds of electric, magnetic, and visible radiation
6. An elementary particle with a negative charge and a very small mass.
7. The energy possessed by a body because of its motion
9. the process in which energy is emitted as particles or waves.
11. the number of times that an event occurs within a given period; rate of recurrence
13. a mechanical device for opening and closing the aperture of a camera lens to expose film or the like.
15. The round pigmented contractile membrane of the eye that is perforated in the center by the pupil, forms the front part of the vascular tunic, and is attached on the margin to the ciliary body
19. The transparent, convex, anterior portion of the outer fibrous coat of the eyeball that covers the iris and the pupil and is continuous with the sclera.
20. A form of energy associated with the motion of atoms or molecules and capable of being transmitted through solid and fluid media by conduction, through fluid media by convection, and through empty space
21. The distance between one peak or crest of a wave of light, heat, or other energy and the next corresponding peak or crest.
22. The degree of hotness or coldness of a body or an environment.
24. A very low frequency electromagnetic wave (from roughly 30 kilohertz to 100 gigahertz). Used for the transmission of radio and television signals
25. an opening, as a hole, slit, crack, gap, etc
27. A stream of high-energy electromagnetic radiation given off by an atomic nucleus undergoing radioactive decay.
29. the intensity of light falling on a photographic film or plate multiplied by the time for which it is exposed
32. Electromagnetic radiation that can be perceived by the human eye.