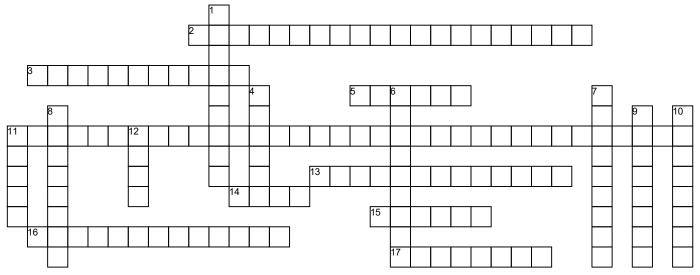
## Space Systems Crossword Puzzle

1. Using the Across and Down clues, write the correct answer in the numbered grid below.



## ACROSS

- 2. Space observatory orbiting Earth, providing valuable data and images of distant galaxies and cosmic phenomena.
- 3. Collection of planets, moons, asteroids, and comets orbiting around the Sun.
- 5. Large system of stars, gas, dust, and dark matter held together by gravity.
- 11. Faint glow of electromagnetic radiation filling the universe, considered a remnant of the Big Bang.
- Recognizable pattern of stars in the night sky named after mythological figures, animals, or objects.
- 14. Luminous celestial body consisting of hot gas that generates light and heat through nuclear fusion.
- 15. Interstellar cloud of dust, hydrogen, helium, and other ionized gases where stars are born.
- Cosmological model describing the rapid expansion of the universe from a hot, dense state approximately 13.8 billion years ago.
- 17. Phenomenon where light from distant galaxies is shifted toward longer (redder) wavelengths due to the expansion of the universe.

## DOWN

- Powerful explosion marking the death of a massive star, releasing an immense amount of energy and creating heavy elements.
- 4. Celestial body that orbits a star, is spherical in shape, and has cleared its orbit of other debris.
- 6. Unit of astronomical distance equal to the distance light travels in one year, approximately 9.46 trillion kilometers.
- 7. Region of spacetime where gravity is so strong that nothing, not even light, can escape.
- 8. Small rocky body orbiting the Sun, found primarily in the asteroid belt between Mars and Jupiter.
- 9. Spiral galaxy containing our solar system, consisting of billions of stars, dust, and gas.
- 10. All of space and time and their contents, including galaxies, stars, planets, and cosmic phenomena.
- 11. Small icy body orbiting the Sun, consisting of dust, rock, and frozen gases that vaporize near the Sun, producing a visible coma and tail.
- 12. Natural satellite orbiting a planet, reflecting light from the Sun.

cosmic microwave background radiation	moon
black hole	star
constellation	Hubble Space Telescope
nebula	comet
supernova	redshift
Universe	asteroid
solar system	galaxy
Big Bang theory	light-year
Milky Way	planet