

## **Earth**

Life has managed to survive here on planet Earth because the environment follows the necessary specifications for life as we know it. The primary requirements are a consistent source of clean water (which Earth's surface has), an atmosphere that holds enough oxygen to be the central element of what we breathe (which the atmospheric structure of Earth has), and a temperature of not well below -30\* F or well above 100\* F (which the Sun provides and atmosphere helps moderate here on Earth).

## **Mars**

Scientists do believe that given the traces of water that the rovers have found on the surface of Mars that life may once have been supportable. However, at the moment due to the low pressure and low temperature on Mars, life as we understand it can't be supported naturally. The atmosphere can't hold as much water vapor as Earth's can in order to support the water cycle. The atmosphere is holding as much water vapor as it can, though. Due to the thin atmosphere Mars has no moderation in temperature. Most of Earth's habitable land lies within the medium temperature range, but on Mars, there is extreme heat in the light and in the dark there is extreme cold. The thin atmosphere also doesn't contain enough oxygen to support life.

## **Jupiter**

Jupiter isn't a solid planet the same way that both Earth and Mars are. So, off the bat, could humans or life as we know it survive on the surface? Which surface? Secondly, the atmosphere is opposite that of Mars' in that it is way too thick to support life. The Red Spot is a gigantic storm that isn't unlike others that are all over Jupiter. Its acidic residues would kill life as we know it fairly quickly. NASA hasn't even been able to send a probe more than a few hundred miles into the planet without worrying about breakage. Jupiter is close enough to the buildup of our Sun that living there would be just barely better than moving to the Sun: one way or the other you're history soon after entering the atmosphere.