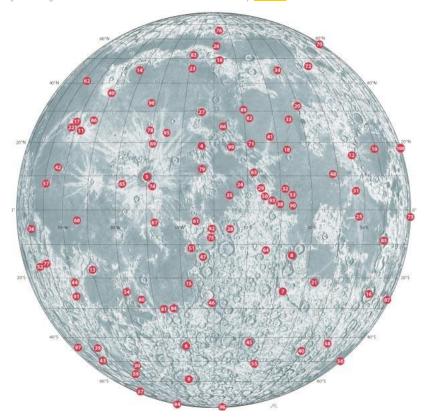
Lunar 100

The "Lunar 100" was described by Sky & Telescope in their April 2004 article by Charles Wood. The objects are arranged in order from the easiest to the most difficult to view. The table below the map describes each object and has image links to the ones which I have observed.

Click on the image thumbnails for the full size image. Full image details will be added to the table at a later date. Many of the pictures of the higer numbered items don't show the actual item just the general area! For other "Lunar 100" sites try this list



L	Image	Feature Name	Significance	Lat. (°)	Long. (°)	Diam. (km)	Rükl Chart	S&T Issue
1		Moon	Large satellite	_	_	3,476	_	
2		Earthshine Mare/highland dichotomy	Twice reflected sunlight Two materials with distinct compositions	_ _	_ _	_ _	_ _	May 2005 May 2005
4		Apennines	Imbrium basin rim	18.9N	3.7W	70	22	Feb 2005
5	() ()	Copernicus	Archetypal large complex crater	9.7N	20.1W	93	31	Jul 2004 Jan 2006
6		Tycho	Large rayed crater with impact melts	43.4S	11.1W	85	64	Jan 2006
7		Altai Scarp	Nectaris basin rim	24.3S	22.6E	425	57	Jun 2004
8		Theophilus, Cyrillus, Catharina	Crater sequence illustrating stages of degradation	13.2S	24.0E	_	46, 57	Oct 2004
9		Clavius	Lacks basin features in spite of its size	58.8S	14.1W	225	72	April 2005

10		Mare Crisium	Mare contained in large circular basin	18.0N	59.0E	540	26, 27, 37, 38	
11	3. 3. S.	Aristarchus	Very bright crater with dark bands on its walls	23.7N	47.4W	40	18	March 2005
12 13 14	O ADEM	Proclus Gassendi Sinus Iridum	Oblique-impact rays Floor-fractured crater Very large crater with missing rim	16.1N 17.6S 45.0N	46.8E 40.1W 32.0W	28 101 260	26 52 10	Dec 2004
15		Straight Wall	Best example of a lunar fault	21.85	7.8W	110	54	Dec 2005
16		Petavius	Crater with domed & fractured floor	25.1S	60.4E	177	59	Dec 2004
17	4 3.	Schröter's Valley	Giant sinuous rille	26.2N	50.8W	168	18	March 2005
18	Use the second	Mare Serenitatis dark edges	Distinct mare areas with different compositions	17.8N	23.0E	N/A	24	
19		Alpine Valley	Lunar graben	49.0N	3.0E	165	4	
20		Posidonius	Floor-fractured crater	31.8N	29.9E	95	14	Dec 2004
21		Fracastorius	Crater with subsided & fractured floor	21.5S	33.2E	124	58	
22	3. 3th	Aristarchus Plateau	Mysterious uplifted region mantled with pyroclastics	26.0N	51.0W	150	18	March 2005
23 24		Pico Hyginus Rille	Isolated Imbrium basin-ring fragment Rille containing rimless collapse pits	45.7N 7.4N	8.9W 7.8E	25 220	11 34	Feb 2005
25		Messier & Messier A	Oblique ricochet-impact pair	1.95	47.6E	11	48	Jan 2006
26		Mare Frigoris	Arcuate mare of uncertain origin	56.0N	1.4E	1600	2-6	Sep 2005
27 28		Archimedes Hipparchus	Large crater lacking central peak First drawing of a single crater	29.7N 5.5S	4.0W 4.8E	83 150	12, 22 44, 45	Nov 2004
29		Aridaeus Rille	Long, linear graben	6.4N	14.0E	250	34	Oct 2005
30		Schiller	Possible oblique impact	51.9S	39.0W	180	71	
31		Taruntius	Young floor-fractured crater	5.6N	46.5E	56	37	
32		Arago Alpha & Beta	Volcanic domes	6.2N	21.4E	26	35	
