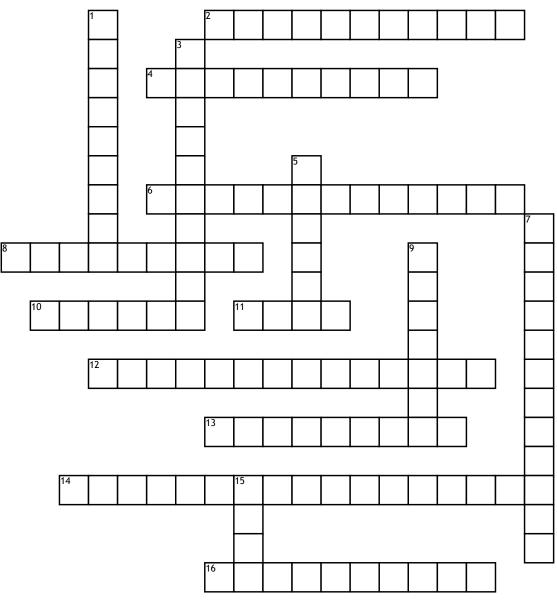
## Stars, Galaxies and the Universe



## <u>Across</u>

**2.** Pair of stars that revolve around each other and are held together by gravity.

**4.** Nightly luminous stars from main sequence stars that are more massive than the sun, which becomes larger than giants in their third stage.

**6.** An observed change in the frequency of a wave when the source or observer is moving.

8. The colors in the spectrum of a side moving toward earth are shifted slightly toward blue.

10. A collection of stars, dust, and gas bound together by gravity.11. A large celestial body that is composed of gas and that emits light.

**12.** A spiral galaxy in which the sun is one of hundreds of billions of stars.

**13.** The study of the origin, properties, and evolution of the universe.

**14.** The brightness of a star as seen from earth.

16. Unknown material

## <u>Down</u>

1. an object so massive and dense that even light cannot escape its gravity.

**3.** The total amount of energy stars give off each second.

**5.** A large cloud of gas or dust in interstellar space; a region in space where stars are born.

7. The coldest temperature possible.

9. 14 billion years ago, a sudden event that sent all matter and energy outward in all directions.
15. A star that suddenly becomes brighter.