| Task or Target \# | Task Description or Target Name | Wood's <br> LUNAR 100 <br> Catalog | RükI <br> Atlas <br> (chart) |
| :---: | :---: | :---: | :---: |
|  | Create a sketch/map of the visible lunar surface: |  |  |
| 1 | Observe a Full Moon and sketch a large-scale (prominent features) map depicting the nearside; disk of visible surface should be drawn | L-1 |  |
| 2 | at | L-1 |  |
| 3 | least 5 -inches in diameter. Sketch itself should be created only by observing the Moon, but maps or guidebooks may be used when labeling sketched features. Label all maria, prominent craters, and major rays by the crater name they originated from. (Counts as 3 observations (OBSV): \#1, \#2 \& \#3) | L-1 |  |
|  | Observe these targets; provide brief descriptions: |  |  |
| 4 | Alpetragius |  | 55 |
| 5 | Arago |  | 35 |
| 6 | Arago Alpha \& Arago Beta | L-32 | 35 |
| 7 | Aristarchus Plateau | L-18 | 18 |
| 8 | Baco | L-55 | 74 |
| 9 | Bailly | L-37 | 71 |
| 10 | Beer, Beer Catena \& Feuillée |  | 21 |
| 11 | Bullialdus, Bullialdus A \& Bullialdus B |  | 53 |
| 12 | Cassini, Cassini A \& Cassini B |  | 12 |
| 13 | Cauchy, Cauchy Omega \& Cauchy Tau | L-48 | 36 |
| 14 | Censorinus |  | 47 |
| 15 | Crüger |  | 50 |
| 16 | Dorsae Lister \& Smirnov (A.K.A. Serpentine Ridge) | L-33 | 24 |
| 17 | Grimaldi Basin outer and inner rings | L-36 | 39, etc. |
| 18 | Hainzel, Hainzel A \& Hainzel C |  | 63 |
| 19 | Hercules, Hercules G, Hercules E |  | 14 |
| 20 | Hesiodus A | L-81 | 54, 64 |
| 21 | Hortensius dome field | L-65 | 30 |
| 22 | Julius Caesar |  | 34 |
| 23 | Kies |  | 53 |
| 24 | Kies Pi | L-60 | 53 |
| 25 | Lacus Mortis |  | 14 |
| 26 | Linne |  | 23 |
| 27 | Lamont | L-53 | 35 |
| 28 | Mairan |  | 9 |
| 29 | Mare Australe | L-56 | 76 |
| 30 | Mare Cognitum |  | 42, etc. |
| 31 | Mare Humboltianum basin | L-70 | 7, etc. |
| 32 | Mare Insularum \& Sinus Aestuum |  | 32, etc. |
| 33 | Mare Marginis |  | 27, 38 |
| 34 | Mare Smythii |  | 38, 49 |
| 35 | Mare Spumans |  | 38 |
| 36 | Mare Undarum |  | 38 |
| 37 | Marius Hills | L-42 | 29 |
| 38 | Mersenius | L-44 | 51 |


