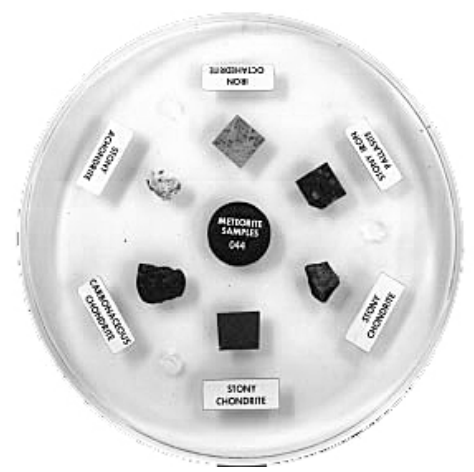


NASA Meteorites Disc



Name	Find Location	Find Date	Mass (kg)	Classification
ALH90411	Allan Hills, Antarctica	1990	5.8	chondrite L3
LEW87030	Lewis Cliff, Antarctica	1987	8	chondrite H5
Allende	Allende Mexico	1969	1,000	carbonaceous chondrite
EET83227	Elephant Moraine, Ant.	1983	2	basaltic achondrite
Gibeon	Namibia, Africa	1836	21,000	iron - octahedrite
Brenham	Kansas, USA	1882	4,400	stony-iron - pallasite

NOTES

L Chondrites have chondrules. L stands for Low iron. They would have come from small undifferentiated bodies that experienced a big impact. The low iron content is a clue to which bodies they might have been.

H Chondrites have chondrules. H stands for High iron. They would have come from small undifferentiated bodies that experienced a big impact. The high iron content is a clue to which bodies they might have been.

Carbonaceous chondrites are the most primitive meteorites that tell us about the earliest stages of the solar system before the formation of planets. They contain the carbon based building blocks for life such as amino acids.

Basaltic achondrites have no chondrules. They have been through igneous processes, so must have come from planetary bodies such as a large asteroid, the Moon or Mars. It would have been part of a crust, like basalt on Earth or lunar mares.

Iron octahedrites get their name from the octahedral pattern of the crystalline structure exposed when the iron is cut, polished and etched to reveal the Widmanstätten patterns (also called Thomson structures). Octahedrite meteorites have a nickel content intermediate between the norm for kamacite and taenite, this leads under slow cooling conditions to the precipitation of kamacite and growth of kamacite plates along certain crystallographic planes in the taenite crystal lattice.

(source: Wikipedia)

Stony-iron pallasites give us a snapshot of the core-mantle boundary of a planetary body. Olivine crystals are embedded in an iron rich matrix. Pallasites are rare and very beautiful. In smaller samples the olivine is usually weathered away after thousands of years of lying on Earth after impact.