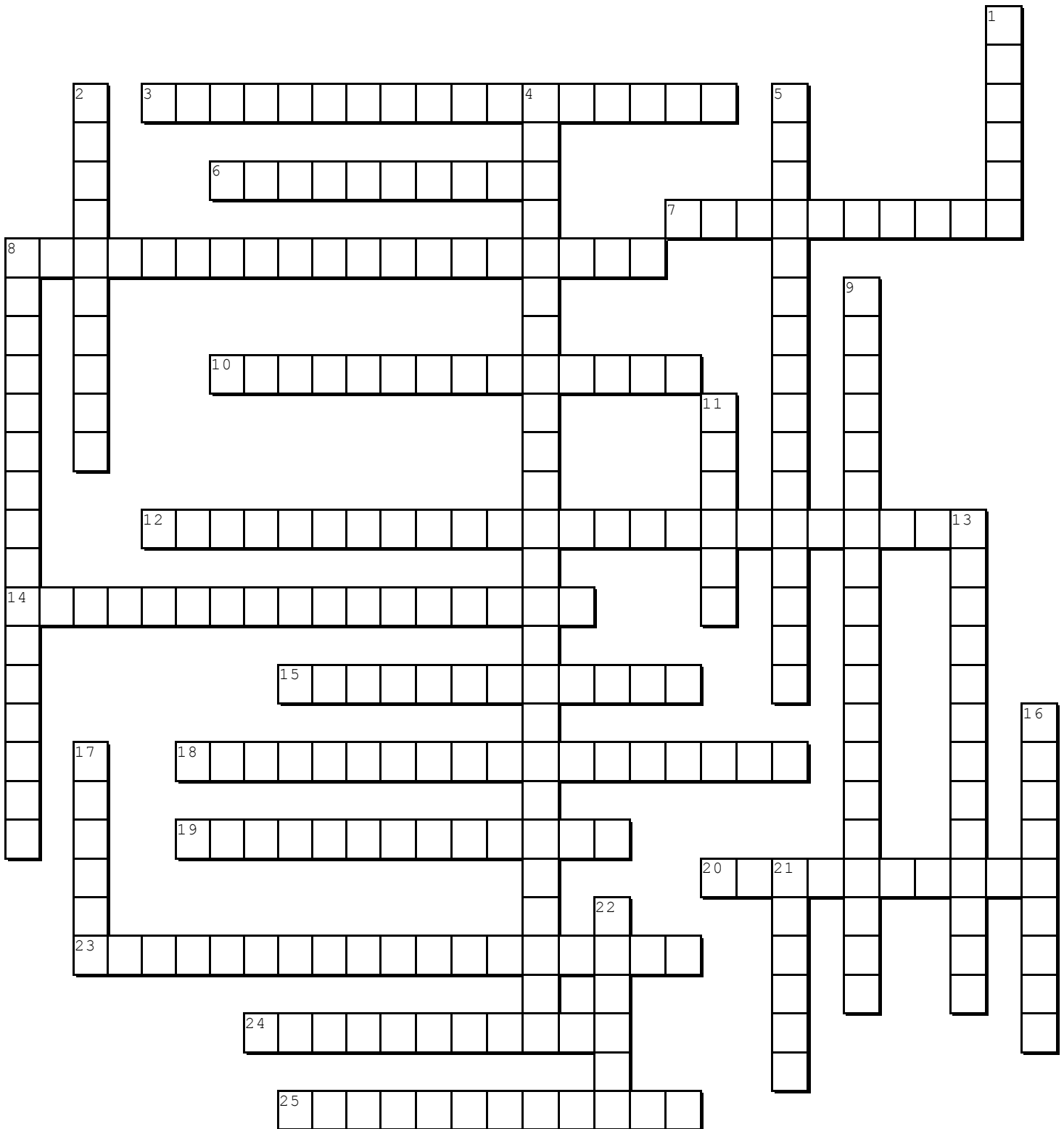


Name: _____

Stars and Galaxies

Complete the crossword below



Across

- 3.** A spectrum consisting of individual lines at characteristic wavelengths produced when light passes through an incandescent gas; a bright-line spectrum
- 6.** The final life stage of an extremely massive star, with a gravitational field so intense that not even light can escape
- 7.** A large star with great luminosity and a diameter 10 to 100 times greater than that of the sun
- 8.** A spectrum that contains all colors or wavelengths
- 10.** The theory holding that the universe originated from the instant expansion of an extremely small agglomeration of matter of extremely high density and temperature
- 12.** A continuum depicting the range of electromagnetic radiation, with the longest wavelength at one end and the shortest at the other
- 14.** The average distance between Earth and the sun, about 150 million km
- 15.** The superdense remains of a massive star that collapsed with enough force to push all of its electrons into the nuclei they orbit, resulting in a mass of neutrons
- 18.** The measure of how bright a star appears to be to an observer on Earth
- 19.** A group of stars that appear to form a pattern in the sky
- 20.** The distance that light travels in one year, about 9.5 trillion km
- 23.** The measure of how bright a star would be if it were located 10 parsecs from Earth
- 24.** The most luminous, most massive stars, with diameters greater than 100 times the diameter of the sun
- 25.** The remnant of a giant star that has lost its outer atmosphere; the glowing stellar core

Down

- 1.** A distant neutron star that emits rapid pulses of light and radio waves instead of steady radiation
- 2.** The brightness of a star
- 4.** Energy radiated in the form of a wave, resulting from the motion of electric charges and the magnetic fields they produce
- 5.** A halo of gases that is formed by the expelled layers of a star's atmosphere
- 8.** A variable star that brightens and dims regularly, or pulses, and whose distance can be determined from its period of pulsation
- 9.** A continuous spectrum crossed by dark lines produced when light passes through an incandescent gas
- 11.** A unit of measurement used to describe distances between celestial objects, equal to 3.258 light-years
- 13.** A star that is at the point in its life cycle in which it is actively fusing hydrogen nuclei into helium nuclei; also, the band of the Hertzsprung-Russell Diagram depicting such stars
- 16.** The brilliant burst of light that follows the collapse of the iron core of a massive star
- 17.** A large cloud of gas and dust in space
- 21.** A group of millions, or even billions of stars held together by gravity
- 22.** A very distant, extremely luminous celestial object that scientists consider to be a type of active galactic nuclei