

City Lights Astronomical Society for Students



www.classusa.org

Welcome to the City Lights Astronomical Society for Students' (CLASS) Telescope Observing Program. This is a beginning program to familiarize everyone with the night sky. The rules are simple, just observe the 20 required objects from the lists provided. To get the 20 objects, you will need to observe and record any ten deep sky objects, then observe and record any ten double stars. That's it. That is a total of twenty objects observed using a telescope. When recording your observations, you need only log the date and time observed. At the completion of the program you will receive recognition from CLASS and a nice lapel pin to wear proudly. There is no time limit in completing the program, and you may observe the objects from either the city or the country. Any size telescope may be used. All objects are listed in Right Ascension order so that you will know if they are observable at the time of year that you attempt this program. Right Ascension is in hours and minutes, while Declination is in degrees and minutes. Types of objects are open clusters, globular clusters, and planetaries. Finally, size is in minutes with planetaries in seconds.

Once you have completed the program and have filled out the accompanying logs, send your observations to:

John Wagoner
CLASS
1409 Sequoia Dr.
Plano, Tx. 75023

When sending in your log sheets, please include your name and address, what grade you are in, and what school you go to. We will then send you your CLASS Telescope Observing Program lapel pin. To help in recognizing the twenty objects, you may want to check out a book at your local or school library, or you can purchase a planisphere or a simple sky map online at www.skyandtelescope.com. And if you need a little help from a parent or friend, that is ok too. Good luck, clear skies, and good observing.

John Wagoner – President – CLASS
john@classusa.org

Deep Sky Objects (any 10)

Catalog	Type	R.A.	Dec.	Mag	Size	Con	Date Observed	Time Observed
N129	OCI	00 30	+60 14	6.5	21.0'	Cas		
N457	OCI	01 19	+58 20	6.4	13.0'	Cas		
N663	OCI	01 46	+61 15	7.1	16.0'	Cas		
N752	OCI	01 58	+37 41	5.7	50.0'	And		
N1342	OCI	03 32	+37 20	6.7	14.0'	Per		
N1807	OCI	05 11	+16 32	7.0	17.0'	Tau		
N1817	OCI	05 12	+16 42	7.7	15.0'	Tau		
N1981	OCI	05 35	-04 26	4.2	25.0'	Ori		
N2232	OCI	06 27	-04 45	3.9	29.0'	Mon		
N2281	OCI	06 49	+41 04	5.4	14.0'	Aur		
N2301	OCI	06 52	+00 28	6.0	12.0'	Mon		
N2392	Pln	07 29	+20 55	9.2	47"	Gem		
N2539	OCI	08 11	-12 50	6.5	21.0'	Pup		
N3242	Pln	10 25	-18 38	7.8	45"	Hya		
N6210	Pln	16 44	+23 49	8.8	48"	Her		
IC4665	OCI	17 46	+05 43	4.2	70.0'	Oph		
N6520	OCI	18 03	-27 54	7.6	6.0'	Sgr		
N6633	OCI	18 28	+06 34	4.6	20.0'	Oph		
IC4756	OCI	18 39	+05 27	4.6	40.0'	Ser		
N6709	OCI	18 52	+10 21	6.7	13.0'	Aqi		
N6826	Pln	19 45	+50 31	8.8	27"	Cyg		
N6910	OCI	20 23	+40 47	7.4	7.0'	Cyg		
N6934	GCI	20 34	+07 24	8.7	5.9'	Del		
N6940	OCI	20 35	+28 18	6.3	31.0'	Vul		
N7009	Pln	21 04	-11 22	8.0	44"	Aqr		
N7160	OCI	21 54	+62 36	6.1	7.0'	Cep		
N7209	OCI	22 05	+46 30	7.7	25.0'	Lac		
N7243	OCI	22 15	+49 53	6.4	21.0'	Lac		
N7662	Pln	23 26	+42 33	8.3	32"	And		
N7789	OCI	23 57	+56 44	6.7	15.0'	Cas		

Double Stars (any 10)

Star/Constellation	Magnitude/Separation	Date Observed	Time Observed
Eta Cassiopeia	(3.4,7.5) - 12"		
Gamma Aries	(4.8,4.8) - 7.8"		
Gamma Andromeda	(2.3,5.5) - 9.8"		
Gamma Cetus	(3.5,7.3) - 2.8"		
Beta Orion	(0.1,6.8) - 9.5"		
Lambda Orion	(3.6,5.5) - 4.4"		
Beta Monoceros	(4.7,5.2) - 7.3"		
Alpha Gemini	(1.9,2.9) - 2.2"		
Iota Cancer	(4.2,6.6) - 30"		
38 Lynx	(3.9,6.6) - 2.7"		
Gamma Leo	(2.2,3.5) - 4.4"		
Alpha Leo	(1.4,7.7) - 177"		
Alpha Canes Venatici	(2.9,5.5) - 19.4"		
Zeta Ursa Major	(2.3,4.0,4.0) - 14.4",709"		
Epsilon Bootes	(2.5,4.9) - 2.8"		
Delta Serpens	(4.2,5.2) - 3.9"		
Beta Scorpius	(2.6,4.9) - 13.6"		
Alpha Hercules	(3.5,5.4) - 4.7"		
Zeta Lyra	(4.3,5.9) - 44"		
Beta Cygnus	(3.1,5.1) - 34.4"		
Beta Capricornus	(3.4,6.2) - 206"		
Gamma Delphinus	(4.5,5.5) - 9.6"		
Xi Cepheus	(4.4,6.5) - 7.7"		
Delta Cepheus	(3.9,6.3) - 41"		