

The Lunar 100 - Love the Night Sky

L	Name	Significance	Latitude (°)	N/S	Longitude (°)	E/W
1	Moon	Large satellite	—	—	—	—
2	Earthshine	Twice reflected sunlight	—	—	—	—
3	Mare/highland dichotomy	Two materials with distinct compositions	—	—	—	—
4	Apennines	Imbrium basin rim	18.9	N	3.7	W
5	Copernicus	Archetypal large complex crater	9.7	N	20.1	W
6	Tycho	Large rayed crater with impact melts	43.4	S	11.1	W
7	Altai Scarp	Nectaris basin rim	24.3	S	22.6	E
8	Theophilus, Cyrillus, Catharina	Crater sequence illustrating stages of degradation	13.2	S	24	E
9	Clavius	Lacks basin features in spite of its size	58.8	S	14.1	W
10	Mare Crisium	Mare contained in large circular basin	18	N	59	E
11	Aristarchus	Very bright crater with dark bands on its walls	23.7	N	47.4	W
12	Proclus	Oblique-impact rays	16.1	N	46.8	E
13	Gassendi	Floor-fractured crater	17.6	S	40.1	W
14	Sinus Iridum	Very large crater with missing rim	45	N	32	W
15	Straight Wall	Best example of a lunar fault	21.8	S	7.8	W
16	Petavius	Crater with domed & fractured floor	25.1	S	60.4	E
17	Schröter's Valley	Giant sinuous rille	26.2	N	50.8	W
18	Mare Serenitatis dark edges	Distinct mare areas with different compositions	17.8	N	23	E
19	Alpine Valley	Lunar graben	49	N	3	E
20	Posidonius	Floor-fractured crater	31.8	N	29.9	E
21	Fracastorius	Crater with subsided & fractured floor	21.5	S	33.2	E
22	Aristarchus Plateau	Mysterious uplifted region mantled with pyroclastics	26	N	51	W
23	Pico	Isolated Imbrium basin-ring fragment	45.7	N	8.9	W
24	Hyginus Rille	Rille containing rimless collapse pits	7.4	N	7.8	E
25	Messier & Messier A	Oblique ricochet-impact pair	1.9	S	47.6	E
26	Mare Frigoris	Arcuate mare of uncertain origin	56	N	1.4	E
27	Archimedes	Large crater lacking central peak	29.7	N	4	W

28	Hipparchus	First drawing of a single crater	5.5	S	4.8	E
29	Ariadaeus Rille	Long, linear graben	6.4	N	14	E
30	Schiller	Possible oblique impact	51.9	S	39	W
31	Taruntius	Young floor-fractured crater	5.6	N	46.5	E
32	Arago Alpha & Beta	Volcanic domes	6.2	N	21.4	E
33	Serpentine Ridge	Basin inner-ring segment	27.3	N	25.3	E
34	Lacus Mortis	Strange crater with rille & ridge	45	N	27.2	E
35	Triesnecker Rilles	Rille family	4.3	N	4.6	E
36	Grimaldi basin	A small two-ring basin	5.5	S	68.3	W
37	Bailly	Barely discernable basin	66.5	S	69.1	W
38	Sabine & Ritter	Possible twin impacts	1.7	N	19.7	E
39	Schickard	Crater floor with Orientale basin ejecta stripe	44.3	S	55.3	W
40	Janssen Rille	Rare example of a highland rille	45.4	S	39.3	E
41	Bessel ray	Ray of uncertain origin near Bessel	21.8	N	17.9	E
42	Marius Hills	Complex of volcanic domes & hills	12.5	N	54	W
43	Wargentín	A crater filled to the rim with lava or ejecta	49.6	S	60.2	W
44	Mersenius	Domed floor cut by secondary craters	21.5	S	49.2	W
45	Maurolycus	Region of saturation cratering	42	S	14	E
46	Regiomontanus central peak	Possible volcanic peak	28	S	0.6	W
47	Alphonsus dark spots	Dark-halo eruptions on crater floor	13.7	S	3.2	W
48	Cauchy region	Fault, rilles, & domes	10.5	N	38	E
49	Gruithuisen Delta & Gamma	Volcanic domes formed with viscous lavas	36.3	N	40	W
50	Cayley Plains	Light, smooth plains of uncertain origin	4	N	15.1	E
51	Davy crater chain	Result of comet-fragment impacts	11.1	S	6.6	W
52	Crüger	Possible volcanic caldera	16.7	S	66.8	W
53	Lamont	Possible buried basin	4.4	N	23.7	E
54	Hippalus Rilles	Rilles concentric to Humorum basin	24.5	S	29	W
55	Baco	Unusually smooth crater floor & surrounding plains	51	S	19.1	E
56	Australe basin	A partially flooded ancient basin	49.8	S	84.5	E
57	Reiner Gamma	Conspicuous swirl & magnetic anomaly	7.7	N	59.2	W

