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# Summary Information Sheet

# THE MOON



The Moon is our next-door neighbour. It is the only natural satellite of Earth, a ball of rock that spins around its own axis while orbiting the Earth and travelling with the Earth. The Moon is one of the largest natural satellites in the Solar System. It is the only other celestial body so far visited by astronauts.



Crust of granite-like rock  
65 km thick

Iron-poor rocky mantle  
65-700 km depth

Zone of moonquakes  
700-1200 km depth

Partially molten outer  
core, iron-rich

Small inner core  
1200-1700 km depth

Thick dust layer

Young craters like Tycho  
with rays

Far-side of the Moon - unseen  
before the age of space exploration

Craters formed by impacts are  
round depressions and are  
found almost everywhere.  
Sizes range from smaller  
than a pinhead  
up to ~200 km

The mare appear dark  
and are lowlands covering  
some 20% of the Moon's  
total surface. Sizes range  
from 700-3000 km

Lunar faults and rilles

Nightside with temperatures  
around -175° C

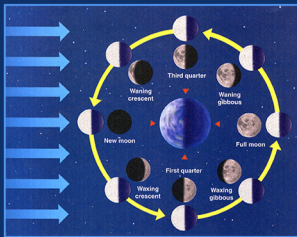
Highlands cover more  
than 70% of the surface

Lunar mountains like Leibniz Montes

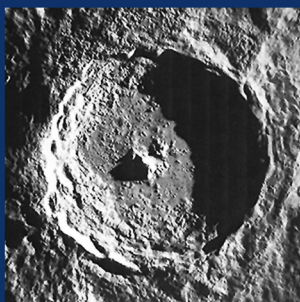
South polar region (with water ice?)

One revolution  
around the Earth  
lasts 27.3 days

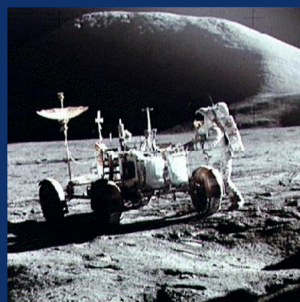
Surface temperature on  
the sunlit side ~100° C



Phases of the Moon



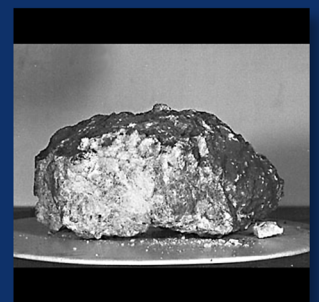
Crater Tycho



Apollo 17 rover and  
Hadley Montes



Hyginus Rille



Moon Rock

## Physical Data

## For comparison

Property	Moon	Earth	Mercury
Distance from the Sun	150 million km	150 million km	58 million km
Rotation period	27 days 8 hrs	23 hrs 56 min	59 days
Equatorial radius	1738 km	6378 km	2240 km
Mass	$7.35 \times 10^{22}$ kg	$5.97 \times 10^{24}$ kg	$3.30 \times 10^{23}$ kg
Density	3340 kg/m <sup>3</sup>	5520 kg/m <sup>3</sup>	5340 kg/m <sup>3</sup>