









# Astronomical Objects: What's in Space?

Study the illustrations and the table.

## Common Astronomical Objects Defined

Object	Name	Definition	Did You Know?
	<b>asteroid</b>	small, rocky object that orbits the Sun and ranges in size from about 30 feet to 600 feet across	Most asteroids are concentrated in the asteroid belt, located between the orbits of Jupiter and Mars.
	<b>black hole</b>	extremely dense object whose gravitational pull is so strong that not even light can escape from it	Black holes are generally thought to result from the collapse of certain very massive stars at the ends of their lives.
	<b>comet</b>	small chunk of ice, dust, and rocky material that forms a glowing tail of gas and dust when it passes near the Sun in its orbit	A comet may measure only a few miles across, but its tail may be millions of miles long, making it visible to the naked eye.
	<b>meteoroid</b>	rocky object that orbits the Sun and is much smaller than an asteroid	A meteoroid that enters Earth's atmosphere and burns up is called a meteor. Pieces that remain intact and strike the earth are called meteorites.
	<b>moon</b>	body of matter that orbits a planet, reflects light from the Sun, and has a similar composition to planets	Moons are also called satellites. Saturn has 29 moons, the most of any planet. Some planets do not have any moons.
	<b>nebula</b>	fuzzy cloud of gas and/or dust that is visible in space because it glows, or scatters light from stars within it, or blocks light from objects behind it	Stars are born inside collapsing nebulae.
	<b>planet</b>	any large body (bigger than an asteroid) that revolves around a star	Mercury, Venus, Earth, and Mars are called terrestrial planets because they contain mainly rocks and metal and are fairly dense. Jupiter, Saturn, Uranus, and Neptune are called gaseous planets because they are mainly hydrogen and helium.
	<b>star</b>	giant ball of burning gas held together by gravity	Stars vary in size, color, and temperature. Blue stars are hottest, red stars are coolest, and yellow-white stars fall in between. The Sun is a yellow-white star. It is the largest object in our solar system and contains over 99 percent of the system's total mass.

Use the clues to solve the crossword puzzle.

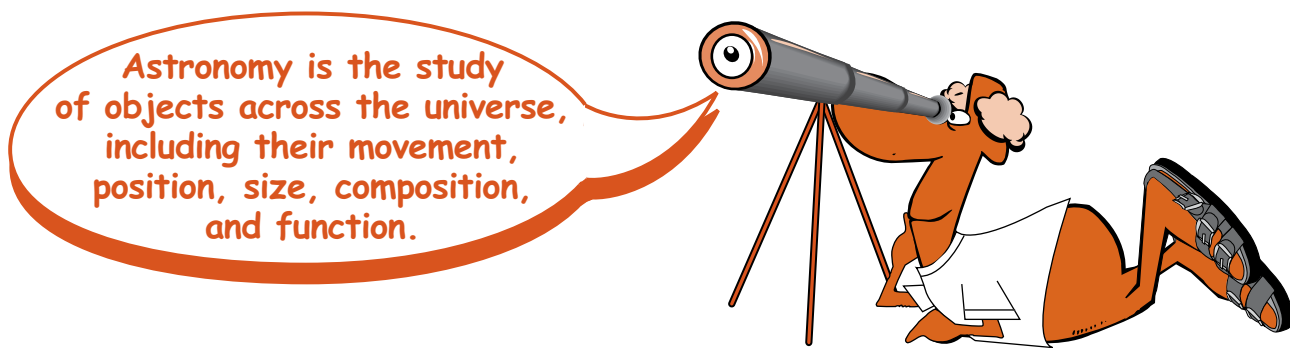
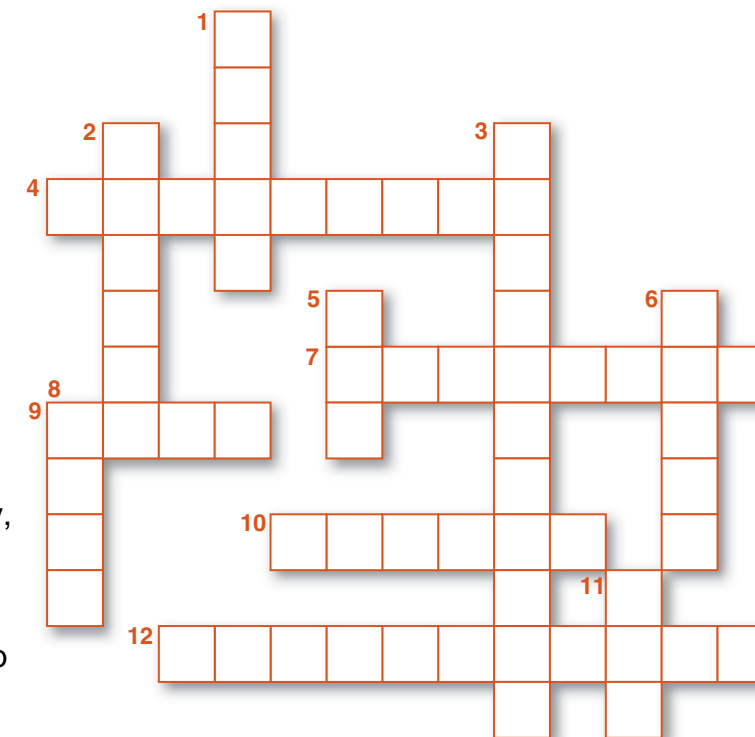
### Across

- 4 piece of space rock that strikes Earth
- 7 rocky object up to 600 feet across
- 9 most asteroids are found between this planet and Jupiter

- 10 planet with the greatest number of moons
- 12 characteristic that determines star color

### Down

- 1 object made mainly of ice
- 2 fuzzy cloud of gas and/or dust
- 3 classification used to identify rocky, dense planets
- 5 content of stars
- 6 black holes are powerful enough to trap even this form of energy
- 8 object also known as a satellite
- 11 star located at the center of our solar system



<b>A</b> nebula	<b>B</b> temperature	<b>C</b> Saturn	<b>D</b> meteorite	<b>E</b> Mars	<b>F</b> gas
<b>G</b> moon	<b>H</b> light	<b>I</b> comet	<b>J</b> asteroid	<b>K</b> Sun	<b>L</b> terrestrial



Research Sedna. What is it? Where is it? How big is it?