33		Serpentine Ridge	Basin inner-ring segment	27.3N	25.3E	155	24	
34	E. S.	Lacus Mortis	Strange crater with rille & ridge	45.0N	27.2E	152	14	Dec 2005De



	/							
35	(Triesnecker Rilles	Rille family	4.3N	4.6E	215	33	
36	2011	Grimaldi basin	A small two-ring basin	5.5S	68.3W	440	39	April 2005
37		Bailly	Barely discernible basin	66.5S	69.1W	303	71	April 2005
38		Sabine & Ritter	Possible twin impacts	1.7N	19.7E	30	35	
39		Schickard	Crater floor with Orientale basin ejecta stripe	44.35	55.3W	227	62	
40		Janssen Rille	Rare example of a highland rille	45.4S	39.3E	190	67, 68	
41		Bessel ray	Ray of uncertain origin near Bessel	21.8N	17.9E	N/A	24	
42		Marius Hills	Complex of volcanic domes & hills	12.5N	54.0W	125	28, 29	
43		Wargentin	A crater filled to the rim with lava or ejecta	49.6S	60.2W	84	70	
44	4 Y - 100 C12	Mersenius	Domed floor cut by secondary craters	21.5S	49.2W	84	51	
45		Maurolycus	Region of saturation cratering	42.0S	14.0E	114	66	
4.5	9 (3	Regiomontanus central		20.05	0.614	424		
46) (c)	peak	Possible volcanic peak	28.0S	0.6W	124	55	
47		Alphonsus dark spots	Dark-halo eruptions on crater floor	13.7S	3.2W	119	44	Aug 2005
48		Cauchy region	Fault, rilles, & domes	10.5N	38.0E	130	36	Dec 2005
49	10	Gruithuisen Delta & Gamma	Volcanic domes formed with viscous lavas	36.3N	40.0W	20	9	
50		Cayley Plains	Light, smooth plains of uncertain origin	4.0N	15.1E	14	34	March 2006
	e.	I						2000
51		Davy crater chain	Result of comet-fragment impacts	11.1S	6.6W	50	43	
52		Crüger	Possible volcanic caldera	16.7S	66.8W	45	50	
53		Lamont	Possible buried basin	4.4N		106	35	
54		Hippalus Rilles	Rilles concentric to Humorum basin	24.5S	29.0W	240	52, 53	
55		Васо	Unusually smooth crater floor & surrounding plains	51.0S	19.1E	69	74	March 2006
E6	- A CHARLEST A	Australe basin	A partially flooded ancient bacin	49.8S	04 EE	990	76	
56 57		Reiner Gamma	A partially flooded ancient basin Conspicuous swirl & magnetic anomaly	49.65 7.7N	84.5E 59.2W	880 70	28	
58	168	Rheita Valley	Basin secondary-crater chain	42.5S	51.5E	445	68	Jun 2004
59		Schiller-Zucchius basin	Badly degraded overlooked basin	56.0S	45.0W	335	70, 71	April 2005
60		Kies Pi	Volcanic dome	26.9S	24.2W	45	53	Jun 2005
61		Mösting A	Simple crater close to center of lunar near side	3.2S	5.2W	13	43	Jul 2004
62		Rümker	Large volcanic dome	40.8N	58.1W	70	8	
63		Imbrium sculpture	Basin ejecta near & overlying Boscovich & Julius Caesar	11.0N	12.0E	_	34	
	A March							
64		Descartes	Apollo 16 landing site; putative region of highland volcanism	11.7S	15.7E	48	45	
65		Hortensius domes	Dome field north of Hortensius	7.6N	27.9W	10	30	Jun 2005
66	, (%)	Hadley Rille	Lava channel near Apollo 15 landing site	25.0N	3.0E	_	22	Sep 2004
67		Fra Mauro formation	Apollo 14 landing site on Imbrium ejecta	3.6S	17.5W	_	42	

Copening secondary Copening secondary Control Co	68		Flamsteed P	Proposed young volcanic crater & Surveyor 1 landing site	3.0S	44.0W	112	40	Nov 2004
Part	69			Rays & crateriets near Pytheas	19.6N	19.1W	4	20	
