Summary Information Sheet

MARS

Mars, the fourth planet from the Sun, is named after the Roman god of war. Mars is known as the red planet because red iron-oxide dust and rocks cover its surface. Mars is more Earth-like than any other body in the Solar system.

Temperature ~ -55°C
min. -133°C, max. +27°C

North polar ice cap
(frozen carbon dioxide and water ice)

Permanently frozen soil

Crust, 40-50 km thick

Mantle of silicate rock
~1500 km thick

Solid iron-rich core
radius ~1700km

Olympus Mons

One revolution around
the Sun lasts
687 Earth days

Condensation clouds

Northern hemisphere with
many vast plains like
Lunae Planum formed of
solidified lava

Dust storm more
than 120 km/hr

Old dried-up river
systems = arroyos

Valles Marineris canyon
system, ten times
longer and four times
deeper than the Grand
Canyon in the USA

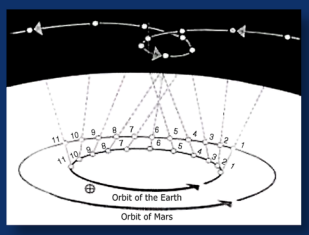
Southern hemisphere pitted with
craters and large impact basins

Dry, thin and
cold atmosphere
95% CO_2,
2,7% N,
1,6% Ar

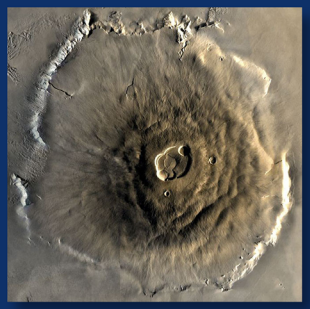
Huge vulcanos

South polar ice cap
Both caps shrink during
the martian summer

Inclination of the Equator
to orbital plane 25°11'

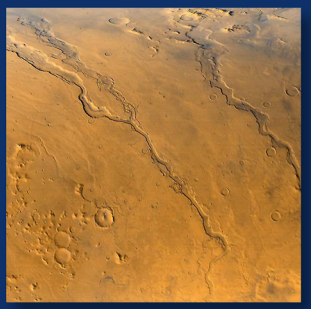


Mars loops in the sky



Olympus Mons

Cratered terrain and
reddish atmosphere



Old dried-up river bed
= arroyo

Surface seen by
SPIRIT 2004

Physical Data

Property	Mars	Moon	Earth
Distance from the Sun	228 million km	150 million km	150 million km
Rotation period	24 hrs 37 min	27 days 8 hrs	23 hrs 56 min
Equatorial radius	3397 km	1738 km	6378 km
Mass	6.42 x 10^{23}kg	7.35 x 10^{22}kg	5.97 x 10^{24}kg
Density	3940 kg/m^3	3340 kg/m^3	5520 kg/m^3
Satellites	2	0	1

For comparison

Images: ESO, ESA, NASA, except otherwise stated

Concept: B. Mackowiak