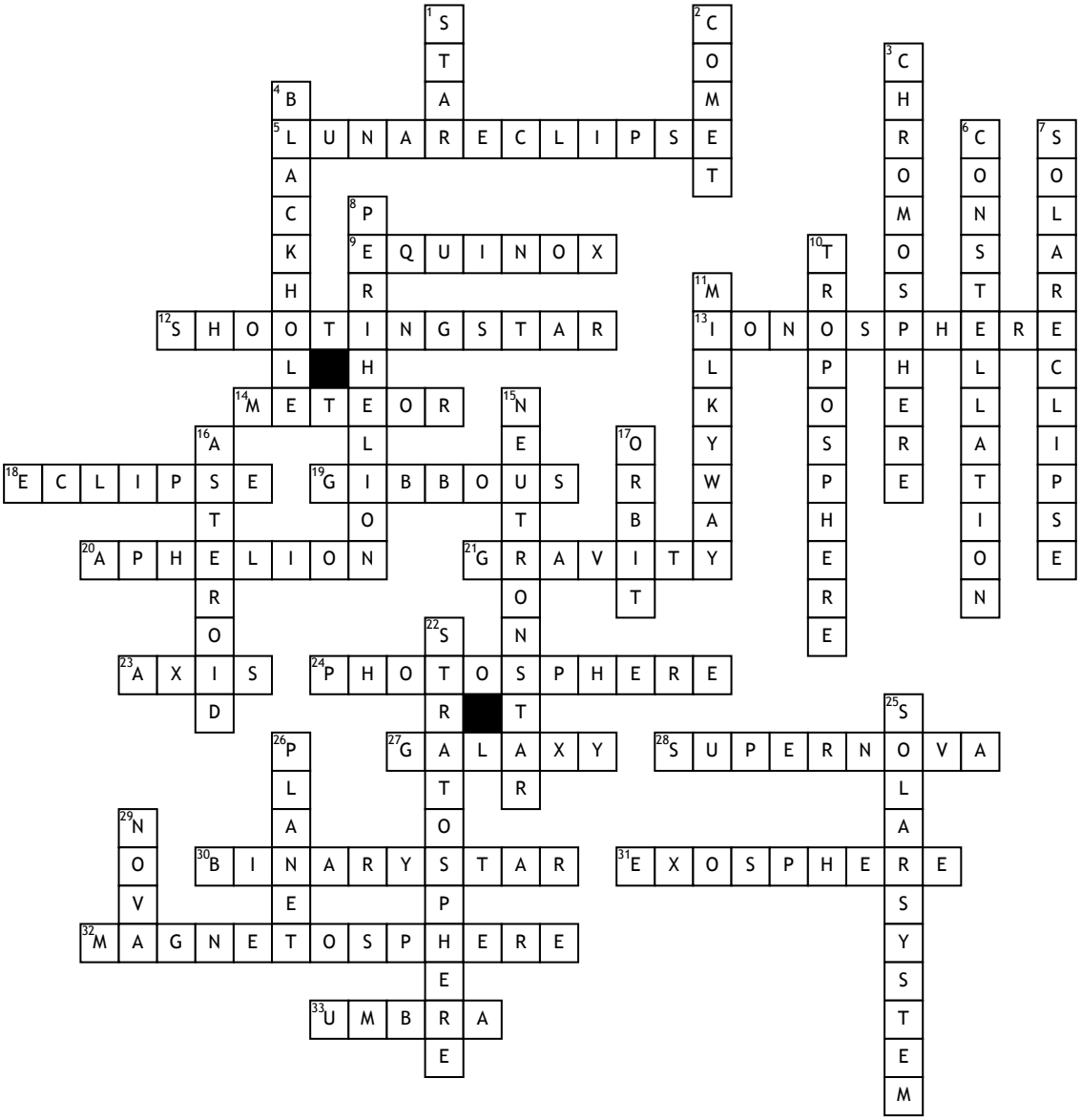
Name: _____ Date: _____

# Astronomy



**Across**

**5.** an eclipse in which the moon appears darkened as it passes into the earth's shadow.

**9.** the time or date at which the sun crosses the celestial equator, when day and night are of equal length.

**12.** a small, rapidly moving meteor burning up on entering the earth's atmosphere.

**13.** the layer of the earth's atmosphere that contains a high concentration of ions and free electrons and is able to reflect radio waves. It lies above the mesosphere and extends from about 50 to 600 miles (80 to 1,000 km) above the earth's surface.

**14.** a small body of matter from outer space that enters the earth's atmosphere, becoming incandescent as a result of friction and appearing as a streak of light.

**18.** 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.

**19.** (of the moon) having the observable illuminated part greater than a semicircle and less than a circle.

**20.** the point in the orbit of a planet, asteroid, or comet at which it is furthest from the sun.

**21.** he force that attracts a body toward the center of the earth, or toward any other physical body having mass.

**23.** an imaginary line about which a body rotates.

**24.** the luminous envelope of a star from which its light and heat radiate.

**27.** a system of millions or billions of stars, together with gas and dust, held together by gravitational attraction.

**28.** a star that suddenly increases greatly in brightness because of a catastrophic explosion that ejects most of its mass.

**30.** a system of two stars in which one star revolves around the other or both revolve around a common center.

**31.** the outermost region of a planet's atmosphere.

**32.** the region surrounding the earth or another astronomical body in which its magnetic field is the predominant effective magnetic field.

**33.** the fully shaded inner region of a shadow cast by an opaque object, especially the area on the earth or moon experiencing the total phase of an eclipse.

**Down**

**1.** a fixed luminous point in the night sky that is a large, remote incandescent body like the sun.

**2.** a celestial object consisting of a nucleus of ice and dust and, when near the sun, a “tail” of gas and dust particles pointing away from the sun.

**3.** a reddish gaseous layer immediately above the photosphere of the sun or another star. Together with the corona, it constitutes the star's outer atmosphere.

**4.** a region of space having a gravitational field so intense that no matter or radiation can escape.

**6.** a group of stars forming a recognizable pattern that is traditionally named after its apparent form or identified with a mythological figure.

**7.** an eclipse in which the sun is obscured by the moon.

**8.** the point in the orbit of a planet, asteroid, or comet at which it is closest to the sun.

**10.** the lowest region of the atmosphere, extending from the earth's surface to a height of about 3.7–6.2 miles (6–10 km), which is the lower boundary of the stratosphere.

**11.** A faint band of light crossing the sky, made up of vast numbers of faint stars. It corresponds to the plane of our Galaxy, in which most of ours stars are located.

**15.** a celestial object of very small radius (typically 18 miles/30 km) and very high density, composed predominantly of closely packed neutrons.

**16.** a small rocky body orbiting the sun. Large numbers of these, ranging in size from nearly 600 miles across to dust particles, are found especially between the orbits of Mars and Jupiter, though some have more eccentric orbits, and a few pass close to the earth or enter the atmosphere as meteors.

**17.** the curved path of a celestial object or spacecraft around a star, planet, or moon, especially a periodic elliptical revolution.

**22.** he layer of the earth's atmosphere above the troposphere, extending to about 32 miles (50 km) above the earth's surface (the lower boundary of the mesosphere).

**25.** the collection of eight planets and their moons in orbit around the sun, together with smaller bodies in the form of asteroids, meteoroids, and comets.

**26.** a celestial body moving in an elliptical orbit around a star.

**29.** a star showing a sudden large increase in brightness and then slowly returning to its original state over a few months.