

GSA-

Question:1

Differentiate between a star and planet. What is magnitude of a star and how the color of stars is correlated with their temperature?

Answer:

Differences between star and planet as they are both celestial bodies located in outer space.

star	Planet
<p>1 Star is a massive shining sphere of hot gas.</p>	<p>1 Planet is a round body in space that orbits a star.</p>
<p>2 A star shines by releasing light produced by nuclear fusion.</p>	<p>2 Planet do not produce light.</p>
<p>3 Different heavenly objects revolve around star such as planet, dwarf</p>	<p>3 Object that revolve around planets are called, satellite (moon)</p>

Star	planet
planet, asteroid etc	
⁴ Stars revolve around the centre of their galaxy.	⁴ Planets revolve around star.
⁵ Stars having very high temperature like sun has a surface temperature of 5500 to 6000°C.	⁵ Planets derive energy and heat from sun therefore the ones near to sun are hotter.
Example are sun, proxima centauri and Pistol Star	Example are Earth, Venus, Mars, Neptune, Uranus and Jupiter etc.

Magnitude of star:

In astronomy magnitude of star and other celestial bodies is the measure of brightness of star. An object's and star's

apparent magnitude depends on its luminosity and ^{their} distance.

→ Relationship between color of stars and their temperature:

A star's color provides direct measurement of its surface temperature.

~~color of star & color of~~

→ color of star & temperature of star.

The hottest stars shine blue-white, while the coolest are dull orange or red.

Stars produce their energy through nuclear fusion. For most stars this process is dominated by a process called the proton-proton chain. A sequence of events that transforms ~~two~~ hydrogen atoms into helium.



good answer!!