Across
4. an eclipse in which the sun is obscured by the moon.
6. an obscuring of the light from one celestial body by the passage of
   another between it and the observer or between it and its source of
   illumination
10. Diffused light, as opposed to the direct rays of the sun
11. the phase of the moon when it is in conjunction with the sun and
    invisible from earth, or shortly thereafter when it appears as a slender
crescent.
13. the path followed by an object revolving around another object,
    under the influence of gravitation (see satellite).
14. an imaginary line about which a body rotates.
15. (of the moon between new and full) have a progressively larger
    part of its visible surface illuminated, increasing its apparent size.
16. the phase of the moon in which its whole disk is illuminated.
17. when the sun reaches its highest or lowest point in the sky at
    noon, marked by the longest and shortest days.
18. an eclipse in which the moon appears darkened as it passes into
    the earth's shadow.

Down
1. the sun shines directly
2. the shape of the illuminated (sunlit) portion of the Moon as seen by
   an observer on Earth.
3. an instance of revolving.
5. the action of rotating around an axis or center.
7. the time or date (twice each year) at which the sun crosses the
   celestial equator, when day and night are of equal length (about
   September 22 and March 20).
8. a round solid figure, or its surface, with every point on its surface
   equidistant from its center.
9. the angle between an object's rotational axis and its orbital axis, or,
   equivalently, the angle between its equatorial plane and orbital plane.
12. "shrinking" or decreasing in illumination.