


Top 10 Night Sky Objects for Astronomy Beginners

Moon	All Year Observed: _____ Seeing (1-5): _____	Best view: edges and Terminator, the line where the dark and illuminated areas meet.	Dia: 3 476 km Distance: 384 000 km Mass: 1.2% of Earth Density: 61% of Earth	
Jupiter 5 th Planet	Varies Observed: _____ Seeing (1-5): _____	Cloud bands and Red Spot make a great target on clear nights. Also check 4 moons and their orbits.	Diameter: 142 980 km Distance Sun: 4.95 AU Mass: 318 x Earth Density: 1.32 g/cm3	
Saturn 6 th Planet	Varies Observed: _____ Seeing (1-5): _____	Saturn's ring is a breathtaking view. If conditions permit, even the Cassini separation may be visible.	Diameter: 123 000 km Distance Sun: 9.54 AU Mass: 95 x Earth Density: 0.67 g/cm3	
Mizar & Alcor Multiple Star System	Mid Winter - Mid Fall Observed: _____ Seeing (1-5): _____	Great target to test eyesight (Mizar/Alcor) and telescope performance (Mizar A/B).	Constellation: Ursa Major Dist: 83 LY Dia: 4.1/1.8 Mass (Mizar/Alcor): 7.7 /2 Mag (Mizar/Alcor): 2.2/4.0	
Albireo Beautiful Double Star	Late Spring to Fall Observed: _____ Seeing (1-5): _____	A telescope resolves a beautiful optical double star. Striking color contrast (yellow / blue).	Constellation: Cygnus Dist: 390/390 LY Dia: 16/2.7 Mass: 5/3.2 Mag: A 3.2, B 5.8	
Orion Nebula M42 – Nebula	Winter & Spring Observed: _____ Seeing (1-5): _____	Look just below Orion's belt as a part of Orion's sword. Large object, use your lowest magnification.	Constellation: Orion Dist 1,344 LY Dia: 24 LY Mass: 2000 x Sun Mag: 4.0	
Andromeda Galaxy M31 – Spiral Galaxy	Summer, Fall, Winter Observed: _____ Seeing (1-5): _____	Andromeda Galaxy has a very bright core which is nicely visible. Large object, use lowest magnification.	Constellation: Andromeda Dist: 2.54 Million LY Mass: 1 -1.5 x Milky Way Magnitude: 3.44	
Hercules Cluster M13 – Globular Cluster	Spring, Summer, Fall Observed: _____ Seeing (1-5): _____	The Globular Cluster is almost as old as the known Universe. Even with small telescopes a dazzling view.	Constellation: Hercules Dist: 25,100 LY Dia: 168 LY Mass: 600,000 x Sun Mag: 5.8 Age: 14 Billion yrs	
Double Cluster NGC 869 & NGC 884 – Close Open Clusters	Fall, Winter Observed: _____ Seeing (1-5): _____	A telescope view sown with scintillating stars which show very beautiful contrasting colors.	Constellation: Perseus Dist: 6,800 / 7,600 LY Age: 5.6 / 3.2 Million years Magnitude: 4.2	
Dumbbell Nebula M 27 - Planetary Nebula	Fall, Winter, Spring Observed: _____ Seeing (1-5): _____	Beautiful planetary nebula. Faint but very rewarding object (may be difficult to see with bright moon).	Constellation: Vulpecula Dist: 1,360 LY Dia: 1.44 LY Mag: 7.5 Age: 9,800 yrs Mass central star: 0.56 sun	