

MERCURY: VITAL STATISTICS

Average distance from Sun:	0.387 AU = 5.79×10^7 km
Maximum distance from Sun:	0.467 AU = 6.98×10^7 km
Minimum distance from Sun:	0.307 AU = 4.60×10^7 km
Eccentricity of orbit:	0.21
Average orbital speed:	47.9 km/s
Sidereal period of revolution:	88.0 Earth days = 0.24 Earth year
Sidereal rotation period:	58.7 Earth days
Solar rotation period (day):	176 Earth days
Inclination of equator to orbit:	0.5°
Inclination of orbit to ecliptic:	7° 00' 16"
Radius (equatorial):	2439 km = 0.382 Earth radius
Mass:	3.30×10^{22} kg = 0.0553 Earth mass
Average density:	5430 kg/m ³ = 0.984 Earth density
Escape speed:	4.3 km/s
Surface gravity (Earth = 1):	0.38
Albedo:	0.12
Average surface temperatures:	Day: 350°C = 662°F = 623 K Night: -170°C = -274°F = 103 K
Atmosphere:	Very thin, transient H, He, K, Na, O



VENUS: VITAL STATISTICS

Average distance from Sun:	0.723 AU = 1.082×10^8 km
Maximum distance from Sun:	0.728 AU = 1.089×10^8 km
Minimum distance from Sun:	0.718 AU = 1.075×10^8 km
Eccentricity of orbit:	0.007
Average orbital speed:	35.0 km/s
Sidereal period of revolution:	224.7 days = 0.615 Earth year
Sidereal rotation period:	243.0 days (retrograde)
Solar rotation period (day):	116.8 Earth days
Inclination of equator to orbit:	177.4°
Inclination of orbit to ecliptic:	3.39°
Radius (equatorial):	6051 km = 0.949 Earth radius
Mass:	4.87×10^{24} kg = 0.815 Earth mass
Average density:	5240 kg/m ³ = 0.949 Earth density
Escape speed:	10.4 km/s
Surface gravity (Earth = 1):	0.91
Albedo:	0.59
Average surface temperature:	460°C = 860°F = 733 K
Atmospheric composition (by number of molecules):	96.5% carbon dioxide (CO ₂), 3.5% nitrogen (N ₂), 0.003% water vapor (H ₂ O)



MARS: VITAL STATISTICS

Average distance from Sun:	1.52 AU = 2.28×10^8 km
Maximum distance from Sun:	1.67 AU = 2.49×10^8 km
Minimum distance from Sun:	1.38 AU = 2.10×10^8 km
Eccentricity of orbit:	0.093
Average orbital speed:	24.1 km/s
Sidereal period of revolution:	687 Earth days = 1.88 Earth years
Sidereal rotation period:	24 ^h 37 ^m 22 ^s
Solar rotation period (day):	24 ^h 39 ^m 35 ^s
Inclination of equator to orbit:	25.19°
Inclination of orbit to ecliptic:	1.85°
Radius (equatorial):	3393 km = 0.53 Earth radius
Mass:	6.42×10^{23} kg = 0.107 Earth mass
Average density:	3950 kg/m ³ = 0.716 Earth density
Escape speed:	5.0 km/s
Surface gravity (Earth = 1):	0.38
Albedo:	0.16
Surface temperatures:	Maximum: 20°C = 70°F = 293 K Mean: -53°C = -63°F = 220 K Minimum: -140°C = -220°F = 133 K
Atmospheric composition (by number of molecules):	95.3% carbon dioxide (CO ₂) 2.7% nitrogen (N ₂) 0.03% water vapor (H ₂ O) 2% other gases



THE INNER PLANETS: A COMPARISON

	Interior	Surface	Temperature	Atmosphere	Magnetic Field
Mercury	Not known whether liquid or solid	Heavy cratering, scarps	700 K by day, 100 K by night	H, He, K, Na, O; transient and tenuous	0.1 times Earth's field
Venus	At least partially molten	Light cratering, mostly volcanic plains, gently rolling hills, some volcanoes	750 K	Mostly CO ₂ , N ₂ ; 90 times denser than Earth's	None detected
Earth	Solid inner core, molten outer core, mantle	Very little cratering, continents and land at ocean floors, weathering, volcanoes, global tectonic plates	200–315 K	Mostly N ₂ , O ₂	Strong global field
Mars	Probably solid core	Moderate cratering, weathering, dormant volcanoes, huge canyons	160–280 K	Mostly CO ₂ , N ₂ ; 0.006 times as dense as Earth's	Weak, local fields