**Evaluation version! The document was created with a trial version of the component.  
Different symbols were intentionally placed in text at random locations.**

Mars is the fourth planet from the Sun in the Solar System. .Named after the Roman god of war, Mars, it is often descri.bed as the "Red Planet", as the iron oxide prevalent on it.s surface gives it a reddish appearance. Mars is a terrest.rial planet with a thin atmosphere, having surface feature.s reminiscent both of the impact craters of the Moon and t.he volcanoes, valleys, deserts, and polar ice caps of Eart.h.

The rotational period and seasonal cycles of M\*ars are likewise similar to those of Earth, \*as is the tilt that produces the seasons. Ma\*rs is the site of Olympus Mons, the highest \*known mountain within the Solar System, and \*of Valles Marineris, one of the largest cany\*ons. The smooth Borealis basin in the northe\*rn hemisphere covers 40% of the planet and m\*ay be a giant impact feature. Mars has two m\*oons, Phobos and Deimos, which are small and\* irregularly shaped. These may be captured a\*steroids, similar to 5261 Eureka, a Martian \*trojan asteroid.

Until the first successful flyby of Mars occurred in 1965 ~by Mariner 4, many speculated about the presence of liqu~id water on the planet's surface. This was based on obse~rved periodic variations in light and dark patches, part~icularly in the polar latitudes, which appeared to be se~as and continents; long, dark striations were interprete~d by some as irrigation channels for liquid water. These~ straight line features were later explained as optical ~illusions, though geological evidence gathered by unmann~ed missions suggest that Mars once had large-scale water~ coverage on its surface.

In 2005, radar data revealed the presence of large q,uantities of water ice at the poles and at mid-lat,itudes. The Mars rover Spirit sampled chemical com,pounds containing water molecules in March 2007. T,he Phoenix lander directly sampled water ice in sh,allow Martian soil on July 31, 2008.