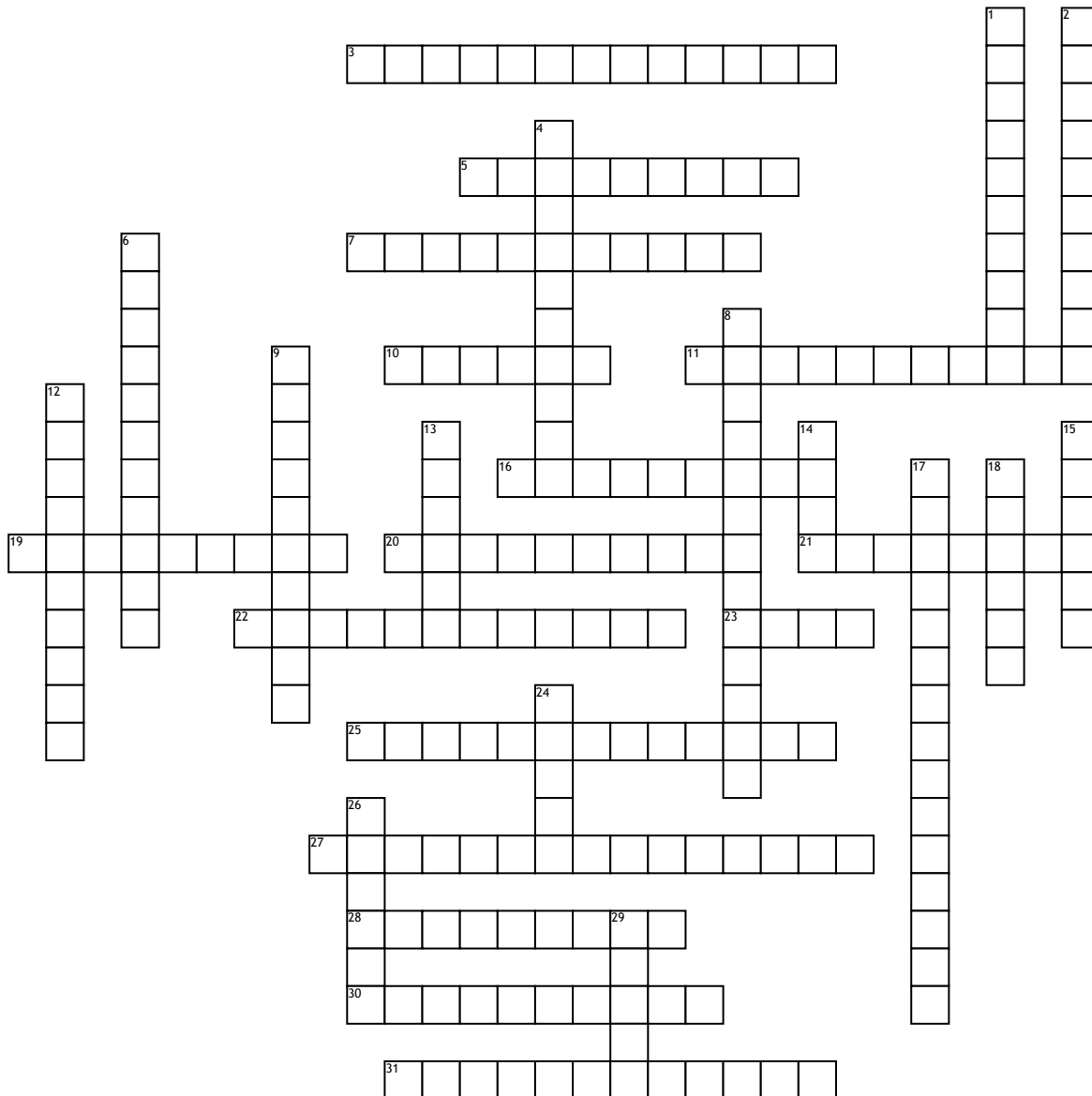


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Light



## Across

3. any of a group of colours from which all other colours can be obtained by mixing.

5. the point of entry of the optic nerve on the retina, insensitive to light.

7. An incident ray is a ray of light that strikes a surface. The angle between this ray and the perpendicular or normal to the surface is the angle of incidence. The reflected ray corresponding to a given incident ray, is the ray that represents the light reflected by the surface.

10. the transparent layer forming the front of the eye.

11. the process or state of converging.

16. A real image is a reproduction of an object via light that can be formed on a surface. A real image exists regardless of whether an observer is present. One example is the image seen on a screen at a movie theater (in contrast, the image one sees in a flat mirror is not a real image, but rather a virtual image).

19. an apparatus consisting of a tube attached to a set of mirrors or prisms, by which an observer (typically in a submerged submarine or behind a high obstacle) can see things that are otherwise out of sight.

20. an optical instrument used for viewing very small objects, such as mineral samples or animal or plant cells, typically magnified several hundred times.

21. a band of colours, as seen in a rainbow, produced by separation of the components of light by their different degrees of refraction according to wavelength.

22. an optical image formed from the apparent divergence of light rays from a point, as opposed to an image formed from their actual divergence.

23. a flat, coloured, ring-shaped membrane behind the cornea of the eye, with an adjustable circular opening (pupil) in the centre.

25. the clear fluid filling the space in the front of the eyeball between the lens and the cornea.

27. vision using two eyes with overlapping fields of view, allowing good perception of depth.

28. an optical instrument designed to make distant objects appear nearer, containing an arrangement of lenses, or of curved mirrors and lenses, by which rays of light are collected and focused and the resulting image magnified.

30. the fact or phenomenon of light, radio waves, etc. being deflected in passing obliquely through the interface between one medium and another or through a medium of varying density.

31. convex mirror, diverging mirror, or fish eye mirror is a curved mirror in which the reflective surface bulges toward the light source. Convex mirrors reflect light outwards, therefore they are not used to focus light.

## Down

1. the throwing back by a body or surface of light, heat, or sound without absorbing it.

2. each of the second pair of cranial nerves, transmitting impulses to the brain from the retina at the back of the eye.

4. the process or state of diverging

6. the mucous membrane that covers the front of the eye and lines the inside of the eyelids.

8. A curved mirror is a mirror with a curved reflecting surface. The surface may be either convex (bulging outward) or concave (bulging inward). Most curved mirrors have surfaces that are shaped like part of a sphere, but other shapes are sometimes used in optical devices.

9. the point at which rays or waves meet after reflection or refraction, or the point from which diverging rays or waves appear to proceed

12. the action or process of distributing things or people over a wide area.

13. a layer at the back of the eyeball that contains cells sensitive to light, which trigger nerve impulses that pass via the optic nerve to the brain, where a visual image is formed.

14. a piece of glass or other transparent material with curved sides for concentrating or dispersing light rays, used singly (as in a magnifying glass) or with other lenses (as in a telescope).

15. conforming to a standard; usual, typical, or expected.

17. a colour resulting from the mixing of two primary colours.

18. each of the second pair of cranial nerves, transmitting impulses to the brain from the retina at the back of the eye.

24. a person who is taught by another, especially a schoolchild or student in relation to a teacher.

26. a porous device for removing impurities or solid particles from a liquid or gas passed through it.

29. a solid geometric figure whose two ends are similar, equal, and parallel rectilinear figures, and whose sides are parallelograms.