$\qquad$

## Optics

1. shows how rays change direction when they strike mirrors and pass through lenses
2. the angle the incident ray makes a line drawn perpendicular to the surface of the mirror
3. the angle the reflected ray makes with the perpendicular line
4. a mirror with a flat surface
5. a copy of an object formed at the location from which the light rays appear to come
6. when the inside surface of a curved mirror is the reflecting surface the mirror
7. the point at which the light days meet
8. a copy of an object formed at the point where light days actually meet
9. when the outside surface of a curved mirror is the reflecting surface
10. a material is the ratio of the speed of light in a vacuum to the speed of light in the material
11. an object made of transparent material that has one or two curved surfaces that can reflecting light
12. Curved inward at the center and is thickest at the outside edges
13. curved outward at the center and is thinnest at the outer edges
14. the angle of incidence that produces an angle of refraction of 90 degrees
15. the complete reflection of a light ray back into it's original medium
16. An instrument that uses lenses or mirrors to collect and focus light from distant objects
17. uses mirrors and convex lenses to collect and focus light
18. uses convex lenses to collect and focus light
19. an optical instrument that records an image of an object
Q. virtual mirror
R. angle of reflection
A. reflecting telescope
B. cornea
C. concave mirror
D. lens
E. microscope
F. plane mirror
G. retina
H. Angle of incidence
I. convex lens
J. pupil
K. convex mirror
L. camera
M. focal point
$N$. concave lens
20. real image
P. refraction telescope
S. Ray diagram
21. an optical instrument that uses lenses to provide enlarged images of very small near objects
22. light rays enter your eyes through the transparent outer coating of the eye
23. the opening that allows light days to enter your eye
24. the colored part of your eye
25. a sealed capsule containing a cleat fluid
26. the inner surface of the eye
27. It's surface is covered by light sensitive nerve endings
T. lens
U. critical angle
V. Iris
W. telescope
X. total internal reflection
Y. index of refraction
Z. rods and cones