58	Rheita Valley	Basin secondary-crater chain	42.5	S	51.5	E
59	Schiller-Zucchius basin	Badly degraded overlooked basin	56	S	45	W
60	Kies Pi	Volcanic dome	26.9	S	24.2	W
61	Mösting A	Simple crater close to center of lunar near side	3.2	S	5.2	W
62	Rümker	Large volcanic dome	40.8	N	58.1	W
63	Imbrium sculpture	Basin ejecta near & overlying Boscovich & Julius Caesar	11	N	12	E
64	Descartes	Apollo 16 landing site; putative region of highland volcanism	11.7	S	15.7	E
65	Hortensius domes	Dome field north of Hortensius	7.6	N	27.9	W
66	Hadley Rille	Lava channel near Apollo 15 landing site	25	N	3	E
67	Fra Mauro formation	Apollo 14 landing site on Imbrium ejectra	3.6	S	17.5	W
68	Flamsteed P	Proposed young volcanic crater & Surveyor 1 landing site	3	S	44	W
69	Copernicus secondary craters	Rays & craterlets near Pytheas	19.6	N	19.1	W
70	Humboldtianum basin	Multi-ring impact basin	57	N	80	E
71	Sulpicius Gallus dark mantle	Ash eruptions northwest of crater	19.6	N	11.6	E
72	Atlas dark-halo craters	Explosive volcanic pits on the floor of Atlas	46.7	N	44.4	E
73	Smythii basin	Difficult-to-observe basin scarp & mare	2	S	87	E
74	Copernicus H	Dark-halo impact crater	6.9	N	18.3	W
75	Ptolemaeus B	Saucerlike depression on the floor of Ptolemaeus	8	S	0.8	W
76	W. Bond	Large crater degraded by Imbrium ejecta	65.3	N	3.7	E
77	Sirsalis Rille	Procellarum basin radial rilles	15.7	S	61.7	W
78	Lambert R	A buried "ghost" crater	23.8	N	20.6	W
79	Sinus Aestuum	Eastern dark-mantle volcanic deposit	12	N	3.5	W
80	Oriente basin	Youngest large impact basin	19	S	95	W
81	Hesiodus A	Concentric crater	30.1	S	17	W
82	Linné	Small crater once thought to have disappeared	27.7	N	11.8	E
83	Plato craterlets	Crater pits at limits of detection	51.6	N	9.4	W
84	Pitatus	Crater with concentric rilles	29.8	S	13.5	W
85	Langrenus rays	Aged ray system	8.9	S	60.9	E
86	Prinz Rilles	Rille system near the crater Prinz	27	N	43	W
87	Humboldt	Crater with central peaks & dark spots	27	S	80.9	E

88	Peary	Difficult-to-observe polar crater	88.6	N	33	E
89	Valentine Dome	Volcanic dome	30.5	N	10.1	E
90	Armstrong, Aldrin & Collins	Small craters near the Apollo 11 landing site	1.3	N	23.7	E
91	De Gasparis Rilles	Area with many rilles	25.9	S	50.7	W
92	Gylden Valley	Part of the Imbrium radial sculpture	5.1	S	0.7	E
93	Dionysus rays	Unusual & rare dark rays	2.8	N	17.3	E
94	Drygalski	Large south-pole region crater	79.3	S	84.9	W
95	Procellarum basin	The Moon's biggest basin?	23	N	15	W
96	Leibnitz Mountains	Rim of South Pole-Aitken basin	85	S	30	E
97	Inghirami Valley	Oriente basin ejecta	44	S	73	W
98	Imbrium lava flows	Mare lava-flow boundaries	32.8	N	22	W
99	Ina	D-shaped young volcanic caldera	18.6	N	5.3	E
100	Mare Marginis swirls	Possible magnetic field deposits	18.5	N	88	E