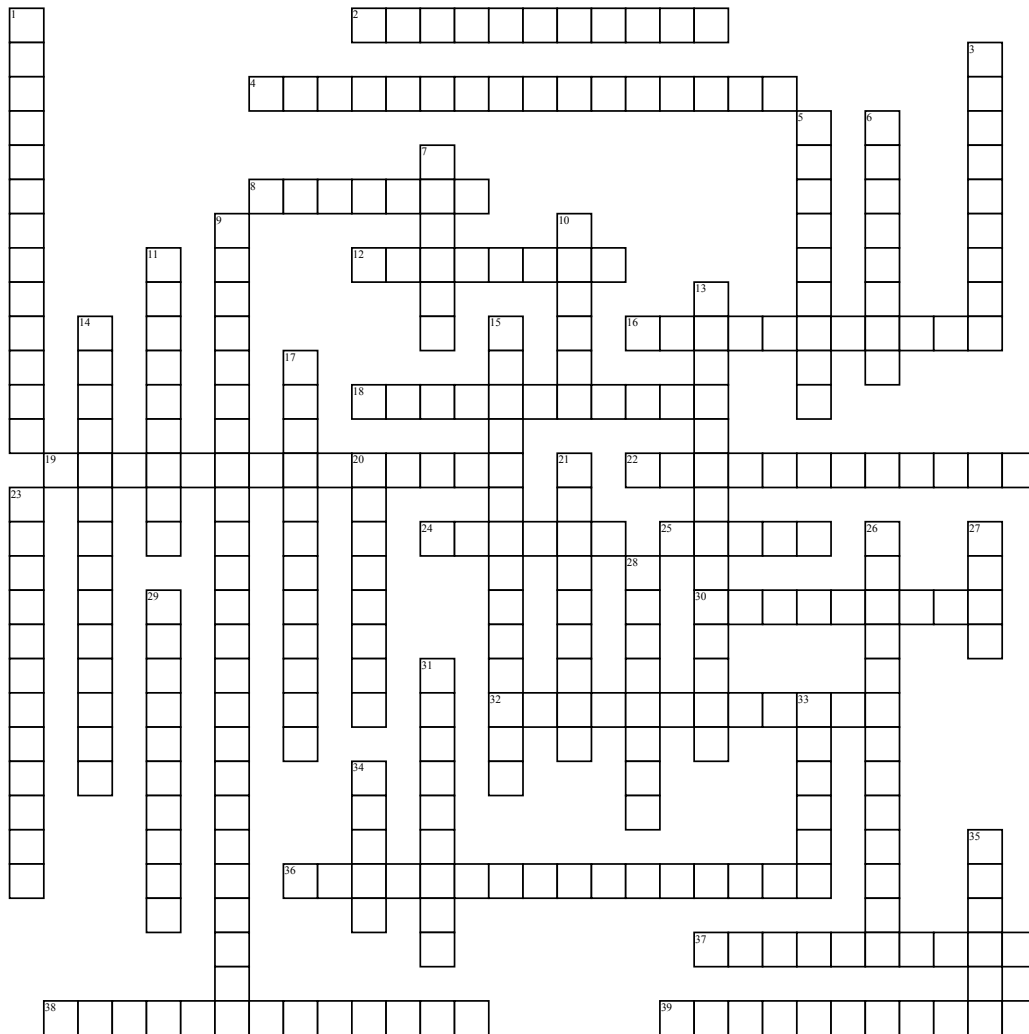


Name: \_\_\_\_\_

# Space Exploration Crossword



**Across**

- 2. star that has a mass of less than half the mass of the sun. The smallest, coolest and is orange, red or brown in color. This type of star has a long life due to slow burning of hydrogen
- 4. any objects we can see in the sky
- 8. happens twice a year when the sun crosses the celestial equator and when both day and night are of equal length
- 12. A mass of gas that is decreasing in size that represents the early age of formation of a star
- 16. a celestial object with a small radius and very high density. Made of closely compacted neutrons and are formed from the remnants of a massive star after a supernova explosion
- 18. a system of planets and celestial objects that orbit around the sun
- 19. a type of star that is about the same size as the sun and goes through a core helium burning phase
- 22. a layer of the sun above the photosphere that varies in temperature of 6000C to 20 000C and at higher temperatures it gives off a reddish colour
- 24. a large space cloud of dust, helium and other ionized gases
- 25. a celestial object composed of ice and space dust
- 30. an astronomical event that occurs during the last stages of a massive stars life
- 32. when the earth is blocking the suns light and causes the moon to be in its shadow and makes the moon dark or not visible from earth

- 36. one of these is the average distance between earth and the sun and is used to measure distances in our solar system
  - 37. a person that studies astronomy
  - 38. the theory of how the universe was created/started
  - 39. the visible part of the suns surface, it is not solid, it is a thin layer of 100km of gas compared to the suns radius of 700 000km
- Down**
- 1. a process in which the nuclei of atoms come together and form larger atoms
  - 3. a unit of distance that measures how far light travels in one year
  - 5. a place in space that has a very strong gravitational pull and nothing can escape it, not even light, and is caused by lots of matter being squeezed in to a tiny space
  - 6. everything that exists physically, including space, time and all forms of matter and energy
  - 7. the word is latin and comes from the word "crown" and it is the plasma that surrounds the sun and other stars
  - 9. a type of energy that travels in waves
  - 10. a collection of hundreds of billions of stars held together by gravity
  - 11. a man made artificial body placed in the orbit of earth or another planet or other celestial objects in order to collect information
  - 13. the longest day and marks the beginning of summer in the northern hemisphere

- 14. the solstice that marks the beginning of winter in the northern hemisphere
- 15. a natural appearance of streamers of reddish, bluish or greenish light in the sky located usually near the north or south pole
- 17. when the moon blocks the sun from earths view and creates a very bright glow
- 20. spots that appear on the suns surface when that spot is a different temperature
- 21. the flow of particles that allow the solar system to work and for the planets to move
- 23. a large disk of rock like celestial objects in our solar system located roughly between the orbits of mars and jupiter
- 26. Group of stars that create a pattern that is recognizable
- 27. a ball of plasma that shines bright because of nuclear fusion taking place in its core
- 28. a popular/famous pattern or group of stars, this group of stars is smaller than a constellation
- 29. a brief eruption of high energy radiation on the suns surface
- 31. the study of space, the universe and everything in the universe
- 33. a celestial body orbiting in an oval shape around a star or sun
- 34. the only planet with known life and made of 73% water
- 35. a small body of matter that enters the earths atmosphere and can create a streak of light often referred to as a shooting star

**Word Bank**

- |                  |                 |                   |               |                           |                   |
|------------------|-----------------|-------------------|---------------|---------------------------|-------------------|
| comet            | solar wind      | astronomer        | lunar eclipse | astronomy                 | nebula            |
| satellite        | super nova      | winter solstice   | low mass star | solar system              | Neutronstar       |
| equinox          | asteroid belt   | star              | protosar      | aurora borealis           | universe          |
| constellation    | summer solstice | nuclear fusion    | galaxy        | electromagnetic radiation | photosphere       |
| solar flame      | big bang theory | Astronomical unit | asterism      | planet                    | meteor            |
| medium mass star | corona          | chromosphere      | earth         | light-year                | celestial objects |
| sun spots        | blackhole       | solar eclipse     |               |                           |                   |