



Tabriz Astronomy Olympiad Group

Messier objects by type:

Nebulas:

- **Supernova Remnants:**
 - M1: The Crab Nebula
- **Planetary nebulae:**
 - M27: The Dumbbell Nebula
 - M57: The Ring Nebula
 - M76: The Little Dumbbell, Cork, or Butterfly Nebula
 - M97: The Owl Nebula
- **Star forming nebulae:** (each of them containing a young open star cluster)
 - M8: The Lagoon Nebula
 - M16: The Eagle or Star Queen Nebula
 - M17: The Omega Nebula (also: The Swan, Horseshoe, or Lobster Nebula)
 - M20: The Trifid Nebula
 - M42: The Orion Nebula
 - M43: de Mairan's Nebula (Part or Companion of the Orion Nebula)
 - M78 (a diffuse reflection nebula)

Clusters:

- **Open clusters:** (include here the young clusters in star forming nebulae mentioned above)
 - M6: The Butterfly Cluster
 - M7: Ptolemy's Cluster
 - M11: The Wild Duck Cluster
 - M18
 - M21
 - M23
 - M25
 - M26
 - M29
 - M34
 - M35
 - M36
 - M37
 - M38

- M39
- M41
- M44: Praesepe, the Beehive Cluster
- M45: Subaru, the Pleiades (the Seven Sisters)
- M46
- M47
- M48
- M50
- M52
- M67
- M93
- M103
- **Globular clusters:**
 - M2
 - M3
 - M4
 - M5
 - M9
 - M10
 - M12
 - M13: Great Hercules Globular Cluster
 - M14
 - M15
 - M19
 - M22
 - M28
 - M30
 - M53
 - M54
 - M55
 - M56
 - M62
 - M68
 - M69
 - M70
 - M71
 - M72
 - M75
 - M79
 - M80
 - M92
 - M107

Galaxies:

- **Spiral galaxies:**

- M31: The Andromeda Galaxy (type Sb)
- M33: The Triangulum Galaxy (type Sc)
- M51: The Whirlpool Galaxy (type Sc)
- M58 (type Sb/SBb or Sab(s)II)
- M61 (type Sc, or SAB(rs)bc)
- M63: The Sunflower Galaxy (type Sb or Sbc)
- M64: The Blackeye Galaxy (type Sb or Sab)
- M65
- M66
- M74
- M77 (type Sb, a Seyfert 2 galaxy)
- M81: Bode's Galaxy (or Bode's Nebula, type Sb)
- M83: The Southern Pinwheel Galaxy
- M88 , M90 , M91 , M 94 , M95 , M 96 , M98 , M99
- M100
- M101: The Pinwheel Galaxy
- M104: The Sombrero Galaxy (type Sa)
- M106
- M108
- M109
- **Lenticular (S0) galaxies:**
 - M84
 - M85
 - M86
 - M102 may be (!) the Spindle Galaxy NGC 5866
- **Elliptical galaxies:**
 - M32: Satellite galaxy of the Andromeda Galaxy, M31
 - M49
 - M59
 - M60
 - M87: Virgo A, the central galaxy in the Virgo cluster
 - M89
 - M105
 - M110: Satellite galaxy of the Andromeda Galaxy, M31
- **Irregular Galaxies:**
 - M82: The Cigar Galaxy

Others:

- Though real Messier objects, these are actually no deep sky objects at all:
 - M24: Milky Way Patch (star cloud, 'Delle Caustiche'); containing open cluster NGC 6603
 - M40: Double Star, Winnecke 4 (WNC 4)
 - M73: System or Asterism of 4 Stars