

Challenge Objects Observing List Valid Dates: Aug 16 – 24, 2025

Observer: _____

Suggested Optical aid: **Telescopes with aperture at least 250 mm (10")**

Pin requirements: **Find any 15 from the following list. No 'goto' or setting circles allowed**

Object	Type	Constellation	Mag	Date	Notes (more space on back)
NGC 6364	Galaxy	Hercules	14.1		
IC 4617 *	Galaxy	Hercules	16.0		
NGC 6207	Galaxy	Hercules	12.1		
PGC 60967	Galaxy Sb	Hercules	15.0		
Arp 103	Galaxy x 3	Hercules	14.9		
UGC 9241	Galaxy Sc	Bootes	14.2		
UGC 9240	Galaxy Irregular	Bootes	13.3		
MRK 841	Active Galactic Nuclei	Bootes	14.0		
NGC 6791	Open Cluster	Lyra	9.5		
Pluto	Dwarf planet	Aquarius	14.4		
NGC 6822	Galaxy	Sagittarius	9.3		
Palomar 11	Globular Cluster	Aquarius	9.8		
IC 5146	Emission Neb/ Reflection Neb	Cygnus	7.2		
NGC 7317-20	Galaxy	Pegasus	14.6		
Jones 1	Planetary Neb	Pegasus	12.1		
NGC 7822 *	Emission Neb/ Reflection Neb	Cepheus			
IC 59	Emission Neb/ Reflection Neb	Cassiopeia	13.3		
NGC 609	Open Cluster	Cassiopeia	11.0		
IC 1795	Emission Neb	Cassiopeia	7		
Maffei 1 *	Galaxy E3	Cassiopeia	17.0		
Abel 426	Galaxy Cluster	Perseus	13		
NGC 1432/35	Reflection Neb	Taurus	3.9/4.2		
IC 342	Galaxy SBc	Camelopardalis	9.1		

* Suggested aperture at least 300 mm

Object	Notes
NGC 6364	
IC 4617 *	
NGC 6207	
PGC 60967	
Arp 103	
UGC 9241	
UGC 9240	
MRK 841	
NGC 6791	
Pluto	
NGC 6822	
Palomar 11	
IC 5146	
NGC 7317-20	
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IC 342	