Artis dark-helo criteries Explosive volcanic pits on the floor of Atlass Artis dark-helo criteries Explosive volcanic pits on the floor of Atlass Artis dark-helo criteries Explosive volcanic pits on the floor of Atlass Artis dark-helo criteries Smythii basin Difficult to observe basin scarp 8 mere Copemicus H Dark-helo impact criteries Artis Smythii basin Difficult to observe basin scarp 8 mere Copemicus H Dark-helo impact criteries Artis				- '					A 200E
Smythil basin	/1	· Const		Ash eruptions northwest of crater	19.6N	11.6E	12	23	Aug 2005
Copermicus H	72		Atlas dark-halo craters	Explosive volcanic pits on the floor of Atlas	46.7N	44.4E	87	15	
Professional Base Profession Professio	73		Smythii basin	Difficult-to-observe basin scarp & mare	2.05	87.0E	740	38, 49	Nov 2005
No. Bond Large crater degraded by Imbrium ejecta 55.3N 3.7E 158 4 25 39,50 0ct 2005 15.78 15.88 14.89 15.75 15.70 14.25 39,50 0ct 2005 15.79 15.80 15.79 15.80 15.79 15.80 15.79 15.80 15.79 15.80 15.79 15.80 15.79 15.80 15.79 15.80 15.70 15.80 15.70 15.80 15.70 15.80 15.70 15.80 15.80 15.70 15.80 15.80 15.70 15.80 15.	74	2.00	Copernicus H	Dark-halo impact crater	6.9N	18.3W	5	31	
Sirsals Rille Procellarum basin radial riles 15.75 61.7W 425 30, 50 004 2005 Recommendation 23.8N 20.6N 54 20 000 2004 Recommendation 23.8N 20.6N 930 33 Aug 2005 Recommendation 23.8N 20.6N 930 50 33 Aug 2005 Recommendation 23.8N 23.8N 23.8N 23.8N 23.8N 23.8N Recommendation 23.8N 23.8N 23.8N 23.8N 23.8N 23.8N 23.8N Recommendation 23.8N 2	75		Ptolemaeus B	Saucerlike depression on the floor of Ptolemaeus	8.05	0.8W	16	44	
Lamber R Sinus Aestuum Eastern dark-mantle volcanic deposit 12.0 3.5 90 33 Aug 2005	76		W. Bond	Large crater degraded by Imbrium ejecta	65.3N	3.7E	158	4	
Sinus Aesturm Eastern dark-mantle volcanic deposit 12.0N 3.5W 90 33 Aug 2005									
Note									
	79	4 57 (2) (6)	Sinus Aestuum	Eastern dark-mantle volcanic deposit	12.0N	3.5W	90	33	Aug 2005
Linné Small crater once thought to have disappeared 27.7N 11.8E 2.4 23 23 23 24 23 24 23 24 24	80	15	Orientale basin	Youngest large impact basin	19.0S	95.0W	930	50	
Linné Small crater once thought to have disappeared 27.7N 11.8E 2.4 23 23 23 24 23 24 23 24 24	81		Hesiodus A	Concentric crater	30.15	17 NW	15	54	
Pitatus Crater with concentric rilles 29.85 13.5W 97 54									
Pitatus Crater with concentric rilles 29.85 13.5W 97 54		V. Salanda Maria							
85 Langrenus rays Aged ray system 8.95 60.9E 132 49 86 Prinz Rilles Rille system near the crater Prinz 27.0N 43.0W 46 19 Sep 2004 87 Humboldt Peary Crater with central peaks & dark spots Difficult-to-observe polar crater 27.0S 80.9E 207 60 74 4, II July 2005 89 Valentine Dome Volcanic dome 30.5N 10.1E 30 13	83		Plato craterlets	Crater pits at limits of detection	51.6N	9.4W	101	3, 4	
Prinz Rilles Prinz Rilles Rille system near the crater Prinz 27.0N 43.0W 46 19 Sep 2004	84		Pitatus	Crater with concentric rilles	29.85	13.5W	97	54	
