

**ACROSS**

2. Real image: formed by \_\_\_\_\_ light rays.
5. Bending of light rays.
7. When light passes into a medium of a lower index of refraction, the ray bends \_\_\_\_\_ from the normal.
9. \_\_\_\_\_ equation: used to relate focal length, image position and object position.
10. A wave that consists of oscillating electric and magnetic fields, which radiate outward from the source at the speed of light.
13. Reflective surface "inside the spoon"
14. Mirror, mirror on the wall, who is the fairest of all...?
16. \_\_\_\_\_ mirrors always produce virtual images that are smaller and right-side-up
17. \_\_\_\_\_ Law: describes refraction.
19. \_\_\_\_\_ reflection: the scattering of light off a rough surface.
20. \_\_\_\_\_ length:  $f = r/2$
22. Line perpendicular to a surface.
24. Caused by the change in speed experienced by a wave when it changes medium.
25. \_\_\_\_\_ image: type of image formed by diverging light rays...plan mirrors always have one.
26. The point where incident light rays that are parallel to the principal axis converge after reflecting from the mirror.
27. image height divided by object height
28. \_\_\_\_\_ mirror: smooth flat surface from which light is reflected by specular reflection.

**DOWN**

1. Speed of light in a \_\_\_\_\_ = "c"
3. Line that can show the direction a wave is traveling and is drawn perpendicular to the wave front.
4. Combination of the image points produced by reflected light rays.
5. Index of \_\_\_\_\_:  $n = c/v$
6. source of light rays that are to be reflected by a mirrored surface.
8. \_\_\_\_\_ image: formed by converging light rays.
11. Prefix meaning  $10^{-9}$
12. \_\_\_\_\_ angle: the incident angle that starts to produce total internal reflection.
13. Reflective surface "outside the spoon"
14. \_\_\_\_\_ reflection: parallel rays are reflected in parallel...smooth surfaces.
15. \_\_\_\_\_ model of light: light travels in straight-line paths.
17. The higher the index of refraction, the \_\_\_\_\_ the speed of light is in that medium.
18. When light passes into a medium of a higher index of refraction, the ray bends \_\_\_\_\_ the normal.
21. Convex mirrors always produce virtual images that are \_\_\_\_\_ and right-side-up
23. Angle of incidence equals angle of \_\_\_\_\_.