Red Color of Mars

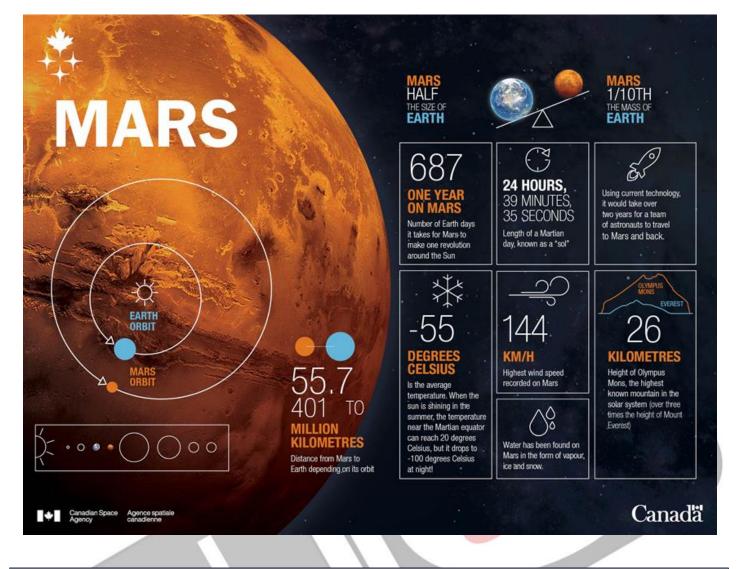
Source: TOI

The study, based on data from several space missions and ground-level observations, suggests that Mars' red color is primarily due to Ferrihydrite—a water-formed iron oxide—rather than the previously assumed Hematite.

- Ferrihydrite forms in cool, water-rich conditions, whereas hematite forms in dry, warm conditions.
 - It suggests that **Mars once had liquid water**, potentially supporting life. Additionally, **the study revealed hydrogen bound to iron-rich minerals**, further indicating past interactions with liquid water on Mars.

Mars: Mars is the 4th planet from the Sun and the second-smallest in the Solar System after Mercury.

- About half Earth's size, it hosts Olympus Mons (largest volcano), and has 2 moons (Phobos and Deimos).
- Mars completes a rotation every 24.6 hours, making its day nearly identical in length to Earth's (23.9 hours). Martian days are called sols.
 - A year on Mars lasts 669.6 sols, which is the same as 687 Earth days.
- Its axis is tilted at 25 degrees relative to its orbit, similar to Earth's axial tilt of 23.4 degrees.
 Mars experiences seasons like Earth, but they are longer in duration.
- Important Mars Missions:
 - NASA's Mars Mission, India's MOM, UAE's Hope
 - Tianwen-1: China's Mars Mission
- <u>//_</u>



Read More: NASA's Mars Sample Return Program

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