| 39 | Milichius Pi |  | 30 |
| :---: | :---: | :---: | :---: |
| 40 | Mons Gruithuisen Gamma \& Mons Gruithuisen Delta | L-49 | 9 |
| 41 | Mons Rümker (A.K.A. Rümker Hills) | L-65 | 8 |
| 42 | Montes Agricola |  | 18 |
| 43 | Montes Cordillera |  | 39, 50 |
|  | Montes Foucault (The mountains just west and north of Foucault |  |  |
| 44 | Crater) |  | 2 |
| 45 | Montes Rook |  | 50 |
| 46 | Montes Recti, Teneriffe \& Spitzbergen |  | 11, etc |
| 47 | Mösting A | L-61 | 43 |
| 48 | Promontorium Archerusia |  | 24 |
| 49 | Regiomontanus \& Regiomontanus A | L-46 | 55 |
| 50 | Rabbi Levi |  | 67 |
| 51 | Rima Aridaeus | L-29 | 34 |
| 52 | Rima Cauchy | L-48 | 36 |
| 53 | Rima Hadley | L-66 | 22 |
| 54 | Rima Hesiodus |  | 63, etc |
| 55 | Rimae Hippalus | L-54 | 52, 53 |
| 56 | Rimae Janssen | L-40 | 67 |
| 57 | Rimae Triesnecker | L-35 | 33 |
| 58 | Ritter \& Sabine | L-38 | 35 |
| 59 | Sacrobosco |  | 56 |
| 60 | Schiller, Segner, Zucchius region | L-59 | 71 |
| 61 | Sinus Amoris |  | 25 |
| 62 | Sinus Asperitatis |  | 46, 47 |
| 63 | Sinus Concordiae |  | 37 |
| 64 | Sinus Lunicus |  | 12 |
| 65 | Stadius \& Stadius Catenae |  | 32 |
| 66 | Taruntius | L-31 | 37 |
| 67 | Timocharis |  | 21 |
| 68 | Vallis Rheita | L-58 | 68 |
| 69 | Wargentin | L-43 | 70 |
| 70 | Wolf |  | 54 |
|  | Sketch these targets: |  |  |
| 71 | Any polar crater (above 80N latitude or below 80S latitude) |  |  |
| 72 | Clavius \& its internal craterlets (counts as 2 OBSV: \#72 \& \#73) | L-9 | 72 |
| 73 | Clavius \& its internal craterlets | L-9 | 72 |
| 74 | Davy Y | L-51 | 43 |
| 75 | Delaunay |  | 55 |
| 76 | Mare Crisium | L-10 | 26, etc |
| 77 | Messier, Messier A \& rays |  | 48 |
| 78 | Montes Jura (counts as 2 OBSV: \#78 \& \#79) |  | 10 |
| 79 | Montes Jura |  | 10 |
| 80 | Müller and craterlet chains |  | 44 |
| 81 | Thebit, Thebit A \& Thebit L |  | 55 |
| 82 | Vallis Alpes |  | 4 |
| 83 | Sketch or image "earthshine" on lunar surface. Identify any major features visible on the shadowed portion of the lunar surface | L-2 |  |
| 84 85 | Create sketches or images of limb feature(s) that depict libration effect. (counts as 2 OBSV: \#84 \& \#85) |  |  |

86 Sketch or image a close conjunction of Moon and bright star or planet
Observe and create multiple sketches (or images) of same targets:
87 Byrgius A near lunar sunrise (or sunset) 50
88 Byrgius A near lunar midday
89 Proclus near lunar midday
Proclus near lunar midday L-12
50
$90 \quad$ Proclus near lunar sunset
91 Rupes Recta near lunar sunrise
L-12
26
L-15
26
Rupe Recta near lur
Rupes Recta near lunar sunset L-15 54
Tycho near lunar sunrise (or sunset) L-6 64
Tycho near lunar midday $\quad$ L-6 64

## Miscellaneous observations:

Observe Statio Tranquillitatis region (AKA "Tranquility Base")
In addition to describing the lunar surface, observing notes should include mission name, date(s) of exploration, and a brief description of significance.
96 Observe another Luna, Lunakhod, or Apollo mission site - in addition to describing lunar surface, observing notes should include mission
name, date(s) of exploration and a brief description of significance
97 Observe another Luna, Lunakhod, or Apollo mission site - in addition to describing lunar surface, observing notes should include mission
name, date(s) of exploration and a brief description of significance Observe occultation (ingress, egress or graze) of a bright star, planet or planetary moon. Include exact time of event. (count as 1 OBSV; if both ingress
behind \& egress from behind Moon are logged, count as 2 OBSV)
99 Observe a lunar eclipse; description and/or labeled sketches/images
100 must as a minimum describe entry and event maximum (counts as 2 OBSV: \#99 \& \#100)

## OPTIONAL TARGETS: may substitute for required tasks/targets

OPT-A Create a series of sketches or images that show daily phase/position change; 3 or more days/nights at approximately same hour (sub for 2 OBSV)
OPT-B Create two or more sketches or images, taken one month or more apart, that show change in Moon's path w/ respect to landmark(s) on
the local horizon. Images should be taken with same equipment and
at same magnification (sub for 2 OBSV)
OPT-C Create two or more images that depict the change in apparent diameter of the Moon at/near apogee and perigee. Each image should be taken with same equipment and at same magnification (sub for 1 OBSV)
OPT-D Observe a solar eclipse (sub for 1 OBSV; if sketches/images
are included and depict entry and event maximum, sub for 2 OBSV)
OPT-E Observe a lowland area with one or more colored filters, and compare the similarities/differences to the unfiltered view (sub for 1 OBSV)
OPT-F Create a series of images at one-hour intervals that show the terminator passing over a prominent feature (sub for 2 OBSV)