Humboldt Peary Difficult-to-observe polar crater 88.6N 33.0E 74 4, II July 2005 89 Valentine Dome Volcanic dome 30.5N 10.1E 30 13 90 Armstrong, Aldrin & Collins Small craters near the Apollo 11 landing site De Gasparis Rilles Area with many rilles 25.9S 50.7W 30 51 Qylden Valley Part of the Imbrium radial sculpture 5.1S 0.7E 47 44 Dionysius rays Unusual & rare dark rays 2.8N 17.3E 18 35 91 Drygalski Large south-pole region crater 79.3S 84.9W 162 72, VI July 2005 95 Procellarum basin The Moon's biggest basin? 23.0N 15.0W 3200 — Sep 2005 96 Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E — 73, V July 2005 97 Inghirami Valley Orientale basin ejecta 44.0S 73.0W 140 61 Jan 2005 1mbrium lava flows Mare lava-flow boundaries 32.8N 22.0W — 10 Aug 2004	85	Ane.	Langrenus rays	Aged ray system	8.95	60.9E	132	49	
88 Peary Difficult-to-observe polar crater 88.6N 33.0E 74 4, II July 2005 89 Valentine Dome Volcanic dome 30.5N 10.1E 30 13 90 Armstrong, Aldrin & Collins Small craters near the Apollo 11 landing site De Gasparis Rilles 1.3N 23.7E 3 35 91 De Gasparis Rilles Area with many rilles 25.9S 50.7W 30 51 92 Gylden Valley Part of the Imbrium radial sculpture 5.1S 0.7E 47 44 93 Dionysius rays Unusual & rare dark rays 2.8N 17.3E 18 35 94 Drygalski Large south-pole region crater 79.3S 84.9W 162 72, VI July 2005 95 Procellarum basin The Moon's biggest basin? 23.0N 15.0W 3200 — Sep 2005 96 Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E — 73, V July 2005 97 Inghirami Valley Imbrium lava flows	86	30	<u>Prinz Rilles</u>	Rille system near the crater Prinz	27.0N	43.0W	46	19	Sep 2004
Valentine Dome Volcanic dome 30.5N 10.1E 30 13 Name of the Imbrium radial sculpture 5.15 0.7E 47 44 18 18 35 Procellarum basin The Moon's biggest basin? 23.0N 15.0W 3200 — Sep 2005 Procellarum basin Rim of South Pole-Aitken basin glecta Mare lava-flow boundaries 18.6N 5.3E 3 22 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22	87		Humboldt	Crater with central peaks & dark spots	27.0S	80.9E	207	60	
Armstrong, Aldrin & Collins Small craters near the Apollo 11 landing site De Gasparis Rilles Area with many rilles Sgylden Valley Part of the Imbrium radial sculpture Dionysius rays Unusual & rare dark rays Procellarum basin The Moon's biggest basin? Leibnitz Mountains Rim of South Pole-Aitken basin Rim of South Rim	88	(I SANA)	Peary	Difficult-to-observe polar crater	88.6N	33.0E	74	4, II	July 2005
91 De Gasparis Rilles Gylden Valley Part of the Imbrium radial sculpture Dionysius rays Unusual & rare dark rays 2.8N 17.3E 18 35 94 Drygalski Large south-pole region crater 79.3S 84.9W 162 72, VI July 2005 95 Procellarum basin The Moon's biggest basin? 23.0N 15.0W 3200 — Sep 2005 96 Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E — 73, V July 2005 97 Inghirami Valley Orientale basin ejecta 44.0S 73.0W 140 61 Jan 2005 98 Imbrium lava flows Mare lava-flow boundaries 32.8N 22.0W — 10 Aug 2004 99 Ina	89		Valentine Dome	Volcanic dome	30.5N	10.1E	30	13	
92 93Gylden Valley Dionysius raysPart of the Imbrium radial sculpture Unusual & rare dark rays5.1S 2.8N0.7E 17.3E47 1844 3594DrygalskiLarge south-pole region crater79.3S84.9W16272, VIJuly 200595Procellarum basinThe Moon's biggest basin?23.0N15.0W3200—Sep 200596Leibnitz MountainsRim of South Pole-Aitken basin85.0S30.0E—73, VJuly 200597Inghirami Valley Imbrium lava flowsOrientale basin ejecta Mare lava-flow boundaries44.0S73.0W140 22.0W61 22.0WJan 200599InaD-shaped young volcanic caldera18.6N5.3E322	90		Armstrong, Aldrin & Collins	Small craters near the Apollo 11 landing site	1.3N	23.7E	3	35	
