# The Moon

### A Natural Satellite

The Moon is the only natural satellite of the Earth, and the fifth largest satellite in the Solar System. It is the largest natural satellite of a planet in the Solar System relative to the size of its primary, having a quarter the diameter of Earth but only 1/81 its' mass.



The Moon as seen from Ottawa.

#### **Statistics**

• **Semi-major axis:** 384,399 km

• Orbital period: 27.321582 days

• **Average orbital speed:** 1.022 km/s

• **Mean radius:** 1,737.10 km

• Surface area:  $3.793 \times 10^7 \text{ km}^2$ 

• **Volume:**  $2.1958 \times 10^{10} \text{ km}^3$ 

• Mass:  $7.3477 \times 10^{22} \text{ kg}$ 

## **Moon Landings**

1. Apollo 11

July 20, 1969

Apollo 11 was an American spaceflight in which the astronauts Neil Armstrong and Buzz Aldrin became the first ever to land on the Moon on July 20, 1969, at 20:18 UTC. Further, Neil Armstrong became the first to step onto the Moon 6 hours after the landing on 21 July, 02:56 UTC.

Source: <a href="http://en.wikipedia.org/wiki/Apollo\_11">http://en.wikipedia.org/wiki/Apollo\_11</a>

#### 2. Apollo 12

November 19, 1969

Apollo 12 was the sixth manned flight in the United States Apollo program and the second to land on the Moon (an H type mission). It was launched on November 14, 1969 from the Kennedy Space Center, Florida, four months after Apollo 11. Source: <a href="http://en.wikipedia.org/wiki/Apollo\_12">http://en.wikipedia.org/wiki/Apollo\_12</a>