

Well, so what if I am not a Planet?! Look at the planet you call home - while it is part of the planetary club, with heavyweights like Jupiter and Saturn around, it seems like just an insignificant dot in that group. In contrast, I am king among the Kuiper Body Objects (KBO) and even have a group named after me. I want you to remember one thing - about four billion years

from now, the Sun will run out of all its fuel, with all its hydrogen fused into helium. Once this happens, the outer shell of the Sun will expand outwards as it becomes a red giant. Mercury, Venus and most probably your Earth will all be swallowed up by that monster. I, on the other hand, will be safe, far away from all the destruction, and still undisputed King of the KBOs!

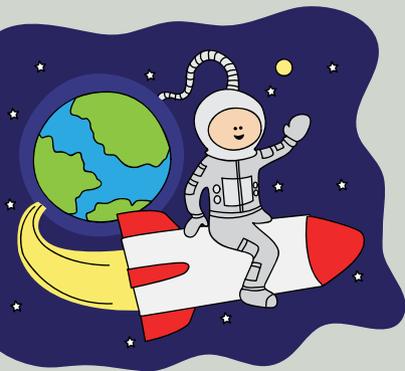


References

1. Pluto. (2016, February 22). In Wikipedia, The Free Encyclopedia. Retrieved 15:05, February 23, 2016, from: <https://en.wikipedia.org/w/index.php?title=Pluto&oldid=706223881>
2. Plutoid. (2016, January 7). In Wikipedia, The Free Encyclopedia. Retrieved 15:07, February 23, 2016, from: <https://en.wikipedia.org/w/index.php?title=Plutoid&oldid=698715537>
3. IAU definition of planet. (2016, January 28). In Wikipedia, The Free Encyclopedia. Retrieved 15:07, February 23, 2016, from: https://en.wikipedia.org/w/index.php?title=IAU_definition_of_planet&oldid=702140377
4. Kuiper belt. (2016, February 20). In Wikipedia, The Free Encyclopedia. Retrieved 15:07, February 23, 2016, from: https://en.wikipedia.org/w/index.php?title=Kuiper_belt&oldid=705900423
5. Eris (dwarf planet). (2016, February 22). In Wikipedia, The Free Encyclopedia. Retrieved 15:07, February 23, 2016, from: [https://en.wikipedia.org/w/index.php?title=Eris_\(dwarf_planet\)&oldid=706333070](https://en.wikipedia.org/w/index.php?title=Eris_(dwarf_planet)&oldid=706333070)



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Solid Gases and Metal Vapours

– Vignesh Narayan

Among the many wonders of space are planets. They come in all sizes, colours and most strikingly, chemicals. Extremes of temperature, gravitational forces and velocities cause chemicals to behave in ways that are rarely seen on Earth.

NASA's New Horizons spacecraft displayed the first ever images of Pluto, the dwarf planet, in 2015, after a 9-year voyage in space. These pictures show smooth plains of nitrogen ice arising from Pluto's 'heart' meeting mountains several kilometres high. These mountains are actually gargantuan icebergs that are resting, and move around on layers of solid nitrogen below them.

Closer to the sun, Mercury actually has thin vapours of sodium and potassium gas above its surface. Jupiter, known as a gas giant, has no surface at all! The top quarter of the planet is faced with such high temperatures and pressure that hydrogen atoms are stripped of their electrons to form a liquid metal. What makes the atmosphere of Jupiter even more interesting is a layer of ammonia and hydrogen sulphide crystals sandwiched between water ice at the bottom and ammonia ice on top. The planets Uranus and Neptune have clouds made of crystalline methane. Since methane absorbs all wavelengths other than blue, both planets appear blue in colour when seen by space probes and telescopes.

None of the planets or moons in the Solar System has an atmosphere similar to that of Earth. This means that if humans travel to other planets, they will have to take their own atmosphere along in order to survive!

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