

# Geology

[Science](#), [Biology](#)



**Birth and Death of Stars in the Solar System** The solar system comprises of the sun and other objects that revolve around the sun. These objects are basically planets and other satellites. It is believed that the solar system was formed approximately 4.6 billion years ago as a result of the gravitational collapse of a large molecular cloud of gas and dust (Seeds 76).

According to researchers the solar system came into existence as a result of death of a star in a supernova event. The scientists discovered that the supernova event caused shock waves that could have caused the collapse of the molecular cloud of gas and dust. This then resulted to the formation of the sun and planets that make up the solar system (Seeds 80). This has been supported by the ratio of the aluminum isotopes found in the meteorites that were formed when the molecular cloud collapsed. The scientists came up with a model that explains the unusual levels that the isotope contained (Seeds 79). They stated that the levels could have been because the isotopes were being fed in the molecular cloud at the time the supernova event was occurring.

The seismic waves caused by the supernova event were hot in nature thus when they collided with the cold molecular cloud of gas resulted to it colliding. This consequently led to the formation of the solar system. As it is seen the death of the star that was caused by the seismic waves that were a result of the supernova event made way for the solar system to be formed. This helps us to understand the fact that the solar system came into existence as a result of the death of a star (Seeds 82).

#### Work Cited

Seeds, Michael A. The Solar System. Belmont: Thomson Brooks, 2007.