Dionysius rays Unusual & rare dark rays 2.8N 17.3E 18 35 Prygalski Large south-pole region crater 79.3S 84.9W 162 72, VI July 2005 Procellarum basin The Moon's biggest basin? 23.0N 15.0W 3200 — Sep 2005 Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E — 73, V July 2005 Inghirami Valley Imbrium lava flows Mare lava-flow boundaries 32.8N 22.0W — 10 Aug 2004 Po-shaped young volcanic caldera 18.6N 5.3E 3 22	91		De Gasparis Rilles	Area with many rilles	25.9S	50.7W	30	51	
Drygalski Large south-pole region crater 79.3S 84.9W 162 72, VI July 2005 Procellarum basin The Moon's biggest basin? 23.0N 15.0W 3200 — Sep 2005 Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E — 73, V July 2005 Inghirami Valley Orientale basin ejecta 44.0S 73.0W 140 61 Jan 2005 Mare lava-flow boundaries 32.8N 22.0W — 10 Aug 2004 July 2005 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22				· · · · · · · · · · · · · · · · · · ·					
Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E - 73, V July 2005 Inghirami Valley Orientale basin ejecta 44.0S 73.0W 140 61 Jan 2005 Imbrium lava flows Mare lava-flow boundaries 32.8N 22.0W - 10 Aug 2004 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22				•					July 2005
Leibnitz Mountains Rim of South Pole-Aitken basin 85.0S 30.0E - 73, V July 2005 Inghirami Valley Orientale basin ejecta 44.0S 73.0W 140 61 Jan 2005 Imbrium lava flows Mare lava-flow boundaries 32.8N 22.0W - 10 Aug 2004 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22		The same of the same							
97 Inghirami Valley Orientale basin ejecta 44.0S 73.0W 140 61 Jan 2005 98 Imbrium lava flows Mare lava-flow boundaries 32.8N 22.0W — 10 Aug 2004 99 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22	95		Procellarum basin	The Moon's biggest basin?	23.0N	15.0W	3200	_	Sep 2005
98 Imbrium lava flows Mare lava-flow boundaries 32.8N 22.0W — 10 Aug 2004 99 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22	96		Leibnitz Mountains	Rim of South Pole-Aitken basin	85.0S	30.0E	_	73, V	July 2005
99 Ina D-shaped young volcanic caldera 18.6N 5.3E 3 22			= :				140		
	90	- 56N	Impiram rava nows	That chave now boundance	JE.ON	22.UVV	_	10	Aug 2004
100 Mare Marginis swirls Possible magnetic field deposits 18.5N 88.0E – 27, III Nov 2005	99		<u>Ina</u>	D-shaped young volcanic caldera	18.6N	5.3E	3	22	
	100		Mare Marginis swirls	Possible magnetic field deposits	18.5N	88.0E	_	27, III	Nov 2005

Lunar 100 Observing Club http://www.rtpnet.org/~rac/obsprograms/Lunar%20100%20List 1.2.pdf Observing log sheets http://www.eastvalleyastronomy.org/downloads/OTL100.pdf Key Lunar imaging links <u>•</u> Google == If you have any comments or suggestions about $% \frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) =\frac$ Search

these pages please contact the author. Page content ©2001-2007 Mike Tyrrell