An Introduction to The Moon, its History and Features.

Said to be the only telescopic object in which the telescopic view is more spectacular than images.

A. History

Moon thought to be formed by glancing impact between Mars sized object and early cooling Earth approx 4.5 billion years ago.

Pre Nectarian

Between 4.5 and 3.92 billion years ago. Moon cooled and its crust and mantle formed. Ended with the formation of the Nectaris basin. Mare Tranquillitatis, Ptolemaeus and Grimaldi formed.

Late Heavy Bombardment

Between 4.1 and 3.8 billion years ago many lunar basins and craters were formed.

Nectarian

Between 3.92 and 3.85 billion years ago Mares Nectaris, Humorum and Crisium together with complex crater Clavius were formed. Ended with formation of the Imbrium Basin.

Early Imbrium

Between 3.85 and 3.8 billion years ago craters Petavius, Cassini, Macrobius, and Arzachel formed. Period ended with the formation of the Orientale Basin.

Late Imbrium

Between 3.8 and 3.15 billion years ago. Major larva flows filled the impact basins. Craters Archimedes, Plato, Posidonius, Piccolomini, and the Sinus Iridium (Bay of Rainbows) were formed

Eratosthenian

Between 3.15 and 1.0 billion years ago. Major larva flows stopped and high crater forming impact rates slowly decreased. Craters such as Eratosthenes could form in the solidified larva. Other craters include Pythagorus, Bullialdus, Theophilus and Langrenius.

Copernican

Between 1 billion years ago to today. Craters with ray systems that are still bright were created. Ray systems darken with age. Copernicus was formed 800 million years ago. Tycho is 100 million years old. Other craters from this period include Aristarchus, Kepler and Eudoxus.

B. Binocular Targets

Seas (Maria)	Crisium
	Serenitatis
	Tranquillitatis
	Nectaris
	Fecunditatis
	Frigoris
	Imbrium (Sea of Rains)
	Nubium
	Humorum
	Oceanus Procellarum (Ocean of Storms)
Bay	Sinus Iridium (Bay of Rainbows)

C. Telescopic Targets *Cont. p.2*

C. Telescopic Targets

Craters	Tycho
	Copernicus
	Plato
	Kepler
	Aristarchus
	Proclus
	Theophilus, Cyrillus and Catherina
	Grimaldi
Mountain Ranges	Alps
	Appenines
	Carpatus
	Jura
Valleys	Alps
	Rheita
	Schroteri

D. Guide to the phases of the Moon

Phase	**Day**
New Moon	0
Waxing Crescent	
First Quarter	7
Waxing Gibbous	
Full Moon	14
Waning Gibbous	
Last Quarter	21
Waning Crescent	
New Moon	0

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